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STORMWATER POLLUTION PREVENTION PLAN

Sigma Complex & MST Metal Fabrication Facilities

Los Alamos National Laboratory

A requirement of the
NPDES MULTI-SECTOR GENERAL PERMIT
NMR053195 (LANS)
for Stormwater Discharges Associated with Industrial Activities

Prepared by:
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Sigma Complex & MST Metal Fabrication Facilities
Storm Water Pollution Prevention Plan
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SIGMA COMPLEX & METAL FABRICATION FACILITIES
STORMWATER POLLUTION PREVENTION PLAN

PREFACE

This Stormwater Pollution Prevention Plan (SWPPP) was developed in accordance with the provisions of the Clean Water Act (33 U.S.C. §§1251 et seq., as amended), and the Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity (U.S. EPA, June 2015) issued by the U.S. Environmental Protection Agency (EPA) for the National Pollutant Discharge Elimination System (NPDES) and using the industry specific permit requirements for Sector AA – Subsection AA1 – Fabricated Metal Product Manufacturing Facilities and Sector F–Primary Metals. The applicable stormwater discharge permit is EPA General Permit Number NMR050000 (Los Alamos National Security (LANS) (U.S. EPA June, 2015) Contents of the June 2015 Multi-Sector General Permit can be viewed at http://cfpub.epa.gov/npdes/stormwater/msgp.cfm
This SWPPP applies to discharges of stormwater from the operational areas of the Sigma Complex & MST Metal Fabrication Facilities at Los Alamos National Laboratory (referred to as LANL or the "Laboratory"). The Laboratory is owned by the Department of Energy (DOE) and is operated by Los Alamos National Security, LLC (LANS). Throughout this document, the term "Facility" refers to the Sigma Complex & MST Metal Fabrication Facilities.

A copy of the LANS NOI and Delegation of Authority Letter is located in Appendix L of this SWPPP.

SECTION 1: FACILITY DESCRIPTION AND CONTACT INFORMATION

1.1 Facility Information

Facility Information

Name of Facility: Sigma Complex & MST Metal Fabrication Facilities, Buildings 0141, 0159, and 0169

Street: Los Alamos National Laboratory, Technical Area 03

City: Los Alamos State: NM ZIP Code: 87545

County or Similar Subdivision: Los Alamos County

Permit Tracking Number: NMR05GB21 (if covered under a previous permit)

Latitude/Longitude (Use **one** of three possible formats, and specify method)

Latitude:	Longitude:
1. 3 5 º 5 2 ' 1 8" N (degrees, minutes, seconds)	1. 1 0 6 º 1 9 ' 0 4" W (degree, minutes, seconds)
2. _ _ º _ _ . _ _' N (degrees, minutes, decimal)	2. _ _ º _ _ . _ _' W (degrees, minutes, decimal)
3. _ _ . _ _ _ _ º N (decimal)	3. _ _ . _ _ _ _ º W (decimal)

Method for determining latitude/longitude (check one):

☐ USGS topographic map (specify scale:_____) ☒ EPA Web site ☐ GPS

☐ Other (please specify): _____

Is the facility located in Indian Country? ☐ Yes ☒ No

If yes, name of Reservation, or if not part of a Reservation, indicate "not applicable."_____

_____

Is this facility considered a Federal Facility? ☒ Yes ☐ No

Estimated area of industrial activity at site exposed to storm water: 9.6 (acres)

Discharge Information

Does this facility discharge storm water into an MS4? ☐ Yes ☒ No

If yes, name of MS4 operator: _____

Name(s) of water(s) that receive storm water from your facility Sandia Canyon and Upper Mortandad Canyon (Tributaries to the Rio Grande)

Are any of your discharges directly into any segment of an “impaired” water? ☒ Yes ☐ No

If Yes, identify name of the impaired water (and segment, if applicable): Sandia Canyon (Sigma Canyon to NPDES outfall 001) Assessment Unit NM-9000.A_047 and Mortandad Canyon (within LANL) Assessment Unit NM-9000.A_042

Identify the pollutant(s) causing the impairment: Total Recoverable Aluminum, PCBs, Dissolved Copper, Dissolved Thallium and Adjusted Gross Alpha.

For pollutants identified, which do you have reason to believe will be present in your discharge?

Dissolved Thallium

For pollutants identified, which have a completed TMDL? None

Do you discharge into a receiving water designated as a Tier 2 (or Tier 2.5) water? ☐ Yes ☒ No

Are any of your storm water discharges subject to effluent guidelines? ☐ Yes ☒ No

If Yes, which guidelines apply?

Primary SIC Code or 2-letter Activity Code: 3398, 3399,3441

Identify your applicable sector and subsector: Sectors F (subsector F4) and AA (subsector AA1)

1.2 Facility Contact Information/Responsible Parties

Facility Operator (s):
Name: LANS, LLC
Address: PO BOX 1663 MS K490
City, State, Zip Code: LOS ALAMOS, NM 87545
Telephone Number: (505) 665-3741

SWPPP Contact:
Name: Holly Wheeler
Telephone number: (505) 667-1312
Email address: hbenson@lanl.gov

Facility Contact:
STO-FOD Office: (505) 667-7988
STO Duty Officer #1: (505) 664-3865
STO Duty Officer #2: (505) 664-4444
Fax number: (505) 665-5236

1.3 Storm Water Pollution Prevention Team (PPT)

Staff Names	Individual Responsibilities
STO-FOD Division Leader	Responsible for the operations and maintenance of all aspects of the buildings and facilities listed within this Plan.
STO-FOD DSESH Group Leader	Responsible for the management of all environmental, safety, health, and quality programs for the buildings and facilities listed

	within this Plan. This includes performing oversight and periodic walk downs to ensure implementation of the requirements of the MSGP and this SWPPP including overseeing the assigned duties of other PPT members. The Group Leader is responsible for ensuring that problems noted in inspections are corrected. The Group Leader must also ensure funding is established to cover compliance requirements of the MSGP and this SWPPP.
STO-FOD Deployed Environmental Professional (DEP)	Responsible for the management of all environmental programs and issues for the buildings and facilities listed within this Plan. The DEP is responsible for training, recordkeeping, and SWPPP revision. The DEP will ensure that all PPT, operations site workers (as appropriate), and applicable supervisors receive annual MSGP and SWPPP training. The DEP will ensure that inspection documents and other required MSGP records relative to the SWPPP are managed in accordance with the permit and established document control procedures and that the SWPPP is kept current. The DEP provides technical and regulatory support to Sigma Complex personnel and those at "no exposure" facilities within the STO FOD regarding implementation of the MSGP and this SWPPP. Lastly, the DEP conducts routine inspections and visual assessments as required by the MSGP (if trained and qualified to do so). Identified corrective actions from routine inspection are entered into the EPC-CP Corrective Action Report (CAR) database. The DEP is responsible for tracking and updating the status of corrective actions that cannot be implemented immediately.
STO-FOD Operations/ Maintenance Manager	Responsible for managing the operation and maintenance of all aspects of the buildings and facilities listed within this Plan. The Facility Manager shall provide review and ensure coordination with core personnel and the PPT, as appropriate, when tenants within the STO FOD propose a new process or a new site or operation that may be subject to the MSGP.
Materials Science and Technology-Metallurgy (MST-6) Group Leader	Responsible for managing the operation of all MST-6 staff and equipment. MST-6 is currently managing beryllium and metal fabrication activities inside TA-03-0066. This includes performing oversight and periodic walk downs to ensure implementation of the requirements of the MSGP and this SWPPP at sites subject to the MSGP.
Condensed Matter and Magnet Science (CMMS) Group Leader	Responsible for managing the operation of all CMMS staff and equipment. This includes performing oversight and periodic walk downs to ensure implementation of the requirements of the MSGP and this SWPPP at sites subject to the MSGP.
STO-FOD Waste Management Coordinator Team	Responsible for overseeing waste management activities for the STO-FOD Division and for the TA-03-0066 facility.

EPC-CP MSGP Project Lead	The MSGP Project Lead is responsible for managing and administering the Multi-Sector General Permit Storm Water Program for all industrial facilities within Los Alamos National Laboratory. The MSGP Project Lead advises and provides guidance to facility personnel on NPDES MSGP regulations/requirements. The MSGP Project Lead also acts as the institutional point of contact for all interactions with the regulatory authority (EPA) and supervises personnel implementing storm water monitoring requirements for the facility. EPC-CP conducts the Comprehensive Site Inspection annually. This is usually done by the MSGP Project Lead, but may be conducted by any trained or qualified person within ENV-CP.

1.4 Activities at the Facility

This section provides a general summary of activities occurring within the facilities covered by this Plan, as required in Part 5.2.2 of 2015 MSGP.

1.4.1 Sigma Complex

The Sigma Complex (Building TA-03-0066), the Beryllium Technology Facility (BTF) (TA-03-0141), the Thorium Storage Building (TA-03-0159), the Warehouse (TA-03-0169) and several other small support structures make up the Complex. The facility is enclosed by a security fence and site access is controlled by a security gate opened only with a LANL badge. The Complex is currently used for materials synthesis as well as for processing, characterizing and fabricating metallic and ceramic items, including depleted uranium (DU) items used in the U.S. Department of Energy (DOE) Stockpile Stewardship and Management Program.

The Sigma Complex is classified as a radiological, moderate-hazard facility. TA-3-66 contains laboratories for metallurgical and ceramics projects, offices and administrative spaces, and storage areas for hazardous chemicals (concentrated acidic and caustic solutions) and mechanical ventilation systems. Machining and metal fabrication facilities are located throughout this building.

The BTF is classified as a non-nuclear, moderate-hazard facility. The BTF is 16,000 square-feet (ft^2) in size. Of this total, approximately 13,000 ft^2 of the building has been converted to house a facility for beryllium operations. The remaining 3,000 ft^2 of the facility is used for general metallurgical operations.

The Thorium Storage Building is classified as a radiological, low-hazard facility. This building is located in the southeastern corner of the Complex. The building is made of concrete and has no electrical or water utilities connected to it. The activities located in this part of the Complex are outside storage of low-level radiological waste storage containers, at the northeast corner of the building.

The Warehouse is classified as a radiological, low-hazard facility. The building is used to store radioactive waste and chemicals for the Complex.

1.4.2 TA-3 Metal Fabrication Shops

The Metal Fabrication Shops within STO FOD at TA-03 are located on the western portion of the Complex, outside the security fence.

1.5 General Location Map

The facilities described within this Plan drain storm water to Upper Mortandad and Sandia Canyons. Both of these canyons are tributaries to the Rio Grande, which is located approximately five miles to the east of the facility discharge points. The general location map for this facility can be seen in Appendix A.

1.6 Site Map

Copies of the site maps for the facilities located within the Complex can be found in Appendix B. The following information is contained in these maps:

the site is approximately 9.6 acres;
the location and extent of significant structures and impervious surfaces;
directions of storm water flow;
locations of existing structural control measures;
locations of all receiving waters in the immediate vicinity of the Sigma Complex;
locations of all storm water conveyances including ditches, pipes, and swales;
locations of potential pollutant sources identified under MSGP, Part 5.2.3.2;
no significant spills or leaks have occurred that meet the definition identified in Part 5.2.3.3;
locations of the 2 storm water monitoring points;
locations of storm water inlets and outfalls, and an approximate outline of the areas draining to each outfall;
locations and descriptions of all non-storm water discharges identified under MSGP, Part 2.1.2.9;
locations of the following activities where such activities are exposed to precipitation:
loading/unloading areas;
locations used for the treatment, storage, or disposal of wastes;
processing and storage areas;
immediate access roads used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility;
transfer areas for substances in bulk;
machinery; and
locations and sources of run-on to the site from adjacent property that contains significant quantities of pollutants. There are no run-on sources with significant quantities of pollutants so this is not applicable.

SECTION 2: POTENTIAL POLLUTANT SOURCES

This section of the Plan contains descriptions of areas within the complex where industrial materials or activities are exposed to storm water and from which allowable non-storm water discharges are released. The elements required by MSGP Part 5 are detailed within this section.

2.1 Industrial Activity and Associated Pollutants

In order to meet the required elements of MSGP Parts 5.2.3.1 and 5.2.3.2, the following table contains a list of industrial activities exposed to storm water (e.g., material storage; equipment/vehicle fueling, maintenance, cutting steel beams) and the pollutants or pollutant constituents (e.g., motor oil, fuel, battery acid, and cleaning solvents) associated with these activities. In addition, to these items, the list includes all significant materials that have been handled, treated, stored, or disposed, and that have been or could be exposed to storm water. The use of cover bins, inlets, and good housekeeping are used as best management practices to minimize pollutants in storm water.

The information contained in the following table is divided into three major categories: (1) Activities associated with primary metal facilities operations; (2) Fabricated metal products industry operations; and (3) Significant quantities of materials stored in support of primary and fabricated metal operations.

Industrial Activity	Associated Pollutants	Locations of Activity	Outfall
Primary Metal Facilities Operations			
Ceramic firings[1, 2]	Sulfur and nitrogen oxides	TA-03-0066 (Sigma Building) TA-03-0141 (Beryllium Tech. Fac.)	All outfalls (013-020) affected.
Ceramic sample preparation[1, 2]	Aluminum	TA-03-0066 (Sigma Building) TA-03-0141 (Beryllium Tech. Fac.)	All outfalls (013-020) affected.
Dry & wet ceramic processing[1, 2]	Aluminum	TA-03-0066 (Sigma Building) TA-03-0141 (Beryllium Tech. Fac.)	All outfalls (013-020) affected.
Machining of uranium & graphite[2]	Depleted Uranium Graphite	TA-03-0066 (Sigma Building)	All outfalls (013-020) affected.
Outdoor storage of graphite	Graphite	North end of TA-03-0066 (Sigma Building)	All outfalls (013-020) affected.
Machining of	Beryllium	TA-03-0141 (Beryllium	All outfalls (013-

Industrial Activity	Associated Pollutants	Locations of Activity	Outfall
beryllium[2]		Tech. Fac.)	020) affected.
Fabricated Metal Products Industry Operations			
Electroplating[2]	Copper	TA-03-0066 (Sigma Building)	All outfalls (013-020) affected.
Fabrication of beryllium powder metallurgy components[2]	Beryllium	TA-03-0141 (Beryllium Tech. Fac.)	All outfalls (013-020) affected.
Foundry operations[2]	Aluminum Cast Iron Steel Magnesium Copper Tin Zinc	TA-03-0066 (Sigma Building) TA-03-0141 (Beryllium Tech. Fac.)	All outfalls (013-020) affected.
Machining of Beryllium[2]	Beryllium	TA-03-0141 (Beryllium Tech. Fac.)	All outfalls (013-020) affected.
Machining of depleted uranium & graphite[2]	Depleted Uranium Graphite	TA-03-0066 (Sigma Building)	All outfalls (013-020) affected.
Materials characterization & inorganic chemical synthesis[2]	Depleted Uranium Other radiogenic isotopes, as required by experiments Tin Chromium Nitric Acid Hydrochloric Acid Sulfuric Acid	TA-03-0066 (Sigma Building) TA-03-0141 (Beryllium Tech. Fac.)	All outfalls (013-020) affected.
Mechanical metallurgy[2]	Tin Chromium Experimental Composites Aluminum Steel	TA-03-0066 (Sigma Building) TA-03-0141 (Beryllium Tech. Fac.)	All outfalls (013-020) affected.
Mechanical testing[2]	Experimental Composites Aluminum Beryllium Steel	TA-03-0066 (Sigma Building) TA-03-0141 (Beryllium Tech. Fac.)	All outfalls (013-020) affected.
Microscopy & metallurgy[2]	Experimental Composites Aluminum Beryllium Steel Ceramic Materials	TA-03-0066 (Sigma Building) TA-03-0141 (Beryllium Tech. Fac.)	All outfalls (013-020) affected.

Industrial Activity	Associated Pollutants	Locations of Activity	Outfall
Microwave processing[2]	Experimental Composites Silicon Carbide Aluminum Oxide Ceramic Materials	TA-03-0066 (Sigma Building)	All outfalls (013-020) affected.
Powder metallurgy[2]	Erbium Oxide Ceramic Materials Experimental Composites Beryllium	TA-03-0066 (Sigma Building) TA-03-0141 (Beryllium Tech. Fac.)	All outfalls (013-020) affected.
Powder research & development[2]	Erbium Oxide Ceramic Materials Experimental Composites Beryllium	TA-03-0066 (Sigma Building) TA-03-0141 (Beryllium Tech. Fac.)	All outfalls (013-020) affected.
Sintering operations[2]	Ceramic Materials Experimental Composites Beryllium Graphite	TA-03-0066 (Sigma Building) TA-03-0141 (Beryllium Tech. Fac.)	All outfalls (013-020) affected.
Machining/milling[2]	Iron Tin Steel Aluminum Chromium Zinc Experimental Alloys	TA-03-0066 (Sigma Building) TA-03-0141 (Beryllium Tech. Fac.)	All outfalls (013-020) affected.
Lathe operations[2]	Iron Tin Steel Aluminum Experimental Alloys	TA-03-0066 (Sigma Building) TA-03-0141 (Beryllium Tech. Fac.)	All outfalls (013-020) affected.
Grinding[2]	Iron Tin Steel Aluminum Chromium Zinc Experimental Alloys	TA-03-0066 (Sigma Building) TA-03-0141 (Beryllium Tech. Fac.)[3]	All outfalls (013-020) affected.
Cutting[2]	Iron Tin Steel Aluminum Experimental Alloys	TA-03-0066 (Sigma Building) TA-03-0141 (Beryllium Tech. Fac.)	All outfalls (013-020) affected.

Industrial Activity	Associated Pollutants	Locations of Activity	Outfall
Soldering[2]	Iron Tin Steel Aluminum Experimental Alloys	TA-03-0066 (Sigma Building)	All outfalls (013-020) affected.
Brazing[2]	Iron Tin Steel Aluminum Experimental Alloys	TA-03-0066 (Sigma Building) TA-03-0141 (Beryllium Tech. Fac.)	All outfalls (013-020) affected.
Sanding[2]	Iron Tin Steel Aluminum Chromium Zinc Experimental Alloys	TA-03-0066 (Sigma Building) TA-03-0141 (Beryllium Tech. Fac.)[4]	All outfalls (013-020) affected.
Welding[2]	Iron Tin Steel Aluminum Experimental Alloys	TA-03-0066 (Sigma Building) TA-03-0141 (Beryllium Tech. Fac.)	All outfalls (013-020) affected.
Cleaning (Dry or wet)[2]	Iron Tin Steel Aluminum Rinse Water[2,6,7] Chromium Zinc Experimental Alloys	TA-03-0066 (Sigma Building) TA-03-0141 (Beryllium Tech. Fac.)	All outfalls (013-020) affected.

Significant Stored Materials		
Material	**Location**	**Outfall**
Solid graphite & other non-corrosive metals	TA-03-0066 (Sigma Building)	013, 014, 016, 017, 019
Graphite Dust	TA-03-0066 (Sigma Building)	013, 014, 016, 017, 019
Diesel Fuel[5]	TA-03-0066 (Sigma Building)	013, 014, 016, 017, 019
Carbon Material	TA-03-0066 (Sigma Building)	013, 014, 016, 017, 019
Non-corrosive or Steel Feedstock	TA-03-0066 (Sigma Building)	013, 014, 016, 017, 019
Miscellaneous Equipment	Throughout Complex	013-020

Industrial Activity	Associated Pollutants	Locations of Activity	Outfall
Low-level Radioactive Waste		TA-03-0066 (Sigma Building)	013, 014, 016, 017, 019
Solid Beryllium		TA-03-0141 (Beryllium Tech. Fac.)	015, 020
Oil Storage Area		East of TA-03-0066	013, 014, 016, 017, 019
Beryllium waste		North and east of TA-03-0066	013, 014, 016, 017, 019
Metal for recycle		North and east of TA-03-0066	013, 014, 016, 017, 019
Wood for recycle		East of TA-03-0066	013, 014, 016, 017, 019

Notes:

1) Ceramic materials fabricated at the Complex are often experimental and one-of-a-kind materials. A separate NEPA review is conducted for these operations to determine environmental impacts.
2) Activity takes place indoors.
3) Activity involves grinding with hand-tools only.
4) Activity involves polishing of fabricated parts via light sanding.
5) Current fuel and oil inventories have not exceeded 1,320 gallons of aggregate storage, which would trigger the need to write and implement a Spill Prevention, Control, and Countermeasure Plan in accordance with 40CFR112. If in the course of routine, quarterly, and annual site inspections, the inspector determines that this limit has been exceeded, the Complex will have the opportunity to manage its inventory to a level below this volume or will be required to write and implement an SPCC Plan. These drains are routed to the Radioactive Liquid Waste Treatment Facility via the Radioactive Liquid Waste Line.
6) Whenever possible, environmentally friendly cleaners and solvents are used.

2.2 Spills and Leaks

MSGP Part 5.2.3.3 requires that this Plan contain a description of where potential spills and leaks could occur at the Complex that could contribute pollutants to your storm water discharge, and specify which outfalls are likely to be affected by such spills and leaks.

The following table lists a description of locations at the Complex where potential spills and leaks could occur. The information was developed by walking through the complex and evaluating storage areas and utility lines. There is still the potential for spills and leaks to occur at other locations in the Complex; however, these areas were evaluated as having the greatest potential for spills and leaks to occur in their vicinity. Spills that do occur are to be cleaned up immediately.

Areas of Site Where Potential Spills/Leaks Could Occur	
Location	**Outfalls**
Utility lines (water, sanitary sewage, unauthorized cooling tower discharge, steam condensate) located throughout the facility. Oils that could leak from metal bins.	All

Oil storage area located to the south of TA-03-0169	Southeast outfall discharging to Mortandad Canyon (015)
Diesel storage on Loading Dock #1at TA-03-0066 Used Oil Storage Area at Dock #2 at TA-03-0066	North outfalls discharging to Sandia Canyon (019)
Waste oil storage area located to the north of the loading dock located to the east of TA-03-1698	Northeast outfall discharging to a swale, detention pond, then to Sandia Canyon

MSGP Part 5.2.3.3 requires that this Plan list a description of significant spills and leaks in the past 3 years of oil or toxic or hazardous pollutants that actually occurred at exposed areas, or that drained to a storm water conveyance. Please note that
are not limited to, releases of oil or hazardous substances in excess of quantities that are reportable under Clean Water Act (CWA) Section 311 (see 40 CFR 110.6 and 40 CFR 117.21) or Section 102 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 USC §9602.

The following table lists a description of past spills and leaks that have occurred at the Complex. The information was obtained via a database maintained by LANL's EPC-CP Group. Some of the information does not contain a great deal of detail; however, in the interest of meeting the reporting requirements outlined in Part 5.2.3.3 of the 2015 MSGP, the information is presented below. Appendix C contains a Spill Occurrence Log that will be used to document any future spills within the Complex. All unauthorized non-storm water discharges (those not identified in Part 1.1.3.1 of the MSGP) and spills are also to be included as a corrective action in the EPC-CP Corrective Action Reporting (CAR) database.

	Description of Past Spills/Leaks		
Date	**Description**	**Outfalls**	**Corrective Actions Taken**
05-13-2005	A tube failed on a chilled water unit inside TA-03-0141. Approximately 200 gallons of treated chilled water flowed out of the equipment room and onto the asphalt surface outside the building. The chiller was secured and the tubing was replaced. The room and area outside the building was roped off until radiological swipes could be taken. The swipes were negative for any radiological constituents.	None	Chiller unit was shut down to stop the release. The discharged water evaporated.
03-11-2008	A buried steam condensate line began leaking, which led to	Southeast outfall discharging to	Repairs were completed on the

	approximately 200 gallons of steam condensate being released to the surface. The steam condensate flowed onto an asphalt surface and into a storm water drainage system before entering Upper Mortandad watercourse. The water flowed over Solid Waste Management Units (SWMUs) 03-0405(h) and 03-049(a) before entering the watercourse. No erosive impacts to the SWMUs or the watercourse were noted.	Mortandad Canyon	steam condensate line to stop the discharge.
10-27-2009	***Small amount of diesel spilled from a Gov't vehicle while at the guard gate.***	***None***	
3-26-2010	***A small amount of oil spilled onto the ground while moving a metal recycle bin. Oil was tested and was non-PCB.***	***None***	***Absorbent was applied to the impacted area to remediate the release.***
8-4-2010	***Cooling Tower overflow of approx...30 gals.***	***None***	***Flow to the cooling tower was turned off to stop the overflow/release.***
4-17-2014	***Cooling Tower make up water basin had a very small leak. Less than a gallon.***	***None***	***Upon discovery of the release a work ticket was created to fix the leak.***
1-7-2015	***During a PM performed by an off-site contractor The STO F.R. observed the contractor rinsing a set of cooling coils. The water,***	***Southeast outfall discharging to Mortandad Canyon***	***Work was paused upon discovery of the release. The***

	chemical mix entered a storm drain. Release was on asphalt, no erosion and it did not flow over a PRS.		***residual discharge material was removed.***

2.3 Non-Storm Water Discharges Documentation

Date of evaluation: 8-25-2015
Description of the evaluation criteria used: Visual inspection and walkdown which involved visually sighting and evaluating potential sources of non-storm water discharges.
List of the outfalls or onsite drainage points that were directly observed during the evaluation: All site drainage points were observed (outfalls 013-020).
Different types of non-storm water discharge(s) and source locations: There were no non-storm water discharges observed during the inspection.
Action(s) taken, such as a list of control measures used to eliminate unauthorized discharge(s), if any were identified. For example, a floor drain was sealed, a sink drain was re-routed to sanitary, or an NPDES permit application was submitted for an unauthorized cooling water discharge: None.

2.4 Sampling Data Summary

The current year MSGP sampling and analysis plan is entered into EIM. It then generates the chain of custody forms and retains validated data once returned from an off-site laboratory. SWTS is used to generate the MSGP Discharge Monitoring Reports by pulling the analytical data from EIM to populate the MDMRs. EPC-CP provided EIM download of data on 8/27/2015. No exceedances occurred at Sigma while monitoring occurred under the old 2008 MSGP. The monitoring data for Sigma (labeled TA-03-0141 and Sandia Tributary below Sigma) can be seen in Appendix K. .

CY 2016

Monitored outfall 018 was permanently plugged during site control measures installation in December 2016. Former substantially identical outfall 017 was re-assigned as the new monitored outfall effective at the beginning of the 2017 calendar year. As outfall 017 was an SIO during 2016, no monitoring data are available.

Monitored Outfall	Discontinue Monitoring		Continue Monitoring				
	Average of four monitoring values did not exceed benchmark; quarterly monitoring discontinued per Section 6.2.1.2	Impaired water constituent was not detected in storm water discharge; annual monitoring discontinued per Section 6.2.4.1.	Fewer than four quarterly samples have been collected in current sequence. Average concentration is not mathematically certain to exceed benchmark.	Average concentration mathematically certain to exceed benchmark.	Average of four quarterly monitoring values exceeded benchmark.	Impaired water constituent was detected, but did not exceed New Mexico Water Quality criterion.	Impaired water constituent exceeded New Mexico Water Quality criterion.
020	—	Total Aroclors; Tl, Adjusted Gross Alpha	Al, Cu , Fe, NO3+NO2-N	Zn	—	Al, Cu	—

CY 2017

Monitored Outfall	Discontinue Monitoring		Continue Monitoring				
	Average of four monitoring values did not exceed	Impaired water constituent was not detected in storm	Fewer than four quarterly samples have been collected in	Average concentration mathematically	Average of four quarterly monitoring	Impaired water constituent was detected, but did not	Impaired water constituent exceeded New

	benchmark; quarterly monitoring discontinued per Section 6.2.1.2	water discharge; annual monitoring discontinued per Section 6.2.4.1.	current sequence. Average concentration is not mathematically certain to exceed benchmark.	certain to exceed benchmark.	values exceeded benchmark.	exceed New Mexico Water Quality criterion.	Mexico Water Quality criterion.
017	NO3+NO2-N	Tl	—	Al, Fe, Cu	Zn	Total Aroclors, Adjusted Gross Alpha	Al, Cu
020	Al, Cu, Fe, NO3+NO2-N	—	Zn	—	—	Al	Cu

SECTION 3: STORM WATER CONTROL MEASURES

3.1 Minimize Exposure

To minimize exposure of industrial activities in precipitation events the Complex utilizes covers for scrap, waste, recycle-able containers and roll-off bins and are typically stored throughout the Complex. Along with this all dumpster lids are kept closed when not in use. However, it is not possible to store all the materials, related to Complex industrial activities that have the potential to be released with storm water discharges undercover. The table shown below lists materials located at the Complex that have the potential to be released with storm water discharges, and

the method(s) used to minimize the exposure of these materials to storm water. In the event of a spill or leak (section 3.4) dry methods are used to clean up these promptly.

Location	Activity	Control Measure
TA-03-0141 & 03-0066	Storage of low-level radioactive waste	Material is stored in sealed containers and locked low-level waste burial boxes and transportainers.
TA-03-0066	Loading and unloading materials	Activity is conducted in covered loading dock attached to certain docks surrounding the building.
TA-03-0141	Storage of beryllium waste	Material is stored inside Building TA-03-0317 and transportainers, which are closed and locked.

3.2 Good Housekeeping

Operations personnel at the Complex perform weekly inspections/rounds at the facility which are focused toward keeping the site clean, spills prevention and detection, and identification of potential compliance issues. Maintenance of the containment structures and storm water conveyances is essential to good housekeeping. Storm water controls are cleaned as necessary to prevent clogging and promote proper operation. Containers susceptible to spillage or leakage are plainly labeled to encourage proper handling and facilitate rapid response if spills or leaks occur. If a spill is witnessed, call the Emergency Response Group (SEO-1) Office at 667-6211. If fire or an explosion is occurring, or if the potential for such exists, the situation must be reported by dialing 911 from a non-cellular phone or by activating a fire pull box. In the event of a spill, SEO-1 will determine appropriate cleanup procedures and will notify the individuals or organizations responsible for completing regulatory reporting requirements. The DEP or other FOD personnel will have to complete a spill report and submit it the EPC-CP. The spill report will be handled according to EPC-CP-007, *Spill Investigations* (see Appendix J), and may require external agency notification, depending on the nature of the spilled material and the location of the release. All incidents shall be reported and evaluated in accordance with P322-3, *Performance Improvement from Abnormal Events* (see Appendix J).

3.3 Maintenance

The PF-DO Representative and or the STO Operations manager must regularly inspect, test, and repair all industrial equipment and systems to avoid situations that may result in leaks, spills, and other releases of pollutants in stormwater that is discharged to receiving waters. The facility must maintain all control measures that are used to achieve the effluent limits required by this permit in effective operating condition. Nonstructural control measures must also be diligently maintained (e.g., spill response supplies available, personnel appropriately trained). If the facility

finds that their controls need to be replaced or repaired, they must make the necessary repairs or modifications as expeditiously as practicable. Documentation of Maintenance and Repairs of Control Measures (BMPs) is entered in to the EPC-CP MSGP Corrective Action Reporting (CAR) database.

The following items are checked daily and again during the monthly inspections:

- Ensure that facility grounds are in an orderly condition
- Ensure that stormwater structures are free of debris, floating material or other obstructions
- Identify maintenance needs for equipment or stormwater BMPs
- Identify signs of new erosion
- Identify signs of leaks, spills, or other releases

If a problem is found that cannot be immediately remedied, the inspection and the response are documented in the EPC-CP Corrective Action Reporting database and an expected completion date is identified.

At the Complex, preventive maintenance is performed on all vehicles on a six-month schedule outside the Complex, subject to GSA Fleet requirements. Facilities personnel perform weekly facility rounds at the Complex. These rounds would identify any facility maintenance issues associated with the structural BMPs on site. Also, the inspections of the facility by the SWPP Team identifies corrective measures necessary for maintaining the structural storm water controls in proper operating condition and maintaining working stormwater drains. Baghouses are inspected and maintained at least quarterly to prevent escape of dust from the system and immediately removing any accumulated dust at the base of the exterior baghouse. With respect to machining operations at the Complex, all operations are controlled through general housekeeping and routine custodial maintenance.

3.4 Spill Prevention and Response

At present, the Complex does not require a Spill Prevention, Control and Countermeasure (SPCC) Plan as outlined in 40CFR112. The Complex manages its bulk oil storage to an aggregate level less than 1,320 gallons. If the inventory within the Complex rises above this level, the inventory will be required to be decreased or an SPCC Plan will be written for the Complex. Spill kits are located throughout the Complex, as detailed in the Facility Emergency Plan (see Appendix J).

The application of good housekeeping procedures (see Appendix J) and the regular weekly visual inspections minimize the probability of a spill or release. Also, LANL's institutional procedures P409 Waste Management and P101-14 Chemical Management (see Appendix J) require labeling of wastes, used oils, and chemicals stored on-site to facilitate the proper handling and response if spills or leaks occur. P409 also identifies inspection requirements or waste containers.

Operational controls are implemented to minimize the possibility of any accidents resulting in spills or releases off site. In general, the approach to spill clean-up of a known substance is to first contain the spill by securing the spill source and deploying spill containment materials. If secondary containment is being provided (e.g. secondary containment pallets for liquids) it will contain the spill. Small spills are responded to by the operator involved in the spill or by the operator located in the vicinity. For incidental releases, absorbents are used to pick-up free liquids and the contaminated absorbents are properly disposed. Standard procedures for spill containment and clean up include the use of spill control kits, sorbent pillows, socks, sheets, and granules. Clean-up residues are managed as appropriate, and as determined by the facility waste management coordinator and EPC-CP personnel depending on the material spilled. Larger spills require that EPC-CP personnel be contacted to respond to the spill, securing the spill area and contacting LANL's SEO-1 Office at 667-6211.

The LANL SEO-1 Office has been appointed by the Laboratory Director as the organization responsible for emergency management at the Laboratory. The LANL SEO-1 Office will be notified if a spill cannot be easily controlled with the materials on hand, threatens to escape the facility or enter the environment, additional resources are needed, an unidentified hazard exists, injuries have occurred, fire protection is needed, or if operational or facility personnel are not adequately trained in the use of spill control equipment or are not confident in their ability to carry out spill response activities. They can be reached at 667-6211. If a fire or explosion is present, or if the potential for such exists, the situation must be reported by dialing 911 from a non-cellular phone or by activating a fire pull box. 911 should also be dialed in the event of an employee injury. In the event of a spill, the SEO-1 Office will notify the individuals or organizations responsible for the completion of spill reports or the fulfillment of regulatory reporting requirements. Spills will be managed in accordance with EPC-CP-007, *Spill Investigations* (see Appendix J).

The completion of a spill report is required in the event of a spill. The determination of whether a spill is reportable will be made by the SEO-1 Office or EPC-CP in accordance with Laboratory and U.S. Department of Energy (DOE) policies, and federal and state regulatory reporting requirements and EPC-DO-QP-101.3, *Environmental Reporting Requirements for Releases or Events* (see Appendix J). In addition to fulfilling reporting requirements, spill reports assist user Groups and Laboratory management in assessing the cause of a spill and in executing corrective action.

Two types of spill reporting are required at the Laboratory: internal spill record keeping and external agency notification. Copies of internal spill reports will be kept by the SWPPP Team member, EPC-CP and the responsible organization. External agency notification (as determined by EPC-CP personnel) may consist of verbal or written notification to the National Response Center, EPA Region VI, or the New Mexico Environment Department. All incidents shall be reported and evaluated in accordance with P322-3, *Performance Improvement from Abnormal Events* (see Appendix J).

The Complex utilizes the controls listed in the table below to aid in spill prevention and response.

Location	Activity	Control Measure
TA-03-0066	Storage of diesel drums	Drums are stored in secondary containment at Dock #1 of the building.
	Used Oil Storage Area	Drums are stored in secondary containment at Dock #2
TA-03-0034 & 03-1698	Storage of drums of machinery lubricant	Drums are stored within a standardized secondary containment unit at both buildings.
TA-03-0034	Spill response	Absorbent material is located outside the metal shop door in a covered metal box.

3.5 Erosion and Sediment Controls

The areas surrounding operations at the Complex, including material and waste storage areas, are covered with asphalt. Along the southern fence border, to the southeast of Building TA-03-0141 (BTF), there is a large area covered with base course and riprap to slow the storm water, as it flows off of the asphalt. Water diversion channels have been constructed around the Complex buildings to direct storm water runoff away from any area that may contain pollutants. The areas surrounding the Complex buildings are paved with asphalt, thereby minimizing the potential for erosion from sites within the Complex. Holding ponds to the north end of the Complex help with velocity dissipation and sediment control. There are occasions that activities around the Complex grounds do cause soil to be exposed (i.e. repair of utility lines); however, once these activities cease, the exposed soil is covered with asphalt or compacted base course.

3.6 Management of Runoff

Most of the storm water drainage from the buildings at the Complex is directed underground to off-site drainage areas. These areas are covered with native vegetation and grass and do not pose any potential threat to the environment. Drainage that comes off the south end of the facility and drainage that occurs east of TA-3-141 where the sampler is does not go below ground. A berm around a portion of the Sigma Complex is used to prevent runoff of contaminated flows in this area. Holding ponds to the north end of the Complex help with velocity dissipation and sediment control.

3.7 Salt Storage Piles or Piles Containing Salt

There are no areas within the Complex that either cover or enclose salt storage piles or piles containing salt. The roads and parking lots surrounding the Complex are treated with salt during snow events in the winter. However, the salting operations are conducted by Logistics Division,

Heavy Equipment Roads and Grounds, and the salt for these activities is stored at the LANL Roads & Grounds Facility at TA-60. The LANL Roads & Grounds Facility has a separate SWPPP to comply with 2015 MSGP. Please refer to that document for the controls used by that facility. Also, please note that there are small containers (5 – 10 gallon) containers of de-icing salt staged throughout the Complex grounds during the winter months; these smaller amounts of salt are used for spot de-icing on sidewalks and do not require storm water controls as defined in Part 2.1.2.7 of 2015 MSGP.

3.8 MSGP Sector-Specific Non-Numeric Effluent Limits

According to Part 2.1.2. of the 2015 MSGP, this Plan must describe controls and procedures to be used at the regulated facility to comply with sector-specific requirements that apply in Part 8 of the MSGP. Since the Complex involves operations and activities that fall under both Sector F – Primary Metals and Sector AA – Metal Fabrication, both sectors will be addressed in this section of the Plan.

3.8.1 Sector F Additional Technology-Based Effluent Limits

3.8.1.1 All Areas - Good Housekeeping Measures

The Complex's Good Housekeeping Program involves the periodic cleaning of all impervious areas of the facility where particulate matter, dust or debris may accumulate. Of particular importance to this program are the loading, unloading, storage, handling and processing areas throughout the Complex, which include the eight covered loading docks at TA-03-0066 (Sigma Building), the Graphite Dust Waste Storage Area to the north of TA-03-0066, the Beryllium Waste Storage Areas to the north of TA-03-0141 (BTF), the Oil Storage Area to the west of TA-03-0141, and the waste storage areas near TA-03-0066 and 0141. In addition to the periodic sweeping of the impervious surfaces near these areas, these areas are inspected on a weekly basis by the STO-FOD Operations Manager. Periodic inspections of waste management areas are conducted by the Waste Management Coordinator assigned to the Complex. The loading docks are high-visibility areas and are, by convention, cleaned up after each loading and unloading operation. The most troublesome area, with respect to the Good Housekeeping Program, is the Graphite Dust Waste Storage Area to the north of TA-03-0066; the waste containers in this area are covered at all times, and the area is swept as often as possible. . For additional information relative to spill prevention and response procedures refer to section 3.4 of this SWPPP.

3.8.2 Sector AA Additional Technology-Based Effluent Limits

3.8.2.1 Raw Steel Handling and Storage Areas

All scrap metals, fines, and iron dust is captured and contained in covered metal bins and sent to LANL's Material Recycling Facility to be stored and shipped out for recycling. All deliveries of raw materials go directly in the building therefore they are not stored outside and do not come in contact with storm water.

3.8.2.2 Paints and Painting Equipment

Painting activities and the storage of paints and painting equipment does not take place outdoors at the Complex. If fabricated machinery requires a coat of paint, it is typically taken to TA-35-0124 for indoor spray painting under a fume hood. TA-35-0124 is one of three machine shops located at TA-35 that conducts all operations indoors.

3.8.2.3 Metal Fabrication Areas

All metal fabrication activities take place indoors in clean, dry and orderly areas. DOE safety and industrial hygiene requirements help minimize the potential for pollutants to be exposed to storm water runoff.

3.8.2.4 Lubricating Oil and Hydraulic Fluid Operations

The potential for storm water contamination resulting from lubricating and hydraulic fluid operations at the Complex is minimized by storing all bulk material in secondary containment units at the locations shown in the site map contained in Appendix B. The graphite collection system and graphite storage area are located on the north side of TA-03-0066. Dust generation and minimization can be seen in Section 3.12 of this SWPPP.

3.9 Employee Training

Employee training is essential for effective implementation and maintenance of this SWPPP. All employees who work in areas where industrial material or activities are exposed to storm water, or who are responsible for implementing activities necessary to meet the conditions of the MSGP, including 1) Personnel who are responsible for the design, installation, maintenance and/or repair of controls (including pollution prevention measures); (2) Personnel responsible for the storage and handling of chemicals and materials that could become contaminants in storm water discharges; (3) Personnel who are responsible for conducting and documenting monitoring and inspections; and (4) Personnel who are responsible for taking and documenting corrective actions. Training will cover (1)An overview of what is in the SWPPP; (2) Spill response procedures, good housekeeping, maintenance requirements, and material management practices; (3) The location of all controls on the site required by this permit and how they are to be maintained; (4) The proper procedures to follow with respect to the permit's pollution prevention requirements; and (5) When and how to conduct inspections, record applicable findings, and take corrective actions. Personnel are required to be trained to EPC-CP-007, Spill Investigations (Appendix J).

All STO-FOD operational on-site workers, managers, and supervisors at the Complex as well as SWPPP team members will annually receive storm water pollution prevention training. This training is recorded in LANL's UTrain training database. In addition, the management of tenant groups within the Complex will be asked to develop a list of workers, supervisors and management that should take this training, due to their activities in either Primary Metal Operations or Metal Fabrication.

3.10 Non-Storm Water Discharges

There were no unauthorized non-storm water discharges identified during the site evaluation (See Section 2.3). However, please note that the potential for unauthorized cooling tower discharges and discharges from broken utility lines was identified as a potential pollutant source in Section 2.2 – Spills and Leaks.

The following are the non-storm water discharges authorized under this permit:

- Discharges from emergency/unplanned fire-fighting activities;
- Fire hydrant flushings;
- Potable water, including water line flushings;
- Uncontaminated condensate from air conditioners, coolers/chillers, and other compressors and from the outside storage of refrigerated gases or liquids;
- Irrigation drainage;
- Landscape watering provided all pesticides, herbicides, and fertilizers have been applied in accordance with the approved labeling;
- Pavement wash waters where no detergents or hazardous cleaning products are used (e.g., bleach, hydrofluoric acid, muriatic acid, sodium hydroxide, nonylphenols), and the wash waters do not come into contact with oil and grease deposits, sources of pollutants associated with industrial activities, or any other toxic or hazardous materials, unless residues are first cleaned up using dry clean-up methods (e.g., applying absorbent materials and sweeping, using hydrophobic mops/rags) and you have implemented appropriate control measures to minimize discharges of mobilized solids and other pollutants (e.g., filtration, detention; settlement);
- Routine external building washdown/power wash water that does not use detergents or hazardous cleaning products (e.g., those containing bleach, hydrofluoric acid, muriatic acid, sodium hydroxide, nonylphenols);
- Uncontaminated ground water or spring water
- Foundation or footing drains where flows are not contaminated with process materials; and
- Incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of your facility , but not intentional discharges from the cooling tower (e.g., “piped” cooling tower blowdown: drains).

3.11 Waste, Garbage and Floatable Debris

STO-FOD operations and facility personnel perform weekly inspections/rounds to identify housekeeping issues (including waste items). Personnel remove all waste items and dispose of them in an appropriate manner. Portions of the Complex also have fences that surround portions of the facility where trash or other wind carried waste items can be caught prior to entering any storm- water conveyance.

3.12 Dust Generation and Vehicle Tracking of Industrial Materials

The Complex stores all scrap, waste and recyclable materials in covered bins or roll-offs. Bulk materials staging and storage is kept indoors, whenever possible. Industrial activities associated with Sectors F and AA are conducted indoors. Outdoor storage areas and associated controls have been summarized in Sections 3.1 and 3.4 of this Plan.

Dust generation is minimized by the controls shown in the following table:

Location	Activity	Control Measure
TA-03-0066	Process Activities	Graphite dust generated by process activities is collected via a permanently installed dust collection system to minimize the release of dust through the building's exhaust stacks.
TA-03-0066 & 0141	Dust/waste Storage	Graphite dust is stored in sealed 55-gallon drums, with the drums stored in secondary containment units.
TA-03-0066	Process Activities	Filters on the dust collection system are replaced every two to five years, depending upon the amount of generated dust to ensure the removal system is working at maximum efficiency.
TA-03-0141	Process Activities	Beryllium waste generated by process activities is collected via a permanently installed waste collection system to minimize the release of waste through the Building's cyclone stacks.
Entire Complex	Vehicle Operation	The Complex grounds are paved with asphalt, which minimizes the generation of dust associated with facility operations.

SECTION 4: SCHEDULES AND PROCEDURES FOR MONITORING

4.1 Stormwater Monitoring

Analytical monitoring comprised of quarterly benchmark and annual impaired waters monitoring are performed on storm water discharges from the site. Monitoring events are from storm events that result in an actual discharge from the site and that follow the preceding measurable storm event by at least 72 hours (3 days). For runoff from snowmelt, the monitoring will be performed at a time when a measurable discharge from the site occurs.

Monitoring is conducted according to test procedures approved under 40 CFR Part 136. Runoff samples are collected by taking a minimum of one grab sample from a discharge, collected within the first 30 minutes of a measurable storm event. If it is not possible to collect the sample within the first 30 minutes of a measurable storm event, the sample will be collected as soon as practicable after the first 30 minutes and documentation will be kept with the SWPPP explaining why it was not possible to take samples within the first 30 minutes.

Samples are retrieved in accordance with *Inspecting Storm Water Runoff Samplers and Retrieving Samples for the MSGP,* EPC-CP-QP-047 (see Appendix J). Stormwater samples are processed in accordance with *Processing MSGP Storm Water Samples,* EPC-CP-QP-048 (see Appendix J). All stormwater monitoring is conducted in accordance with the *Quality Assurance Project Plan for the Storm Water Multi-Sector General Permit for Industrial Activities Program,* EPC-CP-QAPP-MSGP (see Appendix J) and the current year MSGP *Sampling and Analysis Plan*.

4.2 Monitoring Schedule

For this permit term, monitoring will begin in the first full quarter following October 1, 2015,. LANL is located in a high elevation, semi-arid climate where the majority of rainfall occurs during a period between July and September. Freezing conditions that would prevent runoff from occurring for extended periods may also occur during the winter months. Because of these conditions, monitoring events are distributed between April 1, and November 30 of each calendar year, during seasons when precipitation occurs, or when snowmelt results in a measurable discharge from the site (also see quarterly monitoring schedule below). If adverse weather conditions prevent the collection of samples according to the relevant monitoring schedule, a substitute sample will be collected during the next qualifying storm event or as soon as practical.

Benchmark monitoring will continue on a quarterly basis at least once in each of the following 2-month intervals:
April 1 – May 31;
June 1 – July 31;

August 1 – September 30; and
October 1 – November 30.

Impaired waters monitoring is performed on an annual basis with a sample collected in the period between April 1 and November 30.

4.3 Substantially identical Outfalls

This facility utilizes substantially identical outfalls for monitoring events. The outfalls have been identified as substantially identical based on common potential pollutant sources, drainage areas, activities within the drainage areas, and general site topography and characteristics. Required information supporting this outfall determination is as follows:

Location of the substantially identical outfalls: See the SWPPP Site Map. These are labeled as outfalls 013-019. Outfall 020 is not considered a substantially identical outfall because it collects water largely from a roof drain.
Description of the general industrial activities conducted in the drainage area of each outfall: See Section 2 of the SWPPP
Description of the control measures implemented in the drainage area of each outfall: See Section 3 of the SWPPP
Description of the exposed materials located in the drainage area of each outfall that are likely to be significant contributors of pollutants to storm water discharges: See Section 2 of the SWPPP
Estimate of the runoff coefficient of the drainage areas (low=under 40%; medium=40 to 65%; high =above 65%): High
Why the outfalls are expected to discharge substantially identical effluents: Similar activities, potential pollutant sources, and site characteristics.
** Monitored outfall 018 was permanently plugged during site control measures installation in December 2016. Former substantially identical outfall 017 was re-assigned as the new monitored outfall effective at the beginning of the 2017 calendar year.

Permitted Facility: TA-3-66 Sigma Complex

Section 4.4 Monitoring Requirements

Outfalls: 017 (3-Sigma-6), 020 (3-Sigma-8)

Former monitored outfall 018 was permanently plugged during site control measures installation in December 2016. Former substantially identical outfall 017 was re-assigned as the new monitored outfall effective at the beginning of the 2017 calendar year.

Outfall	Monitoring Requirement	Industrial Sector	Assessment Unit	Analyte	Filtered/ Unfiltered	Regulatory Standard	Units	Regulatory Standard Type	Regulatory Standard Reference
017	Impaired Waters	-	NM-9000.A_047	Total Aroclors	UF	0.2	ug/L	2007 EPA R6 MQL	20.6.4.900 NMAC Subpart J/ 20.6.4.12 NMAC Subpart E
	Impaired Waters/ Quarterly Benchmark	AA	NM-9000.A_047	Al	F10u[1]	681	ug/L	NM 2010 Aquatic Chronic 60 mg	20.6.4.900 NMAC Subpart I
	Impaired Waters/ Quarterly Benchmark	AA/F	NM-9000.A_047	Cu	F[2]	6	ug/L	NM 2010 Aquatic Chronic 60 mg	20.6.4.900 NMAC Subpart I
	Impaired Waters	-	NM-9000.A_047	Adjusted Gross Alpha	UF	15	pCi/L	NM 2010 Livestock Watering	20.6.4.900 NMAC Subpart J
	Impaired Waters	-	NM-9000.A_047	Tl	F	0.47	ug/L	NM 2010 HH Persistent	20.6.4.900 NMAC Subpart J
	Quarterly Benchmark	AA	-	Fe	UF	1000	ug/L	MSGP QBM 2015	NMR053195 Sect 9.6.2.1
	Quarterly Benchmark	AA	-	NO3+NO2-N	UF	0.68	mg/L	MSGP QBM 2015	NMR053195 Sect 9.6.2.1
	Quarterly Benchmark	AA/F	-	Zn	F	76	ug/L	NM 2010 Aquatic Chronic 60 mg	20.6.4.900 NMAC Subpart I
020	Impaired Waters	-	NM-9000.A_047	Total Aroclors	UF	0.2	ug/L	2007 EPA R6 MQL	20.6.4.900 NMAC Subpart J/ 20.6.4.12 NMAC Subpart E
	Impaired Waters/ Quarterly Benchmark	AA	NM-9000.A_047	Al	F10u[1]	681	ug/L	NM 2010 Aquatic Chronic 60 mg	20.6.4.900 NMAC Subpart I
	Impaired Waters/ Quarterly Benchmark	AA/F	NM-9000.A_047	Cu	F[2]	6	ug/L	NM 2010 Aquatic Chronic 60 mg	20.6.4.900 NMAC Subpart I
	Impaired Waters	-	NM-9000.A_047	Adjusted Gross Alpha	UF	15	pCi/L	NM 2010 Livestock Watering	20.6.4.900 NMAC Subpart J
	Impaired Waters	-	NM-9000.A_047	Tl	F	0.47	ug/L	NM 2010 HH Persistent	20.6.4.900 NMAC Subpart J

	Quarterly Benchmark	AA	-	Fe	UF	1000	ug/L	MSGP QBM 2015	NMR053195 Sect 9.6.2.1
	Quarterly Benchmark	AA	-	NO3+NO2-N	UF	0.68	mg/L	MSGP QBM 2015	NMR053195 Sect 9.6.2.1
	Quarterly Benchmark	AA/F	-	Zn	F	76	ug/L	NM 2010 Aquatic Chronic 60 mg	20.6.4.900 NMAC Subpart I

[1]F10u - 10 µm filter

[2]F - 0.45 µm filter

4.5 Monitoring Results

If the average of the 4 monitoring values for any parameter exceeds the benchmark, or if prior to completion of 4 quarterly samples, an exceedance of the 4 quarter average is mathematically certain, the Pollution Prevention Team and ENV-CP personnel will:

Review the selection, design, installation, and implementation of your control measures to determine if modifications are necessary to meet the effluent limits,
Implement the necessary modifications, and
Continue quarterly monitoring until 4 additional quarters of monitoring have been completed for which the average does not exceed the benchmark.

If the average of the 4 monitoring values for any parameter does not exceed the benchmark, monitoring for that particular parameter will no longer be performed.

4.6 Recordkeeping

For each monitoring event, except snowmelt monitoring, the following information will be recorded and maintained through field data sheets, LANL database systems, and Discharge Monitoring Records:

The date, exact place, and time of sampling or measurements;
The date and duration (in hours) of the rainfall event
Rainfall total (in inches) for that rainfall event
Time (in days) since the previous measurable storm event
The individual(s) who performed the sampling or measurements;
The date(s) analyses were performed
The individual(s) who performed the analyses;
The analytical techniques or methods used; and
The results of such analyses.

For snowmelt monitoring, all information except rainfall event durations, totals, and time since previous event will be included. Additionally, all records of monitoring information, including all calibration and maintenance records will be maintained for a minimum period of at least three years from the date the permit expires.

SECTION 5: INSPECTIONS AND CORRECTIVE ACTIONS

5.1 Routine Facility Inspection Procedures

Routine inspections will be conducted and documented quarterly (Jan-March, April-June, July-September, October-December) by a qualified member of the SWPP Team (typically the Deployed Environmental Professional or EPC-CP Water Quality SME). Inspections will evaluate all monitoring data and quarterly visual assessment results in preparation for the inspection. The procedure used is EPC-CP-QP-022, *MSGP Stormwater Corrective Actions* (see Appendix J).

One routine inspection will be conducted during an active storm water discharge. Routine inspections will evaluate the following, at a minimum:

Inspection date and time;

The name(s) and signature(s) of the inspector(s);

Weather information:

A description of any discharge occurring at the time of inspection;

Any previously unidentified discharges from and/or pollutants at the site;

Any evidence of, or the potential for, pollutants entering the drainage system;

Observations regarding the physical condition and around the outfalls, including any flow dissipation devices, and evidence of pollutants in discharges and/or the receiving water;

Any control measures needing maintenance, repairs, or replacement;

Any additional control measures needed to comply with the permit requirements;

Any incidence or noncompliance; and

A statement signed and certified in accordance with Appendix B, Subsection 11 of the 2015 MSGP.

With respect to Sector F facilities, the 2015 MSGP states that inspections must address all potential sources of pollutants, including air pollution control equipment (e.g., bag houses, electrostatic precipitators, scrubbers, cyclones) must be inspected for signs of degradation(e.g., leaks, corrosion, or improper operation) that could limit their efficiency and lead to excessive emissions. Air flow should be monitored at inlets and outlets to check for leaks or blockage in ducts. Also the 2015 MSGP requires Sector F facility inspections to examine all process and material handling equipment (e.g., cranes, conveyors and vehicles) for leaks, drips, or the potential loss of material; and material storage areas (e.g., piles, bins, or hoppers for storing coke, coal, scrap, or slag, as well as chemicals stored in tanks and drums) for signs of material losses due to wind or storm water runoff.

With respect to Sector AA facilities, the 2015 MSGP states that inspections must, at a minimum, include the following areas in all inspections: raw metal storage areas, finished product storage areas, material and chemical storage areas, spent solvents and chemical storage areas, recycling

areas, loading and unloading areas, equipment storage areas, paint areas, drainage from roof and vehicle fueling and maintenance areas.

Specific areas of the facility to be inspected include:

Note – air pollution control equipment in Buildings TA-03-0066 and 03-0141 will not be inspected during inspections covered by this plan. The stacks and cyclone separators are inspected and maintained on weekly, monthly, and quarterly schedules by qualified technicians and engineers. Rather than inspecting these systems during storm water inspections, the SWPP Plan inspector will review maintenance records, which document both preventive and corrective maintenance actions. Maintenance records for the TA-03-0066 dust collection system; filter replacement records for the dust control system in TA-03-0066; maintenance records for the permanent beryllium waste system in TA-03-0141; and stack emission records for the TA-03-0141 system will be reviewed on a quarterly basis under the SWPP program.
Waste storage areas near and around Buildings TA-03-0066 and 03-0141, including low-level radioactive waste stored in sealed containers and locked low-level waste burial boxes and transportainers will be inspected quarterly. Note that it will not be necessary to open these containers during the inspection process; rather, the containers will be examined for any degradation, and the areas surrounding the containers will be examined for evidence of pollutant transport and good housekeeping.
All loading areas for each of the buildings listed in the Plan will be inspected for good housekeeping practices, as well as for the potential of pollutants to be transported off site via storm water runoff. This includes the eight loading docks surrounding TA-03-0066;
The graphite dust waste storage area north of TA-03-0066 will be examined to ensure that all 55-gallon drums are covered and that the area is being swept and maintained on a regular basis.
The beryllium waste storage areas inside Building TA-03-0317 and around the transportainers, which are closed and locked shall be inspected for good housekeeping and will be examined for evidence of pollutant transport.
The scrap metal storage area near TA-03-0034 located in two cabinets outside the metal shop door will be inspected to ensure that all of the scrap metal generated here is stored inside the cabinets. In addition, the area will be examined for good housekeeping practices.
All equipment storage areas, whether temporary, or permanent shall be inspected for evidence of leaks and spills.
All outfalls from the Complex, including asphalt rundowns, swales, and drop inlets, will be inspected for evidence of the transport of pollutants off-site.

The SWPP Team member performing the inspection will document the inspection and will note potential storm water pollution problems that were encountered on the routine facility inspection form. Any required corrective actions identified during the inspection will be addressed in accordance with Section 5.4 Corrective Actions Process of this plan.

5.2 Quarterly Visual Inspection Procedures

The quarterly visual assessments will be conducted by a qualified member of the SWPP Team (Deployed Environmental Professional or EPC-CP Water Quality SME). The procedure used is EPC-CP-QP-064*, Stormwater Visual Inspections* (see Appendix J).

Quarterly visual assessment at substantially identical outfalls will occur on a quarterly basis at least once in each of the following 2-month intervals on a rotating basis for the permit term:
April 1 – May 31;
June 30 – July 31;
August 1 – September 30; and
October 1 – November 30.

Visual assessments must be made:

Of a sample in a clean, colorless glass or plastic container, and examined in a well-lit area;
On samples collected in the first 30 minutes of a discharge from a storm event. If it is not possible to collect the samples within the first 30 minutes of discharge, the sample must be collected as soon as practicable after the first 30 minutes and you must document why it was not possible to take the sample within the first 30 minutes. In the case of snowmelt, samples must be taken during a period with in a measurable discharge from your site; and
For storm events, on discharges that occur at least 72 hours (three days) from the previous discharge. The 72-hour (three days) storm interval does not apply if you document that less than a 72-hour (three days) interval is representative for local storm events during the sampling period.

Outfalls to be inspected are identified on the site map. Most of the outfalls at the facility are substantially identical outfalls (SIO), therefore quarterly visual assessment of the discharge at one SIO can also apply to the other SIO, provided that you perform visual asseessments on a rotating basis of each substantially identical outfall throughout the period of your coverage under this permit.

The visual assessment will inspect for the following water quality characteristics: color, odor, clarity, floating solids, settled solids, suspended solids foam, oil sheen, and other obvious indicators of storm water pollution.

The SWPP Team member performing the visual assessment will document potential stormwater pollution problems that were observed during the assessment on the Quarterly Visual Assessment form. Any required corrective actions identified during the assessment will be addressed in accordance with Section 5.4 Corrective Actions Process of this plan.

5.3 Corrective Actions Process

*Upon discovery of any of the following conditions, the condition must be documented within 24 hours of the discovery on the form provided in Appendix E of this SWPPP:

*An unauthorized release or discharge (e.g., spill, leak, or discharge of non-storm water not authorized by this or another NPDES permit to a water of the U.S.) occurs at your facility;

*A discharge violates a numeric effluent limit listed in Table 2-1 and in your Part 8 sector-specific requirements;

*Your control measures are not stringent enough for the discharge to meet applicable water quality standards or the non-numeric effluent limits in this permit;

*A required control measure was never installed, was installed incorrectly, or not in accordance with Parts 2 and/or 8, or is not being properly operated or maintained;

*Whenever a visual assessment shows evidence of stormwater pollution (e.g., color, odor, floating solids, settled solids, suspended solids, foam).

*Within 14 days of discovery of the identified condition, corrective action(s) to eliminate or further investigate the condition or documentation that no corrective action is needed will be documented and entered into the LANL MSGP Corrective Actions Database by the Deployed ENV Professional This is required to track the status of all issues.

*If it is determined that corrective actions are necessary, the facility must immediately take all reasonable steps necessary to minimize or prevent the discharge of pollutants until a permanent solution is installed and made operational, including cleaning up any contaminated surfaces so that the material will not discharge in subsequent storm events. Also if any corrective actions are identified the SWPPP must be reviewed and a determination made as to whether to modify it. If any modifications to control measures are needed these will be made before the next storm event if possible, or as soon as practicable following that storm event. If a runoff event should occur while a control measure is off line, EM&R will be contacted. A DEP will evaluate control measures informally to ensure all control measures are maintained. If the completion of corrective action will exceed the 45 day timeframe, you may take the minimum additional time necessary to complete the corrective action, provided that you notify the EPA Regional Office of your intention to exceed 45 days, your rationale for an extension, and a completion date, which you must also include in your corrective action documentation. STO-FOD personnel are required to coordinate with EPC-CP for completion of a written letter to EPA prior to the 45th day. Where your corrective actions result in changes to any of the controls or procedures documented in your SWPPP, you must modify your SWPPP accordingly within 14 calendar days of completing corrective action work.

5.4 Conditions Requiring Review to Determine if Modifications Are Necessary

If any of the following conditions occur, a review of the selection, design, installation, and implementation of control measures will be performed to determine if modifications are necessary to meet the effluent limits in this permit:

*construction or a change in design, operation, or maintenance at your facility that significantly changes the nature of pollutants discharged in stormwater from the facility, or significantly increases the quantity of pollutants discharged; or

*the average of four quarterly sampling results exceeds an applicable benchmark. If less than four benchmark samples have been taken, but the results are such that an exceedance of the four quarter average is mathematically certain (i.e., if the sum of quarterly sample results to date is more than four times the benchmark level) this is considered a benchmark exceedance, triggering this review.

*If a review identifies any necessary modifications, they will be performed following the corrective action process identified in Section 5.4 above.

SECTION 6: DOCUMENTATION TO SUPPORT ELIGIBILITY CONSIDERATIONS UNDER OTHER FEDERAL LAWS

6.1 Documentation Regarding Endangered Species

The Los Alamos National Laboratory (LANL) Threatened and Endangered Species Habitat Management Plan (HMP) (see Appendix J)was prepared to provide for the protection of federally listed threatened and endangered species and their habitats at LANL. The HMP was designed to be a comprehensive landscape-scale management plan that balances the current operations and future development needs of LANL with the habitat requirements of threatened and endangered species. It also facilitates DOE compliance with the Endangered Species Act and related federal regulations. The HMP received concurrence from the U.S. Fish and Wildlife Service (USFWS) (see Appendix J) and was first implemented in 1999. All changes to the HMP, such as adding new species or changing requirements, are assessed in a new consultation with the USFWS before being implemented. The HMP provides guidance by species for different types of activities allowed without further review by the USFWS.

Currently, the only federally-listed species that have habitat or occur at LANL are the Southwestern Willow Flycatcher (Empidonax trailii extimus), Jemez Mountains Salamander (Plethodon neomexicanus), and Mexican Spotted Owl (Strix occidentalis lucida). Suitable habitats for these species, along with a protective buffer area surrounding the habitats, have been designated as Areas of Environmental Interests (AEIs). An AEI consists of a core area that contains important breeding or wintering habitat for a specific species and a buffer area around the core area. The buffer protects the core area from disturbances that would degrade the value of the core area to the species.

The HMP includes ecorisk analyses which account for any industrial facility’s storm water discharges, allowable non-storm water discharges, and storm water discharge-related activities. In addition, the Site-wide Environmental Impact Statement (SWEIS) biological assessment (BA) covered the continuation of Laboratory operations and included outfalls.

As determined by earlier evaluations, storm water discharges, allowable non-storm water discharges, and storm water discharge-related activities from LANL MSGP locations are not likely to adversely affect any species that is federally-listed as endangered or threatened under Criterion D Section iii, the ESA, and will not result in the adverse modification or destruction of habitat that is federally-designated as "critical habitat" under the ESA. New activities are evaluated to determine if they will have an impact to any species. If an activity can be completed within the guidelines of the HMP it can go forward as scheduled; however, if the activity can not comply with the guidelines, the HMP requires that a project-specific BA be prepared for the action and go through the consultation process with the USFWS.

6.1 Documentation Regarding Historic Properties

In August, 2015 and December 2008, the Cultural Resources Team (using GPS spatial data as well as conducting visual inspections), reviewed the Laboratory industrial sites (see list below) and their associated outfalls and monitoring stations subject to the 2015 Multi-Sector General Permit (Permit #NMR050000) for effects on historic properties. All of these sites were found to be undertakings of no effect and in compliance with Section 106 of the National Historic Preservation Act (i.e., Criterion B).

- TA-3-22 Power and Steam Plant
- TA-3-38 Metals Fabrication Shop
- TA-3-38 Wood Shop
- TA-3-39 and 102 Metal Shop
- TA-3-66 Sigma Complex
- TA-60 Asphalt Batch Plant
- TA-60-1 Heavy Equipment Yard
- TA-60 Material Recycle Facility
- TA-60 Roads and Grounds
- TA-60-2 Warehouse
- TA-54 Area L
- TA-54 Area G
- TA-54 Maintenance Facility West
- TA-54 RANT

6.3 Documentation Regarding NEPA Review

The Final Site-Wide Environmental Impact Statement for the Operation of Los Alamos National Laboratory (DOE/EIS-0380) was issued in May 2008, and a Record of Decision in September 2008. Storm water issues and associated pollution prevention requirements and activities at LANL are analyzed in Chapters 4 and 5 of the 2008 Site-Wide EIS. These activities are integrated into environmental reviews on a project-specific level through both the LANL excavation permit process and the LANL project requirements (PR-ID) process. Storm water issues are identified and pollution prevention activities are implemented during the design and construction phases of all LANL projects, and as part of facility operations, including routine maintenance. LANL staff monitors storm water pollution prevention compliance at the MSGP sites in accordance with Section 4.0 Monitoring of this plan. Corrective actions are taken as necessary as described in Section 5.4 Corrective Actions Process of this plan.

Section 7: SWPPP CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information contained therein. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information contained is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Clifford W. Kirkland, Science & Technology Operations
Facility Operations Director
Los Alamos National Security, LLC

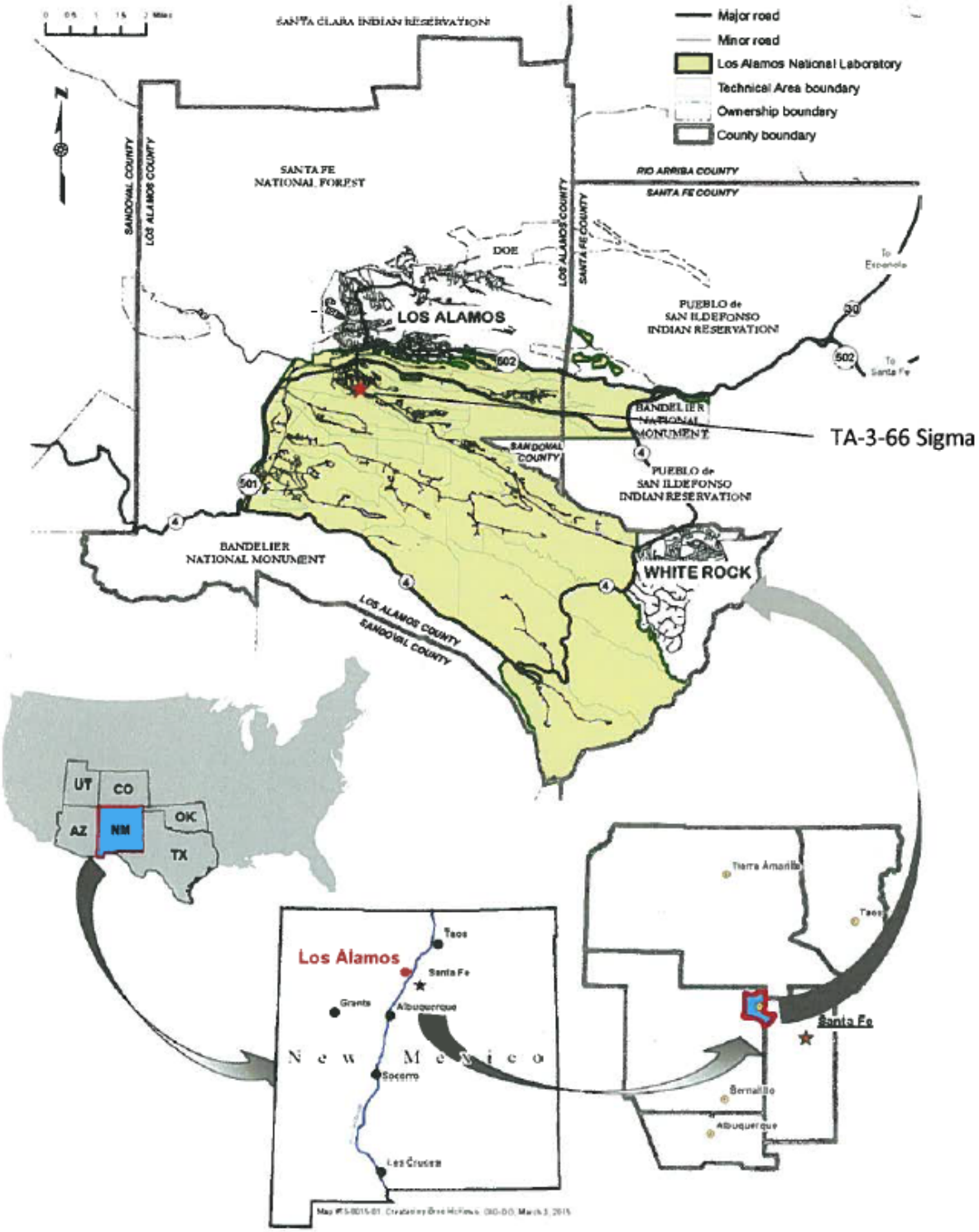
Manager Signature

1/31/18
Date

SECTION 8: SWPPP MODIFICATIONS

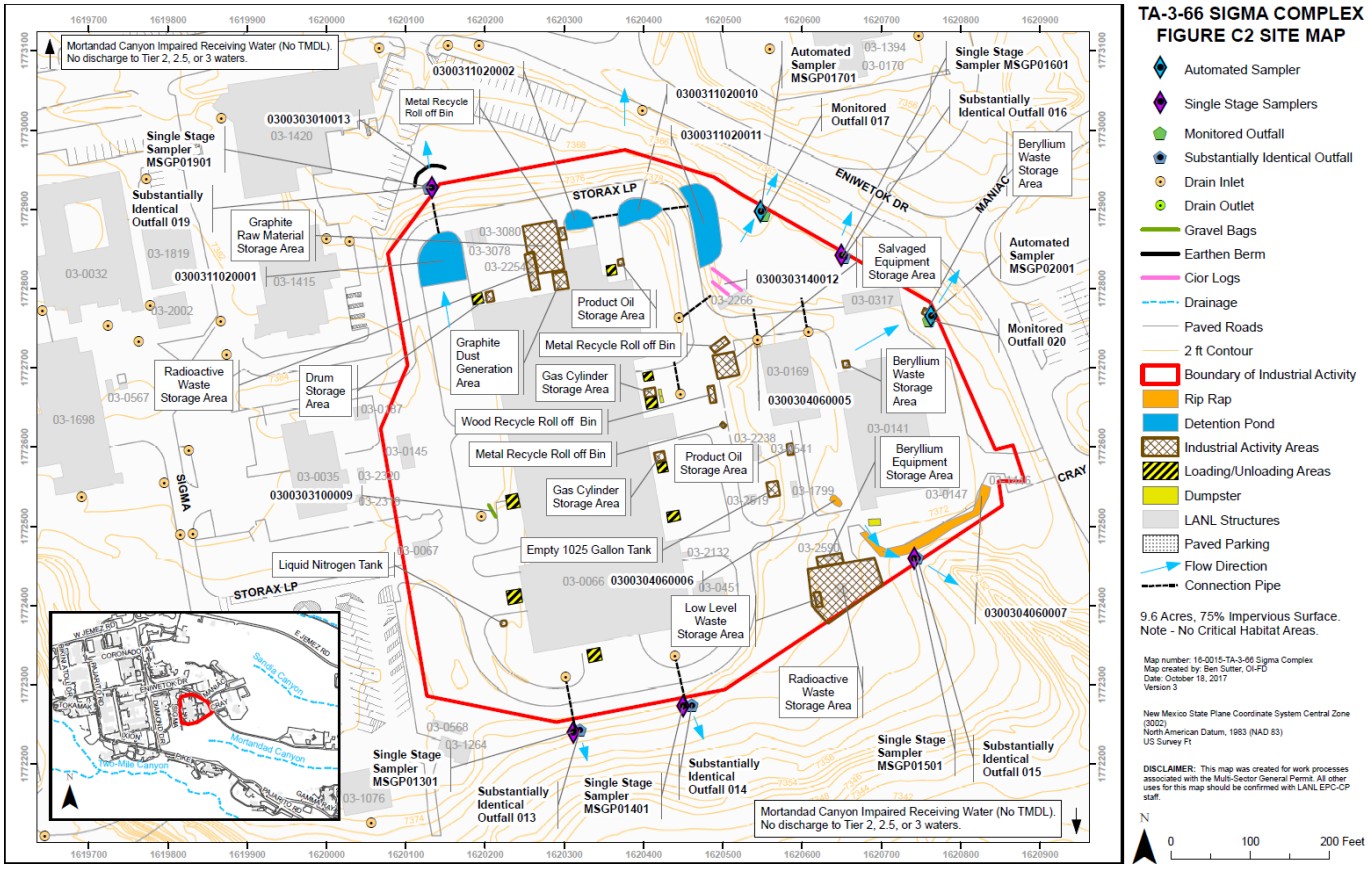
Modification of this SWPPP will occur whenever necessary to address any of the triggering conditions for corrective action in Part 5.4.1 of this plan and to ensure that they do not reoccur, or to reflect changes implemented when a review following the triggering conditions in Part 5.4.2 indicates that changes to control measures are necessary to meet the effluent limits in this permit. Changes to this SWPPP document must be made in accordance with the corrective action deadlines in Parts 5.4.3 and 5.4.4, and must be signed and dated in accordance with MSGP Appendix B, Subsection 11 (A, B, or C). A copy of the MSGP can be found at http://water.epa.gov/polwaste/npdes/stormwater/upload/msgp2015_finalpermit.pdf.

Appendix A – General Location Map

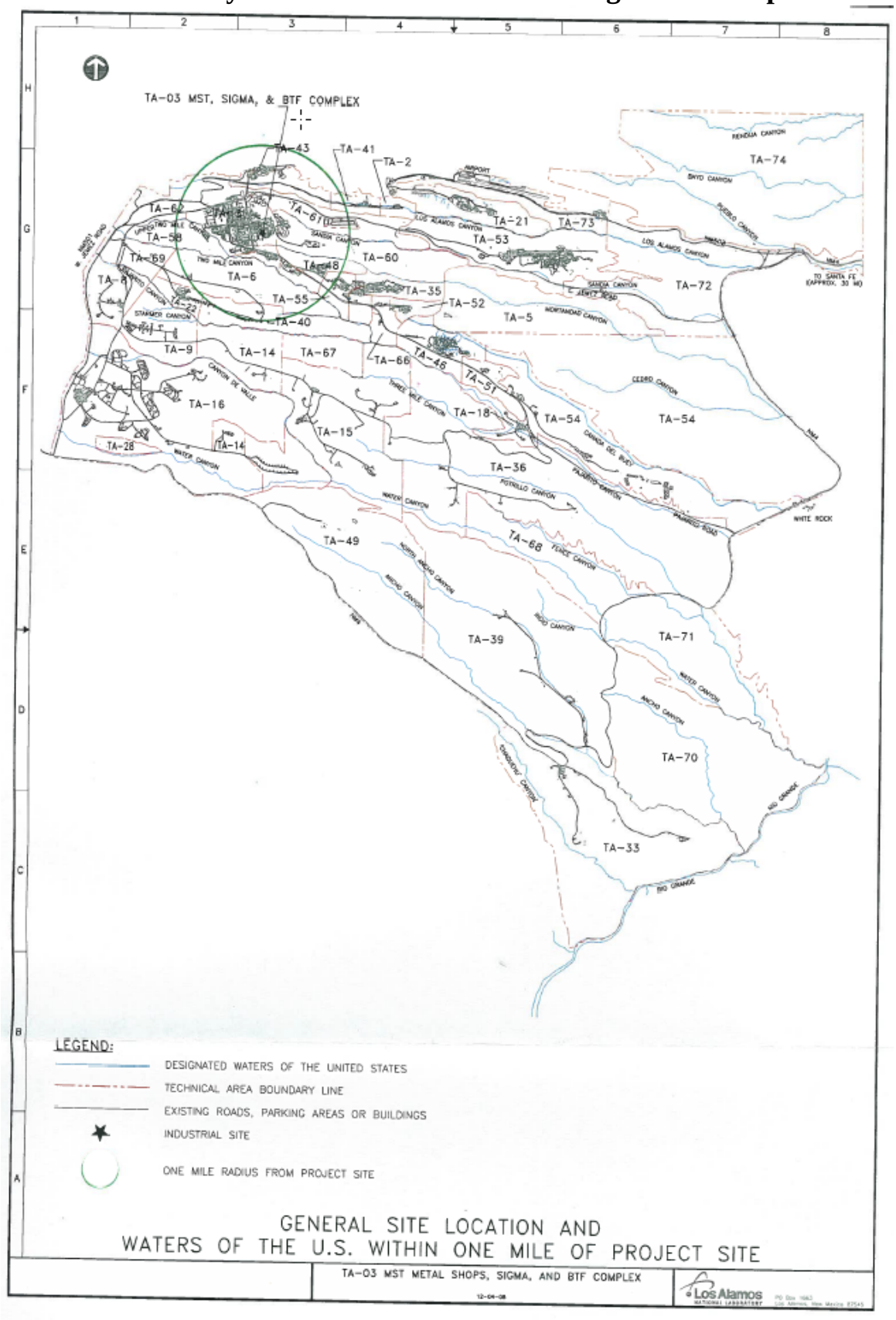


Appendix B – Site Map, Location of Nearby Surface Waters and Receiving Waters Map, Threatened and Endangered Species Map

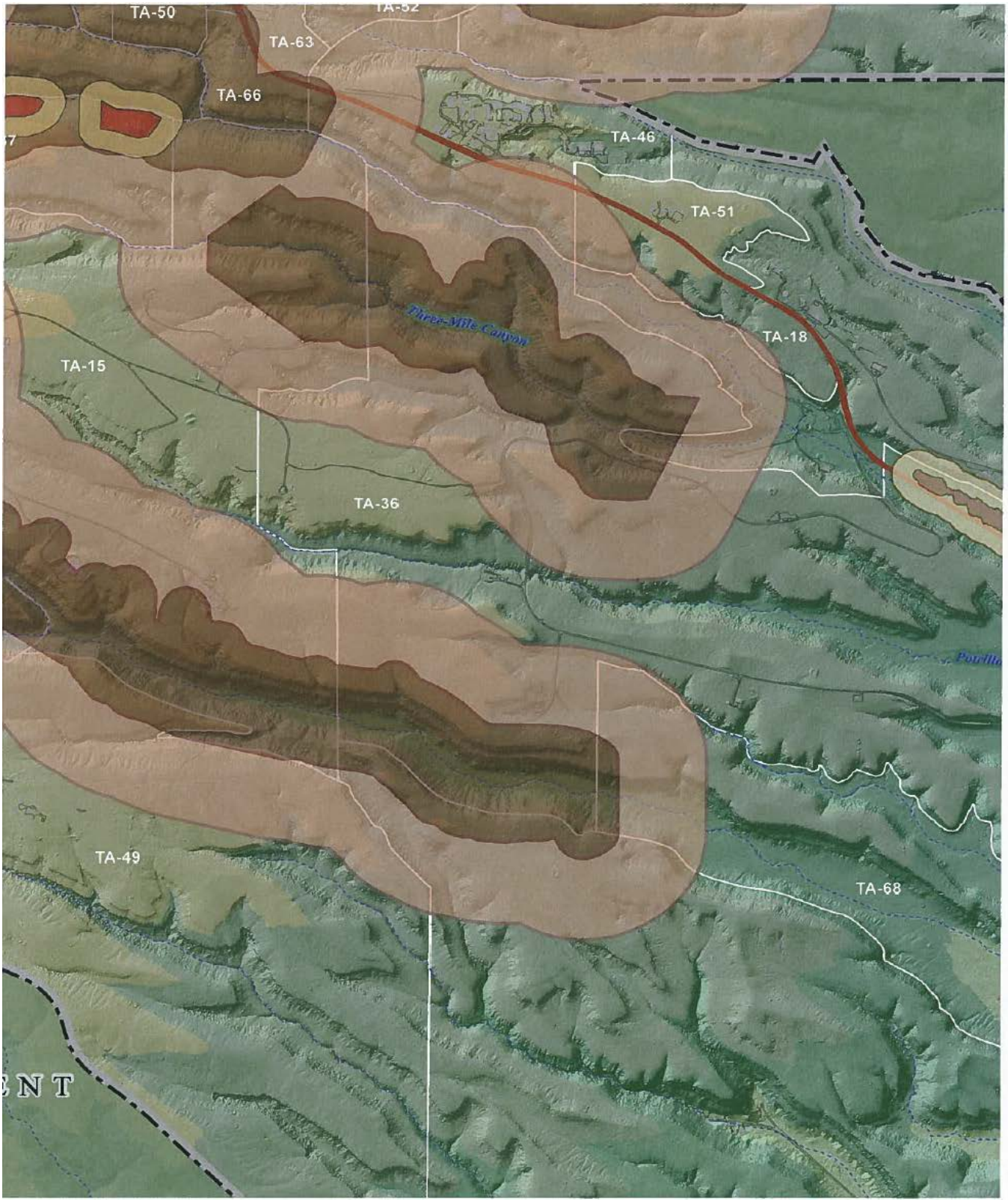
Site Map



Location of Nearby Surface Waters and Receiving Waters Map



Endangered Species Map



Appendix C – Spill Occurrence Log

Spill Log – Record of Spills, Leaks and Other Releases

Spill Log
Table for Tracking Past and Future Spills

Date	Spill Location	What Spilled	Quantity Spilled	Corrective Action Taken	Plans to Prevent Recurrence
9/10/15	East of 3-66	Steam Cond.	10-20 gallons	Condnesate line fixed	N/A
12/2/15	East of 3-66	Steam Cond.	10-20 gallons	Condensate line fixed	N/A
10/18/16	East of 3-66	Steam Cond.	20-30 gallons	Condensate line fixed	
9/20/16	Behind 3-66	Steam Cond.	300 gallons	Pipe fixed	N/A

Appendix D – Inspection Records

Facility Inspections

Inspection Forms and Completed Reports:

Quarterly Routine Inspections
Quarterly Visual Assessments
Annual Report

Copy

MSGP Stormwater Industrial Routine Facility Inspection Report

General Information		
Facility Name	TA-3-66 Sigma Complex	
NPDES Tracking No.		
Date of Inspection	7/28/16	**Time:** 10:35 am
Inspector's Name(s)	Marc R. Gallegos	
Inspector's Title(s)	CISEC #410	
Inspector's Qualifications	CISEC #410	

Weather Information

Weather at time of this inspection?
☐ Clear ☐ Cloudy ☐ Rain ☐ Sleet ☐ Fog ☐ Snow ☐ High Winds
☒ Other: Partly Cloudy Temperature: 49°F

Have any previously unidentified discharges of pollutants occurred since the last inspection? ☐ Yes ☒ No
If yes, describe:

Are there any discharges occurring at the time of inspection? ☐ Yes ☒ No
If yes, describe:

Is there any evidence of, or the potential for, pollutants entering the drainage system? ☒ Yes ☐ No
If yes, describe: Metal shavings on ground next to metal recycle bin North side of TA-3-66

Observations regarding the physical condition of and around all outfalls including any flow dissipation devices, and evidence of pollutants in discharges and/or the receiving water. OK

Control Measures

- *Number the structural stormwater control measures identified in your SWPPP on your site map and list them below (add as many control measures as are implemented on-site). Carry a copy of the numbered site map with you during your inspections. This list will ensure that you are inspecting all required control measures at your facility.*
- *Describe corrective actions initiated, date completed, and note the person that completed the work in the Corrective Action Log.*

	Structural Control Measure	Control Measure is Operating Effectively?	If No, In Need of Maintenance, Repair, or Replacement?	Corrective Action Needed and Notes (identify needed maintenance and repairs, or any failed control measures that need replacement)
1	Culvert	☒ Yes ☐ No	☐ Maintenance ☐ Repair ☐ Replacement	
2	Culvert	☒ Yes ☐ No	☐ Maintenance ☐ Repair ☐ Replacement	
3	Culvert	☒ Yes ☐ No	☐ Maintenance ☐ Repair ☐ Replacement	
4	Culvert	☒ Yes ☐ No	☐ Maintenance ☐ Repair ☐ Replacement	

	Structural Control Measure	Control Measure is Operating Effectively?	If No, In Need of Maintenance, Repair, or Replacement?	Corrective Action Needed and Notes (identify needed maintenance and repairs, or any failed control measures that need replacement)
5	culvert	☒Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
6	culvert	☒Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
7	Riprap	☒Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
8	Riprap	☒Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
9	Riprap	☒Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
10	Riprap	☒Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	

Areas of Industrial Materials or Activities exposed to stormwater

Below are some general areas that should be assessed during routine inspections. Customize this list as needed for the specific types of industrial materials or activities at your facility.

	Area/Activity	Inspected?	Controls Adequate (appropriate, effective, and operating)?	Corrective Action Needed and Notes
1	**Material loading/unloading and storage areas**	☒Yes ☐No ☐ N/A	☒Yes ☐No	
2	**Equipment operations and maintenance areas**	☐Yes ☐No ☒ N/A	☐Yes ☐No	
3	**Fueling areas**	☐Yes ☐No ☒ N/A	☐Yes ☐No	
4	**Outdoor vehicle and equipment washing areas**	☐Yes ☐No ☒ N/A	☐Yes ☐No	
5	**Waste handling and disposal areas**	☒Yes ☐No ☐ N/A	☒Yes ☐No	
6	**Erodible areas/construction**	☐Yes ☐No ☒ N/A	☐Yes ☐No	
7	**Non-stormwater/ illicit connections**	☐Yes ☐No ☒ N/A	☐Yes ☐No	
8	**Salt storage piles or pile containing salt**	☐Yes ☐No ☒ N/A	☐Yes ☐No	

	Area/Activity	Inspected?	Controls Adequate (appropriate, effective, and operating)?	Corrective Action Needed and Notes
9	**Dust generation and vehicle tracking**	☐Yes ☐No ☒N/A	☐Yes ☐No	
10	**(Other)** Metal recycle bin	☒Yes ☐No ☐N/A	☐Yes ☒No	Metal shavings on ground next to metal recycle bin need to be addressed.
11	**(Other)** Housekeeping	☒Yes ☐No ☐N/A	☐Yes ☒No	Trash along East fence line east of TA-3-141 BTF.
12	**(Other)**	☐Yes ☐No ☐N/A	☐Yes ☐No	

Non-Compliance

Describe any incidents of non-compliance observed and not described above:

Additional Control Measures

Describe any additional control measures needed to comply with the permit requirements:

Control Measure	Operating Effectively
11. Storm drain	11. yes
12. Holding Pond/w riser	12. yes
13. Holding Pond/w riser	13. yes

Notes

Use this space for any additional notes or observations from the inspection:

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Print name and title: Cliff Kirkland STO-FOD

Signature: [signature] **Date:** 3/30/16

Copy

MSGP Stormwater Industrial Routine Facility Inspection Report

General Information	
Facility Name	TA-3-66 Sigma
NPDES Tracking No.	NMR053195
Date of Inspection	6/22/16 **Time:** ~~10:02 am~~ 11:05 am
Inspector's Name(s)	Marc R. Gallegos
Inspector's Title(s)	CISEC #410
Inspector's Qualifications	CISEC #410

Weather Information

Weather at time of this inspection?
☐ Clear ☐ Cloudy ☐ Rain ☐ Sleet ☐ Fog ☐ Snow ☐ High Winds
☒ Other: Partly Cloudy Temperature: 76°F

Have any previously unidentified discharges of pollutants occurred since the last inspection? ☐Yes ☒No
If yes, describe:

Are there any discharges occurring at the time of inspection? ☐Yes ☒No
If yes, describe:

Is there any evidence of, or the potential for, pollutants entering the drainage system? ☐Yes ☒No
If yes, describe:

Observations regarding the physical condition of and around all outfalls including any flow dissipation devices, and evidence of pollutants in discharges and/or the receiving water. None

Control Measures

- *Number the structural stormwater control measures identified in your SWPPP on your site map and list them below (add as many control measures as are implemented on-site). Carry a copy of the numbered site map with you during your inspections. This list will ensure that you are inspecting all required control measures at your facility.*
- *Describe corrective actions initiated, date completed, and note the person that completed the work in the Corrective Action Log.*

	Structural Control Measure	Control Measure is Operating Effectively?	If No, In Need of Maintenance, Repair, or Replacement?	Corrective Action Needed and Notes (identify needed maintenance and repairs, or any failed control measures that need replacement)
1	Culvert #1 ~~Stormdrain #1~~ 6/22/16	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
2	Culvert #2	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
3	Culvert #3	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
4	Culvert #6	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	

	Structural Control Measure	Control Measure is Operating Effectively?	If No, In Need of Maintenance, Repair, or Replacement?	Corrective Action Needed and Notes (identify needed maintenance and repairs, or any failed control measures that need replacement)
5	culvert #11	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
6	culvert #12	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
7	riprap #4	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
8	riprap #7	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
9	riprap #9	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
10	riprap #5	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	

Areas of Industrial Materials or Activities exposed to stormwater

Below are some general areas that should be assessed during routine inspections. Customize this list as needed for the specific types of industrial materials or activities at your facility.

	Area/Activity	Inspected?	Controls Adequate (appropriate, effective, and operating)?	Corrective Action Needed and Notes
1	Material loading/unloading and storage areas	☐Yes ☐No ☐ N/A	☐Yes ☐No	
2	Equipment operations and maintenance areas	☐Yes ☐No ☐ N/A	☐Yes ☐No	
3	Fueling areas	☐Yes ☐No ☐ N/A	☐Yes ☐No	
4	Outdoor vehicle and equipment washing areas	☐Yes ☐No ☐ N/A	☐Yes ☐No	
5	Waste handling and disposal areas	☐Yes ☐No ☐ N/A	☐Yes ☐No	
6	Erodible areas/construction	☐Yes ☐No ☐ N/A	☐Yes ☐No	
7	Non-stormwater/ illicit connections	☐Yes ☐No ☐ N/A	☐Yes ☐No	
8	Salt storage piles or pile containing salt	☐Yes ☐No ☐ N/A	☐Yes ☐No	

	Area/Activity	Inspected?	Controls Adequate (appropriate, effective, and operating)?	Corrective Action Needed and Notes
9	**Dust generation and vehicle tracking**	❑Yes ❑No ❑ N/A	❑Yes ❑No	
10	**(Other)**	❑Yes ❑No ❑ N/A	❑Yes ❑No	
11	**(Other)**	❑Yes ❑No ❑ N/A	❑Yes ❑No	
12	**(Other)**	❑Yes ❑No ❑ N/A	❑Yes ❑No	

Non-Compliance

Describe any incidents of non-compliance observed and not described above:

- Graphite dust on ground on Northside graphite area of TA-3-66. Located under covered drum area.

Additional Control Measures

Describe any additional control measures needed to comply with the permit requirements:

Control Measure	Operating Effectively
11. Storm drain #8	yes
12. Holding Pond/w riser #10	yes
13. Holding Pond/w riser & culvert #13	yes

Notes

Use this space for any additional notes or observations from the inspection:

- Misc. equipment, material will be addressed when TA-3-66 Sigma "clean up" occurs.

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Print name and title: Cliff Kirkland FOD

Signature: [signature] **Date:** 6/22/16

[signature] 6/22/16

TA-3-66 Program Manager

Los Alamos National Lab

Work Order MSGP-56540

MSGP Monitoring Stations
Printed 7/25/2016 - 10:54 AM

Maintenance Details

Requested By: Banar, Alethea on 7/25/2016 10:53:42 AM

Procedure: MSGP Stormwater ~~Industrial Routine~~ 3rd Qtr. Facilty Inspection (EPC-CP-Form-1020.1)

MP 7/28/16

Last PM: N/A

Reason: TA-3-66 Sigma Complex

Special Instructions: NMR053195

Target: 7/29/2016
Priority/Type: / Routine
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex

Contact: Banar, Alethea
Phone: 665-0454

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
	Weather Information						
20	Describe the weather at time of inspection in the Weather lookup table. If "Other" is chosen, provide description in task comments of this line. Document the temperature (F°) in the "Reading" field of this line.	Partly Cloudy	82°F		☐	☐	☑
	Within the Facility Boundary						
40	Is the facility free of new discharges of pollutants that have occurred since the last inspection? If "Failed", describe:				☐	☐	☑
50	If "Failed" has a CAR been previously initiated for this new discharge? (Range: 0 - 0)				☐	☑	☐
60	Is the facility free of discharge of pollutants at the time of inspection? If "Failed" describe: (Range: 0 - 0)				☐	☐	☑
70	Is the facility free of evidence of, or the potential for, pollutants entering the drainage system. If "Failed" describe: (Range: 0 - 0)				☐	☐	☑
	Outfall Inspection needed maintenance and repairs, failed control measures that need replacement, or a description of corrective actions in relevant task comment)						
90	**Monitored Outfall [018]** Free of Evidence of Erosion? (Range: 0 - 0)				☐	☐	☑
100	**Monitored Outfall [018]** Flow Dissipation Devices Operating Effectively? (Range: 0 - 0)				☐	☐	☑
110	**Monitored Outfall [018]** Free of Evidence of Pollutants in Discharges and/or Receiving Water? (Range: 0 - 0)				☐	☐	☑
120	**Monitored Outfall [020]** Free of Evidence of Erosion? (Range: 0 - 0)				☐	☐	☑
130	**Monitored Outfall [020]** Flow Dissipation Devices Operating Effectively? (Range: 0 - 0)				☐	☐	☑
140	**Monitored Outfall [020]** Free of Evidence of Pollutants in Discharges and/or Receiving Water? (Range: 0 - 0)				☐	☐	☑
150	**Substantially Identical Outfall [013]** Free of Evidence of Erosion? (Range: 0 - 0)				☐	☐	☑
160					☑	☐	☐

	Substantially Identical Outfall [013] Flow Dissipation Devices Operating Effectively? (Range: 0 - 0)							
170	**Substantially Identical Outfall [013]** Free of Evidence of Pollutants in Discharges and/or Receiving Water? (Range: 0 - 0)					☐	☐	☑
180	**Substantially Identical Outfall [014]** Free of Evidence of Erosion? (Range: 0 - 0)					☐	☐	☑
190	**Substantially Identical Outfall [014]** Flow Dissipation Devices Operating Effectively? (Range: 0 - 0)					☐	☐	☑
200	**Substantially Identical Outfall [014]** Free of Evidence of Pollutants in Discharges and/or Receiving Water? (Range: 0 - 0)					☐	☐	☑
210	**Substantially Identical Outfall [015]** Free of Evidence of Erosion? (Range: 0 - 0)					☐	☐	☑
220	**Substantially Identical Outfall [015]** Flow Dissipation Devices Operating Effectively? (Range: 0 - 0)					☐	☐	☑
230	**Substantially Identical Outfall [015]** Free of Evidence of Pollutants in Discharges and/or Receiving Water? (Range: 0 - 0)					☐	☐	☑
240	**Substantially Identical Outfall [016]** Free of Evidence of Erosion? (Range: 0 - 0)					☐	☐	☑
250	**Substantially Identical Outfall [016]** Flow Dissipation Devices Operating Effectively? (Range: 0 - 0)					☐	☐	☑
260	**Substantially Identical Outfall [016]** Free of Evidence of Pollutants in Discharges and/or Receiving Water? (Range: 0 - 0)					☐	☐	☑
270	**Substantially Identical Outfall [017]** Free of Evidence of Erosion? (Range: 0 - 0)					☐	☐	☑
280	**Substantially Identical Outfall [017]** Flow Dissipation Devices Operating Effectively? (Range: 0 - 0)					☐	☐	☑
290	**Substantially Identical Outfall [017]** Free of Evidence of Pollutants in Discharges and/or Receiving Water? (Range: 0 - 0)					☐	☐	☑
300	**Substantially Identical Outfall [019]** Free of Evidence of Erosion? (Range: 0 - 0)					☐	☐	☑
310	**Substantially Identical Outfall [019]** Flow Dissipation Devices Operating Effectively? (Range: 0 - 0)					☐	☐	☑
320	**Substantially Identical Outfall [019]** Free of Evidence of Pollutants in Discharges and/or Receiving Water? (Range: 0 - 0)					☐	☐	☑
	Control Measures (identify needed maintenance and repairs, failed control measures that need replacment, or a description of corrective actions in relevant task comments).							
340	**Gravel Bags [0300303100008]** Control Measure is operating effectively? (Range: 0 - 0)					☐	☐	☑
350	**Gravel Bags [0300303100008]** If "Failed", is control measure in need of maintenance, Repair, or Replacement?					☐	☐	☑
360	**Gravel Bags [0300303100009]** Control Measure is operating effectively? (Range: 0 - 0)					☐	☐	☑
370	**Gravel Bags [0300303100009]** If "Failed", is control measure in need of maintenance, Repair, or Replacement?					☐	☐	☑
380	**Rip Rap [0300304060003]** Control Measure is operating effectively? (Range: 0 - 0)					☐	☐	☑
390						☐	☑	☐

	Rip Rap [0300304060003] If "Failed", is control measure in need of maintenance, Repair, or Replacement?					
400	**Rip Rap [0300304060004]** Control Measure is operating effectively? (Range: 0 - 0)			☑	☑	
410	**Rip Rap [0300304060004]** If "Failed", is control measure in need of maintenance, Repair, or Replacement?			☑	☐	
420	**Rip Rap [0300304060005]** Control Measure is operating effectively? (Range: 0 - 0)			☐	☐	☑
430	**Rip Rap [0300304060005]** If "Failed", is control measure in need of maintenance, Repair, or Replacement?			☐	☑	☐
440	**Rip Rap [0300304060006]** Control Measure is operating effectively? (Range: 0 - 0)			☐	☐	☑
450	**Rip Rap [0300304060006]** If "Failed", is control measure in need of maintenance, Repair, or Replacement?			☐	☑	☐
460	**Rip Rap [0300304060007]** Control Measure is operating effectively? (Range: 0 - 0)			☐	☐	☑
470	**Rip Rap [0300304060007]** If "Failed", is control measure in need of maintenance, Repair, or Replacement?			☐	☑	☐
480	**Detention Pond [0300311020001]** Control Measure is operating effectively? (Range: 0 - 0)			☐	☐	☑
490	**Detention Pond [0300311020001]** If "Failed", is control measure in need of maintenance, Repair, or Replacement?			☐	☑	☐
500	**Detention Pond [0300311020002]** Control Measure is operating effectively? (Range: 0 - 0)			☐	☐	☑
510	**Detention Pond [0300311020002]** If "Failed", is control measure in need of maintenance, Repair, or Replacement?			☐	☑	☐

Area/Activity exposed to stormwater (identify needed mainteance or a description of corrective actiosn in relevant task comment).

530	Material loading/unloading and storage areas inspected?			☐	☐	☑
540	Area/Activity controls adequate (appropriate, effective, and operating)? (Range: 0 - 0)			☐	☐	☑
550	Transfer areas for substances in bulk inspected?			☐	☑	☐
560	Area/Activity controls adequate (appropriate, effective, and operating)? (Range: 0 - 0)			☐	☑	☐
570	Produce/chemical storage areas (raw material) inspected?			☐	☑	☐
580	Area/Activity controls adequate (appropriate, effective, and operating)? (Range: 0 - 0)			☐	☑	☐
590	Liquid tank storage/secondary containment inspected?			☐	☑	☐
600	Area/Activity controls adequate (appropriate, effective, and operating)? (Range: 0 - 0)			☐	☑	☐
610	Industrial processing and finished product storage areas inspected?			☐	☑	☐
620	Area/Activity controls adequate (appropriate, effective, and operating)? (Range: 0 - 0)			☐	☑	☐
630	Equipment operation and maintenance areas inspected?			☐	☑	☐
640	Area/Activity controls adequate (appropriate, effective, and operating)? (Range: 0 - 0)			☐	☑	☐
650	Fueling areas inspected?			☐	☑	☐
660	Area/Activity controls adequate (appropriate, effective, and operating)? (Range: 0 - 0)			☐	☑	☐

these do not exsist. mrs 7/28/16

mrs 7/28/16

670	Outdoor vehicle and equipment washing areas inspected?	☐	☑	☐
680	Area/Activity controls adequate (appropriate, effective, and operating)? (Range: 0 - 0)	☐	☑	☐
690	Machinery inspected?	☐	☑	☐
700	Area/Activity controls adequate (appropriate, effective, and operating)? (Range: 0 - 0)	☐	☑	☐
710	Waste handling and disposal areas inspected?	☐	☐	☑
720	Area/Activity controls adequate (appropriate, effective, and operating)? (Range: 0 - 0)	☐	☐	☑
730	Erodible areas/construction inspected?f	☐	☑	☐
740	Area/Activity controls adequate (appropriate, effective, and operating)? (Range: 0 - 0)	☐	☑	☐
750	Locations and sources of run-on to the site inspected?	☐	☐	☑
760	Area/Activity controls adequate (appropriate, effective, and operating)? (Range: 0 - 0)	☐	☐	☑
770	Non-stormwater/illicit connections inspected?	☐	☑	☐
780	Area/Activity controls adequate (appropriate, effective, and operating)? (Range: 0 - 0)	☐	☑	☐
790	Salt storage piles or pile containing salt inspected?	☐	☑	☐
800	Area/Activity controls adequate (appropriate, effective, and operating)? (Range: 0 - 0)	☐	☑	☐
810	Dust generation and vehicle tracking inspected?	☐	☑	☐
820	Area/Activity controls adequate (appropriate, effective, and operating)? (Range: 0 - 0)	☐	☑	☐
830	Housekeeping (Industrial materials/residues/trash in contact with stormwater) inspected?	☑	☐	☐
840	Area/Activity controls adequate (appropriate, effective, and operating)? (Range: 0 - 0)	☑	☐	☐
850	Leaks and spills inspected?	☐	☑	☐
860	Area/Activity controls adequate (appropriate, effective, and operating)? (Range: 0 - 0)	☐	☑	☐
870	**Sector F [03003-F]** Baghouse for degradation that could limit efficiency and lead to excessive emissions inspected?	☐	☑	☐
880	**Sector F [03003-F]** Area/Activity controls adequate (appropriate, effective, and operating)? (Range: 0 - 0)	☐	☑	☐
	Non-Compliance			
900	Free of incidents of observed non-compliance not associated with any of the above? (Range: 0 - 0)	☑	☐	☐
	Additional Control Measures			
920	Are permit requirements satisfied with existing control measure(s) not associated with any of the above? (Range: 0 - 0)	☐	☐	☑
		☐	☐	☐

Labor Report

Completed: _____ **Failure:** _____ **Meter 1:** _____ **Meter 2:** _____

Report:

WO ID:_____ Page____ of____

Signature (lead inspector):_____ Date and Time: 7/28/16 11:50 am

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Cliff Kirkland STO-FOD

Signature:_____ Date: 11/23/16

Los Alamos National Lab - ADESH

Work Order MSGP-59440

MSGP Monitoring Stations
Printed 12/7/2016 - 2:12 PM

Maintenance Details

Requested: 12/6/2016 3:51:09 PM
Procedure: MSGP Stormwater Industrial Routine Facility Inspection (EPC-CP-Form-1020.1)
Last PM: N/A
Project: Routine Facility Inspections Dec 2016 (P-MSGP-RI-5158)

Target: 12/30/2016
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex

Contact:
Phone:

Reason: MSGP Stormwater Industrial Routine Facility Inspection

Precipitation Type:
Odor:
Clarity:
Settled Solids:
Suspended Solids:
Special Instructions: NMR053195

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
	Weather Information						
20	Describe the weather at time of inspection in the Weather lookup table. If "Other" is chosen, provide description in task comments of this line. Document the temperature (F°) in the "Reading" field of this line.	Mostly cloudy 44°F		WS 12/12/16	☐	☐	☒
	Within the Facility Boundary						
40	Is the facility free of new discharges of pollutants that have occurred since the last inspection? If "Failed", describe:				☐	☐	☒
50	If "Failed" has a CAR been previously initiated for this new discharge? (Range: 0 - 0)				☐	☒	☐
60	Is the facility free of discharge of pollutants at the time of inspection? If "Failed" describe: (Range: 0 - 0) see labor report				☒	☐	☐
70	Is the facility free of evidence of, or the potential for, pollutants entering the drainage system. If "Failed" describe: (Range: 0 - 0) see labor report				☒	☐	☐
	Outfall Inspection (needed maintenance and repairs, failed control measures that need replacement, or a description of corrective actions in relevant task comment)						
90	**Monitored Outfall [018]** Free of Evidence of Erosion? (Range: 0 - 0)				☐	☐	☒
100	**Monitored Outfall [018]** Flow Dissipation Devices Operating Effectively? (Range: 0 - 0)				☐	☐	☒
110	**Monitored Outfall [018]** Free of Evidence of Pollutants in Discharges and/or Receiving Water? (Range: 0 - 0)				☐	☐	☒
120	**Monitored Outfall [020]** Free of Evidence of Erosion? (Range: 0 - 0)				☐	☐	☒
130	**Monitored Outfall [020]** Flow Dissipation Devices Operating Effectively? (Range: 0 - 0)				☐	☐	☒
140	**Monitored Outfall [020]** Free of Evidence of Pollutants in Discharges and/or Receiving Water? (Range: 0 - 0)				☐	☐	☒

150	**Substantially Identical Outfall [013]** Free of Evidence of Erosion? (Range: 0 - 0)		☐	☐	☒
160	**Substantially Identical Outfall [013]** Flow Dissipation Devices Operating Effectively? (Range: 0 - 0)		☐	☐	☒
170	**Substantially Identical Outfall [013]** Free of Evidence of Pollutants in Discharges and/or Receiving Water? (Range: 0 - 0)		☐	☐	☒
180	**Substantially Identical Outfall [014]** Free of Evidence of Erosion? (Range: 0 - 0)		☐	☐	☒
190	**Substantially Identical Outfall [014]** Flow Dissipation Devices Operating Effectively? (Range: 0 - 0)		☐	☐	☒
200	**Substantially Identical Outfall [014]** Free of Evidence of Pollutants in Discharges and/or Receiving Water? (Range: 0 - 0)		☐	☐	☒
210	**Substantially Identical Outfall [015]** Free of Evidence of Erosion? (Range: 0 - 0)		☐	☐	☒
220	**Substantially Identical Outfall [015]** Flow Dissipation Devices Operating Effectively? (Range: 0 - 0)		☐	☐	☒
230	**Substantially Identical Outfall [015]** Free of Evidence of Pollutants in Discharges and/or Receiving Water? (Range: 0 - 0)		☐	☐	☒
240	**Substantially Identical Outfall [016]** Free of Evidence of Erosion? (Range: 0 - 0)		☐	☐	☒
250	**Substantially Identical Outfall [016]** Flow Dissipation Devices Operating Effectively? (Range: 0 - 0)		☐	☐	☒
260	**Substantially Identical Outfall [016]** Free of Evidence of Pollutants in Discharges and/or Receiving Water? (Range: 0 - 0)		☐	☐	☒
270	**Substantially Identical Outfall [017]** Free of Evidence of Erosion? (Range: 0 - 0)		☒	☐	☐
280	**Substantially Identical Outfall [017]** Flow Dissipation Devices Operating Effectively? (Range: 0 - 0)		☒	☐	☐
290	**Substantially Identical Outfall [017]** Free of Evidence of Pollutants in Discharges and/or Receiving Water? (Range: 0 - 0)		☐	☐	☒
300	**Substantially Identical Outfall [019]** Free of Evidence of Erosion? (Range: 0 - 0)		☐	☐	☒
310	**Substantially Identical Outfall [019]** Flow Dissipation Devices Operating Effectively? (Range: 0 - 0)		☐	☐	☒
320	**Substantially Identical Outfall [019]** Free of Evidence of Pollutants in Discharges and/or Receiving Water? (Range: 0 - 0)		☐	☐	☒

Control Measures (identify needed maintenance and repairs, failed control measures that need replacment, or a description of corrective actions in relevant task comments).

340	**Gravel Bags [0300303100008]** Control Measure is operating effectively? (Range: 0 - 0)		☐	☐	☒
350	**Gravel Bags [0300303100008]** If "Failed", is control measure in need of maintenance, Repair, or Replacement?		☐	☒	☒ MD 12/12/16
360	**Gravel Bags [0300303100009]** Control Measure is operating effectively? (Range: 0 - 0)		☐	☐	☒
370	**Gravel Bags [0300303100009]** If "Failed", is control measure in need of maintenance, Repair, or Replacement?		☐	☒	☐
380	**Rip Rap [0300304060005]** Control Measure is operating effectively? (Range: 0 - 0)		☐	☐	☒

390	**Rip Rap [0300304060005]** If "Failed", is control measure in need of maintenance, Repair, or Replacement?	☐	☒	☐
400	**Rip Rap [0300304060006]** Control Measure is operating effectively? (Range: 0 - 0)	☐	☐	☒
410	**Rip Rap [0300304060006]** If "Failed", is control measure in need of maintenance, Repair, or Replacement?	☐	☒	☐
420	**Rip Rap [0300304060007]** Control Measure is operating effectively? (Range: 0 - 0)	☐	☐	☒
430	**Rip Rap [0300304060007]** If "Failed", is control measure in need of maintenance, Repair, or Replacement?	☐	☒	☐
440	**Detention Pond [0300311020001]** Control Measure is operating effectively? (Range: 0 - 0)	☐	☐	☒
450	**Detention Pond [0300311020001]** If "Failed", is control measure in need of maintenance, Repair, or Replacement?	☐	☒	☐
460	**Detention Pond [0300311020002]** Control Measure is operating effectively? (Range: 0 - 0)	☐	☐	☒
470	**Detention Pond [0300311020002]** If "Failed", is control measure in need of maintenance, Repair, or Replacement?	☐	☒	☐
480	**Detention Pond [0300311020010]** Control Measure is operating effectively? (Range: 0 - 0)	☐	☐	☒
490	**Detention Pond [0300311020010]** If "Failed", is control measure in need of maintenance, Repair, or Replacement?	☐	☒	☐
500	**Detention Pond [0300311020011]** Control Measure is operating effectively? (Range: 0 - 0)	☐	☐	☒
510	**Detention Pond [0300311020011]** If "Failed", is control measure in need of maintenance, Repair, or Replacement?	☐	☒	☐

Area/Activity exposed to stormwater (identify needed mainteance or a description of corrective actions in relevant task comment).

530	Material loading/unloading and storage areas inspected?	☒	☐	☒ mvr 11/9/17
540	Area/Activity controls adequate (appropriate, effective, and operating)? (Range: 0 - 0)	☒	☐	☒ mvr 11/9/17
550	Transfer areas for substances in bulk inspected?	☐	☒	☐
560	Area/Activity controls adequate (appropriate, effective, and operating)? (Range: 0 - 0)	☐	☒	☐
570	Produce/chemical storage areas (raw material) inspected?	☒ mvr 12/12/16	☐	☒
580	Area/Activity controls adequate (appropriate, effective, and operating)? (Range: 0 - 0)	☐	☐	☒
590	Liquid tank storage/secondary containment inspected?	☐	☒	☐
600	Area/Activity controls adequate (appropriate, effective, and operating)? (Range: 0 - 0)	☐	☐	☒
610	Industrial processing and finished product storage areas inspected?	☐	☒	☐
620	Area/Activity controls adequate (appropriate, effective, and operating)? (Range: 0 - 0)	☐	☐	☒
630	Equipment operation and maintenance areas inspected?	☐	☒	☐
640	Area/Activity controls adequate (appropriate, effective, and operating)? (Range: 0 - 0)	☐	☐	☒
650	Fueling areas inspected?	☐	☒	☐
660	Area/Activity controls adequate (appropriate, effective, and operating)? (Range: 0 - 0)	☐	☐	☒

670	Outdoor vehicle and equipment washing areas inspected?	☐	☒	☐
680	Area/Activity controls adequate (appropriate, effective, and operating)? (Range: 0 - 0)	☐	☐	☒
690	Machinery inspected?	☐	☒	☐
700	Area/Activity controls adequate (appropriate, effective, and operating)? (Range: 0 - 0)	☐	☐	☒
710	Waste handling and disposal areas inspected?	☐	☐	☒
720	Area/Activity controls adequate (appropriate, effective, and operating)? (Range: 0 - 0)	☐	☐	☒
730	Erodible areas/construction inspected?f	☐	☒	☐
740	Area/Activity controls adequate (appropriate, effective, and operating)? (Range: 0 - 0)	☐	☐	☒
750	Locations and sources of run-on to the site inspected?	☐	☐	☒
760	Area/Activity controls adequate (appropriate, effective, and operating)? (Range: 0 - 0)	☐	☐	☒
770	Non stormwater/illicit connections inspected?	☐	☒	☐
780	Area/Activity controls adequate (appropriate, effective, and operating)? (Range: 0 - 0)	☐	☒	☐
790	Salt storage piles or pile containing salt inspected?	☐	☒	☐
800	Area/Activity controls adequate (appropriate, effective, and operating)? (Range: 0 - 0)	☐	☒	☐
810	Dust generation and vehicle tracking inspected?	☐	☒	☐
820	Area/Activity controls adequate (appropriate, effective, and operating)? (Range: 0 - 0)	☐	☒	☐
830	Housekeeping (Industrial materials/residues/trash in contact with stormwater) inspected?	☒	☐	☒ MW 1/9/17
840	Area/Activity controls adequate (appropriate, effective, and operating)? (Range: 0 - 0)	☒	☐	☐
850	Leaks and spills inspected?	☐	☒ MW 1/9/17	☒
860	Area/Activity controls adequate (appropriate, effective, and operating)? (Range: 0 - 0)	☐	☒	☐
870	**Sector F [03003-F]** Baghouse for degradation that could limit efficiency and lead to excessive emissions inspected?	☐	☒	☒ MW 1/9/17
880	**Sector F [03003-F]** Area/Activity controls adequate (appropriate, effective, and operating)? (Range: 0 - 0)	☐	☒	☐
	Non-Compliance			
900	Free of incidents of observed non-compliance not associated with any of the above? (Range: 0 - 0)	☒	☐	☐
	Additional Control Measures			
920	Are permit requirements satisfied with existing control measure(s)? If "Failed" describe additional control measures needed. (Range: 0 - 0)	☐	☐	☒
		☐	☐	☐

Labor

Labor	Assigned	Work Date	Reg Hrs	OT Hrs	Other Hrs
Gallegos, Marc	12/30/2016 / 14				

Labor Report

Completed: _____ **Failure:** _____ **Meter 1:** _____ **Meter 2:** _____

Report:
Clean out drop inlet 013. Metal stock on northside of 3-141 needs to be covered or taken inside. This is located under the awning. Graphite dust inside drainage channel on westside of bldg 66 needs to be swept up.

Signature / Name | 12/12/16 Date | Signature / Name | 12/12/16 Date

WO ID:_____ Page____ of____

Signature (lead inspector):_____ Date and Time: 12/12/16 2:00 pm

"I confirm the information as recorded is true, accurate and complete."

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESII Group Leader, EPC Group Leader)

Print name and title: Cliff Kirkland STO-FOD

Signature:_____ Date: 1/11/17

Los Alamos National Lab - ADESH

Work Order MSGP-RI-59470

MSGP Routine Inspection
Printed 1/9/2018 - 2:10 PM

Maintenance Details

Requested: 3/7/2017 12:04:00 PM
Procedure: MSGP Stormwater Industrial Routine Facility Inspection (EPC-CP-Form-1020)
Last PM: 12/12/2016
Project: Routine Facility Inspections 2017 Q1 (P-MSGP-RI-5160)

Target: 3/31/2017
Priority/Type: / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex

Contact:
Phone:

Reason: 2017 Quarter 1 Inspections

Special Instructions: NMR053195

Tasks

#	Description	Meas.	No	N/A	Yes
	Weather Information				
20	Describe the weather at time of inspection in the Weather lookup table. If "Other" is chosen, provide description in task comments of this line. Document the temperature (F°) in the "Reading" field of this line.	Mostly cloudy 46 degrees F	☐	☐	☑
	Within the Facility Boundary				
40	Is the facility free of new discharges of pollutants that have occurred since the last inspection? If "No", describe:		☐	☐	☑
50	If "No" has a CAR been previously initiated for this new discharge?		☐	☑	☐
60	Is the facility free of discharge of pollutants at the time of inspection? If "No" describe.		☐	☐	☑
70	Is the facility free of evidence of, or the potential for, pollutants entering the drainage system. If "No" describe. **Comments: Metal shavings next to metal shavings bin on north side of bldg.66**		☒	☐	☐
	Outfall Inspection (needed maintenance and repairs, failed control measures that need replacement, or a description of corrective actions in relevant task comment)				
90	**Monitored Outfall [018]** Free of Evidence of Erosion? If "No", describe.		☐	☐	☑
100	**Monitored Outfall [018]** Flow Dissipation Devices Operating Effectively? If "No", describe.		☐	☐	☑
110	**Monitored Outfall [018]** Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.		☐	☐	☑
120	**Monitored Outfall [020]** Free of Evidence of Erosion? If "No", describe.		☐	☐	☑
130	**Monitored Outfall [020]** Flow Dissipation Devices Operating Effectively? If "No", describe.		☐	☑	☐
140	**Monitored Outfall [020]** Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.		☐	☐	☑
150	**Substantially Identical Outfall [013]** Free of Evidence of Erosion? If "No", describe.		☐	☐	☑
160	**Substantially Identical Outfall [013]** Flow Dissipation Devices Operating Effectively? If "No", describe.		☐	☑	☐
170	**Substantially Identical Outfall [013]** Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.		☐	☐	☑
180	**Substantially Identical Outfall [014]** Free of Evidence of Erosion? If "No", describe.		☐	☐	☑
190	**Substantially Identical Outfall [014]** Flow Dissipation Devices Operating Effectively? If "No", describe.		☐	☑	☐
200	**Substantially Identical Outfall [014]** Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.		☐	☐	☑
210	**Substantially Identical Outfall [015]** Free of Evidence of Erosion? If "No", describe. **Comments: Area next to fence has evidence of erosion that needs to be addressed.**		☒	☐	☐
220	**Substantially Identical Outfall [015]** Flow Dissipation Devices Operating Effectively? If "No", describe.		☒	☐	☐

	Comments: Rip rap needs to be addressed.				
230	**Substantially Identical Outfall [015]** Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.		☐	☐	☑
240	**Substantially Identical Outfall [016]** Free of Evidence of Erosion? If "No", describe.		☐	☐	☑
250	**Substantially Identical Outfall [016]** Flow Dissipation Devices Operating Effectively? If "No", describe.		☐	☑	☐
260	**Substantially Identical Outfall [016]** Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.		☐	☐	☑
270	**Monitored Outfall [017]** Free of Evidence of Erosion? If "No", describe.		☐	☐	☑
280	**Monitored Outfall [017]** Flow Dissipation Devices Operating Effectively? If "No", describe.		☐	☑	☑
290	**Monitored Outfall [017]** Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.		☐	☐	☑
300	**Substantially Identical Outfall [019]** Free of Evidence of Erosion? If "No", describe.		☐	☐	☑
310	**Substantially Identical Outfall [019]** Flow Dissipation Devices Operating Effectively? If "No", describe.		☐	☐	☑
320	**Substantially Identical Outfall [019]** Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.		☐	☐	☑
	Control Measures (identify needed maintenance and repairs, failed control measures that need replacment, or a description of corrective actions in relevant task comments).				
340	**Gravel Bags [0300303100009]** Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		☐	☐	☑
350	**Rip Rap [0300304060005]** Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		☐	☐	☑
360	**Rip Rap [0300304060006]** Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		☐	☐	☑
370	**Rip Rap [0300304060007]** Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement. **Comments: Rip rap is being undercut. Needs to be addressed.**		☒	☐	☐
380	**Detention Pond [0300311020001]** Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		☐	☐	☑
390	**Detention Pond [0300311020002]** Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		☐	☐	☑
400	**Detention Pond [0300311020010]** Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		☐	☐	☑
410	**Detention Pond [0300311020011]** Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		☐	☐	☑
	Area/Activity exposed to stormwater (identify needed mainteance or a description of corrective actions in relevant task comment).				
430	Material loading/unloading and storage areas: controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☐	☑
440	Transfer areas for substances in bulk: controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☑	☐
450	Product/chemical storage areas (raw material): controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☐	☑
460	Liquid tank storage/secondary containment: controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☐	☑
470	Industrial processing and finished product storage areas: controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☐	☑
480	Equipment operation and maintenance areas: controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☑	☐
490	Fueling areas: controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☑	☐
500	Outdoor vehicle and equipment washing areas: controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☐	☑
510	Machinery: controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☑	☐
520	Waste handling and disposal areas: controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☐	☑
530	Erodible areas/construction: controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☑	☐

540	Locations and sources of run-on to the site: controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☑	☐
550	Non-stormwater/illicit connections: controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☑	☐
560	Salt storage piles or pile containing salt: controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☑	☐
570	Dust generation and vehicle tracking: controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☑	☐
580	Housekeeping (Industrial materials/residues/trash in contact with stormwater): controls adequate (appropriate, effective, and operating)? If "No" describe. **Comments: Metal stock plate next to old HVAC system on south side of bldg. 66 needs to be addressed.**		☒	☐	☐
590	Leaks and spills: controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☐	☑
600	**Sector F [03003-F]** Baghouse for degradation that could limit efficiency and lead to excessive emissions: controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☐	☑
	Non-Compliance				
620	Free of incidents of observed non-compliance not already identified above? If "No" describe. **Comments: 2- Metal bins (1 on noth side next to graphite storage and 1 on east side of bldg. 66) need to be covered.**		☒	☐	☐
	Additional Control Measures				
640	Are permit requirements satisfied with existing control measure(s)? If "No" describe additional control measures needed.		☐	☐	☑

Labor Report

Completed: 3/29/2017 2:03:00 PM

Report: 4/12/2017 - 172470: Marc R. Gallegos

Signature / Name	Date	Signature / Name	Date
Marc R Gallegos	4/12/2017		

I confirm the information as recorded is true, accurate and complete.

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg. FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Cliff Kirkland STO-FOD

Signature: [signature] Date: 1/10/18

Los Alamos National Lab - ADESH

Work Order MSGP-RI-59722

MSGP Routine Inspection
Printed 1/9/2018 - 2:11 PM (Duplicate Copy)

Maintenance Details

Requested: 5/15/2017 3:46:00 PM
Procedure: MSGP Stormwater Industrial Routine Facility Inspection (EPC-CP-Form-1020)
Last PM: 3/29/2017
Project: Routine Facility Inspections 2017 Q2 (P-MSGP-RI-5171)

Target: 6/30/2017
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex

Contact:
Phone:

Reason: 2017 Quarter 2 Inspections

Special Instructions: NMR053195

Tasks

#	Description	Meas.	No	N/A	Yes
	Weather Information				
20	Describe the weather at time of inspection. Document the temperature (F°) in the "Reading" field of this line.	Sunny, clear sky, 74 F	☐	☐	☑
	Within the Facility Boundary				
40	Is the facility free of new discharges of pollutants that have occurred since the last inspection? If "No", describe: **Comments: Pile of iron flakes near dock 3 need to be addressed.**		☒	☐	☐
50	If "No" has a CAR been previously initiated for this new discharge?		☒	☐	☐
60	Is the facility free of discharge of pollutants at the time of inspection? If "No" describe.		☐	☐	☑
70	Is the facility free of evidence of, or the potential for, pollutants entering the drainage system. If "No" describe. **Comments: Iron flakes next to dock 3**		☒	☐	☐
	Outfall Inspection (needed maintenance and repairs, failed control measures that need replacement, or a description of corrective actions in relevant task comment)				
90	**Monitored Outfall [017]** Free of Evidence of Erosion? If "No", describe.		☐	☐	☑
100	**Monitored Outfall [017]** Flow Dissipation Devices Operating Effectively? If "No", describe.		☐	☐	☑
110	**Monitored Outfall [017]** Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.		☐	☐	☑
120	**Monitored Outfall [020]** Free of Evidence of Erosion? If "No", describe.		☐	☐	☑
130	**Monitored Outfall [020]** Flow Dissipation Devices Operating Effectively? If "No", describe.		☐	☑	☐
140	**Monitored Outfall [020]** Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.		☐	☐	☑
150	**Substantially Identical Outfall [013]** Free of Evidence of Erosion? If "No", describe.		☐	☐	☑
160	**Substantially Identical Outfall [013]** Flow Dissipation Devices Operating Effectively? If "No", describe.		☐	☐	☑
170	**Substantially Identical Outfall [013]** Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.		☐	☐	☑
180	**Substantially Identical Outfall [014]** Free of Evidence of Erosion? If "No", describe.		☐	☐	☑
190	**Substantially Identical Outfall [014]** Flow Dissipation Devices Operating Effectively? If "No", describe.		☐	☑	☐
200	**Substantially Identical Outfall [014]** Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.		☐	☐	☑
210	**Substantially Identical Outfall [015]** Free of Evidence of Erosion? If "No", describe.		☐	☐	☑
220	**Substantially Identical Outfall [015]** Flow Dissipation Devices Operating Effectively? If "No", describe.		☐	☐	☑

230	**Substantially Identical Outfall [015]** Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.				☑
240	**Substantially Identical Outfall [016]** Free of Evidence of Erosion? If "No", describe.		☐	☐	☑
250	**Substantially Identical Outfall [016]** Flow Dissipation Devices Operating Effectively? If "No", describe.		☐	☐	☑
260	**Substantially Identical Outfall [016]** Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.		☐	☐	☑
270	**Substantially Identical Outfall [019]** Free of Evidence of Erosion? If "No", describe.		☐	☐	☑
280	**Substantially Identical Outfall [019]** Flow Dissipation Devices Operating Effectively? If "No", describe.		☐	☐	☑
290	**Substantially Identical Outfall [019]** Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.		☐	☐	☑

Control Measures (identify needed maintenance and repairs, failed control measures that need replacment, or a description of corrective actions in relevant task comments).

310	**Gravel Bags [0300303100009]** Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		☐	☐	☑
320	**Rip Rap [0300304060005]** Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		☐	☐	☑
330	**Rip Rap [0300304060006]** Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		☐	☐	☑
340	**Rip Rap [0300304060007]** Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		☐	☐	☑
350	**Detention Pond [0300311020001]** Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		☐	☐	☑
360	**Detention Pond [0300311020002]** Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		☐	☐	☑
370	**Detention Pond [0300311020010]** Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		☐	☐	☑
380	**Detention Pond [0300311020011]** Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		☐	☐	☑

Area/Activity exposed to stormwater (identify needed mainteance or a description of corrective actions in relevant task comment).

400	Material loading/unloading and storage areas: controls adequate (appropriate, effective, and operating)? If "No" describe. **Comments: Iron flakes need to be addressed next to dock 3.**		☒	☐	☐
410	Transfer areas for substances in bulk: controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☑	☐
420	Product/chemical storage areas (raw material): controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☐	☑
430	Liquid tank storage/secondary containment: controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☐	☑
440	Industrial processing and finished product storage areas: controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☑	☐
450	Equipment operation and maintenance areas: controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☐	☑
460	Fueling areas: controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☑	☐
470	Outdoor vehicle and equipment washing areas: controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☑	☐
480	Machinery: controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☐	☑
490	Waste handling and disposal areas: controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☐	☑
500	Erodible areas/construction: controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☐	☑
510	Locations and sources of run-on to the site: controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☐	☑
520	Non-stormwater/illicit connections: controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☑	☐
530	Salt storage piles or pile containing salt: controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☑	☐

540	Dust generation and vehicle tracking: controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☑	☐
550	Housekeeping (Industrial materials/residues/trash in contact with stormwater): controls adequate (appropriate, effective, and operating)? If "No" describe. **Comments: Iron flakes near dock 3.**		☒	☐	☐
560	Leaks and spills: controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☑	☐
570	**Sector F [03003-F]** Baghouse for degradation that could limit efficiency and lead to excessive emissions: controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☐	☑
	Non-Compliance				
590	Free of incidents of observed non-compliance not already identified above? If "No" describe.	Yes	☐	☐	☑
	Additional Control Measures				
610	Are permit requirements satisfied with existing control measure(s)? If "No" describe additional control measures needed.		☐	☐	☑

Labor Report

Completed: 6/26/2017 10:42:00 AM

Report: 7/13/2017 - 172470: Salvage area needs to be addressed. East side of bldg. 66. Salvage equipment area on dock 6 south side needs to be addressed.

Marc Gallegos
7/27/2017 - 172470: CAR# 1130 was created in the LANL MSGP CAR database

Signature / Name	Date	Signature / Name	Date
Marc R Gallegos	6/28/2017		

I confirm the information as recorded is true, accurate and complete.

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg. FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Cliff Kirkland STO-FOD

Signature: Cliff Kirkland Date: 1/10/18

Los Alamos National Lab - ADESH

Work Order MSGP-RI-60715

MSGP Routine Inspection
Printed 1/9/2018 - 2:13 PM (Duplicate Copy)

Maintenance Details

Requested: 7/10/2017 8:56:00 AM
Procedure: MSGP Stormwater Industrial Routine Facility Inspection (EPC-CP-Form-1020)
Last PM: 6/26/2017
Project: Routine Facility Inspections 2017 Q3 (P-MSGP-RI-5200)

Target: 9/30/2017
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex

Contact:
Phone:

Reason: 2017 Quarter 3 Inspections

Special Instructions: NMR053195

Tasks

#	Description	Meas.	No	N/A	Yes
	Weather Information				
20	Describe the weather at time of inspection. Document the temperature (F°) in the "Reading" field of this line.	Sunny, clear 60 degrees F	☐	☐	☑
	Within the Facility Boundary				
40	Is the facility free of new discharges of pollutants that have occurred since the last inspection? If "No", describe:		☐	☐	☑
50	If "No" has a CAR been previously initiated for this new discharge?		☐	☑	☐
60	Is the facility free of discharge of pollutants at the time of inspection? If "No" describe.		☐	☐	☑
70	Is the facility free of evidence of, or the potential for, pollutants entering the drainage system. If "No" describe.		☐	☐	☑
	Outfall Inspection (needed maintenance and repairs, failed control measures that need replacement, or a description of corrective actions in relevant task comment)				
90	**Monitored Outfall [017]** Free of Evidence of Erosion? If "No", describe.		☐	☐	☑
100	**Monitored Outfall [017]** Flow Dissipation Devices Operating Effectively? If "No", describe.		☐	☐	☑
110	**Monitored Outfall [017]** Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.		☐	☐	☑
120	**Monitored Outfall [020]** Free of Evidence of Erosion? If "No", describe.		☐	☐	☑
130	**Monitored Outfall [020]** Flow Dissipation Devices Operating Effectively? If "No", describe.		☐	☑	☐
140	**Monitored Outfall [020]** Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.		☐	☐	☑
150	**Substantially Identical Outfall [013]** Free of Evidence of Erosion? If "No", describe.		☐	☐	☑
160	**Substantially Identical Outfall [013]** Flow Dissipation Devices Operating Effectively? If "No", describe.		☐	☐	☑
170	**Substantially Identical Outfall [013]** Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.		☐	☐	☑
180	**Substantially Identical Outfall [014]** Free of Evidence of Erosion? If "No", describe.		☐	☐	☑
190	**Substantially Identical Outfall [014]** Flow Dissipation Devices Operating Effectively? If "No", describe.		☐	☑	☐
200	**Substantially Identical Outfall [014]** Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.		☐	☐	☑
210	**Substantially Identical Outfall [015]** Free of Evidence of Erosion? If "No", describe.		☐	☐	☑
220	**Substantially Identical Outfall [015]** Flow Dissipation Devices Operating Effectively? If "No", describe.		☐	☐	☑
230	**Substantially Identical Outfall [015]** Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.		☐	☐	☑

240	**Substantially Identical Outfall [016]** Free of Evidence of Erosion? If "No", describe.		☐	☐	☑
250	**Substantially Identical Outfall [016]** Flow Dissipation Devices Operating Effectively? If "No", describe.		☐	☐	☑
260	**Substantially Identical Outfall [016]** Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.		☐	☐	☑
270	**Substantially Identical Outfall [019]** Free of Evidence of Erosion? If "No", describe.		☐	☐	☑
280	**Substantially Identical Outfall [019]** Flow Dissipation Devices Operating Effectively? If "No", describe.		☐	☐	☑
290	**Substantially Identical Outfall [019]** Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.		☐	☐	☑

Control Measures (identify needed maintenance and repairs, failed control measures that need replacment, or a description of corrective actions in relevant task comments).

310	**Gravel Bags [0300303100009]** Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		☐	☐	☑
320	**Rip Rap [0300304060005]** Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		☐	☐	☑
330	**Rip Rap [0300304060006]** Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		☐	☐	☑
340	**Rip Rap [0300304060007]** Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		☐	☐	☑
350	**Detention Pond [0300311020001]** Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		☐	☐	☑
360	**Detention Pond [0300311020002]** Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		☐	☐	☑
370	**Detention Pond [0300311020010]** Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		☐	☐	☑
380	**Detention Pond [0300311020011]** Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		☐	☐	☑

Area/Activity exposed to stormwater (identify needed mainteance or a description of corrective actions in relevant task comment).

400	Material loading/unloading and storage areas: controls adequate (appropriate, effective, and operating)? If "No" describe. **Comments: Dock #6 has misc. equipment that needs to be addressed. Containers have been ordered to place equipment inside. CAR# 1183**		☒	☐	☐
410	Transfer areas for substances in bulk: controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☑	☐
420	Product/chemical storage areas (raw material): controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☐	☑
430	Liquid tank storage/secondary containment: controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☐	☑
440	Industrial processing and finished product storage areas: controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☑	☐
450	Equipment operation and maintenance areas: controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☐	☑
460	Fueling areas: controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☑	☐
470	Outdoor vehicle and equipment washing areas: controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☑	☐
480	Machinery: controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☐	☑
490	Waste handling and disposal areas: controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☐	☑
500	Erodible areas/construction: controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☐	☑
510	Locations and sources of run-on to the site: controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☐	☑
520	Non-stormwater/illicit connections: controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☑	☐
530	Salt storage piles or pile containing salt: controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☑	☐
540	Dust generation and vehicle tracking: controls adequate (appropriate, effective, and		☐	☑	☐

	operating)? If "No" describe.				
550	Housekeeping (Industrial materials/residues/trash in contact with stormwater): controls adequate (appropriate, effective, and operating)? If "No" describe. **Comments: Salvage area E. of bldg. 3-66 needs to be addressed. Sigma personnel tried to take salvage equip. to MRF but we're turned away due to lack of personnel. CAR# 1182**		☒	☐	☐
560	Leaks and spills: controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☐	☑
570	**Sector F [03003-F]** Baghouse for degradation that could limit efficiency and lead to excessive emissions: controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☐	☑
	Non-Compliance				
590	Free of incidents of observed non-compliance not already identified above? If "No" describe.		☐	☐	☑
	Additional Control Measures				
610	Are permit requirements satisfied with existing control measure(s)? If "No" describe additional control measures needed.		☐	☐	☑

Labor Report

Completed: 9/25/2017 11:47:00 AM

Report: 9/27/2017 - 172470: CAR # 1157 is being taken care of by IP personnel to mitigate Cu exceedance from last sampling.

Marc Gallegos

Marc R. Gallegos — Signature / Name

9/27/2017 — Date

Signature / Name

Date

I confirm the information as recorded is true, accurate and complete.

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg. FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Cliff Kirkland STO-FOD

Signature: [signature] Date: 1/10/18

Los Alamos National Lab - ADESH

Work Order MSGP-RI-61632

MSGP Routine Inspection
Printed 1/10/2018 - 9:09 AM (Duplicate Copy)

Maintenance Details

Requested: 10/2/2017 9:34:00 AM
Procedure: MSGP Stormwater Industrial Routine Facility Inspection (EPC-CP-Form-1020)
Last PM: 9/25/2017
Project: Routine Facility Inspections 2017 Q4 (P-MSGP-RI-5228)

Target: 12/31/2017
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex

Contact:
Phone:

Reason: 2017 Quarter 4 Inspections

Special Instructions: NMR053195

Tasks

#	Description	Meas.	No	N/A	Yes
	Weather Information				
20	Describe the weather at time of inspection. Document the temperature (F°) in the "Reading" field of this line.	38 degrees F and clear	☐	☐	☑
	Within the Facility Boundary				
40	Is the facility free of new discharges of pollutants that have occurred since the last inspection? If "No", describe:		☐	☐	☑
50	If "No" has a CAR been previously initiated for this new discharge?		☐	☑	☐
60	Is the facility free of discharge of pollutants at the time of inspection? If "No" describe.		☐	☐	☑
70	Is the facility free of evidence of, or the potential for, pollutants entering the drainage system. If "No" describe.	Metal for recycle roll off bin not covered.	☒	☐	☑
	Outfall Inspection (needed maintenance and repairs, failed control measures that need replacement, or a description of corrective actions in relevant task comment)				
90	**Monitored Outfall [017]** Free of Evidence of Erosion? If "No", describe.		☐	☐	☑
100	**Monitored Outfall [017]** Flow Dissipation Devices Operating Effectively? If "No", describe.	Coir logs to divert flow installed 10/2/2017	☐	☐	☑
110	**Monitored Outfall [017]** Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.		☐	☐	☑
120	**Monitored Outfall [020]** Free of Evidence of Erosion? If "No", describe.		☐	☐	☑
130	**Monitored Outfall [020]** Flow Dissipation Devices Operating Effectively? If "No", describe.		☐	☑	☐
140	**Monitored Outfall [020]** Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.		☐	☐	☑
150	**Substantially Identical Outfall [013]** Free of Evidence of Erosion? If "No", describe.		☐	☐	☑
160	**Substantially Identical Outfall [013]** Flow Dissipation Devices Operating Effectively? If "No", describe.		☐	☑	☐
170	**Substantially Identical Outfall [013]** Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.		☐	☐	☑
180	**Substantially Identical Outfall [014]** Free of Evidence of Erosion? If "No", describe.		☐	☐	☑
190	**Substantially Identical Outfall [014]** Flow Dissipation Devices Operating Effectively? If "No", describe.		☐	☑	☐
200	**Substantially Identical Outfall [014]** Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.		☐	☐	☑
210	**Substantially Identical Outfall [015]** Free of Evidence of Erosion? If "No", describe.		☐	☐	☑
220	**Substantially Identical Outfall [015]** Flow Dissipation Devices Operating		☐	☑	☐

	Effectively? If "No", describe.				
230	**Substantially Identical Outfall [015]** Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.		☐	☐	☑
240	**Substantially Identical Outfall [016]** Free of Evidence of Erosion? If "No", describe.		☐	☐	☑
250	**Substantially Identical Outfall [016]** Flow Dissipation Devices Operating Effectively? If "No", describe.		☐	☑	☐
260	**Substantially Identical Outfall [016]** Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.		☐	☐	☑
270	**Substantially Identical Outfall [019]** Free of Evidence of Erosion? If "No", describe.		☐	☐	☑
280	**Substantially Identical Outfall [019]** Flow Dissipation Devices Operating Effectively? If "No", describe.		☐	☐	☑
290	**Substantially Identical Outfall [019]** Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.		☐	☐	☑

Control Measures (identify needed maintenance and repairs, failed control measures that need replacment, or a description of corrective actions in relevant task comments).

310	**Gravel Bags [0300303100009]** Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		☐	☑	☑
320	**Rip Rap [0300304060005]** Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		☐	☐	☑
330	**Rip Rap [0300304060006]** Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		☐	☐	☑
340	**Rip Rap [0300304060007]** Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		☐	☐	☑
350	**Detention Pond [0300311020001]** Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		☐	☐	☑
360	**Detention Pond [0300311020002]** Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		☑	☑	☑
370	**Detention Pond [0300311020010]** Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		☐	☐	☑
380	**Detention Pond [0300311020011]** Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.	Fabric extended past the berm to stabilize soil.	☐	☐	☑

Area/Activity exposed to stormwater (identify needed mainteance or a description of corrective actions in relevant task comment).

400	Material loading/unloading and storage areas: controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☐	☑
410	Transfer areas for substances in bulk: controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☑	☐
420	Product/chemical storage areas (raw material): controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☐	☑
430	Liquid tank storage/secondary containment: controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☐	☑
440	Industrial processing and finished product storage areas: controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☐	☑
450	Equipment operation and maintenance areas: controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☐	☑
460	Fueling areas: controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☑	☐
470	Outdoor vehicle and equipment washing areas: controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☑	☐
480	Machinery: controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☐	☑
490	Waste handling and disposal areas: controls adequate (appropriate, effective, and operating)? If "No" describe.	Roll off bin not entirely covered.	☑	☐	☐
500	Erodible areas/construction: controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☑	☑
510	Locations and sources of run-on to the site: controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☐	☑

520	Non-stormwater/illicit connections: controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☑	☐
530	Salt storage piles or pile containing salt: controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☑	☐
540	Dust generation and vehicle tracking: controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☐	☑
550	Housekeeping (Industrial materials/residues/trash in contact with stormwater): controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☐	☑
560	Leaks and spills: controls adequate (appropriate, effective, and operating)? If "No" describe.		☐	☐	☑
570	**Sector F [03003-F]** Baghouse for degradation that could limit efficiency and lead to excessive emissions: controls adequate (appropriate, effective, and operating)? If "No" describe.	Baghouse was not evaluated.	☐	☑	☐
	Non-Compliance				
590	Free of incidents of observed non-compliance not already identified above? If "No" describe.		☐	☐	☑
	Additional Control Measures				
610	Are permit requirements satisfied with existing control measure(s)? If "No" describe additional control measures needed.	Suggest installation of Metaloxx wattles at 017.	☒	☐	☐

Labor Report

Completed: 12/21/2017 10:00:00 AM

Report: 1/9/2018 - 118432: Watch for rilling at outfall 015 under fence line. May need to armor area near fence line with angular rock to slow down flow and prevent erosion.
Culvert flowing to outfall 014 is over half full of sediment and needs to be cleaned out (see CAR #1295). Metal roll off bin containing metal for recycle is not fully covered
(see CAR #1294). Discussion occurred with facility personnel of importance of having adequate stormwater controls in place during Sigma Addition construction project
in the near future. BMPs for this construction project will be identified in CGP SWPPP.
Inspector: Holly Wheeler

Signature / Name	Date	Signature / Name	Date
[signature]	1/9/2018		

I confirm the information as recorded is true, accurate and complete.

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg. FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Cliff Kirkland STO-FOD

Signature: [signature] Date: 1/10/18

2015 NPDES Multi-Sector General Permit For Stormwater Discharges Associated With Industrial Activity (MSGP) Forms

United States Environmental Protection Agency
1200 Pennsylvania Ave, NW Washington, DC 20460

Permit Information (* indicates form required data)

What action would you like to take? *

New Industrial Stormwater Annual Report

Enter the NPDES ID corresponding to the facility for which you would like to submit an Annual Report and click the Submit button.

NPDES ID *

NMR053195

☒ Confirm NPDES ID: NMR053195 *

Facility Information

Facility Name

Los Alamos National Laboratory

Street

PO Box 1663

Supplemental address

MS K490

City	State	Zip Code
Los Alamos	**New Mexico**	**87545**

First Name	Middle Name	Last Name	Telephone Number
Holly		**Wheeler**	**5056671312**

Summary of past year's inspections, assessments, and corrective actions

1. Provide a summary of your past year's routine facility inspection documentation (see Part 3.2 of the permit). In addition, if you are an operator of an airport facility (Sector S) that is subject to the airport effluent limitations guidelines, and are complying with the MSGP Part 8.S.8.1 effluent limitation through the use of non-urea-containing deicers, provide a statement certifying that you do not use airfield pavement deicers containing urea (e.g., "*I certify that [name of airport] is in compliance with the effluent limitation guideline for airfield pavement deicing by not using airfield pavement deicers that contain urea.*"). [Note: Operators of airport facilities that are complying with Part 8.S.8.1 by meeting the numeric effluent limitation for ammonia do not need to include this statement.] *

LANL consists of 14 sites under 8 Sectors (A, D, F, K, N, O, P, AA). As specified in a letter to EPA dated Nov 24, 2015, (ENV-DO-15-0328), LANL is providing information collected from the 2015 Comprehensive Site Inspection along with other documentation identified in Part 7.5 of the 2015 MSGP. All 14 sites, one inactive site and 25 sites that qualify for a conditional exclusion for no exposure were inspected Sept 8th-29th, 2015. The active sites became authorized to discharge stormwater under the 2015 MSGP on Oct 3, 2015. Routine inspections were then conducted at these sites in accordance with the 2015 MSGP. Corrective actions identified at all sites between Sept 1 and Dec 31, 2015 are summarized below. An evaluation of analytical monitoring data for the 2015 calendar year is included below.

Power & Steam Plant: Insp-4, Ctrls Maint, Repair, Repl-3, Ctrls Inad to Meet Non-Num. Eff Limit-1; TA-3-34 Metal Shop: Insp-1, Ctrls Inad to Meet Non-Num Eff Limit-1; TA-3-38 Carpenter Shop: Insp-5, Discharges During Insp-1; TA-3-38 Metals Fab Shop: Insp-7, Discharges During Insp-2, Pollutants Entering Drainage-2, Ctrls Inad to Meet Non-Num Eff Limit-1; TA-3-39 & 102 Metal Shop: Insp-2, Ctrls Inad to Meet Non-Num Eff Limit-1; Sigma Facility: Insp-3, Discharges During Insp-2, Ctrls Inad to Meet Non-Num Eff Limit-4; Heavy Equipment Maintenance: Insp-1, Discharges During Insp-1, Ctrls Inad to Meet Non-Num Eff Limit-1; TA-15-313 Machine Shop: Insp-1, Ctrls Inad to Meet Non-Num Eff Limit-1: TA-33-113 Machine Shop: Insp-1, Ctrls Inad to Meet Non-Num Eff Limit-1; TA-46-31 Machine Shop: Insp-1, Discharges During Insp-1, Ctrls Maint, Repair, Repl-1, Ctrls Inad to Meet Non-Num Eff Limit-3; TA-48-8 Machine Shop: Insp-1, Ctrls Maint, Repair, Repl-1, Ctrls Inad to Meet Non-Num Eff Limit-1; TA-53-2 Machine Shop: Insp-1, Ctrls Inad to Meet Non-Num Eff Limit-3; TA-53-16 Machine Shop: Insp-1, Ctrls Inad to Meet Non-Num Eff Limit-1; TA-53-18 Machine Shop: Insp-1, Ctrls Maint, Repair, Repl-1, Ctrls Inad to Meet Non-Num Eff Limit-1; TA-53-26 Machine Shop: Insp-1, Ctrls Inad to Meet Non-Num Eff Limit-1; TA-53-39 Shop & Storage Bldg: Insp-1, Ctrls Inad to Meet Non-Num Eff Limit-2; TA-54 Area L: Insp-3, Discharges During Insp-1, Ctrls Maint, Repair, Repl-1, Ctrls Inad to Meet Non-Num Eff Limit-2; Area G: Insp-9, Discharges During Insp-5, Ctrls Maint, Repair, Repl-3; Maintenance Facility West: Insp-4, Discharges During Insp-2, Ctrls Inad to Meet Non-Num Eff Limit-1, NonComp (NM WQS Exceed Al, Cu)-2*; RANT: Insp 2; Asphalt Batch Plant: Insp-5, Discharges During Insp-1, Ctrls Maint, Repair, Repl-1, Ctrls Inad to Meet Non-Num Eff Limit-1, NonComp (ELG Exceed TSS)-4**; MRF: Insp-6, Discharges During Insp-1, Ctrls Inad to Meet Non-Num Eff Limit-3; Roads & Grounds: Insp-6, Discharges During Insp-2, Ctrls Maint, Repair, Repl-5, Ctrls Inad to Meet Non-Num Eff Limit-9, NonComp (NM WQS Exceed Tl)-1; Heavy Equipment Yard: Insp-6, Discharges During Insp-1, Ctrls Maint, Repair, Repl-5, Ctrls Inad to Meet Non-Num Eff Limit-7; TA-60-2 Whse: Insp-5, Discharges During Insp-1, Prev Unidentified Discharges-1, Ctrls Inad to Meet Non-Num Eff Limit-4.

*Per Part 6.2.4.2 of the 2008 MSGP, LANL ceased monitoring for aluminum and copper at outfall 049, due to their presence below LANL background values submitted to EPA on November 4, 2010 (ENV-RCRA-10-215, LA-UR-10-07291).

**The 30-day avg. effluent limit was exceeded for TSS from rain events on 7/7, 7/15 and 7/20/2015, which were the only discharges that occurred during the second monitoring period at this facility. A subsequent sample was collected on 8/8/2015, which exceeded the daily max. effluent limit for TSS. This sample was collected before analytical results were received for the previous ELG monitoring. An Exceedance Report for Numeric Effluent Limits was sent to EPA on 9/17/2015 (ENV-DO-15-0254, LA-UR # 15-27266). Corrective actions are identified in the report.
LA-UR-16-20466

2. Provide a summary of your past year's quarterly visual assessment documentation (see Part 3.3.2 of the permit) *

A total of 91 quarterly visual assessments were completed at 38 different outfalls. No obvious indicators of pollutants were present in any of these samples.
LA-UR-16-20466

3. For any four-sample (minimum) average benchmark monitoring exceedance, if after reviewing the selection, design, installation and implementation of your control measures and considering whether any modifications are necessary to meet the effluent limits in the permit, you determine that no further pollutant reductions are technologically available and economically practicable and achievable in light of best industry practice, provide your rationale for why you believe no further reductions are achievable (see Part 6.2.1.2 of the permit). *

At this time, LANL is not seeking to determine that no further pollutant reductions are technologically available and economically practicable and achievable in light of best industry practice. Therefore, no rationale is provided.
LA-UR-16-20466

4. Provide a summary of your past year's corrective action documentation (See Part 4.3 of the permit). (Note: If corrective action is not yet completed at the time of submission of this annual report, you must describe the status of any outstanding corrective action(s).) Also describe any incidents of noncompliance in the past year or currently ongoing, or if none, provide a statement that you are in compliance with the permit. *

Please see the response to Section 1 for a summary of corrective action documentation including unauthorized releases, discharges that violate a numeric effluent limit, control measures that were not stringent enough for the discharge to meet applicable water quality standards or the non-numeric effluent limits, and instances where control measures were never installed, were installed incorrectly or not in accordance with Parts 2 and/or 8 of the 2015 MSGP, or were not being properly operated or maintained. Regarding incidents of noncompliance, two ELG exceedances occurred at the TA-60 Asphalt Batch Plant. An Exceedance Report for Numeric Effluent Limits was sent to EPA on 9/17/2015 (ENV-DO-15-0254, LA-UR # 15-27266). Corrective actions are identified in the report. Specifics relative to these exceedances are contained in the footnote to the table in response to Section 1 above. In addition, one New Mexico Water Quality Standard (WQS) exceedance occurred for Thallium at TA-60 Roads and Grounds. The other New Mexico WQS exceedances identified in Section 1 above are below natural background for LANL. All corrective actions identified during calendar year 2015 are closed.
LA-UR-16-20466

Certification Information

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. 40 CFR 122.22 (d)

Certifier E-Mail *	Form Action *
grieggst@lanl.gov	Approve

Appendix E – Quarterly Visual Assessment Records and Discharge Monitoring Reports

(See next page)

Los Alamos
NATIONAL LABORATORY
EST. 1943

memorandum

Environmental Protection & Compliance Division
Environmental Compliance Programs (EPC-CP)

To/MS: Marc Gallegos, DESHF-STO, E509
Thru/MS: Terrill Lemke, EPC-CP, (E-File)
From/MS: Holly Wheeler, EPC-CP, (E-File)
Phone/Fax: 667-1312
Symbol: EPC-DO-16-302
Date: OCT 13 2016

Subject: **National Pollutant Discharge Elimination System (NPDES) Permit No. NMR053195, Multi-Sector General Permit (MSGP) Quarterly Visual Assessment (QVA) Forms for April and May of 2016 for the TA-3-66 Sigma Complex and TA-3-39 and 102 Metal Shop**

Please find attached completed MSGP QVA Forms documenting visual assessments performed during the first quarter of monitoring at the TA-3-66 Sigma Complex and TA-3-39 and 102 Metal Shop. Per Parts 3.2.2 and 5.5 of the 2015 MSGP, the QVA forms shall be incorporated into your MSGP Storm Water Pollution Prevention Plan (SWPPP).

Part 3.2.1 of the 2015 MSGP requires the visual assessment of storm water discharge samples collected from each outfall once each quarter for the entire permit term. Part 3.2.3 allows facilities that are located in an area with a semi-arid climate and/or in an area where freezing conditions exist for an extended period to distribute the quarterly visual assessments during seasons when precipitation runoff occurs. Accordingly, LANS has designated the following MSGP monitoring quarters.

Quarter 1:	April – May	Quarter 2:	June – July
Quarter 3:	August – September	Quarter 4:	October - November

The attached QVA forms document the following information as required by Part 3.2.2 of the 2015 MSGP and were completed by Environmental Compliance Programs (EPC-CP) personnel.

- Sample location;
- Sample collection date and time, and visual assessment date and time for each sample;
- Personnel collecting the sample and performing the visual assessment, and their signatures;
- Nature of the discharge (i.e., runoff or snowmelt);
- Results of observations of the stormwater discharge;
- Probable sources of any observed stormwater contamination (if applicable);
- If applicable, why it was not possible to take a sample within the first 30 minutes of the storm event.

Part 3.2.3 of the 2015 MSGP allows the facility to take a substitute sample during the next qualifying storm event when adverse weather conditions prevent the collection of samples during a specific quarter. Adverse weather conditions are those that are dangerous or create inaccessibility for

personnel, or situations that otherwise make sampling impractical, such as drought or extended frozen conditions. Documentation of the rationale for no visual assessment for the quarter must be included in the facility-specific SWPPP.

Please contact Holly Wheeler at 667-1312 (hbenson@lanl.gov) if you have questions regarding the QVA documentation. Thank you for your assistance in meeting the requirements of the Laboratory's NPDES 2015 MSGP Permit.

TWL:HLW/lm

Enclosures: 1. Quarterly Visual Assessment Forms, First Quarter, 2016 Monitoring Year

Facility Name	Sampling Station	Work Order #
TA-3-39 & 102 Metal Shop	MSGP00401	MSGP-53595
TA-3-39 & 102 Metal Shop	MSGP00401	MSGP-53806
TA-3-66 Sigma Complex	MSGP01801	MSGP-53598
TA-3-66 Sigma Complex	MSGP01301	MSGP-53790
TA-3-66 Sigma Complex	MSGP01401	MSGP-53791
TA-3-66 Sigma Complex	MSGP01501	MSGP-53792
TA-3-66 Sigma Complex	MSGP01601	MSGP-53793
TA-3-66 Sigma Complex	MSGP01701	MSGP-53794
TA-3-66 Sigma Complex	MSGP01801	MSGP-53807
TA-3-66 Sigma Complex	MSGP01401	MSGP-54181

Cy: Gary R. Schramm, DESHF-STO, (E-File)
locatesteam@lanl.gov, (E-File)
epc-correspondence@lanl.gov, (E-File)

Los Alamos National Lab

Work Order MSGP-53598

MSGP Monitoring Stations
Printed 4/18/2016 - 7:26 PM

Maintenance Details

Requested: 4/18/2016 6:16:00 PM
Procedure: MSGP Quarterly Visual Assessment (EPC-CP-Form-1021.2)
Last PM: 8/1/2013
Project: MSGP VISUALS- SNOW EVENT 4-18-16 (P-MSGP-4708)
Reason: MSGP Q1 Visual Assessment
Special Instructions: NMR053195

Target: 4/20/2016
Priority/Type: Normal / Preventive

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (018)
MSGP01801

Contact:
Phone:

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
	Outfall Information						
	Sample information						
30	Document the monitoring Period by using the Monitoring Period lookup table.		MP1		☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).		4/15/16 22:36		☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).		4/15/16 22:36		☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).		4/20/16 14:52		☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.		PR2 0.24 in 0.09 in Antecedent		☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If no or unknown, provide reason in comments of this line.				☐	☐	☑
90	Previous storm ended >72 hours before start of storm? If no, provide reason in comments of this line.				☐	☐	☑
	Parameters						
110	Is sample colorless? If no, describe.				☐	☐	☑
120	Is sample oderless? If no, document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☐	☑
130	Is sample clear? If no, document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		01		☑	☐	☐
140	Is sample free of floating solids? If no, describe if raw or waste material(s) in the comments of this line.				☐	☐	☑
150	Is sample free of settled solids? If no, document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		RAW - Vegetation		☑	☐	☐
160					☐	☐	☑

	Is sample free of suspended solids? If no, document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	SUSSOL2				
170	Is sample foamless after gently shaking?. If no describe foam color and location ('on the surface' or 'in the sample') in the comments of this line.		☐	☐	☑	
180	Is sample devoid of an oil sheen? If no, describe color and thickness (e.g. flecks, globs) in the comments of this line.		☐	☐	☑	
190	Is sample free of other obvious indicators of pollution? If no, describe in the comments of this line.		☐	☐	☑	

Documents

ID	Document Name	Type	Location
MSGP VA signature	MSGP Visual Assessment Signature	Signature page	View

Labor Report

Completed: _____ **Failure:** _____ **Meter 1:** _____ **Meter 2:** _____

Report:

Signature (collecting sample): MSL Date and Time: 4/15/16 22:36

Signature (conducting visual assessment): MSL Date and Time: 4/20/16 14:52

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., EPC Group Leader or designee)

Print name and title: Anthony R. Grieggs, EPC-CP Group Leader

Signature: A R Grieggs Date: 6/9/2016

Los Alamos National Lab

Work Order MSGP-53790

MSGP Monitoring Stations
Printed 5/2/2016 - 11:43 AM

Maintenance Details

Requested: 5/2/2016 11:40:58 AM
Procedure: MSGP Quarterly Visual Assessment (EPC-CP-Form-1021.2)
Last PM: N/A
Project: Sio Visual Assessments 5/2/16 (P-MSGP-4731)

Target: 5/31/2016
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (018)
Substantially Identical Outfall (013)
MSGP01301

Contact: Holly Wheeler
Phone: 667-1312

Reason: MSGP Quarterly Visual Assessment

Special Instructions: NMR053195

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.						
	Sample information						
30	Document the monitoring Period by using the Monitoring Period lookup table.				☐	☐	☒
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)				☐	☐	☒
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).		05/01/16 13:50 (estimated)		☐	☐	☒
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).		05/01/16 13:50 (estimated)		☐	☐	☒
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).		05/05/16 12:35		☐	☐	☒
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.		Snow melt 0.36 in. 5/3/16 ~~30 minute max~~ 0.06"		☐	☐	☒
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.		Personnel not present during non-work hours. Multiple storm events occured over the weekend		☒	☐	☐
90	Previous storm ended >72 hours before start of storm? If "Failed", provide reason in comments of this line. Snowmelt		multiple storm events occurred over the week-end.		☒	☐	☐
	Parameters						
110	Is sample colorless? If "Failed", describe.		lightly tan		☒	☐	☐
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☐	☒
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		Slightly Cloudy		☒	☐	☐
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.				☐	☐	☒
150	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If		Fine		☒	☐	☐

	"other" is chosen from the lookup table, provide description in comments of this line.					
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	Fine	☒	☐	☐	
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line.		☐	☐	☒	
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line.		☐	☐	☒	
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line.		☐	☐	☒	
			☐	☐	☐ ?	

Documents

ID	Document Name	Type	Location
MSGP VA signature	MSGP Visual Assessment Signature	Signature page	View

Labor Report

Completed: _____ **Failure:** _____

Report:

WO ID: MSGP-53790 Page 3 of 3

Signature (collecting sample): Holly Wheel Date and Time: 05/05/16 12:35

Signature (conducting visual assessment): Holly Wheel Date and Time: 05/05/16 12:35

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Greggs, EPC-CP Group Leader

Signature: A R Greggs Date: 6/9/2016

Los Alamos National Lab

Work Order MSGP-53791

MSGP Monitoring Stations
Printed 5/2/2016 - 11:43 AM

Maintenance Details

Requested: 5/2/2016 11:40:59 AM
Procedure: MSGP Quarterly Visual Assessment (EPC-CP-Form-1021.2)
Last PM: N/A
Project: Sio Visual Assessments 5/2/16 (P-MSGP-4731)

Target: 5/31/2016
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (018)
Substantially Identical Outfall (014)
MSGP01401

Contact: Holly W Keller
Phone: 667-1312

Reason: MSGP Quarterly Visual Assessment

Special Instructions: NMR053195

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.						
	Sample information						
30	Document the monitoring Period by using the Monitoring Period lookup table.		April May		☐	☐	☒
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)				☐	☐	☒
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).		05/01/16 13:50 (estimated)		☐	☐	☒
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).		05/01/16 13:50 (estimated)		☐	☐	☒
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).		05/05/16 12:20		☐	☐	☒
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.		Snow Melt 0.36 in. 05/04/16 ~~30 minute max.~~ 0.06"		☐	☐	☒
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.	Occured over the week end.	Personnel not present during non-work hours. Multiple storm events		☒	☐	☐
90	Previous storm ended >72 hours before start of storm? If "Failed", provide reason in comments of this line.	weekend. Snow melt.	Multiple storm events occured over the		☒	☐	☐
	Parameters						
110	Is sample colorless? If "Failed", describe.		light brown		☒	☐	☐
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☐	☒
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		cloudy		☒	☐	☐
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.				☐	☐	☒
150	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If		Fine		☒	☐	☐

	"other" is chosen from the lookup table, provide description in comments of this line.					
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	FWL	☒	☐	☐
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line.		☐	☐	☒
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line.		☐	☐	☒
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line.		☐	☐	☒
			☐	☐	☐ ?

Documents

ID	Document Name	Type	Location
MSGP VA signature	MSGP Visual Assessment Signature	Signature page	View

Labor Report

Completed: _____ **Failure:** _____

Report:

WO ID: MSGP-53791 Page 3 of 3

Signature (collecting sample): Holly Wheeler Date and Time: 05/05/16 12:25

Signature (conducting visual assessment): Holly Wheeler Date and Time: 05/05/16 12:25

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Greggs, EPC-CP Group Leader

Signature: A R Greggs Date: 6/9/2016

Los Alamos National Lab

Work Order MSGP-53792

MSGP Monitoring Stations
Printed 5/2/2016 - 11:43 AM

Maintenance Details

Requested: 5/2/2016 11:40:59 AM
Procedure: MSGP Quarterly Visual Assessment (EPC-CP-Form-1021.2)
Last PM: N/A
Project: Sio Visual Assessments 5/2/16 (P-MSGP-4731)

Target: 5/31/2016
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (018)
Substantially Identical Outfall (015)
MSGP01501

Contact: Holly Wheeler
Phone: 667-1312

Reason: MSGP Quarterly Visual Assessment

Special Instructions: NMR053195

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.						
	Sample information						
30	Document the monitoring Period by using the Monitoring Period lookup table.		April May		☐	☐	☒
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)				☐	☐	☒
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).		05/01/16 13:50 (estimated)		☐	☐	☒
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).		05/01/16 13:50 (estimated)		☐	☐	☒
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).		05/05/16 12:10		☐	☐	☒
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.		0.36 in. AM 5/9/16 30 minute maximum Snow melt + rain		☐	☐	☒
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.	Snow melt & multiple storm events over the week-end			☒	☐	☐
90	Previous storm ended >72 hours before start of storm? If "Failed", provide reason in comments of this line.	Personnel not present during non work hours, Multiple Storm events occured over the weekend.			☒	☐	☐
	Parameters						
110	Is sample colorless? If "Failed", describe.	light tan			☒	☐	☐
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☐	☒
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	Slightly Cloudy			☒	☐	☐
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.				☐	☐	☒
150	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If				☐	☐	☒

	"other" is chosen from the lookup table, provide description in comments of this line.					
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		Fine	☒	☐	☐
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line.			☐	☐	☒
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line.			☐	☐	☒
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line.			☐	☐	☒
				☐	☐	☐

Documents

ID	Document Name	Type	Location
MSGP VA signature	MSGP Visual Assessment Signature	Signature page	View

Labor Report

Completed: _____ **Failure:** _____

Report:

WO ID: MSGP-53792 Page 3 of 3

Signature (collecting sample): Holly Wheeler Date and Time: 05/05/16 12:12

Signature (conducting visual assessment): Holly Wheeler Date and Time: 05/05/16 12:12

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Grieggs, EPC-CP Group Leader

Signature: A R Grieggs Date: 6/9/2016

Los Alamos National Lab

Work Order MSGP-53793

MSGP Monitoring Stations
Printed 5/2/2016 - 11:43 AM

Maintenance Details

Requested: 5/2/2016 11:41:00 AM
Procedure: MSGP Quarterly Visual Assessment (EPC-CP-Form-1021.2)
Last PM: N/A
Project: Sio Visual Assessments 5/2/16 (P-MSGP-4731)

Target: 5/31/2016
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (018)
Substantially Identical Outfall (016)
MSGP01601

Reason: MSGP Quarterly Visual Assessment

Special Instructions: NMR053195

Contact: Holly Wheeler
Phone: 667-1312

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.						
	Sample information						
30	Document the monitoring Period by using the Monitoring Period lookup table.				☐	☒	☐
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)				☐	☒	☐
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).				☐	☒	☐
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).				☐	☒	☐
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).				☐	☒	☐
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.				☐	☒	☐
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.				☐	☒	☐
90	Previous storm ended >72 hours before start of storm? If "Failed", provide reason in comments of this line.				☐	☒	☐
	Parameters						
110	Is sample colorless? If "Failed", describe.				☐	☒	☐
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☒	☐
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☒	☐
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.				☐	☒	☐
150	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If				☐	☒	☐

	"other" is chosen from the lookup table, provide description in comments of this line.						
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☒	☐
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line.				☐	☒	☐
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line.				☐	☒	☐
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line.				☐	☒	☐
					☐	☐	☐

Documents

ID	Document Name	Type	Location
MSGP VA signature	MSGP Visual Assessment Signature	Signature page	View

Labor Report

Completed: _____ **Failure:** _____

Report:

No Flow. No sample collected. No visual assessment performed.

WO ID: MSCP-53793 Page 2 of 3

Signature (collecting sample): [signature] Date and Time: 05/05/16 12:05 pm

Signature (conducting visual assessment): N/A Date and Time: _____

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R Greggs, EPC-CP Group Leader

Signature: A R Greggs Date: 6/9/2016

Los Alamos National Lab

Work Order MSGP-53794

MSGP Monitoring Stations
Printed 5/2/2016 - 11:43 AM

Maintenance Details

Requested: 5/2/2016 11:41:00 AM
Procedure: MSGP Quarterly Visual Assessment (EPC-CP-Form-1021.2)
Last PM: N/A
Project: Sio Visual Assessments 5/2/16 (P-MSGP-4731)

Target: 5/31/2016
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (018)
Substantially Identical Outfall (017)
MSGP01701

Reason: MSGP Quarterly Visual Assessment

Special Instructions: NMR053195

Contact: Holly Wheeler
Phone: 667-1312

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.						
	Sample information						
30	Document the monitoring Period by using the Monitoring Period lookup table.		April/May		☐	☐	☒
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)				☐	☐	☒
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).		05/01/16 13:30 (estimated)		☐	☐	☒
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).		05/01/16 13:50 (estimated)		☐	☐	☒
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).		05/05/16 11:50		☐	☐	☒
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.		~~0.06" 3x min. max.~~ 3x 05/9/16 Snow melt 0.36in.		☐	☐	☒
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line. over the weekend. Personnel were not present during non-work hours. Multiple storm events				☒	☐	☐
90	Previous storm ended >72 hours before start of storm? If "Failed", provide reason in comments of this line. multiple storm events occurred over the weekend.				☒	☐	☐
	Parameters						
110	Is sample colorless? If "Failed", describe.				☐	☐	☒
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☐	☒
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☐	☒
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.				☐	☐	☒
150	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If				☐	☐	☒

	"other" is chosen from the lookup table, provide description in comments of this line.						
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☐	☒
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line.				☐	☐	☒
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line.				☐	☐	☒
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line.				☐	☐	☒
					☐	☐	☐ ?

Documents

ID	Document Name	Type	Location
MSGP VA signature	MSGP Visual Assessment Signature	Signature page	View

Labor Report

Completed: _____ **Failure:** _____

Report:

WO ID: M86P-53794 Page 3 of 3

Signature (collecting sample): Holly Wheeler Date and Time: 05/05/16 11:55

Signature (conducting visual assessment): Holly Wheeler Date and Time: 05/05/16 11:55

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Greggs, EPC-CP Group Leader

Signature: A R Greggs Date: 6/9/2016

Los Alamos National Lab

Work Order MSGP-53807

MSGP Monitoring Stations
Printed 5/2/2016 - 1:22 PM

Maintenance Details

Requested: 5/2/2016 12:19:31 PM
Procedure: MSGP Quarterly Visual Assessment (EPC-CP-Form-1021.2)
Last PM: 4/20/2016
Project: 2016 Q1 Visual Assessments 5/2/16 (P-MSGP-4732)

Target: 5/31/2016
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (018)
MSGP01801

Contact:
Phone:

Reason: MSGP Quarterly Visual Assessment

Special Instructions: NMR053195

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.						
	Sample information						
30	Document the monitoring Period by using the Monitoring Period lookup table.	MP1			☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)				☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	4/30/16 22:29			☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	4/30/16 22:29			☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	5/4/16 15:02			☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.	RR/RR2	0.22in AMB 5/6/16		☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.				☐	☐	☑
90	Previous storm ended >72 hours before start of storm? If "Failed", provide reason in comments of this line.	Previous storm event 4/29/16. AMB 5/6/16			☒	☐	☑ AMB 5/6/16
	Parameters						
110	Is sample colorless? If "Failed", describe.				☐	☐	☑
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☐	☑
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☐	☑
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.				☐	☐	☑
150	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If				☐	☐	☑

	"other" is chosen from the lookup table, provide description in comments of this line.						
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☐	☑
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line.				☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line.				☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line.				☐	☐	☑
					☐	☐	☐

Documents

ID	Document Name	Type	Location
MSGP VA signature	MSGP Visual Assessment Signature	Signature page	View

Labor Report

Completed: _____ **Failure:** _____ **Meter 1:** _____ **Meter 2:** _____

Report:

WO ID: MSGP-53807 Page 3 of 3

Signature (collecting sample): MSL Date and Time: 4/30/16 22:29

Signature (conducting visual assessment): MSL Date and Time: 5/4/16 15:02

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Grieggs, EPC-CP Group Leader

Signature: A R Grieggs Date: 6/9/2016

Los Alamos National Lab

Work Order MSGP-54181

MSGP Monitoring Stations
Printed 5/16/2016 - 11:03 AM

Maintenance Details

Requested: 5/16/2016 10:53:00 AM
Procedure: MSGP Quarterly Visual Assessment (EPC-CP-Form-1021.2)
Last PM: 5/5/2016
Project: SIO Visual Assessments 5-16-16 (P-MSGP-4768)

Target: 5/31/2016
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (018)
Substantially Identical Outfall (014)
MSGP01401

Reason: MSGP Quarterly Visual Assessment

Special Instructions: NMR053195

Contact:
Phone:

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.						
	Sample information						
30	Document the monitoring Period by using the Monitoring Period lookup table.	MP1			☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)				☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	approx. 5/19/16@16:10			☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	approx - 5/19/16@16:10			☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	5/20/16 1:50			☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.	Rain 0.08"			☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.	Grey BKS 5/20/16			☐	☐	☑
	Parameters						
110	Is sample colorless? If "Failed", describe.	Grey			☑	☐	☐
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☐	☑
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	Cloudy			☑	☐	☐
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.	leaves			☑	☐	☐
150	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	fines			☑	☐	☐
160					☐	☐	☐

	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.					
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line.					☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line.					☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line.					☑

Labor Report

Completed: _____ **Failure:** _____

Report:

WO ID: MSGP-54181 Page 3 of 3

Signature (collecting sample): Brad Schultz Date and Time: BLS 5/20/16 5/20/16 1:50

Signature (conducting visual assessment): Brad Schultz Date and Time: 5/20/16 1:50

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Grieggs, EPC-CP Group Leader

Signature: A R Grieggs Date: 6/9/2016

Los Alamos
NATIONAL LABORATORY
EST. 1943

memorandum

Environmental Protection & Compliance Division
Environmental Compliance Programs (EPC-CP)

To/MS: Marc Gallegos, DESHF-STO, E509
Thru/MS: Terrill Lemke, EPC-CP, (E-File)
From/MS: Holly Wheeler, EPC-CP, (E-File)
Phone/Fax: 667-1312
Symbol: EPC-DO: 17-023
Date: JAN 13 2017

Subject: **National Pollutant Discharge Elimination System (NPDES) Permit No. NMR053195, Multi-Sector General Permit (MSGP) Quarterly Visual Assessment (QVA) Forms for June and July of 2016 for the TA-3-66 Sigma Complex**

Please find attached completed MSGP QVA Forms documenting visual assessments performed during the second quarter of monitoring at the TA-3-66 Sigma Complex. Per Parts 3.2.2 and 5.5 of the 2015 MSGP, the QVA forms shall be incorporated into your MSGP Storm Water Pollution Prevention Plan (SWPPP).

Part 3.2.1 of the 2015 MSGP requires the visual assessment of storm water discharge samples collected from each outfall once each quarter for the entire permit term. Part 3.2.3 allows facilities that are located in an area with a semi-arid climate and/or in an area where freezing conditions exist for an extended period to distribute the quarterly visual assessments during seasons when precipitation runoff occurs. Accordingly, LANS has designated the following MSGP monitoring quarters.

Quarter 1:	April – May	Quarter 2:	June – July
Quarter 3:	August – September	Quarter 4:	October - November

The attached QVA forms document the following information as required by Part 3.2.2 of the 2015 MSGP and were completed by Environment Compliance Programs (EPC-CP) personnel.

- Sample location;
- Sample collection date and time, and visual assessment date and time for each sample;
- Personnel collecting the sample and performing the visual assessment, and their signatures;
- Nature of the discharge (i.e., runoff or snowmelt);
- Results of observations of the stormwater discharge;
- Probable sources of any observed stormwater contamination (if applicable);
- If applicable, why it was not possible to take a sample within the first 30 minutes of the storm event.

Part 3.2.3 of the 2008 MSGP allows the facility to take a substitute sample during the next qualifying storm event when adverse weather conditions prevent the collection of samples during a specific quarter. Adverse weather conditions are those that are dangerous or create inaccessibility for personnel, or situations that otherwise make sampling impractical, such as drought or extended frozen

conditions. Documentation of the rationale for no visual assessment for the quarter must be included in the facility-specific SWPPP.

Please contact Holly Wheeler at 667-1312 (hbenson@lanl.gov) if you have questions regarding the QVA documentation. Thank you for your assistance in meeting the requirements of the Laboratory's NPDES 2015 MSGP Permit.

TWL:HLW/am

Enclosure: 1. Quarterly Visual Assessment Forms, Second Quarter, 2016 Monitoring Year

Facility Name	Sampling Station	Work Order #
TA-3-66 Sigma Complex	MSGP02001	MSGP-53604
TA-3-66 Sigma Complex	MSGP01301	MSGP-54180
TA-3-66 Sigma Complex	MSGP01501	MSGP-54182
TA-3-66 Sigma Complex	MSGP01601	MSGP-54183
TA-3-66 Sigma Complex	MSGP01701	MSGP-54184
TA-3-66 Sigma Complex	MSGP01901	MSGP-54211
TA-3-66 Sigma Complex	MSGP01401	MSGP-54710
TA-3-66 Sigma Complex	MSGP01501	MSGP-55360
TA-3-66 Sigma Complex	MSGP02001	MSGP-56029
TA-3-66 Sigma Complex	MSGP01401	MSGP-56124
TA-3-66 Sigma Complex	MSGP01401	MSGP-56648
TA-3-66 Sigma Complex	MSGP01301	MSGP-57044
TA-3-66 Sigma Complex	MSGP01401	MSGP-57045
TA-3-66 Sigma Complex	MSGP01501	MSGP-57046

Copy: Garry Schramm, DESHF-STO, (E-File)
Adesh-records@lanl.gov, (E-File)
lasomailbox@nnsa.doe.gov, (E-File)
locatesteam@lanl.gov, (E-File)
epc-correspondence@lanl.gov, (E-File)

ENCLOSURE 1

Quarterly Visual Assessment Forms
Second Quarter, 2016 Monitoring Year

EPC-DO:17-023

Date: JAN 13 2017

Los Alamos National Lab

Work Order MSGP-53604

MSGP Monitoring Stations
Printed 5/31/2016 - 6:18 PM (Duplicate Copy)

Maintenance Details

Requested: 5/31/2016 5:29:00 PM
Procedure: MSGP Quarterly Visual Assessment (EPC-CP-Form-1021.2)
Last PM: 4/19/2016
Project: MSGP Visual Assessments wk 5/30/16 (P-MSGP-4804)

Target: 7/31/2016
Priority/Type: / Inspection

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (020)
MSGP02001

Contact:
Phone:

Reason: MSGP 2016 Quarterly Visual Assessment

Special Instructions: NMR053195

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.						
	Sample information						
30	Document the monitoring Period by using the Monitoring Period lookup table.	MP2			☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)	~~7/14/14~~	~~1355~~		☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	7/1/14	1356		☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	7/1/14	1356		☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	7/4/14	1525		☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.	PR	0.28 in. AND 7/18/14		☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.				☐	☐	☑
	Parameters						
110	Is sample colorless? If "Failed", describe.				☐	☐	☑
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☐	☑
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☐	☑
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.				☐	☐	☑
150	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	Fine (SCTSOL)			☑	☐	☐
160					☐	☐	☑

	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.					
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line.			☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line.			☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line.			☐	☐	☑
				☐	☐	☐

Labor Report

Completed: _____ **Failure:** _____

Report:

WO ID: MSGP-53604 Page 3 of 3

Signature (collecting sample): MSL Date and Time: 7/1/16 1356

Signature (conducting visual assessment): MSL Date and Time: 7/6/16 1525

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Gregg, EPC-CP Group Leader

Signature: A R Gregg Date: 9/14/2016

Los Alamos National Lab

Work Order MSGP-54180

MSGP Monitoring Stations
Printed 6/1/2016 - 2:03 PM

Maintenance Details

Requested: 5/16/2016 10:53:00 AM
Procedure: MSGP Quarterly Visual Assessment (EPC-CP-Form-1021.2)
Last PM: 5/5/2016
Project: SIO Visual Assessments wk 5/30/16 (P-MSGP-4806)

Target: 7/31/2016
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (018)
Substantially Identical Outfall (013)
MSGP01301

Contact:
Phone:

Reason: MSGP Quarterly Visual Assessment

Special Instructions: NMR053195

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.						
	Sample information						
30	Document the monitoring Period by using the Monitoring Period lookup table.	MP2			☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)				☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	7/25/16 1325			☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	7/25/16 1325			☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	7/26/16 3:08			☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.	Rain	0.08 in. PMD 5/11/16		☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.				☐	☐	☑
	Parameters						
110	Is sample colorless? If "Failed", describe.	Light Brown			☑	☐	☐
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	Musty			☑	☐	☐
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	Cloudy			☑	☐	☐
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.	Veg			☑	☐	☐
150	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	Fine			☑	☐	☐
160					☑	☐	☐

	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		Fine			
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line.			☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line.			☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line.			☐	☐	☑
				☐	☐	☐

Labor Report

Completed: _____ **Failure:** _____

Report:

WO ID: 54180 Page 3 of 3

Signature (collecting sample): Audrey Smith Date and Time: 7/26/16 3:08

Signature (conducting visual assessment): Audrey Smith Date and Time: 7/26/16 3:08

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Conneggs, EPC-CP Group Leader

Signature: A R Conneggs Date: 9/14/2016

Los Alamos National Lab

Work Order MSGP-54182

MSGP Monitoring Stations
Printed 6/1/2016 - 2:03 PM

Maintenance Details

Requested: 5/16/2016 10:53:00 AM
Procedure: MSGP Quarterly Visual Assessment (EPC-CP-Form-1021.2)
Last PM: 5/5/2016
Project: SIO Visual Assessments wk 5/30/16 (P-MSGP-4806)

Target: 7/31/2016
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (018)
Substantially Identical Outfall (015)
MSGP01501

Contact:
Phone:

Reason: MSGP Quarterly Visual Assessment

Special Instructions: NMR053195

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.						
	Sample information						
30	Document the monitoring Period by using the Monitoring Period lookup table.		Jun-July		☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)				☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).		06/07/16 Apx 15:23	tlw 06/09/16	☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).		~~6/8/16~~ 06/07/16 Apx 15:23	tlw 06/09/16	☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).		6/8/16 1032		☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.		Rain 0.07"	tlw 06/09/16	☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.		Per datalogger & precip data		☐	☐	☑
	Parameters						
110	Is sample colorless? If "Failed", describe.				☐	☐	☑
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		Musty		☑	☐	☐
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☐	☑
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.				☐	☐	☑
150	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		Fine		☑	☐	☐
160					☐	☐	☑

	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.					
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line.			☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line.			☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line.			☐	☐	☑
				☐	☑	☐

Labor Report

Completed: _____ **Failure:** _____

Report:

WO ID: 54182 Page 3 of 3

Signature (collecting sample): Audrey Smith Date and Time: 6/8/16 1032

Signature (conducting visual assessment): Audrey Smith Date and Time: 6/8/16 1032

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Cortegoso, EPC-CP Group Leader

Signature: A R Cortegoso Date: 9/14/2016

Los Alamos National Lab

Work Order MSGP-54183

MSGP Monitoring Stations
Printed 6/1/2016 - 2:03 PM

Maintenance Details

Requested: 5/16/2016 10:53:00 AM
Procedure: MSGP Quarterly Visual Assessment (EPC-CP-Form-1021.2)
Last PM: 5/5/2016
Project: SIO Visual Assessments wk 5/30/16 (P-MSGP-4806)

Target: 7/31/2016
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (018)
Substantially Identical Outfall (016)
MSGP01601

Contact:
Phone:

Reason: MSGP Quarterly Visual Assessment

Special Instructions: NMR053195

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.						
	Sample information						
30	Document the monitoring Period by using the Monitoring Period lookup table.		Q2		☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)				☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).		07/31/16 at 12:49	HSW 8/8/16	☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).		07/31/16 at 12:49	HSW 8/8/16	☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).		08/01/16 ~~15~~ 16:29 A)		☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.		Rain 1"	HSW 8/8/16	☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.				☐	☐	☑
	Parameters						
110	Is sample colorless? If "Failed", describe.				☐	☐	☑
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☐	☑
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☐	☑
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.				☐	☐	☑
150	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		SETSOL1		☑	☐	AJ ☑
160					☑	☐	☐

	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	LLS SETJOL1				
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line.		☐	☐	☑	
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line.		☐	☐	☑	
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line.		☐	☐	☑	
			☐	☐	☐	

Labor Report

Completed: _____ **Failure:** _____

Report:

Discharge date and time were taken from the data logger. Rain amount was taken from the precipitation report for rain gage 121.9 on 07/31/2016 by LWI 08/09/16

WO ID: 54183 Page 3 of 3

Signature (collecting sample): Audrey Smith Date and Time: 8/01/16 16:30

Signature (conducting visual assessment): Audrey Smith Date and Time: 8/01/16 16:30

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Greggs, EPC-CP Group Leader

Signature: A R Greggs Date: 9/14/2016

Los Alamos National Lab

Work Order MSGP-54184

MSGP Monitoring Stations
Printed 6/1/2016 - 2:03 PM

Maintenance Details

Requested: 5/16/2016 10:53:00 AM
Procedure: MSGP Quarterly Visual Assessment (EPC-CP-Form-1021.2)
Last PM: 5/5/2016
Project: SIO Visual Assessments wk 5/30/16 (P-MSGP-4806)

Target: 7/31/2016
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (018)
Substantially Identical Outfall (017)
MSGP01701

Contact:
Phone:

Reason: MSGP Quarterly Visual Assessment

Special Instructions: NMR053195

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.						
	Sample information						
30	Document the monitoring Period by using the Monitoring Period lookup table.	Q2			☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)				☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	07/31/16 12:43		MSW 8/8/16	☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	07/31/16 12:43		MSW 8/8/16	☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/01/16	4.26	AJ 1026	☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.	Rain 1"		MSW 8/8/16	☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.				☐	☐	☑
	Parameters						
110	Is sample colorless? If "Failed", describe.				☐	☐	☑
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☐	☑
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☐	☑
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.				☐	☐	☑
150	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	SETSOLI			☑	☐	AJ ☑
160					☐	☐	☑

	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.						
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line.				☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line.				☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line.				☐	☐	☑
					☐	☐	☐

Labor Report

Completed: _____ **Failure:** _____

Report:

Discharge date and time was taken from the data logger. Rain amount was taken from the precipitation report for rain gage 12.1.9 on 07/31/2016. HSB 08/08/16

WO ID: 54184 Page 3 of 3

Signature (collecting sample): Audrey Smith Date and Time: 8/01/16 4:27

Signature (conducting visual assessment): Audrey Smith Date and Time: 8/01/16 4:27

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Greggs, EPC-CP Group Leader

Signature: A R Greggs Date: 9/14/2016

Los Alamos National Lab

Work Order MSGP-54211

MSGP Monitoring Stations
Printed 6/1/2016 - 2:03 PM

Maintenance Details

Requested: 5/16/2016 11:58:00 AM
Procedure: MSGP Quarterly Visual Assessment (EPC-CP-Form-1021.2)
Last PM: N/A
Project: SIO Visual Assessments wk 5/30/16 (P-MSGP-4806)

Target: 7/31/2016
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (018)
Substantially Identical Outfall (019)
MSGP01901

Contact:
Phone:

Reason: MSGP Quarterly Visual Assessment

Special Instructions: NMR053195

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.						
	Sample information						
30	Document the monitoring Period by using the Monitoring Period lookup table.		MP2		☐	☐	☒
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)				☐	☐	☒
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).		07/31/16 12:40	8/8/16	☐	☐	☒
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).		07/31/16 12:40	8/8/16	☐	☐	☒
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).		08/01/16 @ 11:20		☐	☐	☒
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.		Rain 1"		☐	☐	☒
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.				☐	☐	☒
	Parameters						
110	Is sample colorless? If "Failed", describe.				☐	☐	☒
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☐	☒
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☐	☒
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.				☐	☐	☒
150	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		SS1 & SS2		☒	☐	☐
160					☐	☐	☒

	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.					
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line.				☐	☒
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line.				☐	☒
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line.				☐	☒
					☐	☐

Labor Report

Completed: _____ **Failure:** _____

Report:

Discharge date and time was taken from the data logger. Rain amount was from the precipitation report for rain gage 121.9 on 07/31/2016. TJW 9/8/16.

WO ID: MSGP-54211 Page 3 of 3

Signature (collecting sample): Holly Wheeler Date and Time: 08/01/16 16:24

Signature (conducting visual assessment): Holly Wheeler Date and Time: 08/01/16 16:24

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R Carreggo, EPC-CP Group Leader

Signature: A R Carreggo Date: 9/14/2016

Los Alamos National Lab

Work Order MSGP-54710

MSGP Monitoring Stations
Printed 6/1/2016 - 2:03 PM

Maintenance Details

Requested: 6/1/2016 1:29:24 PM
Procedure: MSGP Quarterly Visual Assessment (EPC-CP-Form-1021.2)
Last PM: 5/20/2016
Project: SIO Visual Assessments wk 5/30/16 (P-MSGP-4806)

Target: 7/31/2016
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (018)
Substantially Identical Outfall (014)
MSGP01401

Contact:
Phone:

Reason: MSGP Quarterly Visual Assessment

Special Instructions: NMR053195

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.						
	Sample information						
30	Document the monitoring Period by using the Monitoring Period lookup table.	Q2			☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)				☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	7/1/16 1345 AS			☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	7/1/16 1345 AS			☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	7/5/16 3:45			☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.	Rain	0.28 in. AMB 7/14/16		☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.				☐	☐	☑
	Parameters						
110	Is sample colorless? If "Failed", describe.				☐	☐	☑
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☐	☑
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☐	☑
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.				☐	☐	☑
150	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	fines			☑	☐	☐
160					☑	☐	☐

	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	fine			
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line.		☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line.		☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line.		☐	☐	☑
			☐	☐	☐

Labor Report

Completed: _____ **Failure:** _____

Report:

54710 AS

WO ID: ~~55528~~ Page 3 of 3

Signature (collecting sample): Audrey Smith Date and Time: 7/5/16 3:48

Signature (conducting visual assessment): Audrey Smith Date and Time: 7/5/16 3:48

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Griggs, EPC-CP Group Leader

Signature: A R Griggs Date: 9/14/2016

Los Alamos National Lab

Work Order MSGP-55360

MSGP Monitoring Stations
Printed 6/20/2016 - 5:40 PM

Maintenance Details

Requested: 6/20/2016 5:28:52 PM
Procedure: MSGP Quarterly Visual Assessment (EPC-CP-Form-1021.2)
Last PM: 6/8/2016
Project: SIO Visual Assessments wk 6-20-16 (P-MSGP-4868)

Target: 7/31/2016
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (018)
Substantially Identical Outfall (015)
MSGP01501

Contact:
Phone:

Reason: MSGP Quarterly Visual Assessment

Special Instructions: NMR053195

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.						
	Sample information						
30	Document the monitoring Period by using the Monitoring Period lookup table.	MP2			☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)				☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	7/25/16 @ 1325			☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	7/25/16 @ 1325			☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	7/26/16 3:02			☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.	Rain 0.08 ~~0.24~~ in. AKOG 7/26/16			☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.				☐	☐	☑
	Parameters						
110	Is sample colorless? If "Failed", describe.	Brown			☑	☐	☐
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	Musty			☑	☐	☐
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	Opaque			☑	☐	☐
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.				☐	☐	☑
150	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	Fine			☑	☐	☐
160					☑	☐	☐

	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		Course			
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line.			☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line.			☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line.			☐	☐	☑
				☐	☐	☐

Labor Report

Completed: _____ **Failure:** _____

Report:

WO ID: 55360 Page 3 of 3

Signature (collecting sample): Audrey Smith Date and Time: 7/26/16 3:02

Signature (conducting visual assessment): Audrey Smith Date and Time: 7/26/16 3:02

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Coreggs, EPC-CP Group Leader

Signature: A R Coreggs Date: 9/14/2016

Los Alamos National Lab

Work Order MSGP-56029

MSGP Monitoring Stations
Printed 7/13/2016 - 1:00 PM

Maintenance Details

Requested: 7/13/2016 12:55:25 PM
Procedure: MSGP Quarterly Visual Assessment (EPC-CP-Form-1021.2)
Last PM: 7/6/2016
Project: MSGP Visual Assessments 7/13/16 (P-MSGP-4934)

Target: 7/31/2016
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (020)
MSGP02001

Contact:
Phone:

Reason: MSGP Quarterly Visual Assessment

Special Instructions: NMR053195

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.						
	Sample information						
30	Document the monitoring Period by using the Monitoring Period lookup table.	MP2			☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)				☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	7/21/16	13:20		☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	7/21/16	13:20		☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	7/21/16	1436		☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.	PR1	0.21 in. DAD 7/25/16		☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.				☐	☐	☑
	Parameters						
110	Is sample colorless? If "Failed", describe.				☐	☐	☑
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☐	☑
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☐	☑
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.				☐	☐	☑
150	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☐	☑
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids				☐	☐	☑

	lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.					
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)			☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)			☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)			☐	☐	☑
				☐	☐	☐

Labor Report

Completed: _____ **Failure:** _____

Report:

WO ID: MSGP.56029 Page 3 of 3

Signature (collecting sample): _____ Date and Time: 7/21/16 13:20

Signature (conducting visual assessment): MSL Date and Time: 7/21/16 1436

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Conegap, EPC-CP Group Leader

Signature: A R Conegap Date: 9/14/2016

Los Alamos National Lab

Work Order MSGP-56124

MSGP Monitoring Stations
Printed 7/14/2016 - 5:58 PM

Maintenance Details

Requested: 7/14/2016 5:55:57 PM
Procedure: MSGP Quarterly Visual Assessment (EPC-CP-Form-1021.2)
Last PM: 7/5/2016
Project: SIO Visual Assessments 7-14-16 (P-MSGP-4944)

Target: 7/31/2016
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (018)
Substantially Identical Outfall (014)
MSGP01401

Contact:
Phone:

Reason: MSGP Quarterly Visual Assessment

Special Instructions: NMR053195

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.						
	Sample information						
30	Document the monitoring Period by using the Monitoring Period lookup table.		Q2		☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)				☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).		07/19/16 14:25 HSW 7/25/16		☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).		07/19/16 14:25		☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).		7/20/16 1:42		☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.		Rain 0.13in. HSW 7/25/16		☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.				☐	☐	☑
	Parameters						
110	Is sample colorless? If "Failed", describe.		Light Tan		☑	☐	☐
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☐	☑
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☐	☑
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.				☐	☐	☑
150	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		Fine		☑	☐	☐

160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	Fine	☑	☐	☐
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)		☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)		☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)		☐	☐	☑
			☐	☐	☐

Labor Report

Completed: _____ **Failure:** _____

Report:

WO ID: 56124 Page 3 of 3

Signature (collecting sample): Audrey Smith Date and Time: 7/20/16 1:42

Signature (conducting visual assessment): Audrey Smith Date and Time: 7/20/16 1:42

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Greggs, EPC-CP Group Leader

Signature: A R Greggs Date: 9/14/2016

Los Alamos National Lab

Work Order MSGP-56648

MSGP Monitoring Stations
Printed 7/26/2016 - 3:38 PM

Maintenance Details

Requested By: Banar, Alethea on 7/26/2016 3:36:00 PM
Procedure: MSGP Quarterly Visual Assessment (EPC-CP-Form-1021.2)
Last PM: 7/20/2016
Project: SIO Visual Assessments 7-25-16 (P-MSGP-4983)

Target: 7/31/2016
Priority/Type: / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (018)
Substantially Identical Outfall (014)
MSGP01401

Contact: Banar, Alethea
Phone: 665-0454

Reason: MSGP Quarterly Visual Assessment

Special Instructions: NMR053195

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.						
	Sample information						
30	Document the monitoring Period by using the Monitoring Period lookup table.	MP2			☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)				☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	7/25/16 @1325			☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	7/25/16 @1325			☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	7/26/16	3:06		☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.	Rain	0.08 in. Accum		☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.				☐	☐	☑
	Parameters						
110	Is sample colorless? If "Failed", describe.	Light Brown			☑	☐	☐
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	Musty			☑	☐	☐
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	Opaque			☑	☐	☐
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.	Veg			☑	☐	☐
150	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If				☑	☐	☐

	"other" is chosen from the lookup table, provide description in comments of this line.	Fine			
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	Fine	☑	☐	☐
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)		☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)		☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)		☐	☐	☑
			☐	☐	☐

Labor Report

Completed: _____ **Failure:** _____

Report:

WO ID: 566648 Page 2 of 2

Signature (collecting sample): Audrey Smith Date and Time: 7/26/16 3:06

Signature (conducting visual assessment): Audrey Smith Date and Time: 7/26/16 3:06

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Conegge, EPC-CP Group Leader

Signature: A R Conegge Date: 9/14/2016

Los Alamos National Lab

Work Order MSGP-57044

MSGP Monitoring Stations
Printed 8/1/2016 - 4:03 PM

Maintenance Details

Requested By: Banar, Alethea on 8/1/2016 3:59:00 PM
Procedure: MSGP Quarterly Visual Assessment (EPC-CP-Form-1021.2)
Last PM: 7/26/2016
Project: SIO Visual Assessments 8/1/16 (P-MSGP-5014)

Target: 8/12/2016
Priority/Type: / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (018)
Substantially Identical Outfall (013)
MSGP01301

Contact: Banar, Alethea
Phone: 699-5836

Reason: MSGP Quarterly Visual Assessment

Special Instructions: NMR053195

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.						
	Sample information						
30	Document the monitoring Period by using the Monitoring Period lookup table.		MP2		☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)				☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).		07/31/16 12:36	YDSW 08/08/16	☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).		07/31/16 12:36	YDSW 08/08/16	☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).		8/01/16	16:35	☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.		Rain 1"	YDSW 08/08/16	☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.				☐	☐	☑
	Parameters						
110	Is sample colorless? If "Failed", describe.		Brown		☑	☐	☐
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.			AS	☑	☐	☑
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		Opaque		☑	☐	☐
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.		AS Fine	AS	☒	☐	☒ AS OK
150	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If		Fine: SETSOL 1		☑	☐	☐

	"other" is chosen from the lookup table, provide description in comments of this line.					
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		Fine. SEE 42	☑	☐	☐
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)			☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)			☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)			☐	☐	☑
				☐	☐	☐

Labor Report

Completed: _____ **Failure:** _____

Report:

Date and time of discharge were taken from the data logger. Rain amount of 1" was taken from rain gage 121.9 on precipitation report.

WO ID: 57044 Page 3 of 3

Signature (collecting sample): Audrey Smith Date and Time: 8/01/16 16:35

Signature (conducting visual assessment): Audrey Smith Date and Time: 8/01/16 16:35

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Carnegie, ER-CP Group Leader

Signature: AR Carnegie Date: 9/14/2016

Los Alamos National Lab

Work Order MSGP-57045

MSGP Monitoring Stations
Printed 8/1/2016 - 4:03 PM

Maintenance Details

Requested By: Banar, Alethea on 8/1/2016 4:02:00 PM
Procedure: MSGP Quarterly Visual Assessment (EPC-CP-Form-1021.2)
Last PM: 7/26/2016
Project: SIO Visual Assessments 8/1/16 (P-MSGP-5014)

Target: 8/12/2016
Priority/Type: / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (018)
Substantially Identical Outfall (014)
MSGP01401

Contact: Banar, Alethea
Phone: 699-5836

Reason: MSGP Quarterly Visual Assessment

Special Instructions: NMR053195

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.						
	Sample information						
30	Document the monitoring Period by using the Monitoring Period lookup table.		MP2		☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)				☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).		07/31/16 at 12:40		☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).		07/31/16 at 12:40		☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).		8/01/16 16:40		☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.		Rain 1"		☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.				☐	☐	☑
	Parameters						
110	Is sample colorless? If "Failed", describe.		Brown		☑	☐	☐
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		Musty		☑	☐	☐
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		Opaque		☑	☐	☐
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.		AS		☐	☐	☑
150	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		SETSOL1		☑	☐	☐

160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	US SESOL I	☑	☐	☐
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)		☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)		☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)		☐	☐	☑
			☐	☐	☐

Labor Report

Completed: _____ **Failure:** _____

Report:

Discharge date and time are taken from the data logger. Rain amount is from rain gage 121.7 for 7/31/2016. YDSW 07/31/2016.

WO ID: 57045 Page 3 of 3

Signature (collecting sample): Audrey Smith Date and Time: 8/04/16 16:40

Signature (conducting visual assessment): Audrey Smith Date and Time: 8/04/16 16:40

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Conaggo, ER-cP Group Leader

Signature: A R Conaggo Date: 9/14/2016

Los Alamos National Lab

Work Order MSGP-57046

MSGP Monitoring Stations
Printed 8/1/2016 - 4:03 PM

Maintenance Details

Requested By: Banar, Alethea on 8/1/2016 4:02:00 PM
Procedure: MSGP Quarterly Visual Assessment (EPC-CP-Form-1021.2)
Last PM: 7/26/2016
Project: SIO Visual Assessments 8/1/16 (P-MSGP-5014)

Target: 8/12/2016
Priority/Type: / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (018)
Substantially Identical Outfall (015)
MSGP01501

Contact: Banar, Alethea
Phone: 699-5836

Reason: MSGP Quarterly Visual Assessment

Special Instructions: NMR053195

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.						
	Sample information						
30	Document the monitoring Period by using the Monitoring Period lookup table.	MP2			☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)				☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	07/31/2016 @aft 12:40		WDSW 8/8/16	☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	07/31/2016 @aft 12:40		WDSW 8/8/16	☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	08/01/16 16:42			☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.	Rain 1"		WDSW 8/8/16	☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.				☐	☐	☑
	Parameters						
110	Is sample colorless? If "Failed", describe.	Brown			☑	☐	☐
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	Musty			☑	☐	☐
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	Opaque			☑	☐	☐
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.				☐	☐	☑
150	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	SETSOIL			☑	☐	☐

160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	US SF/SOLI	☑	☐	☐
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)		☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)		☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)		☐	☐	☑
			☐	☐	☐

Labor Report

Completed: _____ **Failure:** _____

Report:

Discharge date and time were taken from the precipitation report for rain gauge 121.9 on 7/31/2016. Ldgw 8/8/2016

WO ID: 57046 Page 3 of 3

Signature (collecting sample): Audrey Smith Date and Time: 08/01/16 16:42

Signature (conducting visual assessment): Audrey Smith Date and Time: 08/01/16 16:42

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Conegge, EPC-CP Group leader

Signature: A R Conegge Date: 9/14/2016

Los Alamos
NATIONAL LABORATORY
EST. 1943

memorandum

Environmental Protection & Compliance Division
Environmental Compliance Programs (EPC-CP)

To/MS: Marc Gallegos, DESHF-STO, E509
Thru/MS: Terrill Lemke, EPC-CP, (E-File)
From/MS: Holly Wheeler, EPC-CP, (E-File)
Phone/Fax: 667-1312
Symbol: EPC-DO: 17-035

Date: JAN 13 2017

Subject: **National Pollutant Discharge Elimination System (NPDES) Permit No. NMR053195, Multi-Sector General Permit (MSGP) Quarterly Visual Assessment (QVA) Forms for August and September of 2016 for the TA-3-66 Sigma Complex**

Please find attached completed MSGP QVA Forms documenting visual assessments performed during the third quarter of monitoring at the TA-3-66 Sigma Complex. Per Parts 3.2.2 and 5.5 of the 2015 MSGP, this memorandum along with all of the attached QVA forms shall be incorporated into your MSGP Storm Water Pollution Prevention Plan (SWPPP).

Part 3.2.1 of the 2015 MSGP requires the visual assessment of storm water discharge samples collected from each outfall once each quarter for the entire permit term. Part 3.2.3 allows facilities that are located in an area with a semi-arid climate and/or in an area where freezing conditions exist for an extended period to distribute the quarterly visual assessments during seasons when precipitation runoff occurs. Accordingly, LANS has designated the following MSGP monitoring quarters.

Quarter 1:	April – May	Quarter 2:	June – July
Quarter 3:	August – September	Quarter 4:	October - November

The attached QVA forms document the following information as required by Part 3.2.2 of the 2015 MSGP and were completed by Deployed Environment, Safety, and Health Services (DESHS) and Environmental Compliance Programs (EPC-CP) personnel.

- Sample location;
- Sample collection date and time, and visual assessment date and time for each sample;
- Personnel collecting the sample and performing the visual assessment, and their signatures;
- Nature of the discharge (i.e., runoff or snowmelt);
- Results of observations of the stormwater discharge;
- Probable sources of any observed stormwater contamination (if applicable);
- If applicable, why it was not possible to take a sample within the first 30 minutes of the storm event.

The signed certification statement contained in this memorandum satisfies the duly authorized signatory requirement for the QVAs completed by EPC-CP representatives contained in Enclosure 1.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information contained therein. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information contained is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Anthony R. Grieggs, EPC-CP Group Leader
(Print name and title)
Los Alamos National Laboratory

Manager Signature

1/13/17
Date

Part 3.2.3 of the 2015 MSGP allows the facility to take a substitute sample during the next qualifying storm event when adverse weather conditions prevent the collection of samples during a specific quarter. Adverse weather conditions are those that are dangerous or create inaccessibility for personnel, or situations that otherwise make sampling impractical, such as drought or extended frozen conditions. Documentation of the rationale for no visual assessment for the quarter must be included in the facility-specific SWPPP.

Please contact Holly Wheeler at 667-1312 (hbenson@lanl.gov) if you have questions regarding the QVA documentation. Thank you for your assistance in meeting the requirements of the Laboratory's NPDES 2015 MSGP Permit.

TWL:HLW/am

Enclosure: 1. Quarterly Visual Assessment Forms Requiring a Certification Statement Signature, Third Quarter, 2016 Monitoring Year

Facility Name	Sampling Station	Work Order #
TA-3-66 Sigma Complex	MSGP01801	MSGP-54113
TA-3-66 Sigma Complex	MSGP02001	MSGP-56952
TA-3-66 Sigma Complex	MSGP01301	MSGP-57759
TA-3-66 Sigma Complex	MSGP01401	MSGP-57760
TA-3-66 Sigma Complex	MSGP01501	MSGP-57761
TA-3-66 Sigma Complex	MSGP01601	MSGP-57762
TA-3-66 Sigma Complex	MSGP01701	MSGP-57763
TA-3-66 Sigma Complex	MSGP01801	MSGP-58309
TA-3-66 Sigma Complex	MSGP01801	MSGP-58310
TA-3-66 Sigma Complex	MSGP01301	MSGP-58315
TA-3-66 Sigma Complex	MSGP01401	MSGP-58316
TA-3-66 Sigma Complex	MSGP01501	MSGP-58317
TA-3-66 Sigma Complex	MSGP01601	MSGP-58318
TA-3-66 Sigma Complex	MSGP01701	MSGP-58319
TA-3-66 Sigma Complex	MSGP01401	MSGP-58408
TA-3-66 Sigma Complex	MSGP01501	MSGP-58409
TA-3-66 Sigma Complex	MSGP01701	MSGP-58410
TA-3-66 Sigma Complex	MSGP01401	MSGP-58497
TA-3-66 Sigma Complex	MSGP01501	MSGP-58498
TA-3-66 Sigma Complex	MSGP01701	MSGP-58499
TA-3-66 Sigma Complex	MSGP01401	MSGP-58509
TA-3-66 Sigma Complex	MSGP01501	MSGP-58510
TA-3-66 Sigma Complex	MSGP01701	MSGP-58511
TA-3-66 Sigma Complex	MSGP01801	MSGP-58520
TA-3-66 Sigma Complex	MSGP01301	MSGP-58542
TA-3-66 Sigma Complex	MSGP01601	MSGP-58543
TA-3-66 Sigma Complex	MSGP01401	MSGP-58545
TA-3-66 Sigma Complex	MSGP01501	MSGP-58546
TA-3-66 Sigma Complex	MSGP01701	MSGP-58547

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epc-correspondence@lanl.gov, (E-File)

ENCLOSURE 1

Quarterly Visual Assessment Forms Requiring a Certification Statement Signature

Third Quarter, 2016 Monitoring Year

EPC-DO: 17-035

Date: JAN 1 3 2017

Los Alamos National Lab

Work Order MSGP-54113

MSGP Monitoring Stations
Printed 5/31/2016 - 6:18 PM

Maintenance Details

Requested: 5/31/2016 5:45:00 PM
Procedure: MSGP Quarterly Visual Assessment (EPC-CP-Form-1021.2)
Last PM: 5/18/2016
Project: MSGP Visual Assessments wk 5/30/16 (P-MSGP-4804)

Target: 9/30/16 ~~7/31/2016~~ AMD 8/15/16
Priority/Type: / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (018)
MSGP01801

Contact:
Phone:

Reason: MSGP 2016 Quarterly Visual Assessment

Special Instructions: NMR053195

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.						
	Sample information						
30	Document the monitoring Period by using the Monitoring Period lookup table.	MP3			☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)				☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/4/16	1156		☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/4/16	1159 TSN 8/10/16		☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/8/16	1422		☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.	PR1	0.28 in. AMD 8/15/16		☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.				☐	☐	☑
	Parameters						
110	Is sample colorless? If "Failed", describe.	Brown			☑	☐	☐
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☐	☑
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	C2			☑	☐	☐
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.	Veg			☑	☐	☐
150	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	SgTSol 2			☑	☐	☐
160					☑	☐	☐

	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	SUSSOL2				
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line.				☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line.				☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line.				☐	☐	☑
					☐	☐	☐

Labor Report

Completed: _____ **Failure:** _____ **Meter 1:** _____ **Meter 2:** _____

Report:

WO ID: MSGP-54113 Page 3 of 3

Signature (collecting sample): MSL Date and Time: 8/4/16 1154

Signature (conducting visual assessment): MSL Date and Time: 8/8/16 1422

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: _____

Signature: _____ Date: _____

Los Alamos National Lab

Work Order MSGP-56952

MSGP Monitoring Stations
Printed 8/1/2016 - 9:45 AM

Maintenance Details

Requested: 8/1/2016 9:43:50 AM
Procedure: MSGP Quarterly Visual Assessment (EPC-CP-Form-1021.2)
Last PM: 7/25/2016
Project: Visual Assessments wk 8/1/16 (P-MSGP-5007)

Target: 9/30/2016
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (020)
MSGP02001

Contact:
Phone:

Reason: MSGP Quarterly Visual Assessment

Special Instructions: NMR053195

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.						
	Sample information						
30	Document the monitoring Period by using the Monitoring Period lookup table.	MP3			☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)				☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/3/16	1840		☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/3/16	1840		☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/4/16	1112		☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.	PR1	0.61 in. Aug 8/16		☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.				☐	☐	☑
	Parameters						
110	Is sample colorless? If "Failed", describe.				☐	☐	☑
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☐	☑
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☐	☑
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.				☐	☐	☑
150	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☐	☑
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids				☐	☐	☑

	lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.					
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)			☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)			☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)			☐	☐	☑
				☐	☐	☐

Labor Report

Completed: _____ **Failure:** _____

Report:

WO ID: MSGP - 56952 ~~56932~~ AMB 9/30/16 Page 3 of 3

Signature (collecting sample): MSL. Date and Time: 6/3/16 1840

Signature (conducting visual assessment): MSL. Date and Time: 8/4/16 1112

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: _____

Signature: _____ Date: _____

Los Alamos National Lab

Work Order MSGP-57759

MSGP Monitoring Stations
Printed 8/8/2016 - 12:31 PM

Maintenance Details

Requested: 8/8/2016 12:28:47 PM
Procedure: MSGP Quarterly Visual Assessment (EPC-CP-Form-1021.2)
Last PM: 7/26/2016
Project: SIO Visual Assessments 8/8/16 (P-MSGP-5073)

Target: 9/30/2016
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (018)
Substantially Identical Outfall (013)
MSGP01301

Reason: MSGP Quarterly Visual Assessment

Contact:
Phone:

Monitoring Period:
Odor:
Clarity:
Settled Solids:
Suspended Solids:
Special Instructions: NMR053195

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.						
	Sample information						
30	Document the monitoring Period by using the Monitoring Period lookup table.		MP 3		☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)				☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).		08/08/16 HSW start 11:30 8/17/16		☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).		08/08/16 HSW start 11:30 8/17/16		☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).		08/09/16 13:45		☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.		HSW 8/17/16 Rain 0.37"		☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.				☐	☐	☑
	Parameters						
110	Is sample colorless? If "Failed", describe.	light tan			☑	☐	☐
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☐	☑
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	Cloudy			☑	☐	☐
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.				☐	☐	☑
150					☑	☐	☐

	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line. SETSOL1 & SETSOL2				
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☑
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)				☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)				☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)				☑
					☐

Labor

Labor	Work Date	Reg Hrs	OT Hrs	Other Hrs

Labor Report

Completed: _____ **Failure:** _____

Report:

Jar was completely filled with sediment. There was 1/2" of water on top of sediment for VA. Discharge and sample collection date and time were taken from the precipitation report for 8/08/16. Precipitation data is from rain gage 121.9 on the same day.

Signature / Name	Date	Signature / Name	Date

WO ID: 57759 Page 3 of 3

Signature (collecting sample): Audrey Smith Date and Time: 08/09/16 13:45

Signature (conducting visual assessment): Audrey Smith Date and Time: 08/09/16 13:45

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: _____

Signature: _____ Date: _____

Los Alamos National Lab

Work Order MSGP-57760

MSGP Monitoring Stations
Printed 8/8/2016 - 12:31 PM

Maintenance Details

Requested: 8/8/2016 12:28:47 PM
Procedure: MSGP Quarterly Visual Assessment (EPC-CP-Form-1021.2)
Last PM: 7/26/2016
Project: SIO Visual Assessments 8/8/16 (P-MSGP-5073)

Target: 9/30/2016
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (018)
Substantially Identical Outfall (014)
MSGP01401

Reason: MSGP Quarterly Visual Assessment

Contact:
Phone:

Monitoring Period:
Odor:
Clarity:
Settled Solids:
Suspended Solids:
Special Instructions: NMR053195

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.						
	Sample information						
30	Document the monitoring Period by using the Monitoring Period lookup table.		MP2		☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)				☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).		08/08/16 start 11:30	HSW 8/17/16	☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).		08/08/16 at 11:30	HSW 8/17/16	☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).		08/09/16 13:52		☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.		Rain 0.37"	HSW 8/17/16	☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.				☐	☐	☑
	Parameters						
110	Is sample colorless? If "Failed", describe.		Brown		☑	☐	☑ AJ
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☐	☑
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		Opaque		☑	☐	☐
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.				☐	☐	☑
150					☑	☐	☐

	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	SETSOLI			
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	SUSSOLI	☑	☐	☐
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)		☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)		☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)		☐	☐	☑
			☐	☐	☐

Labor

Labor	Work Date	Reg Hrs	OT Hrs	Other Hrs

Labor Report

Completed: _____ **Failure:** _____

Report:

Discharge and sample collection date and time were taken from the precipitation report for 8/08/16. Precipitation data is from rain gage 161.9' on the same day. Ldfw 8/17/16

Signature / Name	Date	Signature / Name	Date

WO ID: 577160 Page 3 of 3

Signature (collecting sample): Audrey Smith Date and Time: 08/09/16 13:52

Signature (conducting visual assessment): Audrey Smith Date and Time: 08/09/16 13:52

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title:_____

Signature:_____ Date:_____

Los Alamos National Lab

Work Order MSGP-57761

MSGP Monitoring Stations
Printed 8/8/2016 - 12:31 PM

Maintenance Details

Requested: 8/8/2016 12:28:48 PM
Procedure: MSGP Quarterly Visual Assessment (EPC-CP-Form-1021.2)
Last PM: 7/26/2016
Project: SIO Visual Assessments 8/8/16 (P-MSGP-5073)

Target: 9/30/2016
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (018)
Substantially Identical Outfall (015)
MSGP01501

Reason: MSGP Quarterly Visual Assessment

Contact:
Phone:

Monitoring Period:
Odor:
Clarity:
Settled Solids:
Suspended Solids:
Special Instructions: NMR053195

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.						
	Sample information						
30	Document the monitoring Period by using the Monitoring Period lookup table.		MP3		☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)		08/08/16 @apx 11:30	HSW 08/17/16	☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).		08/08/16 at apx. 11:30	HSW 08/17/16	☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).		↓		☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).		08/09/16 13:58	HSW 8/09/16	☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.		Rain 0.37"		☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.				☐	☐	☑
	Parameters						
110	Is sample colorless? If "Failed", describe.		TAN		☑	☐	☐
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☐	☑
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		Opaque		☑	☐	☐
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.				☐	☐	☑
150					☑	☐	☐

	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	SETSOLI			
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	SUSSOLI	☑	☐	☐
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)		☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)		☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)		☐	☐	☑
			☐	☐	☐

Labor

Labor	Work Date	Reg Hrs	OT Hrs	Other Hrs

Labor Report

Completed: _____ **Failure:** _____

Report:

Discharge and sample collection date and time are taken from the precipitation report for 8/08/16. Precipitation data is from rain gage 121.9 on the same date. dbj 8/17/16

Signature / Name	Date	Signature / Name	Date

WO ID: 577601 Page 3 of 3

Signature (collecting sample): Rodney Smith Date and Time: 08/09/16 13:57

Signature (conducting visual assessment): Rodney Smith Date and Time: 08/09/16 13:58

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: _____

Signature: _____ Date: _____

Los Alamos National Lab

Work Order MSGP-57762

MSGP Monitoring Stations
Printed 8/8/2016 - 12:31 PM

Maintenance Details

Requested: 8/8/2016 12:28:48 PM
Procedure: MSGP Quarterly Visual Assessment (EPC-CP-Form-1021.2)
Last PM: 7/26/2016
Project: SIO Visual Assessments 8/8/16 (P-MSGP-5073)

Target: 9/30/2016
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (018)
Substantially Identical Outfall (016)
MSGP01601

Reason: MSGP Quarterly Visual Assessment

Contact:
Phone:

Monitoring Period:
Odor:
Clarity:
Settled Solids:
Suspended Solids:
Special Instructions: NMR053195

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.						
	Sample information						
30	Document the monitoring Period by using the Monitoring Period lookup table.		MP3		☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)				☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).		08/08/16 at 11:30	tdgw 8/16/16	☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).		08/08/16 at 11:30	tdgw 8/16/16	☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).		08/09/16	1103	☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.		PR1 0.37"	tdgw 8/16/16	☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.				☐	☐	☑
	Parameters						
110	Is sample colorless? If "Failed", describe.				☐	☐	☑
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		Musty		☑	☐	☐
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☐	☑
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.				☐	☐	☑
150					☐	☐	☑

	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	SLDSOLZ.	☑	☐	☐
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)		☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)		☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)		☐	☐	☑
			☐	☐	☐

Labor

Labor	Work Date	Reg Hrs	OT Hrs	Other Hrs

Labor Report

Completed: _____ **Failure:** _____

Report:

Discharge and sample collection date and time were taken from the precipitation vault for 8/08/16. Precipitation data is from rain gage 12L.9 on the same date. HSW 8/08/16

Signature / Name	Date	Signature / Name	Date

WO ID: 577762 Page 3 of 3

Signature (collecting sample): Audrey Smith Date and Time: 08/09/16 11:03

Signature (conducting visual assessment): Audrey Smith Date and Time: 8/9/16 11:03

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: _____

Signature: _____ Date: _____

Los Alamos National Lab

Work Order MSGP-57763

MSGP Monitoring Stations
Printed 8/8/2016 - 12:31 PM

Maintenance Details

Requested: 8/8/2016 12:28:49 PM
Procedure: MSGP Quarterly Visual Assessment (EPC-CP-Form-1021.2)
Last PM: 7/26/2016
Project: SIO Visual Assessments 8/8/16 (P-MSGP-5073)

Target: 9/30/2016
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (018)
Substantially Identical Outfall (017)
MSGP01701

Reason: MSGP Quarterly Visual Assessment

Contact:
Phone:

Monitoring Period:
Odor:
Clarity:
Settled Solids:
Suspended Solids:
Special Instructions: NMR053195

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.						
	Sample information						
30	Document the monitoring Period by using the Monitoring Period lookup table.		MP3		☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)				☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).		08/08/16 11:28	08/12/16	☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	A20	08/08/16 11:28	08/12/16	☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).		08/09/16 10:55	8/12/16	☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.		Rain 0.37"		☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.				☐	☐	☑
	Parameters						
110	Is sample colorless? If "Failed", describe.				☐	☐	☑
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		Musty		☑	☐	☐
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☐	☑
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.				☐	☐	☑
150					☐	☐	☑

	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	SUSSOLI	☑	☐	☐
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)		☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)		☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)		☐	☐	☑
			☐	☐	☐

Labor

Labor	Work Date	Reg Hrs	OT Hrs	Other Hrs

Labor Report

Completed: _____ **Failure:** _____

Report:

Discharge and sample collection date and time are taken from the data logger. Precipitation data is from rain gage 121.9 on 8/08/2016. Ldeju 8/12/2016.

Signature / Name	Date	Signature / Name	Date

Signature (collecting sample): Audrey Smith Date and Time: 08/09/16 10:55

Signature (conducting visual assessment): Audrey Smith Date and Time: 08/09/16 10:55

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: _____

Signature: _____ Date: _____

Los Alamos National Lab - ADESH

Work Order MSGP-58309

MSGP Monitoring Stations
Printed 8/17/2016 - 12:00 PM

Maintenance Details

Requested By: Banar, Alethea on 8/17/2016 11:57:00 AM
Taken By: Banar, Alethea
Procedure: MSGP Quarterly Visual Assessment (EPC-CP-Form-1021.2)
Last PM: 8/8/2016
Project: VISUAL ASSESSMENTS 8-8-16 (P-MSGP-5074)

Target: 9/30/2016
Priority/Type: / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (018)
MSGP01801

Contact: Banar, Alethea
Phone: 699-5836

Reason: MSGP Quarterly Visual Assessment
Monitoring Period:
Odor:
Clarity:
Settled Solids:
Suspended Solids:
Special Instructions: NMR053195

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.						
	Sample information						
30	Document the monitoring Period by using the Monitoring Period lookup table.	MP3			☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)				☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/11/16	7:01		☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/11/16	7:01		☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/12/16	1520		☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.	PRI	8/10/16 0.08" AND 8/12/16		☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.				☐	☐	☐
	Parameters						
110	Is sample colorless? If "Failed", describe.	light Brown			☑	☐	☐
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	01			☑	☐	☐
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	C1			☑	☐	☐

140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.	Very			☑	☐	☐
150	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	SETSOL2			☑	☐	☐
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	SUSSOL2			☑	☐	☐
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)				☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)				☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)				☐	☐	☑
					☐	☐	☐

Labor

Labor	Assigned	Work Date	Reg Hrs	OT Hrs	Other Hrs
Shendo, Marwin	9/30/2016 / 14				

Labor Report

Completed: _____ **Failure:** _____ **Meter 1:** _____ **Meter 2:** _____

Report:

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_____ _____ _____ _____

Signature / Name Date Signature / Name Date

Signature (collecting sample): MSH. Date and Time: 8/11/16 7:01

Signature (conducting visual assessment): MSH. Date and Time: 8/12/16 1528

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: _____

Signature: _____ Date: _____

Los Alamos National Lab - ADESH

Work Order MSGP-58310

MSGP Monitoring Stations
Printed 8/17/2016 - 12:00 PM

Maintenance Details

Requested By: Banar, Alethea on 8/17/2016 11:58:00 AM
Taken By: Banar, Alethea
Procedure: MSGP Quarterly Visual Assessment (EPC-CP-Form-1021.2)
Last PM: 8/8/2016
Project: VISUAL ASSESSMENTS 8-8-16 (P-MSGP-5074)

Target: 9/30/2016
Priority/Type: / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (018)
MSGP01801

Contact: Banar, Alethea
Phone: 699-5836

Reason: MSGP Quarterly Visual Assessment
Monitoring Period:
Odor:
Clarity:
Settled Solids:
Suspended Solids:
Special Instructions: NMR053195

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.						
	Sample information						
30	Document the monitoring Period by using the Monitoring Period lookup table.	MP3			☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)				☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/13/16	1422		☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/13/16	1422		☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/16/16	1623		☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.	PR1	0.3 in AMB 8/13/16		☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.				☐	☐	☑
	Parameters						
110	Is sample colorless? If "Failed", describe.	Brown			☑	☐	☐
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	01			☑	☐	☐
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	C2			☑	☐	☐
					☑	☐	☐

140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.	Veg				
150	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	SeTSOL2			☑	☐
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	SuSSOL2			☑	☐
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)				☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)				☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)				☐	☑
					☐	☐

Labor

Labor	Assigned	Work Date	Reg Hrs	OT Hrs	Other Hrs
Shendo, Marwin	9/30/2016 / 14				

Labor Report

Completed: _____ **Failure:** _____ **Meter 1:** _____ **Meter 2:** _____

Report:

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_____ _____ _____ _____

Signature / Name Date Signature / Name Date

WO ID: MSGP-58310 Page 3 of 3

Signature (collecting sample): MSL Date and Time: 8/13/16 1422

Signature (conducting visual assessment): MSL Date and Time: 8/16/16 1623

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: _____

Signature: _____ Date: _____

Los Alamos National Lab - ADESH

Work Order MSGP-58315

MSGP Monitoring Stations
Printed 8/17/2016 - 2:27 PM

Maintenance Details

Requested: 8/17/2016 2:20:54 PM
Procedure: MSGP Quarterly Visual Assessment (EPC-CP-Form-1021.2)
Last PM: 8/1/2016
Project: SIO Visuals 8-16-16 (P-MSGP-5099)

Target: 9/30/2016
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (018)
Substantially Identical Outfall (013)
MSGP01301

Reason: MSGP Quarterly Visual Assessment

Contact:
Phone:

Monitoring Period:
Odor:
Clarity:
Settled Solids:
Suspended Solids:
Special Instructions: NMR053195

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.						
	Sample information						
30	Document the monitoring Period by using the Monitoring Period lookup table.	MP3			☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)				☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/27/16	11:51		☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/27/16 ~~8/29/16~~	1157 ~~1651~~		☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/29/16	1651		☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.	PR1	0.85 in. AKB 9/6/16		☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.				☐	☐	☑
	Parameters						
110	Is sample colorless? If "Failed", describe.	Brown			☑	☐	☐
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	O1			☑	☐	☐
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	C3			☑	☐	☐
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.	Veg			☑	☐	☐
150					☑	☐	☐

	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	SETSOL			
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	SUSSOL2	☑	☐	☐
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)		☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)		☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)		☐	☐	☑
			☐	☐	☐

Labor

Labor	Work Date	Reg Hrs	OT Hrs	Other Hrs

Labor Report

Completed: _____ **Failure:** _____

Report:

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_____ _____ _____ _____

Signature / Name | Date | Signature / Name | Date

WO ID: MSGP-58315 Page 3 of 3

Signature (collecting sample): MSL Date and Time: 8/27/16 1151

Signature (conducting visual assessment): MSL Date and Time: 8/27/16 1651

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: _____

Signature: _____ Date: _____

Los Alamos National Lab - ADESH

Work Order MSGP-58316

MSGP Monitoring Stations
Printed 8/17/2016 - 2:27 PM

Maintenance Details

Requested: 8/17/2016 2:20:55 PM
Procedure: MSGP Quarterly Visual Assessment (EPC-CP-Form-1021.2)
Last PM: 8/1/2016
Project: SIO Visuals 8-16-16 (P-MSGP-5099)

Target: 9/30/2016
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (018)
Substantially Identical Outfall (014)
MSGP01401

Reason: MSGP Quarterly Visual Assessment

Contact:
Phone:

Monitoring Period:
Odor:
Clarity:
Settled Solids:
Suspended Solids:
Special Instructions: NMR053195

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.						
	Sample information						
30	Document the monitoring Period by using the Monitoring Period lookup table.	MP3			☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)				☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/13/16	1255 approx		☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/13/16	1255 approx		☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/17/16	1559		☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.	PR1	0.3 in. Aug 8/24/16		☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.				☐	☐	☑
	Parameters						
110	Is sample colorless? If "Failed", describe.	Brown			☑	☐	☐
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	O1			☑	☐	☐
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	C3			☑	☐	☐
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.				☐	☐	☑
150					☑	☐	☐

	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	SETSOL1			
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		☐	☐	☑
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)		☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)		☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)		☐	☐	☑
			☐	☐	☐

Labor

Labor	Work Date	Reg Hrs	OT Hrs	Other Hrs

Labor Report

Completed: _____ **Failure:** _____

Report:

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_____ _____ _____ _____

Signature / Name Date Signature / Name Date

Signature (collecting sample): MSH. Date and Time: 8/13/16 1255

Signature (conducting visual assessment): MSH. Date and Time: 8/17/16 1539

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: _____

Signature: _____ Date: _____

Los Alamos National Lab - ADESH

Work Order MSGP-58317

MSGP Monitoring Stations
Printed 8/17/2016 - 2:27 PM

Maintenance Details

Requested: 8/17/2016 2:20:56 PM
Procedure: MSGP Quarterly Visual Assessment (EPC-CP-Form-1021.2)
Last PM: 8/1/2016
Project: SIO Visuals 8-16-16 (P-MSGP-5099)

Target: 9/30/2016
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (018)
Substantially Identical Outfall (015)
MSGP01501

Reason: MSGP Quarterly Visual Assessment

Contact:
Phone:

Monitoring Period:
Odor:
Clarity:
Settled Solids:
Suspended Solids:
Special Instructions: NMR053195

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.						
	Sample information						
30	Document the monitoring Period by using the Monitoring Period lookup table.	MP3			☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)				☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/13/16	1310 approx		☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/13/16	1310 approx		☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/17/16	1604		☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.	PR1	0.3 in. since 8/13/16		☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.				☐	☐	☑
	Parameters						
110	Is sample colorless? If "Failed", describe.	Brown			☑	☐	☐
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	O1			☑	☐	☐
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	C3			☑	☐	☐
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.				☐	☐	☑
150					☑	☐	☐

	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	SET3021				
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☑
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)				☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)				☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)				☐	☑
					☐	☐

Labor

Labor	Work Date	Reg Hrs	OT Hrs	Other Hrs

Labor Report

Completed: _____ **Failure:** _____

Report:

_____

_____

_____

_____

Signature / Name	Date	Signature / Name	Date

WO ID: MSGP-58317 Page 3 of 3

Signature (collecting sample): MSL Date and Time: 8/13/16 1310

Signature (conducting visual assessment): MSL Date and Time: 8/17/16 1604

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: _____

Signature: _____ Date: _____

Los Alamos National Lab - ADESH

Work Order MSGP-58318

MSGP Monitoring Stations
Printed 8/17/2016 - 2:27 PM

Maintenance Details

Requested: 8/17/2016 2:20:56 PM
Procedure: MSGP Quarterly Visual Assessment (EPC-CP-Form-1021.2)
Last PM: 8/1/2016
Project: SIO Visuals 8-16-16 (P-MSGP-5099)

Target: 9/30/2016
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (018)
Substantially Identical Outfall (016)
MSGP01601

Reason: MSGP Quarterly Visual Assessment

Contact:
Phone:

Monitoring Period:
Odor:
Clarity:
Settled Solids:
Suspended Solids:
Special Instructions: NMR053195

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.						
	Sample information						
30	Document the monitoring Period by using the Monitoring Period lookup table.	MP3			☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)				☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/27/16	11:49		☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/27/16 ~~8/29/16~~	1149 ~~1623~~		☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/29/16	1623		☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.	PR1	0.85 in. AMG 9/6/16		☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.				☐	☐	☑
	Parameters						
110	Is sample colorless? If "Failed", describe.	Brown			☑	☐	☐
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	O1			☑	☐	☑ MPS
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	C2			☑	☐	☐
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.				☐	☐	☑
150					☑	☐	☐

	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	SETSOL			
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		☐	☐	☑
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)		☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)		☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)		☐	☐	☑
			☐	☐	☐

Labor

Labor	Work Date	Reg Hrs	OT Hrs	Other Hrs

Labor Report

Completed: _____ **Failure:** _____

Report:

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Signature / Name Date Signature / Name Date

WO ID: MSGP.58318 Page 3 of 3

Signature (collecting sample): MSL Date and Time: 8/27/16 11:49

Signature (conducting visual assessment): MSL Date and Time: 8/29/16 1623

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: _____

Signature: _____ Date: _____

Los Alamos National Lab - ADESH

Work Order MSGP-58319

MSGP Monitoring Stations
Printed 8/17/2016 - 2:27 PM

Maintenance Details

Requested: 8/17/2016 2:20:57 PM
Procedure: MSGP Quarterly Visual Assessment (EPC-CP-Form-1021.2)
Last PM: 8/1/2016
Project: SIO Visuals 8-16-16 (P-MSGP-5099)

Target: 9/30/2016
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (018)
Substantially Identical Outfall (017)
MSGP01701

Reason: MSGP Quarterly Visual Assessment

Contact:
Phone:

Monitoring Period:
Odor:
Clarity:
Settled Solids:
Suspended Solids:
Special Instructions: NMR053195

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.						
	Sample information						
30	Document the monitoring Period by using the Monitoring Period lookup table.	MP3			☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)				☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/13/16	1258		☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/13/16	1258		☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/17/16	1615		☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.	PR1	0.3 in. Aug 8 to 11 16		☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.				☐	☐	☑
	Parameters						
110	Is sample colorless? If "Failed", describe.				☐	☐	☑
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☐	☑
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☐	☑
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.	Veg			☐	☐	☑
150					☐	☐	☑

	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.					
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	SUSSOL2		☑	☐	☐
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)			☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)			☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)			☐	☐	☑
				☐	☐	☐

Labor

Labor	Work Date	Reg Hrs	OT Hrs	Other Hrs

Labor Report

Completed: _____ **Failure:** _____

Report:

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Signature / Name	Date	Signature / Name	Date

WO ID: MSGP-58314 Page 3 of 3

Signature (collecting sample): MSLL Date and Time: 8/13/16 1258

Signature (conducting visual assessment): MSLL Date and Time: 8/17/16 1615

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: _____

Signature: _____ Date: _____

Los Alamos National Lab - ADESH

Work Order MSGP-58408

MSGP Monitoring Stations
Printed 8/23/2016 - 3:43 PM

Maintenance Details

Requested: 8/23/2016 3:43:53 PM
Procedure: MSGP Quarterly Visual Assessment (EPC-CP-Form-1021.2)
Last PM: 8/9/2016
Project: SIO Visuals 8/23/16 (P-MSGP-5107)

Target: 9/30/2016
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (018)
Substantially Identical Outfall (014)
MSGP01401

Reason: MSGP Quarterly Visual Assessment

Contact:
Phone:

Monitoring Period:
Odor:
Clarity:
Settled Solids:
Suspended Solids:
Special Instructions: NMR053195

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.						
	Sample information						
30	Document the monitoring Period by using the Monitoring Period lookup table.	MP3			☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)				☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/21/16	1925 approx		☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/21/16	1925 approx		☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/22/16	12:55		☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.	PR1	0.21 in. AWB 8/30/16		☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.				☐	☐	☑
	Parameters						
110	Is sample colorless? If "Failed", describe.	orange-brown			☑	☐	☐
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☐	☑
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	C3			☑	☐	☐
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.				☐	☐	☑
150					☑	☐	☐

	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	fine				
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☑
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)				☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)				☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)				☐	☑
					☐	☐

Labor

Labor	Assigned	Work Date	Reg Hrs	OT Hrs	Other Hrs
Shendo, Marwin	9/30/2016 / 14				

Labor Report

Completed: _____ **Failure:** _____

Report:

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Signature / Name	Date	Signature / Name	Date

WO ID: W56P-68408 Page 3 of 3

Signature (collecting sample): _____ Date and Time: 8/21/16 1924

Signature (conducting visual assessment): _____ Date and Time: 8/22/16 12:55

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: _____

Signature: _____ Date: _____

Los Alamos National Lab - ADESH

Work Order MSGP-58409

MSGP Monitoring Stations
Printed 8/23/2016 - 3:43 PM

Maintenance Details

Requested: 8/23/2016 3:43:54 PM
Procedure: MSGP Quarterly Visual Assessment (EPC-CP-Form-1021.2)
Last PM: 8/9/2016
Project: SIO Visuals 8/23/16 (P-MSGP-5107)

Target: 9/30/2016
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (018)
Substantially Identical Outfall (015)
MSGP01501

Reason: MSGP Quarterly Visual Assessment

Contact:
Phone:

Monitoring Period:
Odor:
Clarity:
Settled Solids:
Suspended Solids:
Special Instructions: NMR053195

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.						
	Sample information						
30	Document the monitoring Period by using the Monitoring Period lookup table.	MP3			☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)				☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/21/16	1925 approx		☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/21/16	1925 approx		☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/22/16	12:59		☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.	PR1	0.21 in. Aug 8/23/16		☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.				☐	☐	☑
	Parameters						
110	Is sample colorless? If "Failed", describe.	Light Brown			☑	☐	☐
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☐	☑
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	C2			☑	☐	☐
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.				☐	☐	☑
150					☑	☐	☐

	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	fine				
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.					☑
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)					☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)					☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)					☑

Labor

Labor	Assigned	Work Date	Reg Hrs	OT Hrs	Other Hrs
Shendo, Marwin	9/30/2016 / 14				

Labor Report

Completed: _____ **Failure:** _____

Report:

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Signature / Name	Date	Signature / Name	Date

Signature (collecting sample): _____ Date and Time: 9/21/16 1925

Signature (conducting visual assessment): _____ Date and Time: 9/22/2016 12:59

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: _____

Signature: _____ Date: _____

Los Alamos National Lab - ADESH

Work Order MSGP-58410

MSGP Monitoring Stations
Printed 8/23/2016 - 3:43 PM

Maintenance Details

Requested: 8/23/2016 3:43:55 PM
Procedure: MSGP Quarterly Visual Assessment (EPC-CP-Form-1021.2)
Last PM: 8/9/2016
Project: SIO Visuals 8/23/16 (P-MSGP-5107)

Target: 9/30/2016
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (018)
Substantially Identical Outfall (017)
MSGP01701

Reason: MSGP Quarterly Visual Assessment

Contact:
Phone:

Monitoring Period:
Odor:
Clarity:
Settled Solids:
Suspended Solids:
Special Instructions: NMR053195

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.						
	Sample information						
30	Document the monitoring Period by using the Monitoring Period lookup table.	MP3			☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)				☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/21/16	1928 approx		☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/21/16	1928 approx		☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/22/16	12:18		☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.	PR1	0.21 in. Aug 21 2016		☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.				☐	☐	☑
	Parameters						
110	Is sample colorless? If "Failed", describe.				☐	☐	☑
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	Musty			☑	☐	☐
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☐	☑
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.	Veg			☑	☐	☑ CS
150					☐	☐	☑

	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.					
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	Very cs		☑ cs	☐	☑
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)			☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)			☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)			☐	☐	☑
				☐	☐	☐

Labor

Labor	Assigned	Work Date	Reg Hrs	OT Hrs	Other Hrs
Shendo, Marwin	9/30/2016 / 14				

Labor Report

Completed: _____ **Failure:** _____

Report:

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Signature / Name | Date | Signature / Name | Date

WO ID: MSGP - 58910 Page 3 of 3

Signature (collecting sample): _____ Date and Time: 8/21/16 1928

Signature (conducting visual assessment): _____ Date and Time: 8/22/16 12:18

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: _____

Signature: _____ Date: _____

Los Alamos National Lab - ADESH

Work Order MSGP-58497

MSGP Monitoring Stations
Printed 8/31/2016 - 3:46 PM

Maintenance Details

Requested: 8/31/2016 2:35:57 PM
Procedure: MSGP Quarterly Visual Assessment (EPC-CP-Form-1021.2)
Last PM: 8/22/2016
Project: SIO Visuals 8/31/16 (P-MSGP-5113)

Target: 9/30/2016
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (018)
Substantially Identical Outfall (014)
MSGP01401

Reason: MSGP Quarterly Visual Assessment

Contact:
Phone:

Monitoring Period:
Odor:
Clarity:
Settled Solids:
Suspended Solids:
Special Instructions: NMR053195

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.						
	Sample information						
30	Document the monitoring Period by using the Monitoring Period lookup table.	MP3			☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)				☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/27/16	1140		☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/27/16	1140		☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/29/16	1649		☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.	PR1	0.85in	NAD 9/6/16	☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.				☐	☐	☑
	Parameters						
110	Is sample colorless? If "Failed", describe.	Brown			☑	☐	☐
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	O1			☑	☐	☐
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	C3			☑	☐	☐
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.	Veg			☑	☐	☐
150					☑	☐	☐

	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	SETSOL1		☐	☐	☐
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	SUSSOL2		☑	☐	☐
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)			☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)			☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)			☐	☐	☑
				☐	☐	☐

Labor

Labor	Assigned	Work Date	Reg Hrs	OT Hrs	Other Hrs
Shendo, Marwin	9/30/2016 / 14				

Labor Report

Completed: _____ **Failure:** _____

Report:

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_____ _____ _____ _____

Signature / Name | Date | Signature / Name | Date

WO ID: MSGP-58197 Page 3 of 3

Signature (collecting sample): [signature] Date and Time: 8/27/16 1140

Signature (conducting visual assessment): [signature] Date and Time: 8/28/16 1649

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: _____

Signature: _____ Date: _____

Los Alamos National Lab - ADESH

Work Order MSGP-58498

MSGP Monitoring Stations
Printed 8/31/2016 - 3:46 PM

Maintenance Details

Requested: 8/31/2016 2:35:58 PM
Procedure: MSGP Quarterly Visual Assessment (EPC-CP-Form-1021.2)
Last PM: 8/22/2016
Project: SIO Visuals 8/31/16 (P-MSGP-5113)

Target: 9/30/2016
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (018)
Substantially Identical Outfall (015)
MSGP01501

Reason: MSGP Quarterly Visual Assessment

Contact:
Phone:

Monitoring Period:
Odor:
Clarity:
Settled Solids:
Suspended Solids:
Special Instructions: NMR053195

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.						
	Sample information						
30	Document the monitoring Period by using the Monitoring Period lookup table.	MP3			☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)				☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/27/16	1151	approx	☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/27/16	1151	approx	☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/29/16	1644		☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.	MP3	0.85in. AND 9/6/16		☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.				☐	☐	☑
	Parameters						
110	Is sample colorless? If "Failed", describe.	Brown			☑	☐	☐
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	O1			☑	☐	☐
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	C3			☑	☐	☐
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.				☐	☐	☑
150					☑	☐	☐

	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	SETSOL2				
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.			☐	☐	☑
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)			☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)			☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)			☐	☐	☑
				☐	☐	☐

Labor

Labor	Assigned	Work Date	Reg Hrs	OT Hrs	Other Hrs
Shendo, Marwin	9/30/2016 / 14				

Labor Report

Completed: _____ **Failure:** _____

Report:

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Signature / Name Date Signature / Name Date

WO ID: MSGP-58498 Page 3 of 3

Signature (collecting sample): MSL Date and Time: 8/27/16 1151

Signature (conducting visual assessment): MSL Date and Time: 8/29/16 1644

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: _____

Signature: _____ Date: _____

Los Alamos National Lab - ADESH

Work Order MSGP-58499

MSGP Monitoring Stations
Printed 8/31/2016 - 3:46 PM

Maintenance Details

Requested: 8/31/2016 2:35:58 PM
Procedure: MSGP Quarterly Visual Assessment (EPC-CP-Form-1021.2)
Last PM: 8/22/2016
Project: SIO Visuals 8/31/16 (P-MSGP-5113)

Target: 9/30/2016
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (018)
Substantially Identical Outfall (017)
MSGP01701

Reason: MSGP Quarterly Visual Assessment

Contact:
Phone:

Monitoring Period:
Odor:
Clarity:
Settled Solids:
Suspended Solids:
Special Instructions: NMR053195

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.							
Sample information							
30	Document the monitoring Period by using the Monitoring Period lookup table.	MP3			☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)				☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/27/16	1234		☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/27/16	1234		☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/29/16	1621		☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.	PR1	0.85 in. Adj 9/6/16		☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.				☐	☐	☑
Parameters							
110	Is sample colorless? If "Failed", describe.				☐	☐	☑
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	01			☑	☐	☐
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☐	☑
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.	Veg			☑	☐	☑ MS
150					☐	☐	☑

	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.					
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	SuSSOL2		☑	☐	☐
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)			☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)			☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)			☐	☐	☑
				☐	☐	☐

Labor

Labor	Assigned	Work Date	Reg Hrs	OT Hrs	Other Hrs
Shendo, Marwin	9/30/2016 / 14				

Labor Report

Completed: _____ **Failure:** _____

Report:

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Signature / Name Date Signature / Name Date

WO ID: MSGP-58499 Page 3 of 3

Signature (collecting sample): MSL Date and Time: 8/27/16 1234

Signature (conducting visual assessment): MSL Date and Time: 8/29/16 1621

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: _____

Signature: _____ Date: _____

Los Alamos National Lab - ADESH

Work Order MSGP-58509

MSGP Monitoring Stations
Printed 8/31/2016 - 3:42 PM

Maintenance Details

Requested: 8/31/2016 2:57:45 PM
Procedure: MSGP Quarterly Visual Assessment (EPC-CP-Form-1021.2)
Last PM: 8/22/2016
Project: SIO Visuals 9/1/16 (P-MSGP-5114)

Target: 9/30/2016
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (018)
Substantially Identical Outfall (014)
MSGP01401

Reason: MSGP Quarterly Visual Assessment

Contact:
Phone:

Monitoring Period:
Odor:
Clarity:
Settled Solids:
Suspended Solids:
Special Instructions: NMR053195

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.						
	Sample information						
30	Document the monitoring Period by using the Monitoring Period lookup table.		MP3		☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)				☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/24/16	13:10		☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/24/16 ~~8/25/16~~	13:10 ~~1444~~		☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/25/16	1441		☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.	PR1	0.35 in. ~~0.85 in.~~ AMB 9/6/16		☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.				☐	☐	☑
	Parameters						
110	Is sample colorless? If "Failed", describe.	light brown			☑	☐	☐
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	01			☑	☐	☐
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	C3			☑	☐	☐
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.				☐	☐	☑
150					☑	☐	☐

	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	SETSOL2				
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.					☒
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)					☒
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)					☒
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)					☒

Labor

Labor	Assigned	Work Date	Reg Hrs	OT Hrs	Other Hrs
Shendo, Marwin	9/30/2016 / 14				

Labor Report

Completed: _____ **Failure:** _____

Report:

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Signature / Name	Date	Signature / Name	Date

WO ID: MSGP-58509 Page 3 of 3

Signature (collecting sample): MSL Date and Time: 8/24/16 13:10

Signature (conducting visual assessment): MSL Date and Time: 8/25/16 1441

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: _____

Signature: _____ Date: _____

Los Alamos National Lab - ADESH

Work Order MSGP-58510

MSGP Monitoring Stations
Printed 8/31/2016 - 3:42 PM

Maintenance Details

Requested: 8/31/2016 2:57:47 PM
Procedure: MSGP Quarterly Visual Assessment (EPC-CP-Form-1021.2)
Last PM: 8/22/2016
Project: SIO Visuals 9/1/16 (P-MSGP-5114)

Target: 9/30/2016
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (018)
Substantially Identical Outfall (015)
MSGP01501

Reason: MSGP Quarterly Visual Assessment

Contact:
Phone:

Monitoring Period:
Odor:
Clarity:
Settled Solids:
Suspended Solids:
Special Instructions: NMR053195

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.						
	Sample information						
30	Document the monitoring Period by using the Monitoring Period lookup table.	MP3			☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)				☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/24/16	13:25 approx		☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/24/16 8/25/16	13:25 1444		☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/25/16	1444		☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.	PR	0.35 in. ~~0.85 in.~~ AMS 9/6/16		☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.				☐	☐	☑
	Parameters						
110	Is sample colorless? If "Failed", describe.	Brown			☑	☐	☐
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	01			☑	☐	☐
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	C3			☑	☐	☐
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.	Veg			☑	☐	☐
150					☑	☐	☐

	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	SETSOLZ				
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	SUSSOLZ			☑	☐
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)				☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)				☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)				☐	☑
					☐	☐

Labor

Labor	Assigned	Work Date	Reg Hrs	OT Hrs	Other Hrs
Shendo, Marwin	9/30/2016 / 14				

Labor Report

Completed: _____ **Failure:** _____

Report:

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Signature / Name	Date	Signature / Name	Date

WO ID: MSGP-58510 Page 3 of 3

Signature (collecting sample): [signature] Date and Time: 8/24/16 13:35

Signature (conducting visual assessment): [signature] Date and Time: 8/25/16 14:44

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: _____

Signature: _____ Date: _____

Los Alamos National Lab - ADESH

Work Order MSGP-58511

MSGP Monitoring Stations
Printed 8/31/2016 - 3:42 PM

Maintenance Details

Requested: 8/31/2016 2:57:47 PM
Procedure: MSGP Quarterly Visual Assessment (EPC-CP-Form-1021.2)
Last PM: 8/22/2016
Project: SIO Visuals 9/1/16 (P-MSGP-5114)

Target: 9/30/2016
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (018)
Substantially Identical Outfall (017)
MSGP01701

Reason: MSGP Quarterly Visual Assessment

Contact:
Phone:

Monitoring Period:
Odor:
Clarity:
Settled Solids:
Suspended Solids:
Special Instructions: NMR053195

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.						
	Sample information						
30	Document the monitoring Period by using the Monitoring Period lookup table.	MP3			☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)				☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/24/16	13:49 approx		☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/24/16	13:49		☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/25/16	1455		☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.	PR1	0.35 in. ~~0.85 in.~~ MS 9/6/16		☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.				☐	☐	☑
	Parameters						
110	Is sample colorless? If "Failed", describe.				☐	☐	☑
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☐	☑
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☐	☑
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.				☐	☐	☑
150					☐	☐	☑

	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☐	☐
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☐	☒
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)				☐	☐	☒
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)				☐	☐	☒
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)				☐	☐	☐
					☐	☐	☐

Labor

Labor	Assigned	Work Date	Reg Hrs	OT Hrs	Other Hrs
Shendo, Marwin	9/30/2016 / 14				

Labor Report

Completed: _____ **Failure:** _____

Report:

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_____ _____ _____ _____

Signature / Name Date Signature / Name Date

Signature (collecting sample): [signature] Date and Time: 8/24/16 1349

Signature (conducting visual assessment): [signature] Date and Time: 8/25/16 1455

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: _____

Signature: _____ Date: _____

Los Alamos National Lab - ADESH

Work Order MSGP-58520

MSGP Monitoring Stations
Printed 8/31/2016 - 3:40 PM

Maintenance Details

Requested: 8/31/2016 3:04:25 PM
Procedure: MSGP Quarterly Visual Assessment (EPC-CP-Form-1021.2)
Last PM: 8/26/2016
Project: Visual Assessments 8/31/16 (P-MSGP-5115)

Target: 9/30/2016
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (018)
MSGP01801

Contact:
Phone:

Reason: MSGP Quarterly Visual Assessment

Monitoring Period:
Odor:
Clarity:
Settled Solids:
Suspended Solids:
Special Instructions: NMR053195

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.							
Sample information							
30	Document the monitoring Period by using the Monitoring Period lookup table.	MP3			☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)				☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/27/16	10:12		☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/27/16	10:12		☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/27/16	16:14		☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.	PR1	0.85 in. Rec'd 9/6/16		☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.				☐	☐	☑
Parameters							
110	Is sample colorless? If "Failed", describe.				☐	☐	☑
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☐	☑
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☐	☑
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.				☐	☐	☑
150					☐	☐	☑

	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.						
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☐	☑
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)				☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)				☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)				☐	☐	☑
					☐	☐	☐

Labor

Labor	Assigned	Work Date	Reg Hrs	OT Hrs	Other Hrs
Shendo, Marwin	9/30/2016 / 14				

Labor Report

Completed: _____ **Failure:** _____ **Meter 1:** _____ **Meter 2:** _____

Report:

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Signature / Name Date Signature / Name Date

WO ID: MSGP-58620 Page 3 of 3

Signature (collecting sample): [signature] Date and Time: 8/27/16 10:12

Signature (conducting visual assessment): [signature] Date and Time: 8/29/16 1614

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: _____

Signature: _____ Date: _____

Los Alamos National Lab - ADESH

Work Order MSGP-58542

MSGP Monitoring Stations
Printed 9/8/2016 - 3:34 PM

Maintenance Details

Requested: 9/8/2016 3:34:48 PM
Procedure: MSGP Quarterly Visual Assessment (EPC-CP-Form-1021.2)
Last PM: 8/29/2016
Project: SIO Visual Assessments 9-8-16 (P-MSGP-5120)

Target: 9/30/2016
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (018)
Substantially Identical Outfall (013)
MSGP01301

Reason: MSGP Quarterly Visual Assessment

Contact:
Phone:

Monitoring Period:
Odor:
Clarity:
Settled Solids:
Suspended Solids:
Special Instructions: NMR053195

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.						
	Sample information						
30	Document the monitoring Period by using the Monitoring Period lookup table.	MP3			☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)				☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	9/6/16	1534		☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	9/6/16	1536		☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	9/7/16	1042		☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.	PR1		0.45 in. Aug 9/8/16	☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.				☐	☐	☑
	Parameters						
110	Is sample colorless? If "Failed", describe.	Brown			☑	☐	☐
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☐	☑
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	CB			☑	☐	☐
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.	Veg			☑	☐	☐
150					☑	☐	☐

	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	SETSOL4	☐	☐	☐
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	SUSSOL2	☑	☐	☐
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)		☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)		☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)		☐	☐	☑
			☐	☐	☐

Labor

Labor	Assigned	Work Date	Reg Hrs	OT Hrs	Other Hrs
Shendo, Marwin	9/30/2016 / 14				

Labor Report

Completed: _____ **Failure:** _____

Report:

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Signature / Name	Date	Signature / Name	Date

WO ID: MSGP.58542 Page 3 of 3

Signature (collecting sample): MSH. Date and Time: 9/7/16 1042

Signature (conducting visual assessment): MSH. Date and Time: 9/7/16 1042

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: _____

Signature: _____ Date: _____

Los Alamos National Lab - ADESH

Work Order MSGP-58543

MSGP Monitoring Stations
Printed 9/8/2016 - 3:34 PM

Maintenance Details

Requested: 9/8/2016 3:34:49 PM
Procedure: MSGP Quarterly Visual Assessment (EPC-CP-Form-1021.2)
Last PM: 8/29/2016
Project: SIO Visual Assessments 9-8-16 (P-MSGP-5120)

Target: 9/30/2016
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (018)
Substantially Identical Outfall (016)
MSGP01601

Reason: MSGP Quarterly Visual Assessment

Contact:
Phone:

Monitoring Period:
Odor:
Clarity:
Settled Solids:
Suspended Solids:
Special Instructions: NMR053195

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.						
	Sample information						
30	Document the monitoring Period by using the Monitoring Period lookup table.	MP3			☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)				☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	9/6/16	1749		☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	9/6/16	1749		☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	9/7/16	1102		☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.	PR1	0.45 in. AKS 9/8/16		☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.				☐	☐	☑
	Parameters						
110	Is sample colorless? If "Failed", describe.				☐	☐	☑
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☐	☑
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☐	☑
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.				☐	☐	☑
150					☐	☐	☑

	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.						
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☐	☑
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)				☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)				☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)				☐	☐	☑
					☐	☐	☐

Labor

Labor	Assigned	Work Date	Reg Hrs	OT Hrs	Other Hrs
Shendo, Marwin	9/30/2016 / 14				

Labor Report

Completed: _____ **Failure:** _____

Report:

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Signature / Name	Date	Signature / Name	Date

WO ID: MSGP-58543 Page 3 of 3

Signature (collecting sample): [signature] Date and Time: 9/7/16 1102

Signature (conducting visual assessment): [signature] Date and Time: 9/7/16 1102

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: _____

Signature: _____ Date: _____

Los Alamos National Lab - ADESH

Work Order MSGP-58545

MSGP Monitoring Stations
Printed 9/9/2016 - 10:14 AM

Maintenance Details

Requested: 9/9/2016 10:12:17 AM
Procedure: MSGP Quarterly Visual Assessment (EPC-CP-Form-1021.2)
Last PM: 8/25/2016
Project: SIO Visual Assessments 9-8-16 (P-MSGP-5120)

Target: 9/30/2016
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (018)
Substantially Identical Outfall (014)
MSGP01401

Reason: MSGP Quarterly Visual Assessment

Contact:
Phone:

Monitoring Period:
Odor:
Clarity:
Settled Solids:
Suspended Solids:
Special Instructions: NMR053195

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.						
	Sample information						
30	Document the monitoring Period by using the Monitoring Period lookup table.	MP3			☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)				☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	9/6/16	1710		☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	9/6/16	1710		☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	9/7/16	1045		☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.	PR1	0.45in		☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.				☐	☐	☑
	Parameters						
110	Is sample colorless? If "Failed", describe.	Brown			☑	☐	☐
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☐	☑
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	C3			☑	☐	☐
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.				☐	☐	☑
150					☑	☐	☐

	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	SETSOL				
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☐	☑
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)				☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)				☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)				☐	☐	☑
					☐	☐	☐

Labor

Labor	Assigned	Work Date	Reg Hrs	OT Hrs	Other Hrs
Shendo, Marwin	9/30/2016 / 14				

Labor Report

Completed: _____ **Failure:** _____

Report:

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Signature / Name	Date	Signature / Name	Date

WO ID: MSGP- 58595 Page 3 of 3

Signature (collecting sample): MPSLP. Date and Time: 9/7/16 1045

Signature (conducting visual assessment): MPSLP. Date and Time: 9/7/16 1045

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title:_____

Signature:_____ Date:_____

Los Alamos National Lab - ADESH

Work Order MSGP-58546

MSGP Monitoring Stations
Printed 9/9/2016 - 10:14 AM

Maintenance Details

Requested: 9/9/2016 10:12:22 AM
Procedure: MSGP Quarterly Visual Assessment (EPC-CP-Form-1021.2)
Last PM: 8/25/2016
Project: SIO Visual Assessments 9-8-16 (P-MSGP-5120)

Target: 9/30/2016
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (018)
Substantially Identical Outfall (015)
MSGP01501

Reason: MSGP Quarterly Visual Assessment

Contact:
Phone:

Monitoring Period:
Odor:
Clarity:
Settled Solids:
Suspended Solids:
Special Instructions: NMR053195

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.						
	Sample information						
30	Document the monitoring Period by using the Monitoring Period lookup table.	MP3			☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)				☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	9/6/16	1720		☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	9/6/16	1720		☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	9/7/16	1049		☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.	PR1	0.45,n		☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.				☐	☐	☑
	Parameters						
110	Is sample colorless? If "Failed", describe.	Brown			☑	☐	☐
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		01		☑	☐	☐
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		C3		☑	☐	☐
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.				☐	☐	☑
150					☑	☐	☐

	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	SETSOL				
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.					☑
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)					☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)					☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)					☑

Labor

Labor	Assigned	Work Date	Reg Hrs	OT Hrs	Other Hrs
Shendo, Marwin	9/30/2016 / 14				

Labor Report

Completed: _____ **Failure:** _____

Report:

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Signature / Name	Date	Signature / Name	Date

WO ID: MSGP-58596 Page 3 of 3

Signature (collecting sample): MSL Date and Time: 9/7/16 1049

Signature (conducting visual assessment): MSL Date and Time: 9/7/16 1049

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: _____

Signature: _____ Date: _____

Los Alamos National Lab - ADESH

Work Order MSGP-58547

MSGP Monitoring Stations
Printed 9/9/2016 - 10:14 AM

Maintenance Details

Requested: 9/9/2016 10:12:22 AM
Procedure: MSGP Quarterly Visual Assessment (EPC-CP-Form-1021.2)
Last PM: 8/25/2016
Project: SIO Visual Assessments 9-8-16 (P-MSGP-5120)

Target: 9/30/2016
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (018)
Substantially Identical Outfall (017)
MSGP01701

Reason: MSGP Quarterly Visual Assessment

Contact:
Phone:

Monitoring Period:
Odor:
Clarity:
Settled Solids:
Suspended Solids:
Special Instructions: NMR053195

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.						
	Sample information						
30	Document the monitoring Period by using the Monitoring Period lookup table.	MP3			☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)				☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	9/6/16	17:19		☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	9/6/16	17:19		☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	9/7/16	10:59		☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.	PR1	0.45in		☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.				☐	☐	☑
	Parameters						
110	Is sample colorless? If "Failed", describe.				☐	☐	☑
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☐	☑
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				☐	☐	☑
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.	Veg			☑	☐	☐
150					☐	☐	☑

	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.				
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	SnSSOL 2	☑	☐	☐
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)		☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)		☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)		☐	☐	☑
			☐	☐	☐

Labor

Labor	Assigned	Work Date	Reg Hrs	OT Hrs	Other Hrs
Shendo, Marwin	9/30/2016 / 14				

Labor Report

Completed: _____ **Failure:** _____

Report:

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Signature / Name	Date	Signature / Name	Date

WO ID: MSGP-58547 Page 3 of 3

Signature (collecting sample): MSH Date and Time: 9/7/16 1059

Signature (conducting visual assessment): MSH Date and Time: 9/7/16 1059

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: _____

Signature: _____ Date: _____

Los Alamos
NATIONAL LABORATORY
EST. 1943

memorandum

Environmental Protection & Compliance Division
Compliance Programs (EPC-CP)

To/MS: Marc Gallegos, DESHF-STO, E509
Thru/MS: Terrill Lemke, EPC-CP, (E-File)
From/MS: Holly Wheeler, EPC-CP, (E-File)
Phone/Fax: 667-1312
Symbol: EPC-DO: 17-047

Date: JAN 1 9 2017

Subject: **National Pollutant Discharge Elimination System (NPDES) Permit No. NMR053195, Multi-Sector General Permit (MSGP) Quarterly Visual Assessment (QVA) Forms for October and November of 2016 for the TA-3-66 Sigma Complex**

Please find attached completed MSGP QVA Forms documenting visual assessments performed during the fourth quarter of monitoring at the TA-3-66 Sigma Complex. Pursuant to Parts 3.2.2 and 5.5 of the 2015 MSGP, this memorandum along with all of the attached QVA forms shall be incorporated into your MSGP Storm Water Pollution Prevention Plan (SWPPP).

Part 3.2.1 of the 2015 MSGP requires the visual assessment of storm water discharge samples collected from each outfall once each quarter for the entire permit term. Part 3.2.3 allows facilities that are located in an area with a semi-arid climate and/or in an area where freezing conditions exist for an extended period to distribute the quarterly visual assessments during seasons when precipitation runoff occurs. Accordingly, Los Alamos National Security LLC (LANS) has designated the following MSGP monitoring quarters.

Quarter 1:	April – May	Quarter 2:	June – July
Quarter 3:	August – September	Quarter 4:	October - November

The attached QVA forms document the following information as required by Part 3.2.2 of the 2015 MSGP.

- Sample location;
- Sample collection date and time, and visual assessment date and time for each sample;
- Personnel collecting the sample and performing the visual assessment, and their signatures;
- Nature of the discharge (i.e., runoff or snowmelt);
- Results of observations of the stormwater discharge;
- Probable sources of any observed stormwater contamination (if applicable);
- If applicable, why it was not possible to take a sample within the first 30 minutes of the storm event.

The signed certification statement contained in this memorandum satisfies the duly authorized signatory requirement for the QVAs completed by EPC-CP representatives contained in Enclosure 1.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information contained therein. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information contained is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Anthony R. Grieggs, EPC-CP Group Leader
(Print name and title)
Los Alamos National Laboratory

Manager Signature

11/19/17
Date

Part 3.2.3 of the 2015 MSGP allows the facility to take a substitute sample during the next qualifying storm event when adverse weather conditions prevent the collection of samples during a specific quarter. Adverse weather conditions are those that are dangerous or create inaccessibility for personnel or situations that otherwise make sampling impractical, such as drought or extended frozen conditions. Documentation of the rationale for no visual assessment for the quarter must be included in the facility-specific SWPPP.

Please contact Holly Wheeler at 667-1312 (hbenson@lanl.gov) if you have questions regarding the QVA documentation. Thank you for your assistance in meeting the requirements of the Laboratory's NPDES 2015 MSGP Permit.

TWL/HLW:am

Enclosure: 1. Quarterly Visual Assessment Forms Requiring a Certification Statement Signature, Fourth Quarter, 2016 Monitoring Year

Facility Name	Sampling Station	Work Order #
TA-3-66 Sigma Complex	MSGP01901	MSGP-57764
TA-3-66 Sigma Complex	MSGP01301	MSGP-58612
TA-3-66 Sigma Complex	MSGP01401	MSGP-58613
TA-3-66 Sigma Complex	MSGP01501	MSGP-58614
TA-3-66 Sigma Complex	MSGP01601	MSGP-58615
TA-3-66 Sigma Complex	MSGP01701	MSGP-58616
TA-3-66 Sigma Complex	MSGP01801	MSGP-59294
TA-3-66 Sigma Complex	MSGP01401	MSGP-59357
TA-3-66 Sigma Complex	MSGP01501	MSGP-59358
TA-3-66 Sigma Complex	MSGP01701	MSGP-59359

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locatesteam@lanl.gov, (E-File)
epc-correspondence@lanl.gov, (E-File)
Holly Wheeler, EPC-CP, (E-File)

ENCLOSURE 1

Quarterly Visual Assessment Forms Requiring a Certification Statement Signature

Fourth Quarter, 2016 Monitoring Year

EPC-DO: 17-047

Date: JAN 19 2017

Los Alamos National Lab - ADESH

Work Order MSGP-57764

MSGP Monitoring Stations
Printed 1/12/2017 - 11:56 AM (Duplicate Copy)

Maintenance Details

Requested: 8/8/2016 12:28:00 PM
Procedure: MSGP Quarterly Visual Assessment (EPC Sig) (EPC-CP-Form-1021.2 A)
Last PM: 8/9/2016
Project: SIO Visual Assess. Oct-Nov 2016 (P-MSGP-5138)

Target: 11/30/2016
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (018)
Substantially Identical Outfall (019)
MSGP01901

Reason: MSGP Quarterly Visual Assessment

Contact:
Phone:

Precipitation Type: PR1
Odor: NA
Clarity: C2
Settled Solids: NA
Suspended Solids: NA
Special Instructions: NMR053195

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.							
Sample information							
30	Document the monitoring Period by using the Monitoring Period lookup table.			MS	☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)			MS	☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).		11/5/19 at 21:25	MS	☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).		11/5/16 at 21:25	MS	☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).		11/7/16 at 16:20	MS	☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.		.7 inches	MS	☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.			MS	☐	☐	☑
Parameters							
110	Is sample colorless? If "Failed", describe.		brown	MS	☒	☐	☐
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.			MS	☐	☐	☑
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.			MS	☒	☐	☐
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.			MS	☐	☐	☑
150	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If			MS	☐	☐	☑

	"other" is chosen from the lookup table, provide description in comments of this line.						
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.			MS	☐	☐	☑
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)			MS	☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)			MS	☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)			MS	☐	☐	☑

Labor Report

Completed: 11/7/2016 4:20:00 PM **Failure:**

Report:

Signature / Name	Date	Signature / Name	Date
	11/14/2016		

WO ID:_____ Page____ of____

Date:_____ Time:_____

Name/Z#:_____

Signature (collecting sample & conducting visual assessment):_____

"I confirm the information as recorded is true, accurate and complete."

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Grieggs, EPC-CP Group Leader

Signature: (See signature on file) Date:

Los Alamos National Lab - ADESH

Work Order MSGP-58612

MSGP Monitoring Stations
Printed 1/12/2017 - 12:00 PM (Duplicate Copy)

Maintenance Details

Requested: 9/12/2016 11:52:00 AM
Procedure: MSGP Quarterly Visual Assessment (EPC Sig) (EPC-CP-Form-1021.2 A)
Last PM: 9/22/2016
Project: SIO Visual Assess. Oct-Nov 2016 (P-MSGP-5138)

Target: 11/30/2016
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (018)
Substantially Identical Outfall (013)
MSGP01301

Reason: MSGP Quarterly Visual Assessment

Contact:
Phone:

Precipitation Type: PR1
Odor: NA
Clarity: C1
Settled Solids: NA
Suspended Solids: SUSSOL2
Special Instructions: NMR053195

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.							
Sample information							
30	Document the monitoring Period by using the Monitoring Period lookup table.			MS	☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)			MS	☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).		11/5/16 at 21:21	MS	☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).		11/5/16 at 21:21	MS	☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).		11/09/16 at 13:33	MS	☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.		.7 inches	MS	☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.			MS	☐	☐	☑
Parameters							
110	Is sample colorless? If "Failed", describe.		light brown	MS	☒	☐	☐
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.			MS	☐	☐	☑
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.			MS	☒	☐	☐
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.		Vegetation	MS	☒	☐	☐

150	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.			MS	☐	☐	☑
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.			MS	☒	☐	☐
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)			MS	☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)			MS	☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)			MS	☐	☐	☑

Labor Report

Completed: 11/9/2016 1:33:00 PM **Failure:**

Report:

Signature / Name	Date	Signature / Name	Date
MPSH.	11/14/2016		

WO ID:_____ Page____ of____

Date:_____ Time:_____

Name/Z#:_____

Signature (collecting sample & conducting visual assessment):_____

"I confirm the information as recorded is true, accurate and complete."

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Grieggs, EPC-CP Group Leader

Signature: (See signature on file) Date:

Los Alamos National Lab - ADESH

Work Order MSGP-58613

MSGP Monitoring Stations
Printed 1/12/2017 - 12:02 PM (Duplicate Copy)

Maintenance Details

Requested: 9/12/2016 11:52:00 AM
Procedure: MSGP Quarterly Visual Assessment (EPC Sig) (EPC-CP-Form-1021.2 A)
Last PM: 9/22/2016
Project: SIO Visual Assess. Oct-Nov 2016 (P-MSGP-5138)

Target: 11/30/2016
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (018)
Substantially Identical Outfall (014)
MSGP01401

Reason: MSGP Quarterly Visual Assessment

Contact:
Phone:

Precipitation Type: PR1
Odor: O1
Clarity: C3
Settled Solids: SETSOL2
Suspended Solids: NA
Special Instructions: NMR053195

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.							
Sample information							
30	Document the monitoring Period by using the Monitoring Period lookup table.			MS	☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)			MS	☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).		11/5/16 at 21:10	MS	☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).		11/5/16 at 21:10	MS	☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).		11/09/16 at 15:29	MS	☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.		.7 inches	MS	☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.			MS	☐	☐	☑
Parameters							
110	Is sample colorless? If "Failed", describe.		Brown	MS	☒	☐	☐
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.			MS	☒	☐	☐
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.			MS	☒	☐	☐
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.			MS	☐	☐	☑
150				MS	☒	☐	☐

	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.						
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.			MS	☐	☐	☑
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)			MS	☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)			MS	☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)			MS	☐	☐	☑

Labor Report

Completed: 11/9/2016 3:29:00 PM **Failure:**

Report:

[signature]	11/14/2016		
Signature / Name	Date	Signature / Name	Date

WO ID:_____ Page____ of____

Date:_____ Time:_____

Name/Z#:_____

Signature (collecting sample & conducting visual assessment):_____

"I confirm the information as recorded is true, accurate and complete."

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Grieggs, EPC-CP Group Leader

Signature: (See signature on file) Date:

Los Alamos National Lab - ADESH

Work Order MSGP-58614

MSGP Monitoring Stations
Printed 1/12/2017 - 12:11 PM

Maintenance Details

Requested: 9/12/2016 11:52:00 AM
Procedure: MSGP Quarterly Visual Assessment (EPC Sig) (EPC-CP-Form-1021.2 A)
Last PM: 9/22/2016
Project: SIO Visual Assess. Oct-Nov 2016 (P-MSGP-5138)

Target: 11/30/2016
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (018)
Substantially Identical Outfall (015)
MSGP01501

Reason: MSGP Quarterly Visual Assessment

Contact:
Phone:

Precipitation Type: PR1
Odor: O1
Clarity: C3
Settled Solids: SETSOL1
Suspended Solids: SUSSOL2
Special Instructions: NMR053195

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.							
Sample information							
30	Document the monitoring Period by using the Monitoring Period lookup table.			MS	☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)			MS	☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).		11/5/16 at 21:10	MS	☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).		11/5/16 at 21:10	MS	☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).		11/9/16 at 15:25	MS	☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.		.7 inches	MS	☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.			MS	☐	☐	☑
Parameters							
110	Is sample colorless? If "Failed", describe.		brown	MS	☒	☐	☐
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.			MS	☒	☐	☐
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.			MS	☒	☐	☐
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.		Vegetation	MS	☒	☐	☐

150	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.			MS	☒	☐	☐
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.			MS	☒	☐	☐
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)			MS	☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)			MS	☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)			MS	☐	☐	☑

Labor Report

Completed: 11/9/2016 3:25:00 PM **Failure:**

Report:

Signature / Name	Date	Signature / Name	Date
MSL	11/14/2016		

WO ID:_____ Page____ of____

Date:_____ Time:_____

Name/Z#:_____

Signature (collecting sample & conducting visual assessment):_____

"I confirm the information as recorded is true, accurate and complete."

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Grieggs, EPC-CP Group Leader

Signature: (See signature on file) Date:

Los Alamos National Lab - ADESH

Work Order MSGP-58615

MSGP Monitoring Stations
Printed 1/12/2017 - 12:15 PM

Maintenance Details

Requested: 9/12/2016 11:52:00 AM
Procedure: MSGP Quarterly Visual Assessment (EPC Sig) (EPC-CP-Form-1021.2 A)
Last PM: 9/22/2016
Project: SIO Visual Assess. Oct-Nov 2016 (P-MSGP-5138)

Target: 11/30/2016
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (018)
Substantially Identical Outfall (016)
MSGP01601

Reason: MSGP Quarterly Visual Assessment

Contact:
Phone:

Precipitation Type: PR1
Odor: NA
Clarity: NA
Settled Solids: NA
Suspended Solids: SUSSOL2
Special Instructions: NMR053195

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.							
Sample information							
30	Document the monitoring Period by using the Monitoring Period lookup table.			MS	☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)			MS	☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).		11/5/16 at 21:17	MS	☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).		11/5/16 at 21:17	MS	☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).		11/7/16 at 16:12	MS	☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.		.7 inches	MS	☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.			MS	☐	☐	☑
Parameters							
110	Is sample colorless? If "Failed", describe.			MS	☐	☐	☑
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.			MS	☐	☐	☑
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.			MS	☐	☐	☑
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.		vegetation	MS	☒	☐	☐

150	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.			MS	☐	☐	☑
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.			MS	☒	☐	☐
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)			MS	☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)			MS	☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)			MS	☐	☐	☑

Labor Report

Completed: 11/7/2016 4:12:00 PM **Failure:**

Report:

Signature / Name	Date	Signature / Name	Date
MPSH	11/14/2016		

WO ID:_____ Page____ of____

Date:_____ Time:_____

Name/Z#:_____

Signature (collecting sample & conducting visual assessment):_____

"I confirm the information as recorded is true, accurate and complete."

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Grieggs, EPC-CP Group Leader

Signature: (See signature on file) Date:

Los Alamos National Lab - ADESH

Work Order MSGP-58616

MSGP Monitoring Stations
Printed 1/12/2017 - 12:16 PM

Maintenance Details

Requested: 9/12/2016 11:52:00 AM
Procedure: MSGP Quarterly Visual Assessment (EPC Sig) (EPC-CP-Form-1021.2 A)
Last PM: 9/22/2016
Project: SIO Visual Assess. Oct-Nov 2016 (P-MSGP-5138)

Target: 11/30/2016
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (018)
Substantially Identical Outfall (017)
MSGP01701

Reason: MSGP Quarterly Visual Assessment

Contact:
Phone:

Precipitation Type: PR1
Odor: O1
Clarity: C3
Settled Solids: SETSOL1
Suspended Solids: SUSSOL2
Special Instructions: NMR053195

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.							
Sample information							
30	Document the monitoring Period by using the Monitoring Period lookup table.			MS	☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)			MS	☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).		11/5/16 at 21:04	MS	☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).		11/5/16 at 21:04	MS	☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).		11/7/16 at 16:13	MS	☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.		.7 inches	MS	☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.			MS	☐	☐	☑
Parameters							
110	Is sample colorless? If "Failed", describe.		brown	MS	☒	☐	☐
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.			MS	☒	☐	☐
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.			MS	☒	☐	☐
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.		vegetation	MS	☒	☐	☐

150	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.			MS	☒	☐	☐
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.			MS	☒	☐	☐
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)			MS	☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)			MS	☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)			MS	☐	☐	☑

Labor Report

Completed: 11/7/2016 4:13:00 PM **Failure:**

Report:

Signature / Name	Date	Signature / Name	Date
MSLO	11/14/2016		

WO ID:_____ Page____ of____

Date:_____ Time:_____

Name/Z#:_____

Signature (collecting sample & conducting visual assessment):_____

"I confirm the information as recorded is true, accurate and complete."

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Grieggs, EPC-CP Group Leader

Signature: (See signature on file) Date:

Los Alamos National Lab - ADESH

Work Order MSGP-59294

MSGP Monitoring Stations
Printed 1/12/2017 - 12:18 PM

Maintenance Details

Requested By: Dale, Leslie on 11/18/2016 12:40:00 PM
Taken By: Dale, Leslie
Procedure: MSGP Quarterly Visual Assessment (EPC Sig) (EPC-CP-Form-1021.2 A)
Last PM: 11/18/2016
Project: ISCO Visual Assess. Oct-Nov 2016 (P-MSGP-5135)

Target: 11/18/2016
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (018)
MSGP01801

Contact: Dale, Leslie
Phone:

Reason: MSGP Quarterly Visual Assessment (EPC Sig)

Precipitation Type: PR1
Odor: O1
Clarity: C1
Settled Solids: NA
Suspended Solids: SUSSOL2
Special Instructions: NMR053195

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.							
Sample information							
30	Document the monitoring Period by using the Monitoring Period lookup table.			MS	☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)			MS	☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).		11/4/16 at 15:25	MS	☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).		11/4/16 at 15:25	MS	☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).		11/18/16 at 10:12 am	MS	☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.		.71 inches	MS	☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.			MS	☐	☐	☑
Parameters							
110	Is sample colorless? If "Failed", describe.		light brown	MS	☒	☐	☐
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.			MS	☒	☐	☐
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen			MS	☒	☐	☐

	from the lookup table, provide description in comments of this line.						
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.		Vegetation	MS	☒	☐	☐
150	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.			MS	☐	☐	☑
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.			MS	☒	☐	☐
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)			MS	☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)			MS	☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)			MS	☐	☐	☑

Labor Report

Completed: 11/18/2016 10:12:00 AM **Failure:** _____ **Meter(s):** 2

Report: _____

Signature / Name	Date	Signature / Name	Date
MPSLP	11/18/2016		

WO ID:_____ Page____ of____

Date:_____ Time:_____

Name/Z#:_____

Signature (collecting sample & conducting visual assessment):_____

"I confirm the information as recorded is true, accurate and complete."

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Grieggs, EPC-CP Group Leader

Signature: (See signature on file) Date:

Los Alamos National Lab - ADESH

Work Order MSGP-59357

MSGP Monitoring Stations
Printed 1/12/2017 - 11:50 AM

Maintenance Details

Requested: 11/22/2016 4:44:00 PM
Procedure: MSGP Quarterly Visual Assessment (EPC Sig) (EPC-CP-Form-1021.2 A)
Last PM: 11/22/2016
Project: SIO Visual Assess. Oct-Nov 2016 (P-MSGP-5138)

Target: 11/30/2016
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (018)
Substantially Identical Outfall (014)
MSGP01401

Reason: MSGP Quarterly Visual Assessment (EPC Sig)

Contact:
Phone:

Precipitation Type: PR1
Odor: O1
Clarity: C2
Settled Solids: SETSOL1
Suspended Solids: SUSSOL2
Special Instructions: NMR053195

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.							
Sample information							
30	Document the monitoring Period by using the Monitoring Period lookup table.			MS	☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)			MS	☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).		11/21/16 at 16:25	MS	☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).		11/21/16 at 16:25	MS	☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).		11/22/16 at 10:55 am	MS	☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.		.44 inches	MS	☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.			MS	☐	☐	☑
Parameters							
110	Is sample colorless? If "Failed", describe.		Brown	MS	☒	☐	☐
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.			MS	☒	☐	☐
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.			MS	☒	☐	☐
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.		Vegetation	MS	☒	☐	☐

150	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.			MS	☒	☐	☐
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.			MS	☒	☐	☐
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)			MS	☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)			MS	☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)			MS	☐	☐	☑

Labor Report

Completed: 11/22/2016 10:55:00 AM **Failure:**

Report:

Signature / Name	Date	Signature / Name	Date
	11/30/2016		

WO ID:_____ Page____ of____

Date:_____ Time:_____

Name/Z#:_____

Signature (collecting sample & conducting visual assessment):_____

"I confirm the information as recorded is true, accurate and complete."

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Grieggs, EPC-CP Group Leader

Signature: (See signature on file) Date:

Los Alamos National Lab - ADESH

Work Order MSGP-59358

MSGP Monitoring Stations
Printed 1/12/2017 - 12:14 PM

Maintenance Details

Requested: 11/22/2016 4:44:00 PM
Procedure: MSGP Quarterly Visual Assessment (EPC Sig) (EPC-CP-Form-1021.2 A)
Last PM: 11/22/2016
Project: SIO Visual Assess. Oct-Nov 2016 (P-MSGP-5138)

Target: 11/30/2016
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (018)
Substantially Identical Outfall (015)
MSGP01501

Reason: MSGP Quarterly Visual Assessment (EPC Sig)

Contact:
Phone:

Precipitation Type: PR1
Odor: O1
Clarity: C2
Settled Solids: SETSOL1
Suspended Solids: SUSSOL2
Special Instructions: NMR053195

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.							
Sample information							
30	Document the monitoring Period by using the Monitoring Period lookup table.			MS	☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)			MS	☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).		11/21/16 at 16:25	MS	☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).		11/21/16 at 16:25	MS	☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).		11/22/16 at 10:58 am	MS	☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.		.44 inches	MS	☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.			MS	☐	☐	☑
Parameters							
110	Is sample colorless? If "Failed", describe.		brown	MS	☒	☐	☐
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.			MS	☒	☐	☐
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.			MS	☒	☐	☐
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.		vegetation	MS	☒	☐	☐

150	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.			MS	☒	☐	☐
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.			MS	☒	☐	☐
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)			MS	☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)			MS	☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)			MS	☐	☐	☑

Labor Report

Completed: 11/22/2016 10:58:00 AM **Failure:**

Report:

Signature / Name	Date	Signature / Name	Date
MSLQ	11/30/2016		

WO ID:_____ Page____ of____

Date:_____ Time:_____

Name/Z#:_____

Signature (collecting sample & conducting visual assessment):_____

"I confirm the information as recorded is true, accurate and complete."

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Grieggs, EPC-CP Group Leader

Signature: (See signature on file) Date:

Los Alamos National Lab - ADESH

Work Order MSGP-59359

MSGP Monitoring Stations
Printed 1/12/2017 - 12:17 PM

Maintenance Details

Requested: 11/22/2016 4:44:00 PM
Procedure: MSGP Quarterly Visual Assessment (EPC Sig) (EPC-CP-Form-1021.2 A)
Last PM: 11/22/2016
Project: SIO Visual Assess. Oct-Nov 2016 (P-MSGP-5138)

Target: 11/30/2016
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (018)
Substantially Identical Outfall (017)
MSGP01701

Reason: MSGP Quarterly Visual Assessment (EPC Sig)

Contact:
Phone:

Precipitation Type: PR1
Odor: O1
Clarity: C1
Settled Solids: SETSOL1
Suspended Solids: SUSSOL2
Special Instructions: NMR053195

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.							
Sample information							
30	Document the monitoring Period by using the Monitoring Period lookup table.			MS	☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)			MS	☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).		11/21/16 at 16:25	MS	☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).		11/21/16 at 16:25	MS	☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).		11/22/16 at 10:47 am	MS	☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.		.44 inches	MS	☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.			MS	☐	☐	☑
Parameters							
110	Is sample colorless? If "Failed", describe.		brown	MS	☒	☐	☐
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.			MS	☒	☐	☐
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.			MS	☒	☐	☐
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.		vegetation	MS	☒	☐	☐

150	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.			MS	☒	☐	☐
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.			MS	☒	☐	☐
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)			MS	☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)			MS	☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)			MS	☐	☐	☑

Labor Report

Completed: 11/22/2016 10:47:00 AM **Failure:**

Report:

Signature / Name	Date	Signature / Name	Date
APSLP	11/29/2016		

WO ID:_____ Page____ of____

Date:_____ Time:_____

Name/Z#:_____

Signature (collecting sample & conducting visual assessment):_____

"I confirm the information as recorded is true, accurate and complete."

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Grieggs, EPC-CP Group Leader

Signature: (See signature on file) Date:

Los Alamos
NATIONAL LABORATORY
EST.1943

memorandum

Environmental Protection & Compliance Division

To: Marc Gallegos, DESHF-STO, E509
Thru: Terrill Lemke, EPC-CP, (E-File) TL
From: Holly Wheeler, EPC-CP, (E-File) HW
Phone: 505-667-1312
Symbol: EPC-DO: 17-427
Date: OCT 16 2017

Subject: National Pollutant Discharge Elimination System (NPDES) Permit Tracking No. NMR053195, Multi-Sector General Permit (MSGP) Quarterly Visual Assessment (QVA) Forms for April and May of 2017 for the TA-3-66 Sigma Complex

Please find attached completed MSGP QVA Forms documenting visual assessments performed during the first quarter of monitoring at the TA-3-66 Sigma Complex. Per Parts 3.2.2 and 5.5 of the 2015 MSGP, the signed certification statement and associated QVA forms shall be incorporated into your MSGP Storm Water Pollution Prevention Plan (SWPPP).

Part 3.2.1 of the 2015 MSGP requires the visual assessment of storm water discharge samples collected from each outfall once each quarter for the entire permit term. Part 3.2.3 allows facilities that are located in an area with a semi-arid climate and/or in an area where freezing conditions exist for an extended period to distribute the quarterly visual assessments during seasons when precipitation runoff occurs. Accordingly, Los Alamos National Security (LANS) has designated the following MSGP monitoring quarters.

Quarter 1:	April – May	Quarter 2:	June – July
Quarter 3:	August – September	Quarter 4:	October - November

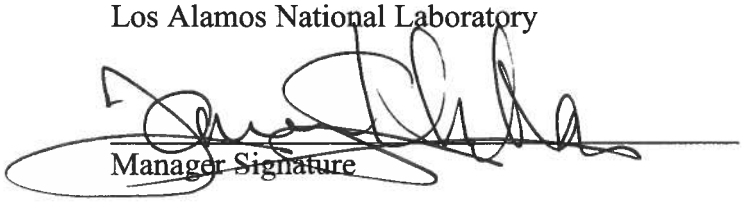
The attached QVA forms document the following information as required by Part 3.2.2 of the 2015 MSGP and were completed by Environmental Compliance Programs (EPC-CP) personnel.

- Sample location;
- Sample collection date and time, and visual assessment date and time for each sample;
- Personnel collecting the sample and performing the visual assessment, and their signatures;
- Nature of the discharge (i.e., runoff or snowmelt);
- Results of observations of the stormwater discharge;
- Probable sources of any observed stormwater contamination (if applicable);
- If applicable, why it was not possible to take a sample within the first 30 minutes of the storm event.

EPC-DO: 17-427
Marc Gallegos

The EPC-CP Group Leader has signed the certification statement to meet the duly authorized signatory requirements for the QVAs completed by EPC-CP representatives contained in Enclosure 1.

> I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information contained therein. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information contained is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.
>
> Taunia Van Valkenburg, EPC-CP Group Leader
>
> Los Alamos National Laboratory



Manager Signature

10/13/17
Date

Part 3.2.3 of the 2015 MSGP allows the facility to take a substitute sample during the next qualifying storm event when adverse weather conditions prevent the collection of samples during a specific quarter. Adverse weather conditions are those that are dangerous or create inaccessibility for personnel, or situations that otherwise make sampling impractical, such as drought or extended frozen conditions. Documentation of the rationale for no visual assessment for the quarter must be included in the facility-specific SWPPP.

Please contact Holly Wheeler at 667-1312 (hbenson@lanl.gov) if you have questions regarding the QVA documentation. Thank you for your assistance in meeting the requirements of the Laboratory's NPDES 2015 MSGP Permit.

EPC-DO: 17-427
Marc Gallegos

Facility Name	Sampling Station	Work Order #
TA-3-66 Sigma Complex	MSGP01701	MSGP-59588
TA-3-66 Sigma Complex	MSGP01301	MSGP-59602
TA-3-66 Sigma Complex	MSGP01401	MSGP-59603
TA-3-66 Sigma Complex	MSGP01501	MSGP-59604
TA-3-66 Sigma Complex	MSGP01601	MSGP-59605
TA-3-66 Sigma Complex	MSGP01701	MSGP-59606
TA-3-66 Sigma Complex	MSGP01401	MSGP-59917
TA-3-66 Sigma Complex	MSGP01301	MSGP-59918
TA-3-66 Sigma Complex	MSGP01401	MSGP-59961
TA-3-66 Sigma Complex	MSGP01601	MSGP-59962
TA-3-66 Sigma Complex	MSGP01401	MSGP-60007
TA-3-66 Sigma Complex	MSGP01501	MSGP-60008

TWL/HLW: am

Enclosure(s):
1) Quarterly Visual Assessment Forms, 2017 Monitoring Year

Copy: Garry Schramm, DESHF-STO (E-File)
Adesh-records@lanl.gov, (E-File)
lasomailbox@nnsa.doe.gov, (E-File)
locatesteam@lanl.gov, (E-File)
epc-correspondence@lanl.gov, (E-File)

ENCLOSURE 1

Quarterly Visual Assessment Forms
First Quarter, 2017 Monitoring Year

EPC-DO: 17-427

Date: OCT 16 2017

Los Alamos National Lab - ADESH

Work Order MSGP-59588

MSGP Monitoring Stations
Printed 7/6/2017 - 5:37 PM

Maintenance Details

Requested: 4/25/2017 5:04:00 PM
Procedure: MSGP Quarterly Visual Assessment (EPC Sig) (EPC-CP-Form-1021.02 2)
Last PM: 3/30/2017
Project: Visual Assessments 4-1-17 (P-MSGP-5156)

Target: 5/31/2017
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (017)
MSGP01701

Contact:
Phone:

Reason: MSGP Quarterly Visual Assessment (EPC Sig)

Special Instructions: NMR053195

Tasks

#	Description	Meas.	No	N/A	Yes
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.				
	Sample information				
30	Document the monitoring Period by using the Monitoring Period lookup table. **Comments: April-May**		☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)		☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format). **Comments: 5/9/2017, Sample collected at 17:05**		☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format). **Comments: 5/9/2017, Sample collected at 17:05**		☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format). **Comments: Inspected 5/11/2017 at 08:45**		☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line. **Comments: Rain w/ hail 0.42"**		☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.		☐	☐	☑
	Parameters				
110	Is sample colorless? If "Failed", describe. **Comments: Light brown**		☒	☐	☐
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		☐	☐	☑
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line. **Comments: Slightly cloudy**		☒	☐	☐
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.		☐	☐	☑
150	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line. **Comments: Fine**		☒	☐	☐
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		☐	☐	☑
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)		☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks,		☐	☐	☑

	globs) in the comments of this line. (Range: 0 - 0)					
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)		☐	☐	☑	

Labor Report

Completed: 5/11/2017 12:54:00 PM

Report: Brad Schilling

Signature / Name	Date	Signature / Name	Date
	5/11/2017		

I confirm the information as recorded is true, accurate and complete.

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg. FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Grieggs, EPC-CP Group Leader

Signature: (See signature on file) Date:

Maintenance Details

Requested: 3/9/2017 12:06:00 PM
Procedure: MSGP Quarterly Visual Assessment (EPC Sig) (EPC-CP-Form-1021.02 2)
Last PM: 3/30/2017
Project: SIO Visual Assesments 4-1-17 (P-MSGP-5166)

Target: 5/31/2017
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (017)
Substantially Identical Outfall (013)
MSGP01301

Reason: MSGP Quarterly Visual Assessment (EPC Sig)

Special Instructions: NMR053195

Contact:
Phone:

Tasks

#	Description	Meas.	No	N/A	Yes
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.				
	Sample information				
30	Document the monitoring Period by using the Monitoring Period lookup table. **Comments: April/May**		☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)		☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	04/04/17 at 12:40 hours	☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	04/04/17 at 12:40 hours.	☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	04/05/17 at 13:23 hours	☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.	Snow melt 0.2"	☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.		☐	☐	☑
	Parameters				
110	Is sample colorless? If "Failed", describe.		☐	☐	☑
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		☐	☐	☑
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		☐	☐	☑
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.		☐	☐	☑
150	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		☐	☐	☑
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		☐	☐	☑
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)		☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)		☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)		☐	☐	☑

Text Fields

Monitoring Period: MP1 **Precipitation Type:** PR2

Labor Report

Completed: 4/5/2017 1:23:00 PM

Report: Holly Wheeler

Signature / Name	Date	Signature / Name	Date
[signature]	4/6/2017		

I confirm the information as recorded is true, accurate and complete.

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg. FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Grieggs, EPC-CP Group Leader

Signature: (See signature on file) Date:

Los Alamos National Lab - ADESH

Work Order MSGP-59603

MSGP Monitoring Stations
Printed 7/6/2017 - 3:28 PM

Maintenance Details

Requested: 3/9/2017 12:06:00 PM
Procedure: MSGP Quarterly Visual Assessment (EPC Sig) (EPC-CP-Form-1021.02 2)
Last PM: 3/30/2017
Project: SIO Visual Assesments 4-1-17 (P-MSGP-5166)

Target: 5/31/2017
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (017)
Substantially Identical Outfall (014)
MSGP01401

Contact:
Phone:

Reason: MSGP Quarterly Visual Assessment (EPC Sig)

Special Instructions: NMR053195

Tasks

#	Description	Meas.	No	N/A	Yes
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.				
	Sample information				
30	Document the monitoring Period by using the Monitoring Period lookup table.	April/May	☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)		☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	04/04/17 at 13:40 hours.	☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	04/04/17 at 13:40 hours.	☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	04/05/2017 at 13:13 hours.	☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.	Snow melt 0.2"	☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.		☐	☐	☑
	Parameters				
110	Is sample colorless? If "Failed", describe.	light tan	☒	☐	☐
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		☐	☐	☑
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	cloudy	☒	☐	☐
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.		☐	☐	☑
150	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	Fine	☒	☐	☐
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	Fine	☒	☐	☐
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)		☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)		☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)		☐	☐	☑

Text Fields

Monitoring Period: MP1 **Precipitation Type:** PR2 **Clarity:** C2 **Settled Solids:** SETSOL1 **Suspended Solids:** SUSSOL1

Labor Report

Completed: 4/5/2017 1:13:00 PM

Report: Holly Wheeler

Signature / Name	Date	Signature / Name	Date
[signature]	4/14/2017		

I confirm the information as recorded is true, accurate and complete.

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg. FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Grieggs, EPC-CP Group Leader

Signature: (See signature on file) Date:

Los Alamos National Lab - ADESH

Work Order MSGP-59604

MSGP Monitoring Stations
Printed 7/6/2017 - 3:36 PM

Maintenance Details

Requested: 3/9/2017 12:06:00 PM
Procedure: MSGP Quarterly Visual Assessment (EPC Sig) (EPC-CP-Form-1021.02 2)
Last PM: 3/30/2017
Project: SIO Visual Assesments 4-1-17 (P-MSGP-5166)

Target: 5/31/2017
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (017)
Substantially Identical Outfall (015)
MSGP01501

Reason: MSGP Quarterly Visual Assessment (EPC Sig)

Special Instructions: NMR053195

Contact:
Phone:

Tasks

#	Description	Meas.	No	N/A	Yes
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.				
	Sample information				
30	Document the monitoring Period by using the Monitoring Period lookup table.	April/May	☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)		☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	15:37 4/25/17	☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	15:37 4/25/17	☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	04/26/17 at 11:43 hours.	☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.	Rain 0.09in	☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.		☐	☐	☑
	Parameters				
110	Is sample colorless? If "Failed", describe.		☐	☐	☑
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	Musty	☒	☐	☐
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		☐	☐	☑
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.		☐	☐	☑
150	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	Fine.	☒	☐	☐
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		☐	☐	☑
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)		☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)		☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)		☐	☐	☑

Labor Report

Completed: 4/26/2017 11:43:00 AM

Report: Holly Wheeler

Signature / Name	Date	Signature / Name	Date
[signature]	5/2/2017		

I confirm the information as recorded is true, accurate and complete.

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg. FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Grieggs, EPC-CP Group Leader

Signature: (See signature on file) Date:

Los Alamos National Lab - ADESH

Work Order MSGP-59605

MSGP Monitoring Stations
Printed 7/6/2017 - 3:37 PM

Maintenance Details

Requested: 3/9/2017 12:06:00 PM
Procedure: MSGP Quarterly Visual Assessment (EPC Sig) (EPC-CP-Form-1021.02 2)
Last PM: 3/30/2017
Project: SIO Visual Assesments 4-1-17 (P-MSGP-5166)

Target: 5/31/2017
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (017)
Substantially Identical Outfall (016)
MSGP01601

Reason: MSGP Quarterly Visual Assessment (EPC Sig)

Special Instructions: NMR053195

Contact:
Phone:

Tasks

#	Description	Meas.	No	N/A	Yes
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.				
	Sample information				
30	Document the monitoring Period by using the Monitoring Period lookup table.	April/May	☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)		☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	04/04/17 at 13:54 hours	☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	04/04/17 at 13:54 hours.	☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	04/05/17 at 13:09 hours	☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.	Snow melt 0.2"	☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.		☐	☐	☑
	Parameters				
110	Is sample colorless? If "Failed", describe.		☐	☐	☑
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		☐	☐	☑
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		☐	☐	☑
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.		☐	☐	☑
150	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		☐	☐	☑
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		☐	☐	☑
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)		☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)		☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)		☐	☐	☑

Text Fields

Monitoring Period: MP1 **Precipitation Type:** PR2

Labor Report

Completed: 4/5/2017 1:09:00 PM

Report: Holly Wheeler

Signature / Name	Date	Signature / Name	Date
[signature]	4/14/2017		

I confirm the information as recorded is true, accurate and complete.

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg. FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Grieggs, EPC-CP Group Leader

Signature: (See signature on file) Date:

Los Alamos National Lab - ADESH

Work Order MSGP-59606

MSGP Monitoring Stations
Printed 7/6/2017 - 3:15 PM

Maintenance Details

Requested: 3/9/2017 12:06:00 PM
Procedure: MSGP Quarterly Visual Assessment (Other Sig) (EPC-CP-Form-1021.02 1)
Last PM: 5/11/2017
Project: Visual Assessments 4-1-17 (P-MSGP-5156)

Target: 5/31/2017
Priority/Type: / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (017)
MSGP01701

Contact:
Phone:

Reason: MSGP Quarterly Visual Assessment (EPC Sig)

Special Instructions: NMR053195

Tasks

#	Description	Meas.	No	N/A	Yes
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.				
	Sample information				
30	Document the monitoring Period by using the Monitoring Period lookup table. **Comments: April/May**		☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)		☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format). **Comments: 04/04/17 at 13:40 hours.**		☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format). **Comments: 04/04/17 at 13:40 hours.**		☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format). **Comments: 04/05/15 at 13:05 hours**		☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line. **Comments: Snow melt 0.2"**		☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.		☐	☐	☑
	Parameters				
110	Is sample colorless? If "Failed", describe.		☐	☐	☑
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		☐	☐	☑
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		☐	☐	☑
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.		☐	☐	☑
150	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		☐	☐	☑
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		☐	☐	☑
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)		☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)		☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)		☐	☐	☑

Labor Report

Completed: 4/5/2017 1:05:00 PM

Report: Holly Wheeler

Signature / Name	Date	Signature / Name	Date
	4/14/2017		

I confirm the information as recorded is true, accurate and complete.

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg. FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Grieggs, EPC-CP Group Leader

Signature: (See signature on file) Date:

Los Alamos National Lab - ADESH

Work Order MSGP-59917

MSGP Monitoring Stations
Printed 7/6/2017 - 3:34 PM (Duplicate Copy)

Maintenance Details

Requested By: Wheeler-Benson, Holly on 5/2/2017 4:35:00 PM
Taken By: Wheeler-Benson, Holly
Procedure: MSGP Quarterly Visual Assessment (EPC Sig) (EPC-CP-Form-1021.022)
Last PM: 4/26/2017
Project: SIO Visual Assesments 4-1-17 (P-MSGP-5166)

Target: 5/31/2017
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (017)
Substantially Identical Outfall (014)
MSGP01401

Contact: Wheeler-Benson, Holly
Phone: 667-1312

Reason: MSGP Quarterly Visual Assessment (EPC Sig)

Special Instructions: NMR053195

Tasks

#	Description	Meas.	No	N/A	Yes
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.				
	Sample information				
30	Document the monitoring Period by using the Monitoring Period lookup table.	April/May	☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)		☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	04/25/17 at 15:40 hours.	☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	04/26/17 at 15:40 hours.	☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	04/26/17 at 11:50 hours.	☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.	Rain 0.09"	☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.		☐	☐	☑
	Parameters				
110	Is sample colorless? If "Failed", describe.		☐	☐	☑
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		☐	☐	☑
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		☐	☐	☑
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.		☐	☐	☑
150	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	Course	☒	☐	☐
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		☐	☐	☑
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)		☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)		☐	☐	☑
	Is sample free of other obvious indicators of pollution? If "Failed", describe in the				

190 comments of this line. (Range: 0 - 0)

Labor Report

Completed: 4/26/2017 11:50:00 PM

Report: Holly Wheeler

Signature / Name	Date	Signature / Name	Date
	5/2/2017		

I confirm the information as recorded is true, accurate and complete.

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg. FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Grieggs, EPC-CP Group Leader

Signature: (See signature on file) Date:

Los Alamos National Lab - ADESH

Work Order MSGP-59918

MSGP Monitoring Stations
Printed 7/6/2017 - 4:22 PM

Maintenance Details

Requested By: Wheeler-Benson, Holly on 5/2/2017 3:37:00 PM
Taken By: Wheeler-Benson, Holly
Procedure: MSGP Quarterly Visual Assessment (EPC Sig) (EPC-CP-Form-1021.022)
Last PM: 5/1/2017
Project: SIO Visual Assesments 4-1-17 (P-MSGP-5166)

Target: 5/16/2017
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (017)
Substantially Identical Outfall (013)
MSGP01301

Contact: Wheeler-Benson, Holly
Phone: 667-1312

Reason: MSGP Quarterly Visual Assessment (EPC Sig)

Special Instructions: NMR053195

Tasks

#	Description	Meas.	No	N/A	Yes
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.				
	Sample information				
30	Document the monitoring Period by using the Monitoring Period lookup table.	April/May	☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)		☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	15:37 on 04/25/17	☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	15:37 on 04/25/17	☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	04/26/17 at 12:00 hours.	☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.	Rain 0.09"	☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.		☐	☐	☑
	Parameters				
110	Is sample colorless? If "Failed", describe.		☐	☐	☑
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		☐	☐	☑
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		☐	☐	☑
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.		☐	☐	☑
150	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	Course	☒	☐	☐
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		☐	☐	☑
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)		☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)		☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)		☐	☐	☑

Labor Report

Completed: 4/26/2017 12:00:00 PM

Report: Holly Wheeler

Signature / Name	Date	Signature / Name	Date
	5/2/2017		

I confirm the information as recorded is true, accurate and complete.

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg. FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Grieggs, EPC-CP Group Leader

Signature: (See signature on file) Date:

Los Alamos National Lab - ADESH

Work Order MSGP-59961

MSGP Monitoring Stations
Printed 7/6/2017 - 3:29 PM

Maintenance Details

Requested: 5/8/2017 1:25:00 PM
Procedure: MSGP Quarterly Visual Assessment (EPC Sig) (EPC-CP-Form-1021.02 2)
Last PM: 4/26/2017
Project: SIO Visual Assesments 4-1-17 (P-MSGP-5166)

Target: 5/31/2017
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (017)
Substantially Identical Outfall (014)
MSGP01401

Reason: MSGP Quarterly Visual Assessment (EPC Sig)

Special Instructions: NMR053195

Contact:
Phone:

Tasks

#	Description	Meas.	No	N/A	Yes
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.				
	Sample information				
30	Document the monitoring Period by using the Monitoring Period lookup table.	April/May	☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)		☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	04/29/17 at 12:10 hours.	☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	04/29/17 at 12:10 hours.	☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	05/01/17 at 15:22 hours.	☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.	Snow melt 0.18"	☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.		☐	☐	☑
	Parameters				
110	Is sample colorless? If "Failed", describe.	light tan	☒	☐	☐
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		☐	☐	☑
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	Opaque	☒	☐	☐
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.		☐	☐	☑
150	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	Fine	☒	☐	☐
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	Fine	☒	☐	☐
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)		☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)		☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)		☐	☐	☑

Labor Report

Completed: 5/1/2017 5:22:00 PM

Report: Holly Wheeler

Signature / Name	Date	Signature / Name	Date
	5/8/2017		

I confirm the information as recorded is true, accurate and complete.

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg. FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Grieggs, EPC-CP Group Leader

Signature: (See signature on file) Date:

Los Alamos National Lab - ADESH

Work Order MSGP-59962

MSGP Monitoring Stations
Printed 7/6/2017 - 3:37 PM

Maintenance Details

Requested: 5/8/2017 1:25:00 PM
Procedure: MSGP Quarterly Visual Assessment (EPC Sig) (EPC-CP-Form-1021.02 2)
Last PM: 5/1/2017
Project: SIO Visual Assesments 4-1-17 (P-MSGP-5166)

Target: 5/31/2017
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (017)
Substantially Identical Outfall (016)
MSGP01601

Contact:
Phone:

Reason: MSGP Quarterly Visual Assessment (EPC Sig)

Special Instructions: NMR053195

Tasks

#	Description	Meas.	No	N/A	Yes
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.				
	Sample information				
30	Document the monitoring Period by using the Monitoring Period lookup table.	April/May	☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)		☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	04/29/17 at 14:24 hours.	☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	04/29/17 at 14:24 hours.	☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	05/01/17 at 15:15 hours.	☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.	Snow melt 0.18"	☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.		☐	☐	☑
	Parameters				
110	Is sample colorless? If "Failed", describe.		☐	☐	☑
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		☐	☐	☑
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		☐	☐	☑
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.		☐	☐	☑
150	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		☐	☐	☑
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		☐	☐	☑
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)		☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)		☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)		☐	☐	☑

Labor Report

Completed: 5/1/2017 3:15:00 PM

Report: Holly Wheeler

Signature / Name	Date	Signature / Name	Date
	5/8/2017		

I confirm the information as recorded is true, accurate and complete.

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg. FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Grieggs, EPC-CP Group Leader

Signature: (See signature on file) Date:

Los Alamos National Lab - ADESH

Work Order MSGP-60007

MSGP Monitoring Stations
Printed 7/6/2017 - 5:39 PM

Maintenance Details

Requested: 5/11/2017 5:26:00 PM
Procedure: MSGP Quarterly Visual Assessment (EPC Sig) (EPC-CP-Form-1021.02 2)
Last PM: 5/11/2017
Project: SIO Visual Assesments 4-1-17 (P-MSGP-5166)

Target: 5/31/2017
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (017)
Substantially Identical Outfall (014)
MSGP01401

Contact:
Phone:

Reason: MSGP Quarterly Visual Assessment (EPC Sig)

Special Instructions: NMR053195

Tasks

#	Description	Meas.	No	N/A	Yes
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.				
	Sample information				
30	Document the monitoring Period by using the Monitoring Period lookup table.	Apr/May	☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)		☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	5/9/17 at 16:55	☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	5/9/17 at 16:55	☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	5/11/17 at 10:49 am	☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.	Rain w/ hail 0.42	☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.		☐	☐	☑
	Parameters				
110	Is sample colorless? If "Failed", describe.	Brown	☒	☐	☐
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	musty	☒	☐	☐
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	cloudy	☒	☐	☐
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.		☐	☐	☑
150	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		☐	☐	☑
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		☐	☐	☑
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)		☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)		☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)		☐	☐	☑

Labor Report

Completed: 5/11/2017 10:49:00 AM

Report: Marwin Shendo

Signature / Name	Date	Signature / Name	Date
	5/12/2017		

I confirm the information as recorded is true, accurate and complete.

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg. FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Grieggs, EPC-CP Group Leader

Signature: (See signature on file) Date:

Los Alamos National Lab - ADESH

Work Order MSGP-60008

MSGP Monitoring Stations
Printed 7/6/2017 - 5:40 PM

Maintenance Details

Requested: 5/11/2017 5:26:00 PM
Procedure: MSGP Quarterly Visual Assessment (EPC Sig) (EPC-CP-Form-1021.02 2)
Last PM: 5/11/2017
Project: SIO Visual Assesments 4-1-17 (P-MSGP-5166)

Target: 5/31/2017
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (017)
Substantially Identical Outfall (015)
MSGP01501

Contact:
Phone:

Reason: MSGP Quarterly Visual Assessment (EPC Sig)

Special Instructions: NMR053195

Tasks

#	Description	Meas.	No	N/A	Yes
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.				
	Sample information				
30	Document the monitoring Period by using the Monitoring Period lookup table.	Apr/May	☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)		☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	5/9/17 at 16:52	☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	5/9/17 at 16:52	☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	5/11/17 at 10:47 am	☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.	Rain w/ hail 0.42	☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.		☐	☐	☑
	Parameters				
110	Is sample colorless? If "Failed", describe.	brown	☒	☐	☐
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	musty	☒	☐	☐
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	Cloudy	☒	☐	☐
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.		☐	☐	☑
150	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	coarse	☒	☐	☐
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		☐	☐	☑
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)		☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)		☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)		☐	☐	☑

Labor Report

Completed: 5/11/2017 10:47:00 AM

Report: Marwin Shendo

Signature / Name	Date	Signature / Name	Date
	5/12/2017		

I confirm the information as recorded is true, accurate and complete.

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg. FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Grieggs, EPC-CP Group Leader

Signature: (See signature on file) Date:

Los Alamos
NATIONAL LABORATORY
EST. 1943

memorandum

Environmental Protection & Compliance Division

To: Marc Gallegos, DESHF-STO, E509
Thru: Terrill Lemke, EPC-CP, (E-File) TL
From: Holly Wheeler, EPC-CP, (E-File) HW
Phone: 505-667-1312
Symbol: EPC-DO: 17-425
Date: OCT 16 2017

Subject: National Pollutant Discharge Elimination System (NPDES) Permit Tracking No. NMR053195, Multi-Sector General Permit (MSGP) Quarterly Visual Assessment (QVA) Forms for June and July of 2017 for the TA-3-66 Sigma Complex

Please find attached completed MSGP QVA Forms documenting visual assessments performed during the second quarter of monitoring at the TA-3-66 Sigma Complex. Per Parts 3.2.2 and 5.5 of the 2015 MSGP, the signed certification statement and associated QVA forms shall be incorporated into your MSGP Storm Water Pollution Prevention Plan (SWPPP).

Part 3.2.1 of the 2015 MSGP requires the visual assessment of storm water discharge samples collected from each outfall once each quarter for the entire permit term. Part 3.2.3 allows facilities that are located in an area with a semi-arid climate and/or in an area where freezing conditions exist for an extended period to distribute the quarterly visual assessments during seasons when precipitation runoff occurs. Accordingly, Los Alamos National Security (LANS) has designated the following MSGP monitoring quarters.

Quarter 1:	April – May	Quarter 2:	June – July
Quarter 3:	August – September	Quarter 4:	October - November

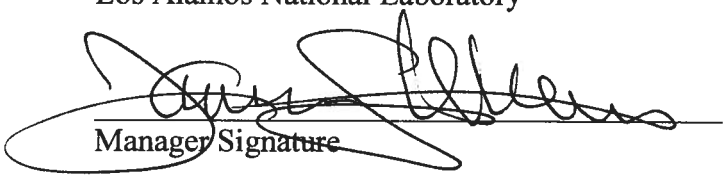
The attached QVA forms document the following information as required by Part 3.2.2 of the 2015 MSGP and were completed by Environmental Compliance Programs (EPC-CP) personnel.

- Sample location;
- Sample collection date and time, and visual assessment date and time for each sample;
- Personnel collecting the sample and performing the visual assessment, and their signatures;
- Nature of the discharge (i.e., runoff or snowmelt);
- Results of observations of the stormwater discharge;
- Probable sources of any observed stormwater contamination (if applicable);
- If applicable, why it was not possible to take a sample within the first 30 minutes of the storm event.

EPC-DO: 17-425
Marc Gallegos

The EPC-CP Group Leader has signed the certification statement to meet the duly authorized signatory requirements for the QVAs completed by EPC-CP representatives contained in Enclosure 1.

> I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information contained therein. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information contained is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.
>
> Taunia Van Valkenburg, EPC-CP Group Leader
>
> Los Alamos National Laboratory



Manager Signature

10/13/17
Date

Part 3.2.3 of the 2015 MSGP allows the facility to take a substitute sample during the next qualifying storm event when adverse weather conditions prevent the collection of samples during a specific quarter. Adverse weather conditions are those that are dangerous or create inaccessibility for personnel, or situations that otherwise make sampling impractical, such as drought or extended frozen conditions. Documentation of the rationale for no visual assessment for the quarter must be included in the facility-specific SWPPP.

Please contact Holly Wheeler at 667-1312 (hbenson@lanl.gov) if you have questions regarding the QVA documentation. Thank you for your assistance in meeting the requirements of the Laboratory's NPDES 2015 MSGP Permit.

EPC-DO: 17-425
Marc Gallegos

Facility Name	Sampling Station	Work Order #
TA-3-66 Sigma Complex	MSGP-58320	MSGP01901
TA-3-66 Sigma Complex	MSGP-59589	MSGP02001
TA-3-66 Sigma Complex	MSGP-60291	MSGP01301
TA-3-66 Sigma Complex	MSGP-60292	MSGP01401
TA-3-66 Sigma Complex	MSGP-60293	MSGP01501
TA-3-66 Sigma Complex	MSGP-60294	MSGP01601
TA-3-66 Sigma Complex	MSGP-60295	MSGP01701
TA-3-66 Sigma Complex	MSGP-60551	MSGP01401
TA-3-66 Sigma Complex	MSGP-60552	MSGP01501
TA-3-66 Sigma Complex	MSGP-60915	MSGP01401
TA-3-66 Sigma Complex	MSGP-60916	MSGP01501
TA-3-66 Sigma Complex	MSGP-60917	MSGP01601
TA-3-66 Sigma Complex	MSGP-61023	MSGP01301
TA-3-66 Sigma Complex	MSGP-61024	MSGP01401
TA-3-66 Sigma Complex	MSGP-61025	MSGP01501

TWL/HLW: am

Enclosure(s):
1) Quarterly Visual Assessment Forms, Second Quarter, 2017 Monitoring Year

Copy: Garry Schramm, DESHF-STO (E-File)
Adesh-records@lanl.gov, (E-File)
lasomailbox@nnsa.doe.gov, (E-File)
locatesteam@lanl.gov, (E-File)
epc-correspondence@lanl.gov, (E-File)

ENCLOSURE 1

Quarterly Visual Assessment Forms
Second Quarter, 2017 Monitoring Year

EPC-DO: 17-425

Date: OCT 16 2017

Los Alamos National Lab - ADESH

Work Order MSGP-58320

MSGP Monitoring Stations
Printed 9/6/2017 - 10:14 AM

Maintenance Details

Requested: 6/1/2017 3:42:00 PM
Procedure: MSGP Quarterly Visual Assessment (EPC Sig) (EPC-CP-Form-1021.02 2)
Last PM: 8/25/2016
Project: SIO Visual Assessments 6/1/17 (P-MSGP-5188)

Target: 7/31/2017
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (017)
Substantially Identical Outfall (019)
MSGP01901

Contact:
Phone:

Reason: MSGP Quarterly Visual Assessment

Special Instructions: NMR053195

Tasks

#	Description	Meas.	No	N/A	Yes
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.				
	Sample information				
30	Document the monitoring Period by using the Monitoring Period lookup table.	mp2	☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)		☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	7/26/17 10:53	☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	7/26/17 10:53	☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	7/27/17 12:09	☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.	rain 0.99	☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.		☐	☐	☑
	Parameters				
110	Is sample colorless? If "Failed", describe.		☐	☐	☑
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	musty	☒	☐	☐
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		☐	☐	☑
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.	vegetation	☒	☐	☐
150	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	coarse	☒	☐	☐
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	coarse	☒	☐	☐
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)		☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)		☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)		☐	☐	☑

Labor Report

Completed: 7/27/2017 12:09:00 PM

Report: Marwin Shendo

Signature / Name	Date	Signature / Name	Date
	7/28/2017		

I confirm the information as recorded is true, accurate and complete.

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg. FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Grieggs, EPC-CP Group Leader

Signature: (See signature on file) Date:

Los Alamos National Lab - ADESH

Work Order MSGP-59589

MSGP Monitoring Stations
Printed 10/11/2017 - 9:48 AM (Duplicate Copy)

Maintenance Details

Requested: 3/9/2017 11:58:00 AM
Procedure: MSGP Quarterly Visual Assessment (EPC Sig) (EPC-CP-Form-1021.02 2)
Last PM: 4/3/2017
Project: Visual Assessments 6-1-17 (P-MSGP-5173)

Target: 7/31/2017
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (020)
MSGP02001

Contact:
Phone:

Reason: MSGP Quarterly Visual Assessment (EPC Sig)

Special Instructions: NMR053195

Tasks

#	Description	Meas.	No	N/A	Yes
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.				
	Sample information				
30	Document the monitoring Period by using the Monitoring Period lookup table.	Q2	☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)		☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	7/12/17 @ 15:13	☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	7/12/17 @ 15:13	☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	7/17/17 @ 10:09	☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.	rain 0.15 in.	☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.		☐	☐	☑
	Parameters				
110	Is sample colorless? If "Failed", describe.		☐	☐	☑
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		☐	☐	☑
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		☐	☐	☑
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.		☐	☐	☑
150	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		☐	☐	☑
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		☐	☐	☑
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)		☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)		☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)		☐	☐	☑

Labor Report

Labor Report

Completed: 7/17/2017 10:07:00 AM

Report: Brad Schilling

Signature / Name	Date	Signature / Name	Date
	7/17/2017		

I confirm the information as recorded is true, accurate and complete.

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg. FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Grieggs, EPC-CP Group Leader

Signature: (See signature on file) Date:

Los Alamos National Lab - ADESH

Work Order MSGP-60291

MSGP Monitoring Stations
Printed 9/6/2017 - 10:18 AM

Maintenance Details

Requested: 5/30/2017 11:28:00 AM
Procedure: MSGP Quarterly Visual Assessment (EPC Sig) (EPC-CP-Form-1021.02 2)
Last PM: 6/7/2017
Project: SIO Visual Assessments 6/1/17 (P-MSGP-5188)

Target: 7/31/2017
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (017)
Substantially Identical Outfall (013)
MSGP01301

Reason: MSGP Quarterly Visual Assessment (EPC Sig)

Contact:
Phone:

Special Instructions: NMR053195

Tasks

#	Description	Meas.	No	N/A	Yes
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.				
	Sample information				
30	Document the monitoring Period by using the Monitoring Period lookup table.	mp2	☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)		☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	7/26/17 10:59	☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	7/26/17 10:59	☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	7/27/17 11:55	☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.	rain 0.99	☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.		☐	☐	☑
	Parameters				
110	Is sample colorless? If "Failed", describe.	brown	☒	☐	☐
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	musty	☒	☐	☐
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	opaque	☒	☐	☐
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.	vegetation	☒	☐	☐
150	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	fine	☒	☐	☐
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	coarse	☒	☐	☐
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)		☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)		☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)		☐	☐	☑

Labor Report

Completed: 7/27/2017 11:55:00 AM

Report: Marwin Shendo

Signature / Name	Date	Signature / Name	Date
	7/28/2017		

I confirm the information as recorded is true, accurate and complete.

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg. FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Grieggs, EPC-CP Group Leader

Signature: (See signature on file) Date:

Los Alamos National Lab - ADESH

Work Order MSGP-60292

MSGP Monitoring Stations
Printed 9/6/2017 - 10:19 AM

Maintenance Details

Requested: 5/30/2017 11:28:00 AM
Procedure: MSGP Quarterly Visual Assessment (EPC Sig) (EPC-CP-Form-1021.02 2)
Last PM: 6/7/2017
Project: SIO Visual Assessments 6/1/17 (P-MSGP-5188)

Target: 7/31/2017
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (017)
Substantially Identical Outfall (014)
MSGP01401

Contact:
Phone:

Reason: MSGP Quarterly Visual Assessment (EPC Sig)

Special Instructions: NMR053195

Tasks

#	Description	Meas.	No	N/A	Yes
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.				
	Sample information				
30	Document the monitoring Period by using the Monitoring Period lookup table.	MP2	☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)		☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	6/6/17 11:40	☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	6/6/17 11:40	☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	6/7/17 11:18	☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.	Rain 0.21	☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.		☐	☐	☑
	Parameters				
110	Is sample colorless? If "Failed", describe.	brown	☒	☐	☐
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	Musty	☒	☐	☐
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	opaque	☒	☐	☐
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.	vegetation	☒	☐	☐
150	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	coarse	☒	☐	☐
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	coarse	☒	☐	☐
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)		☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)		☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)		☐	☐	☑

Labor Report

Completed: 6/7/2017 11:18:00 AM

Report: Marwin Shendo

Signature / Name	Date	Signature / Name	Date
	6/13/2017		

I confirm the information as recorded is true, accurate and complete.

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg. FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Grieggs, EPC-CP Group Leader

Signature: (See signature on file) Date:

Los Alamos National Lab - ADESH

Work Order MSGP-60293

MSGP Monitoring Stations
Printed 9/6/2017 - 10:22 AM

Maintenance Details

Requested: 5/30/2017 11:28:00 AM
Procedure: MSGP Quarterly Visual Assessment (EPC Sig) (EPC-CP-Form-1021.02 2)
Last PM: 6/7/2017
Project: SIO Visual Assessments 6/1/17 (P-MSGP-5188)

Target: 7/31/2017
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (017)
Substantially Identical Outfall (015)
MSGP01501

Contact:
Phone:

Reason: MSGP Quarterly Visual Assessment (EPC Sig)

Special Instructions: NMR053195

Tasks

#	Description	Meas.	No	N/A	Yes
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.				
	Sample Information				
30	Document the monitoring Period by using the Monitoring Period lookup table.	MP2	☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)		☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	6/6/17 11:31	☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	6/6/17 11:31	☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	6/7/17 11:15	☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.	Rain 0.21	☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.		☐	☐	☑
	Parameters				
110	Is sample colorless? If "Failed", describe.	brown	☒	☐	☐
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	musty	☒	☐	☐
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	opaque	☒	☐	☐
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.	vegetation	☒	☐	☐
150	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	coarse	☒	☐	☐
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	coarse	☒	☐	☐
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)		☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)		☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)		☐	☐	☑

Labor Report

Completed: 6/7/2017 11:15:00 AM

Report: Marwin Shendo

Signature / Name	Date	Signature / Name	Date
	6/13/2017		

I confirm the information as recorded is true, accurate and complete.

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg. FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Grieggs, EPC-CP Group Leader

Signature: (See signature on file) Date:

Los Alamos National Lab - ADESH

Work Order MSGP-60294

MSGP Monitoring Stations
Printed 9/6/2017 - 10:16 AM

Maintenance Details

Requested: 5/30/2017 11:29:00 AM
Procedure: MSGP Quarterly Visual Assessment (EPC Sig) (EPC-CP-Form-1021.02 2)
Last PM: 6/7/2017
Project: SIO Visual Assessments 6/1/17 (P-MSGP-5188)

Target: 7/31/2017
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (017)
Substantially Identical Outfall (016)
MSGP01601

Contact:
Phone:

Reason: MSGP Quarterly Visual Assessment (EPC Sig)

Special Instructions: NMR053195

Tasks

#	Description	Meas.	No	N/A	Yes
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.				
	Sample information				
30	Document the monitoring Period by using the Monitoring Period lookup table.	MP2	☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)		☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	6/25/17 15:54	☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	6/25/17 15:54	☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	6/26/17 16:27	☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.	rain 0.44	☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.		☐	☐	☑
	Parameters				
110	Is sample colorless? If "Failed", describe.		☐	☐	☑
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		☐	☐	☑
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		☐	☐	☑
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.		☐	☐	☑
150	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		☐	☐	☑
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		☐	☐	☑
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)		☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)		☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)		☐	☐	☑

Labor Report

Completed: 6/26/2017 4:27:00 PM

Report: Marwin Shendo

Signature / Name	Date	Signature / Name	Date
	6/28/2017		

I confirm the information as recorded is true, accurate and complete.

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg. FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Grieggs, EPC-CP Group Leader

Signature: (See signature on file) Date:

Los Alamos National Lab - ADESH

Work Order MSGP-60295

MSGP Monitoring Stations
Printed 9/6/2017 - 10:15 AM

Maintenance Details

Requested: 5/30/2017 11:29:00 AM
Procedure: MSGP Quarterly Visual Assessment (EPC Sig) (EPC-CP-Form-1021.02 2)
Last PM: 6/2/2017
Project: SIO Visual Assessments 6/1/17 (P-MSGP-5188)

Target: 7/31/2017
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (017)
MSGP01701

Contact:
Phone:

Reason: MSGP Quarterly Visual Assessment (EPC Sig)

Special Instructions: NMR053195

Tasks

#	Description	Meas.	No	N/A	Yes
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.				
	Sample information				
30	Document the monitoring Period by using the Monitoring Period lookup table. **Comments: Quarter 2**		☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)		☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	06/25/17, 16:24	☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	06/25/17, 16:24-16:28	☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	06/27/17,15:46	☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.	Rain 0 .44 inches	☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line. **Comments: Initial runoff infiltrated into dry soils present between culvert outlet and sampler**		☒	☐	☐
	Parameters				
110	Is sample colorless? If "Failed", describe. **Comments: brown**		☒	☐	☐
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		☐	☐	☑
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		☐	☐	☑
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.		☐	☐	☑
150	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		☐	☐	☑
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line. **Comments: fine**		☒	☐	☐
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)		☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g.		☐	☐	☑

	flecks, globs) in the comments of this line. (Range: 0 - 0)				
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)		☐	☐	☑

Labor Report

Completed: 6/27/2017 3:46:00 PM

Report: Brad Schilling

Signature / Name	Date	Signature / Name	Date
	6/27/2017		

I confirm the information as recorded is true, accurate and complete.

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg. FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Grieggs, EPC-CP Group Leader

Signature: (See signature on file) Date:

Los Alamos National Lab - ADESH

Work Order MSGP-60551

MSGP Monitoring Stations
Printed 9/6/2017 - 10:20 AM

Maintenance Details

Requested: 6/15/2017 4:14:00 PM
Procedure: MSGP Quarterly Visual Assessment (EPC Sig) (EPC-CP-Form-1021.02 2)
Last PM: 6/23/2017
Project: SIO Visual Assessments 6/1/17 (P-MSGP-5188)

Target: 7/31/2017
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (017)
Substantially Identical Outfall (014)
MSGP01401

Reason: MSGP Quarterly Visual Assessment (EPC Sig)

Special Instructions: NMR053195

Contact:
Phone:

Tasks

#	Description	Meas.	No	N/A	Yes
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.				
	Sample information				
30	Document the monitoring Period by using the Monitoring Period lookup table.	MP2	☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)		☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	6/25/17 15:37	☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	6/25/17 15:37	☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	6/26/17 16:21	☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.	rain 0.44	☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.		☐	☐	☑
	Parameters				
110	Is sample colorless? If "Failed", describe.		☐	☐	☑
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		☐	☐	☑
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		☐	☐	☑
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.	vegetation	☒	☐	☐
150	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	coarse	☒	☐	☐
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	coarse	☒	☐	☐
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)		☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)		☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)		☐	☐	☑

Labor Report

Completed: 6/26/2017 4:21:00 PM

Report: Marwin Shendo

Signature / Name	Date	Signature / Name	Date
	6/28/2017		

I confirm the information as recorded is true, accurate and complete.

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg. FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Grieggs, EPC-CP Group Leader

Signature: (See signature on file) Date:

Los Alamos National Lab - ADESH

Work Order MSGP-60552

MSGP Monitoring Stations
Printed 9/6/2017 - 10:22 AM

Maintenance Details

Requested: 6/15/2017 4:14:00 PM
Procedure: MSGP Quarterly Visual Assessment (EPC Sig) (EPC-CP-Form-1021.02 2)
Last PM: 6/23/2017
Project: SIO Visual Assessments 6/1/17 (P-MSGP-5188)

Target: 7/31/2017
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (017)
Substantially Identical Outfall (015)
MSGP01501

Contact:
Phone:

Reason: MSGP Quarterly Visual Assessment (EPC Sig)

Special Instructions: NMR053195

Tasks

#	Description	Meas.	No	N/A	Yes
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.				
	Sample information				
30	Document the monitoring Period by using the Monitoring Period lookup table.	MP2	☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)		☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	6/25/17 15:37	☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	6/25/17 15:37	☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	6/26/17 16:17	☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.	rain 0.44	☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.		☐	☐	☑
	Parameters				
110	Is sample colorless? If "Failed", describe.	brown	☒	☐	☐
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	musty	☒	☐	☐
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	opaque	☒	☐	☐
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.	vegetation	☒	☐	☐
150	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	fine	☒	☐	☐
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	coarse	☒	☐	☐
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)		☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)		☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)		☐	☐	☑

Labor Report

Completed: 6/26/2017 4:17:00 PM

Report: Marwin Shendo

Signature / Name	Date	Signature / Name	Date
MSLO	6/28/2017		

I confirm the information as recorded is true, accurate and complete.

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg. FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Grieggs, EPC-CP Group Leader

Signature: (See signature on file) Date:

Los Alamos National Lab - ADESH

Work Order MSGP-60915

MSGP Monitoring Stations
Printed 9/6/2017 - 10:20 AM

Maintenance Details

Requested By: Banar, Alethea on 7/31/2017 1:19:00 PM
Taken By: Banar, Alethea
Procedure: MSGP Quarterly Visual Assessment (EPC Sig) (EPC-CP-Form-1021.022)
Last PM: 7/27/2017
Project: SIO Visual Assessments 6/1/17 (P-MSGP-5188)

Target: 7/31/2017
Priority/Type: / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (017)
Substantially Identical Outfall (014)
MSGP01401

Contact: Banar, Alethea
Phone: 699-5836

Reason: MSGP Quarterly Visual Assessment (EPC Sig)

Special Instructions: NMR053195

Tasks

#	Description	Meas.	No	N/A	Yes
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.				
	Sample information				
30	Document the monitoring Period by using the Monitoring Period lookup table.	mp2	☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)		☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	7/26/17 10:50	☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	7/26/17 10:50	☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	7/27/17 11:58	☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.	rain 0.99	☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.		☐	☐	☑
	Parameters				
110	Is sample colorless? If "Failed", describe.	brown	☒	☐	☐
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	musty	☒	☐	☐
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	slightly cloudy	☒	☐	☐
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.	vegetation	☒	☐	☐
150	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	coarse	☒	☐	☐
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	coarse	☒	☐	☐
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)		☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)		☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)		☐	☐	☑

Labor Report

Completed: 7/27/2017 11:58:00 AM

Report: Marwin Shendo

Signature / Name	Date	Signature / Name	Date
MSD	7/31/2017		

I confirm the information as recorded is true, accurate and complete.

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg. FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Grieggs, EPC-CP Group Leader

Signature: (See signature on file) Date:

Los Alamos National Lab - ADESH

Work Order MSGP-60916

MSGP Monitoring Stations
Printed 9/6/2017 - 10:24 AM

Maintenance Details

Requested By: Banar, Alethea on 7/31/2017 1:20:00 PM
Taken By: Banar, Alethea
Procedure: MSGP Quarterly Visual Assessment (EPC Sig) (EPC-CP-Form-1021.022)
Last PM: 7/27/2017
Project: SIO Visual Assessments 6/1/17 (P-MSGP-5188)

Target: 7/31/2017
Priority/Type: / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (017)
Substantially Identical Outfall (015)
MSGP01501

Contact: Banar, Alethea
Phone: 699-5836

Reason: MSGP Quarterly Visual Assessment (EPC Sig)

Special Instructions: NMR053195

Tasks

#	Description	Meas.	No	N/A	Yes
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.				
	Sample information				
30	Document the monitoring Period by using the Monitoring Period lookup table.	mp2	☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)		☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	7/26/17 10:52	☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	7/26/17 10:52	☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	7/27/17 12:03	☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.	rain 0.99	☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.		☐	☐	☑
	Parameters				
110	Is sample colorless? If "Failed", describe.	brown	☒	☐	☐
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	musty	☒	☐	☐
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	opaguw	☒	☐	☐
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.	vegetation	☒	☐	☐
150	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	coarse	☒	☐	☐
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	coarse	☒	☐	☐
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)		☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)		☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)		☐	☐	☑

Labor Report

Completed: 7/27/2017 12:03:00 PM

Report: Marwin Shendo

Signature / Name	Date	Signature / Name	Date
	7/31/2017		

I confirm the information as recorded is true, accurate and complete.

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg. FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Grieggs, EPC-CP Group Leader

Signature: (See signature on file) Date:

Los Alamos National Lab - ADESH

Work Order MSGP-60917

MSGP Monitoring Stations
Printed 9/6/2017 - 10:17 AM

Maintenance Details

Requested By: Banar, Alethea on 7/31/2017 1:22:00 PM
Taken By: Banar, Alethea
Procedure: MSGP Quarterly Visual Assessment (EPC Sig) (EPC-CP-Form-1021.022)
Last PM: 7/27/2017
Project: SIO Visual Assessments 6/1/17 (P-MSGP-5188)

Target: 7/31/2017
Priority/Type: / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (017)
Substantially Identical Outfall (016)
MSGP01601

Contact: Banar, Alethea
Phone: 699-5836

Reason: MSGP Quarterly Visual Assessment (EPC Sig)

Special Instructions: NMR053195

Tasks

#	Description	Meas.	No	N/A	Yes
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.				
	Sample information				
30	Document the monitoring Period by using the Monitoring Period lookup table.	mp2	☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)		☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	7/26/17 10:54	☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	7/26/17 10:54	☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	7/27/17 12:12	☐	☐	☑
70	Document the nature of discharge using the Precipitation Type lookup table. Document the amount (in) in the "Reading" field of this line.	rain 0.99	☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide reason in comments of this line.		☐	☐	☑
	Parameters				
110	Is sample colorless? If "Failed", describe.		☐	☐	☑
120	Is sample oderless? If "Failed", document observation using the Odor lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.	musty	☒	☐	☐
130	Is sample clear? If "Failed", document observation using the Clarity lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		☐	☐	☑
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.		☐	☐	☑
150	Is sample free of settled solids? If "Failed", document observation using the Settled Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		☐	☐	☑
160	Is sample free of suspended solids? If "Failed", document observation using the Suspended Solids lookup table. If "other" is chosen from the lookup table, provide description in comments of this line.		☐	☐	☑
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location ('on the surface' or 'in the sample') in the comments of this line. (Range: 0 - 0)		☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs) in the comments of this line. (Range: 0 - 0)		☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe in the comments of this line. (Range: 0 - 0)		☐	☐	☑

Labor Report

Completed: 7/27/2017 12:12:00 PM

Report: Marwin Shendo

Signature / Name	Date	Signature / Name	Date
	7/31/2017		

I confirm the information as recorded is true, accurate and complete.

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg. FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Grieggs, EPC-CP Group Leader

Signature: (See signature on file) Date:

Los Alamos National Lab - ADESH

Work Order MSGP-61023

MSGP Monitoring Stations
Printed 9/6/2017 - 10:18 AM

Maintenance Details

Requested: 8/7/2017 11:57:00 AM
Procedure: MSGP Quarterly Visual Assessment (EPC Sig) (EPC-CP-Form-1021.2 3)
Last PM: 7/27/2017
Project: SIO Visual Assessments 6/1/17 (P-MSGP-5188)

Target: 7/31/2017
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (017)
Substantially Identical Outfall (013)
MSGP01301

Reason: MSGP Quarterly Visual Assessment (EPC Sig)

Contact:
Phone:

Special Instructions: NMR053195

Tasks

#	Description	Meas.	No	N/A	Yes
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.				
	Sample information				
30	Document the monitoring Period (e.g., Apr-May)	jun-july	☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)		☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	7/29/17 18:59	☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	7/29/17 18:59	☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/1/17 14:53	☐	☐	☑
70	Document the nature of discharge (e.g., rain, snowmelt). Document the TOTAL amount (in) in the "Reading" field of this line.	rain 0.47	☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide a reason.		☐	☐	☑
	Parameters				
110	Is sample colorless? If "Failed", describe.	brown	☒	☐	☐
120	Is sample oderless? If "Failed", provide description (e.g. musty, sewage, sulfur, sour, solvent, petroleum/gas)	musty	☒	☐	☐
130	Is sample clear? If "Failed", provide description (e.g., slightly cloudy, cloudy, opaque).	Slightly cloudy	☒	☐	☐
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.		☐	☐	☑
150	Is sample free of settled solids? If "Failed", provide description (e.g., fine, course).	fine	☒	☐	☐
160	Is sample free of suspended solids? If "Failed", provide description (e.g., fine, course).		☐	☐	☑
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location (e.g.,'on the surface' or 'in the sample').		☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs).		☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe.		☐	☐	☑

Labor Report

Completed: 8/1/2017 2:53:00 PM

Report: Marwin Shendo

8/8/2017

Signature / Name	Date	Signature / Name	Date

I confirm the information as recorded is true, accurate and complete.

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg. FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Grieggs, EPC-CP Group Leader

Signature: (See signature on file) Date:

Los Alamos National Lab - ADESH

Work Order MSGP-61024

MSGP Monitoring Stations
Printed 9/6/2017 - 10:21 AM

Maintenance Details

Requested: 8/7/2017 11:57:00 AM
Procedure: MSGP Quarterly Visual Assessment (EPC Sig) (EPC-CP-Form-1021.2 3)
Last PM: 7/27/2017
Project: SIO Visual Assessments 6/1/17 (P-MSGP-5188)

Target: 7/31/2017
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (017)
Substantially Identical Outfall (014)
MSGP01401

Contact:
Phone:

Reason: MSGP Quarterly Visual Assessment (EPC Sig)

Special Instructions: NMR053195

Tasks

#	Description	Meas.	No	N/A	Yes
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.				
	Sample information				
30	Document the monitoring Period (e.g., Apr-May)	jun-july	☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)		☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	7/29/17 18:56	☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	7/29/17 18:56	☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/1/17 14:51	☐	☐	☑
70	Document the nature of discharge (e.g., rain, snowmelt). Document the TOTAL amount (in) in the "Reading" field of this line.	rain 0.47	☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide a reason.		☐	☐	☑
	Parameters				
110	Is sample colorless? If "Failed", describe.	brown	☒	☐	☐
120	Is sample oderless? If "Failed", provide description (e.g. musty, sewage, sulfur, sour, solvent, petroleum/gas)	musty	☒	☐	☐
130	Is sample clear? If "Failed", provide description (e.g., slightly cloudy, cloudy, opaque).	Opaque	☒	☐	☐
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.	veg	☒	☐	☐
150	Is sample free of settled solids? If "Failed", provide description (e.g., fine, course).	coarse	☒	☐	☐
160	Is sample free of suspended solids? If "Failed", provide description (e.g., fine, course).	coarse	☒	☐	☐
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location (e.g.,'on the surface' or 'in the sample').		☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs).		☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe.		☐	☐	☑

Labor Report

Completed: 8/1/2017 2:51:00 PM

Report: Marwin Shendo
8/8/2017

Signature / Name	Date	Signature / Name	Date
MPSLO			

I confirm the information as recorded is true, accurate and complete.

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg. FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Grieggs, EPC-CP Group Leader

Signature: (See signature on file) Date:

Los Alamos National Lab - ADESH

Work Order MSGP-61025

MSGP Monitoring Stations
Printed 9/6/2017 - 10:23 AM

Maintenance Details

Requested: 8/7/2017 11:57:00 AM
Procedure: MSGP Quarterly Visual Assessment (EPC Sig) (EPC-CP-Form-1021.2 3)
Last PM: 7/27/2017
Project: SIO Visual Assessments 6/1/17 (P-MSGP-5188)

Target: 7/31/2017
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (017)
Substantially Identical Outfall (015)
MSGP01501

Contact:
Phone:

Reason: MSGP Quarterly Visual Assessment (EPC Sig)

Special Instructions: NMR053195

Tasks

#	Description	Meas.	No	N/A	Yes
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.				
	Sample information				
30	Document the monitoring Period (e.g., Apr-May)	June-July	☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)		☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	7/29/17 18:37	☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	7/29/17 18:37	☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/1/17 14:49	☐	☐	☑
70	Document the nature of discharge (e.g., rain, snowmelt). Document the TOTAL amount (in) in the "Reading" field of this line.	rain 0.47	☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide a reason.		☐	☐	☑
	Parameters				
110	Is sample colorless? If "Failed", describe.	brown	☒	☐	☐
120	Is sample oderless? If "Failed", provide description (e.g. musty, sewage, sulfur, sour, solvent, petroleum/gas)	musty	☒	☐	☐
130	Is sample clear? If "Failed", provide description (e.g., slightly cloudy, cloudy, opaque).	opaque	☒	☐	☐
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.	veg	☒	☐	☐
150	Is sample free of settled solids? If "Failed", provide description (e.g., fine, course).	coarse	☒	☐	☐
160	Is sample free of suspended solids? If "Failed", provide description (e.g., fine, course).	coarse	☒	☐	☐
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location (e.g.,'on the surface' or 'in the sample').		☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs).		☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe.		☐	☐	☑

Labor Report

Completed: 8/1/2017 2:49:00 PM

Report: Marwin Shendo
8/7/2017

Signature / Name	Date	Signature / Name	Date

I confirm the information as recorded is true, accurate and complete.

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg. FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Grieggs, EPC-CP Group Leader

Signature: (See signature on file) Date:

Los Alamos
NATIONAL LABORATORY
EST. 1943

Environmental Protection & Compliance Division (EPC-DO)
Environmental Compliance Programs (EPC-CP)
PO Box 1663, K490
Los Alamos, New Mexico 87545
(505) 667-0666

Date: JUL 0 1 2016
Symbol: EPC-DO-16-180
LA-UR: 16-24542
Locates Action No.: N/A

U.S. EPA Region 6
NPDES Stormwater Program (WQ-PP)
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

To whom it may concern:

Subject: National Pollutant Discharge Elimination System (NPDES) Permit Tracking No. NMR053195, Multi-Sector General Permit (MSGP) Industrial Discharge Monitoring Reports (MDMRs) For April 15, 18 and 19, 2016 and a "No Discharge" Report For April 1 through May 31, 2016

Enclosed are Los Alamos National Laboratory's MDMRs (Enclosure 1) for April 15, 18 and 19, 2016, and a "no discharge" MDMR for the end of the first quarter of monitoring (April 1, 2016 through May 31, 2016) as required under MSGP Permit Tracking No. NMR053195, submitted on behalf of Los Alamos National Security LLC. These MDMRs contain analytical results for impaired water and quarterly benchmark monitoring at outfalls 018, 026, 029, 004, 032, 002, and 009.

Please contact Holly Wheeler at (505) 667-1312 or Terrill Lemke at (505) 665-2397 if you have questions regarding these MDMRs.

Sincerely,

Anthony R. Grieggs
Group Leader
Environmental Compliance Programs (EPC-CP)
Los Alamos National Security, LLC

ARG:TWL:HLW/ms

Enclosure: 1. NPDES Permit Tracking No. NMR053195, MDMRs for April 15, 18 and 19, 2016 and a "No Discharge" Report for April 1 through May 31, 2016

Cy: Everett Spencer, EPA Region 6, Dallas TX (E-File)
Helen Nguyen, EPA Region 6, Dallas TX (E-File)
Craig S. Leasure, PADOPS, (E-File)
William R. Mairson, PADOPS, (E-File)
Michael T. Brandt, ADESH, (E-File)
Raeanna Sharp-Geiger, ADESH, (E-File)
John P. McCann, EPC-DO, (E-File)
Anthony R. Grieggs, EPC-CP, (E-File)
Terrill W. Lemke, EPC-CP, (E-File)
Holly L. Wheeler, EPC-CP, (E-File)
lasomailbox@nnsa.doe.gov, (E-File)
locatesteam@lanl.gov, (E-File)
epc-correspondence@lanl.gov

ENCLOSURE 1

NPDES Permit Tracking No. NMR053195,
MDMRs for April 15, 18 and 19, 2016
and a "No Discharge" Report for
April 1 through May 31, 2016

EPC-DO-16-180

LA-UR-16-24542

Date: JUL 0 1 2016

NPDES FORM 6100-29	EPA	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460 MSGP INDUSTRIAL DISCHARGE MONITORING REPORT (DMR) FORM	Form Approved. OMB No. 2040-0004

A. Approval to User Paper DMR Form

1. Have you been granted a waiver from electronic reporting from EPA Regional Office*? [X] YES [ ] NO

If yes, check which waiver you have been granted, the name of the EPA Regional Office staff person who granted the waiver, and the date of approval:

Waiver granted:

[ ] The owner/operator's headquarters is physically located in a geographic area (i.e., ZIP code or census tract) that is identified as under-served for broadband Internet access in the most recent report from the Federal Communications Commission.

[X] The owner/operator has issues regarding available computer access or computer capability.

Name of EPA staff person that granted the waiver: Everett Spencer

Date approval obtained: 06/17/2016

*** Note: You are required to obtain approval from the applicable EPA Regional Office prior to using this paper DMR form. If you have not obtained a waiver, you must file this form electronically using the NetDMR at http://www.epa.gov/netdmr/**

B. Permit Information

1. NPDES ID: NMR053195

2. Reason(s) for Submission (Check all that apply):

[X] Submitting monitoring data (Fill in all Sections).

[ ] Reporting no discharge for all outfalls for this monitoring period (Fill in Sections A, B, C, D, E.1, and G).

[ ] Reporting that your site status has changed to inactive and unstaffed (Fill in Sections A, B, C, D, and F and include date of status change in comment field in Section F.4).

[ ] Reporting that your site status has changed to active (Fill in all Sections and include date of status change in comment field in Section F.4).

[ ] Reporting that no further pollutant reductions are achievable for all outfalls and for all pollutants via Part 6.2.1.2 of the MSGP (Fill in Sections A, B, C, D, and G).

C. Facility Operator Information

1. Operator Information

Operator Name: Los Alamos National Security, LLC

Mailing Address:

Street: P.O. Box 1663, MS K490

City: Los Alamos State: NM ZIP Code: 87545 -

Phone: 505 667 0666

E-mail: grieggst@lanl.gov

2. DMR Preparer (Complete if DMR was prepared by someone other than the certifier):

First Name, Middle Initial, Last Name: Holly L. Wheeler

Organization: EPC-CP

Phone: 505 667 1312 Ext.

E-mail: hbenson@lanl.gov

D. Facility Information

1. Facility Name: Los Alamos National Laboratory

2. Facility Address:

Street/Location: Bikini Atoll Rd. SM30 K490

City: Los Alamos State: NM ZIP Code: 87545 -

County or Similar Government Subdivision: Los Alamos

E. Discharge Information

1. Identify monitoring period:

[X] Check here if proposing alternative monitoring periods due to irregular stormwater runoff. Identify alternative monitoring schedule and indicate for which alternative monitoring period you are reporting monitoring data:

[ ] Quarter 1 (January 1 – March 31)	[X] Quarter 1: From	04 / 01	To 05 / 31
[ ] Quarter 2 (April 1 – June 30)	[ ] Quarter 2: From	06 / 01	To 07 / 31
[ ] Quarter 3 (July 1 – September 30)	[ ] Quarter 3: From	08 / 01	To 09 / 30
[ ] Quarter 4 (October 1 – December 31)	[ ] Quarter 4: From	10 / 01	To 11 / 30

2. Are you required to monitor for cadmium, copper, chromium, lead, nickel, silver, or zinc in freshwater? [X] Yes (Skip to 3) [ ] No (Skip to 4)

3. What is the hardness level of the receiving water? 57

4. Does your facility discharge into any saltwater receiving waters? [ ] Yes [X] No

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 2 2.b. Rainfall amount (inches): 0.2 2.c. Time since previous measurable storm event (days): 152

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
018	[ ] Substantially identical to outfall:	[ ]	I	Aluminum, total recoverable	183	ug/L		04/15/2016	[ ]	[ ]
018	[ ] Substantially identical to outfall:	[ ]	QBM	Aluminum, total recoverable	183	ug/L		04/15/2016	[ ]	[ ]
018	[ ] Substantially identical to outfall:	[ ]	QBM	Iron, total	784	ug/L		04/15/2016	[ ]	[ ]
013	[X] Substantially identical to outfall: 018	[X]							[ ]	[ ]
014	[X] Substantially identical to outfall: 018	[ ]							[ ]	[ ]
015	[X] Substantially identical to outfall: 018	[ ]							[ ]	[ ]
016	[X] Substantially identical to outfall: 018	[X]							[ ]	[ ]
017	[X] Substantially identical to outfall: 018	[X]							[ ]	[ ]

019	[X] Substantially identical to outfall: 018	[X]							☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 1.58 hours. Rainfall amount = 0.24 inches.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 2 2.b. Rainfall amount (inches): 0.2 2.c. Time since previous measurable storm event (days): 7

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
026	[ ] Substantially identical to outfall:	[ ]	I	Copper, dissolved	22.6	ug/L		04/15/2016	[ ]	[ ]
026	[ ] Substantially identical to outfall:	[ ]	I	Thallium, dissolved	ND		0.450 ug/L	04/15/2016	[ ]	[ ]
027	[X] Substantially identical to outfall: 026	[ ]							[ ]	[ ]
028	[X] Substantially identical to outfall: 026	[ ]							[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 1.58 hours. Rainfall amount = 0.24 inches.

026: The impaired water pollutant dissolved Copper exceeds the New Mexico water quality standard. The impaired water pollutant dissolved Thallium was not detected in stormwater discharge from this outfall. Therefore, annual monitoring for dissolved Thallium will be discontinued per Part 6.2.4.1.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 2 2.b. Rainfall amount (inches): 0.2 2.c. Time since previous measurable storm event (days): 7

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
029	[ ] Substantially identical to outfall:	[ ]	I	Copper, dissolved	34.4	ug/L		04/15/2016	[ ]	[ ]
029	[ ] Substantially identical to outfall:	[ ]	QBM	Copper, dissolved	34.4	ug/L		04/15/2016	[ ]	[ ]
029	[ ] Substantially identical to outfall:	[ ]	QBM	Lead, dissolved	BQL		2.00 ug/L	04/15/2016	[ ]	[ ]
029	[ ] Substantially identical to outfall:	[ ]	I	Thallium, dissolved	ND		0.450 ug/L	04/15/2016	[ ]	[ ]
029	[ ] Substantially identical to outfall:	[ ]	QBM	Zinc, dissolved	1530	ug/L		04/15/2016	[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 1.58 hours. Rainfall amount = 0.24 inches.

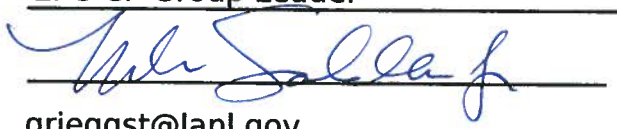
029: The impaired water pollutant dissolved Copper exceeds the New Mexico water quality standard. The average concentration of dissolved Copper is mathematically certain to exceed the benchmark value. The impaired water pollutant dissolved Thallium was not detected in stormwater discharge from this outfall. Therefore, annual monitoring for dissolved Thallium will be discontinued per Part 6.2.4.1. The average concentration of dissolved Zinc is mathematically certain to exceed the benchmark value.

G. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

First Name, Middle Initial, Last Name: Anthony R Grieggs

Title: EPC-CP Group Leader

Signature:  Date 07/01/2016

E-mail: grieggst@lanl.gov

NPDES FORM 6100-29	EPA	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460 MSGP INDUSTRIAL DISCHARGE MONITORING REPORT (DMR) FORM	Form Approved. OMB No. 2040-0004

A. Approval to User Paper DMR Form

1. Have you been granted a waiver from electronic reporting from EPA Regional Office*? [X] YES [ ] NO

If yes, check which waiver you have been granted, the name of the EPA Regional Office staff person who granted the waiver, and the date of approval:

Waiver granted:
- [ ] The owner/operator's headquarters is physically located in a geographic area (i.e., ZIP code or census tract) that is identified as under-served for broadband Internet access in the most recent report from the Federal Communications Commission.
- [X] The owner/operator has issues regarding available computer access or computer capability.

Name of EPA staff person that granted the waiver: Everett Spencer

Date approval obtained: 06/17/2016

*** Note: You are required to obtain approval from the applicable EPA Regional Office prior to using this paper DMR form. If you have not obtained a waiver, you must file this form electronically using the NetDMR at http://www.epa.gov/netdmr/**

B. Permit Information

1. NPDES ID: NMR053195

2. Reason(s) for Submission (Check all that apply):

- [X] Submitting monitoring data (Fill in all Sections).
- [ ] Reporting no discharge for all outfalls for this monitoring period (Fill in Sections A, B, C, D, E.1, and G).
- [ ] Reporting that your site status has changed to inactive and unstaffed (Fill in Sections A, B, C, D, and F and include date of status change in comment field in Section F.4).
- [ ] Reporting that your site status has changed to active (Fill in all Sections and include date of status change in comment field in Section F.4).
- [ ] Reporting that no further pollutant reductions are achievable for all outfalls and for all pollutants via Part 6.2.1.2 of the MSGP (Fill in Sections A, B, C, D, and G).

C. Facility Operator Information

1. Operator Information

Operator Name: Los Alamos National Security, LLC

Mailing Address:

Street: P.O. Box 1663, MS K490

City: Los Alamos State: NM ZIP Code: 87545 -

Phone: 505 667 0666

E-mail: grieggst@lanl.gov

2. DMR Preparer (Complete if DMR was prepared by someone other than the certifier):

First Name, Middle Initial, Last Name: Holly L. Wheeler

Organization: EPC-CP

Phone: 505 667 1312 Ext.

E-mail: hbenson@lanl.gov

D. Facility Information

1. Facility Name: Los Alamos National Laboratory

2. Facility Address:

Street/Location: Bikini Atoll Rd. SM30 K490

City: Los Alamos State: NM ZIP Code: 87545 -

County or Similar Government Subdivision: Los Alamos

E. Discharge Information

1. Identify monitoring period: [X] Check here if proposing alternative monitoring periods due to irregular stormwater runoff. Identify alternative monitoring schedule and indicate for which alternative monitoring period you are reporting monitoring data:

[ ] Quarter 1 (January 1 – March 31)	[X] Quarter 1: From	04	/	01	To	05	/	31
[ ] Quarter 2 (April 1 – June 30)	[ ] Quarter 2: From	06	/	01	To	07	/	31
[ ] Quarter 3 (July 1 – September 30)	[ ] Quarter 3: From	08	/	01	To	09	/	30
[ ] Quarter 4 (October 1 – December 31)	[ ] Quarter 4: From	10	/	01	To	11	/	30

2. Are you required to monitor for cadmium, copper, chromium, lead, nickel, silver, or zinc in freshwater? [X] Yes (Skip to 3) [ ] No (Skip to 4)

3. What is the hardness level of the receiving water? 57

4. Does your facility discharge into any saltwater receiving waters? [ ] Yes [X] No

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: ☐ Rainfall (Complete line items 2.a., 2.b., & 2.c.) ☒ Snowmelt

2.a. Duration of the rainfall event (hours): 2.b. Rainfall amount (inches): 2.c. Time since previous measurable storm event (days):

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
004	☐ Substantially identical to outfall:	☐	I	Adjusted Gross Alpha	3.19	pCi/L		04/18/2016	☐	☐
004	☐ Substantially identical to outfall:	☐	I	Aluminum, total recoverable	9060	ug/L		04/18/2016	☐	☐
004	☐ Substantially identical to outfall:	☐	QBM	Aluminum, total recoverable	9060	ug/L		04/18/2016	☐	☐
004	☐ Substantially identical to outfall:	☐	I	Aroclor, total	BQL		0.103 ug/L	04/18/2016	☐	☐
004	☐ Substantially identical to outfall:	☐	QBM	Iron, total	1590	ug/L		04/18/2016	☐	☐
004	☐ Substantially identical to outfall:	☐	QBM	Nitrate plus Nitrite Nitrogen	0.163	mg/L		04/18/2016	☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

004: The impaired water pollutant total recoverable Aluminum exceeds the New Mexico water quality standard. The average concentration of total recoverable Aluminum is mathematically certain to exceed the benchmark value.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: ☐ Rainfall (Complete line items 2.a., 2.b., & 2.c.) ☒ Snowmelt

2.a. Duration of the rainfall event (hours): 2.b. Rainfall amount (inches): 2.c. Time since previous measurable storm event (days):

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
018	☐ Substantially identical to outfall:	☐	I	Copper, dissolved	4.7	ug/L		04/18/2016	☐	☐
018	☐ Substantially identical to outfall:	☐	QBM	Copper, dissolved	4.7	ug/L		04/18/2016	☐	☐
018	☐ Substantially identical to outfall:	☐	I	Thallium, dissolved	ND		0.450 ug/L	04/18/2016	☐	☐
018	☐ Substantially identical to outfall:	☐	QBM	Zinc, dissolved	2230	ug/L		04/18/2016	☐	☐
013	☒ Substantially identical to outfall: 018	☐							☐	☐
014	☒ Substantially identical to outfall: 018	☐							☐	☐
015	☒ Substantially identical to outfall: 018	☐							☐	☐
016	☒ Substantially identical to outfall: 018	☐							☐	☐

017	[X] Substantially identical to outfall: 018	☐							☐	☐
019	[X] Substantially identical to outfall: 018	☐							☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

018: The impaired water pollutant dissolved Thallium was not detected in stormwater discharge from this outfall. Therefore, annual monitoring for dissolved Thallium will be discontinued per Part 6.2.4.1. The average concentration of dissolved Zinc is mathematically certain to exceed the benchmark value.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: ☐ Rainfall (Complete line items 2.a., 2.b., & 2.c.) ☒ Snowmelt

2.a. Duration of the rainfall event (hours): 2.b. Rainfall amount (inches): 2.c. Time since previous measurable storm event (days):

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
032	☐ Substantially identical to outfall:	☐	I	Copper, dissolved	3.72	ug/L		04/18/2016	☐	☐
032	☐ Substantially identical to outfall:	☐	I	Thallium, dissolved	ND		0.450 ug/L	04/18/2016	☐	☐
033	☒ Substantially identical to outfall: 032	☐							☐	☐
034	☒ Substantially identical to outfall: 032	☐							☐	☐
035	☒ Substantially identical to outfall: 032	☐							☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

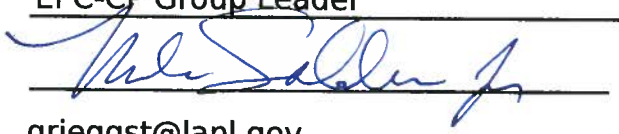
032: The impaired water pollutant dissolved Thallium was not detected in stormwater discharge from this outfall. Therefore, annual monitoring for dissolved Thallium will be discontinued per Part 6.2.4.1.

G. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

First Name, Middle Initial, Last Name: Anthony R Grieggs

Title: EPC-CP Group Leader

Signature:  Date 07/01/2016

E-mail: grieggst@lanl.gov

NPDES FORM 6100-29	EPA	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460 MSGP INDUSTRIAL DISCHARGE MONITORING REPORT (DMR) FORM	Form Approved. OMB No. 2040-0004

A. Approval to User Paper DMR Form

1. Have you been granted a waiver from electronic reporting from EPA Regional Office*? [X] YES [ ] NO

If yes, check which waiver you have been granted, the name of the EPA Regional Office staff person who granted the waiver, and the date of approval:

Waiver granted:

- [ ] The owner/operator's headquarters is physically located in a geographic area (i.e., ZIP code or census tract) that is identified as under-served for broadband Internet access in the most recent report from the Federal Communications Commission.
- [X] The owner/operator has issues regarding available computer access or computer capability.

Name of EPA staff person that granted the waiver: Everett Spencer

Date approval obtained: 06/17/2016

*** Note: You are required to obtain approval from the applicable EPA Regional Office prior to using this paper DMR form. If you have not obtained a waiver, you must file this form electronically using the NetDMR at http://www.epa.gov/netdmr/**

B. Permit Information

1. NPDES ID: NMR053195

2. Reason(s) for Submission (Check all that apply):

- [X] Submitting monitoring data (Fill in all Sections).
- [ ] Reporting no discharge for all outfalls for this monitoring period (Fill in Sections A, B, C, D, E.1, and G).
- [ ] Reporting that your site status has changed to inactive and unstaffed (Fill in Sections A, B, C, D, and F and include date of status change in comment field in Section F.4).
- [ ] Reporting that your site status has changed to active (Fill in all Sections and include date of status change in comment field in Section F.4).
- [ ] Reporting that no further pollutant reductions are achievable for all outfalls and for all pollutants via Part 6.2.1.2 of the MSGP (Fill in Sections A, B, C, D, and G).

C. Facility Operator Information

1. Operator Information

Operator Name: Los Alamos National Security, LLC

Mailing Address:

Street: P.O. Box 1663, MS K490

City: Los Alamos State: NM ZIP Code: 87545 -

Phone: 505 667 0666

E-mail: grieggst@lanl.gov

2. DMR Preparer (Complete if DMR was prepared by someone other than the certifier):

First Name, Middle Initial, Last Name: Holly L. Wheeler

Organization: EPC-CP

Phone: 505 667 1312 Ext.

E-mail: hbenson@lanl.gov

D. Facility Information

1. Facility Name: Los Alamos National Laboratory

2. Facility Address:

Street/Location: Bikini Atoll Rd. SM30 K490

City: Los Alamos State: NM ZIP Code: 87545 -

County or Similar Government Subdivision: Los Alamos

E. Discharge Information

1. Identify monitoring period: [X] Check here if proposing alternative monitoring periods due to irregular stormwater runoff. Identify alternative monitoring schedule and indicate for which alternative monitoring period you are reporting monitoring data:

[ ] Quarter 1 (January 1 – March 31)	[X] Quarter 1: From	04 / 01	To	05 / 31
[ ] Quarter 2 (April 1 – June 30)	[ ] Quarter 2: From	06 / 01	To	07 / 31
[ ] Quarter 3 (July 1 – September 30)	[ ] Quarter 3: From	08 / 01	To	09 / 30
[ ] Quarter 4 (October 1 – December 31)	[ ] Quarter 4: From	10 / 01	To	11 / 30

2. Are you required to monitor for cadmium, copper, chromium, lead, nickel, silver, or zinc in freshwater? [X] Yes (Skip to 3) [ ] No (Skip to 4)

3. What is the hardness level of the receiving water? 57

4. Does your facility discharge into any saltwater receiving waters? [ ] Yes [X] No

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: ☐ Rainfall (Complete line items 2.a., 2.b., & 2.c.) ☒ Snowmelt

2.a. Duration of the rainfall event (hours): 2.b. Rainfall amount (inches): 2.c. Time since previous measurable storm event (days):

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
002	☐ Substantially identical to outfall:	☐	I	Adjusted Gross Alpha	4.35	pCi/L		04/19/2016	☐	☐
002	☐ Substantially identical to outfall:	☐	I	Aluminum, total recoverable	643	ug/L		04/19/2016	☐	☐
002	☐ Substantially identical to outfall:	☐	QBM	Aluminum, total recoverable	643	ug/L		04/19/2016	☐	☐
002	☐ Substantially identical to outfall:	☐	I	Aroclor, total	ND		0.107 ug/L	04/19/2016	☐	☐
002	☐ Substantially identical to outfall:	☐	I	Copper, dissolved	7.35	ug/L		04/19/2016	☐	☐
002	☐ Substantially identical to outfall:	☐	QBM	Iron, total	2270	ug/L		04/19/2016	☐	☐
002	☐ Substantially identical to outfall:	☐	QBM	Nitrate plus Nitrite Nitrogen	0.188	mg/L		04/19/2016	☐	☐
002	☐ Substantially identical to outfall:	☐	I	Thallium, dissolved	ND		0.450 ug/L	04/19/2016	☐	☐

002	☐ Substantially identical to outfall:	☐	QBM	Zinc, dissolved	32	ug/L		04/19/2016	☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

002: The impaired water pollutant total Aroclors was not detected in stormwater discharge from this outfall. Therefore, annual monitoring for total Aroclors will be discontinued per Part 6.2.4.1. The impaired water pollutant dissolved Copper exceeds the New Mexico water quality standard. The impaired water pollutant dissolved Thallium was not detected in stormwater discharge from this outfall. Therefore, annual monitoring for dissolved Thallium will be discontinued per Part 6.2.4.1.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: ☐ Rainfall (Complete line items 2.a., 2.b., & 2.c.) ☒ Snowmelt

2.a. Duration of the rainfall event (hours): 2.b. Rainfall amount (inches): 2.c. Time since previous measurable storm event (days):

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
009	☐ Substantially identical to outfall:	☐	I	Copper, dissolved	9.01	ug/L		04/19/2016	☐	☐
009	☐ Substantially identical to outfall:	☐	I	Thallium, dissolved	BQL		2.00 ug/L	04/19/2016	☐	☐
007	☒ Substantially identical to outfall: 009	☐							☐	☐
008	☒ Substantially identical to outfall: 009	☒							☐	☐
010	☒ Substantially identical to outfall: 009	☐							☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

009: The impaired water pollutant dissolved Copper exceeds the New Mexico water quality standard. The impaired water pollutant dissolved Thallium exceeds the New Mexico water quality standard.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: ☐ Rainfall (Complete line items 2.a., 2.b., & 2.c.) ☒ Snowmelt

2.a. Duration of the rainfall event (hours): 2.b. Rainfall amount (inches): 2.c. Time since previous measurable storm event (days):

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
026	☐ Substantially identical to outfall:	☐	I	Adjusted Gross Alpha	ND			04/19/2016	☐	☐
026	☐ Substantially identical to outfall:	☐	I	Aluminum, total recoverable	1500	ug/L		04/19/2016	☐	☐
026	☐ Substantially identical to outfall:	☐	I	Aroclor, total	ND		0.0351 ug/L	04/19/2016	☐	☐
027	☒ Substantially identical to outfall: 026	☐							☐	☐
028	☒ Substantially identical to outfall: 026	☐							☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

026: The impaired water pollutant Adjusted Gross Alpha was not detected in stormwater discharge from this outfall. Therefore, annual monitoring for Adjusted Gross Alpha will be discontinued per Part 6.2.4.1. The impaired water pollutant total recoverable Aluminum exceeds the New Mexico water quality standard. The impaired water pollutant total Aroclors was not detected in stormwater discharge from this outfall. Therefore, annual monitoring for total Aroclors will be discontinued per Part 6.2.4.1.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: ☐ Rainfall (Complete line items 2.a., 2.b., & 2.c.) ☒ Snowmelt

2.a. Duration of the rainfall event (hours): 2.b. Rainfall amount (inches): 2.c. Time since previous measurable storm event (days):

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
029	☐ Substantially identical to outfall:	☐	I	Adjusted Gross Alpha	2.51	pCi/L		04/19/2016	☐	☐
029	☐ Substantially identical to outfall:	☐	I	Aluminum, total recoverable	954	ug/L		04/19/2016	☐	☐
029	☐ Substantially identical to outfall:	☐	QBM	Aluminum, total recoverable	954	ug/L		04/19/2016	☐	☐
029	☐ Substantially identical to outfall:	☐	QBM	Chemical Oxygen Demand (COD)	BQL		20.0 mg/L	04/19/2016	☐	☐
029	☐ Substantially identical to outfall:	☐	QBM	Iron, total	786	ug/L		04/19/2016	☐	☐
029	☐ Substantially identical to outfall:	☐	QBM	Total Suspended Solids (TSS)	36.8	mg/L		04/19/2016	☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

029: The impaired water pollutant total recoverable Aluminum exceeds the New Mexico water quality standard.

G. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

First Name, Middle Initial, Last Name: Anthony R Grieggs

Title: EPC-CP Group Leader

Signature:  Date 07/01/2016

E-mail: grieggst@lanl.gov

NPDES FORM 6100-29	EPA	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460 MSGP INDUSTRIAL DISCHARGE MONITORING REPORT (DMR) FORM	Form Approved. OMB No. 2040-0004

A. Approval to User Paper DMR Form

1. Have you been granted a waiver from electronic reporting from EPA Regional Office*? [X] YES [ ] NO

If yes, check which waiver you have been granted, the name of the EPA Regional Office staff person who granted the waiver, and the date of approval:

Waiver granted:
- [ ] The owner/operator's headquarters is physically located in a geographic area (i.e., ZIP code or census tract) that is identified as under-served for broadband Internet access in the most recent report from the Federal Communications Commission.
- [X] The owner/operator has issues regarding available computer access or computer capability.

Name of EPA staff person that granted the waiver: Everett Spencer

Date approval obtained: 06/17/2016

*** Note: You are required to obtain approval from the applicable EPA Regional Office prior to using this paper DMR form. If you have not obtained a waiver, you must file this form electronically using the NetDMR at http://www.epa.gov/netdmr/**

B. Permit Information

1. NPDES ID: NMR053195

2. Reason(s) for Submission (Check all that apply):

- [ ] Submitting monitoring data (Fill in all Sections).
- [X] Reporting no discharge for all outfalls for this monitoring period (Fill in Sections A, B, C, D, E.1, and G).
- [ ] Reporting that your site status has changed to inactive and unstaffed (Fill in Sections A, B, C, D, and F and include date of status change in comment field in Section F.4).
- [ ] Reporting that your site status has changed to active (Fill in all Sections and include date of status change in comment field in Section F.4).
- [ ] Reporting that no further pollutant reductions are achievable for all outfalls and for all pollutants via Part 6.2.1.2 of the MSGP (Fill in Sections A, B, C, D, and G).

C. Facility Operator Information

1. Operator Information

Operator Name: Los Alamos National Security, LLC

Mailing Address:

Street: P.O. Box 1663, MS K490

City: Los Alamos State: NM ZIP Code: 87545 -

Phone: 505 667 0666

E-mail: grieggst@lanl.gov

2. DMR Preparer (Complete if DMR was prepared by someone other than the certifier):

First Name, Middle Initial, Last Name: Holly L. Wheeler

Organization: EPC-CP

Phone: 505 667 1312 Ext.

E-mail: hbenson@lanl.gov

D. Facility Information

1. Facility Name: Los Alamos National Laboratory

2. Facility Address:

Street/Location: Bikini Atoll Rd. SM30 K490

City: Los Alamos State: NM ZIP Code: 87545 -

County or Similar Government Subdivision: Los Alamos

E. Discharge Information

1. Identify monitoring period: [X] Check here if proposing alternative monitoring periods due to irregular stormwater runoff. Identify alternative monitoring schedule and indicate for which alternative monitoring period you are reporting monitoring data:

[ ] Quarter 1 (January 1 – March 31)	[X] Quarter 1: From	04 / 01	To 05 / 31
[ ] Quarter 2 (April 1 – June 30)	[ ] Quarter 2: From	06 / 01	To 07 / 31
[ ] Quarter 3 (July 1 – September 30)	[ ] Quarter 3: From	08 / 01	To 09 / 30
[ ] Quarter 4 (October 1 – December 31)	[ ] Quarter 4: From	10 / 01	To 11 / 30

2. Are you required to monitor for cadmium, copper, chromium, lead, nickel, silver, or zinc in freshwater? [X] Yes (Skip to 3) [ ] No (Skip to 4)

3. What is the hardness level of the receiving water? 57

4. Does your facility discharge into any saltwater receiving waters? [ ] Yes [X] No

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: ☐ Rainfall (Complete line items 2.a., 2.b., & 2.c.) ☐ Snowmelt

2.a. Duration of the rainfall event (hours): 2.b. Rainfall amount (inches): 2.c. Time since previous measurable storm event (days):

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
012	☐ Substantially identical to outfall:	☒							☐	☐
011	☒ Substantially identical to outfall: 012	☐							☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

012: NODI: C

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: ☐ Rainfall (Complete line items 2.a., 2.b., & 2.c.) ☐ Snowmelt

2.a. Duration of the rainfall event (hours): 2.b. Rainfall amount (inches): 2.c. Time since previous measurable storm event (days):

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
020	☐ Substantially identical to outfall:	☒							☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

020: NODI: C

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: ☐ Rainfall (Complete line items 2.a., 2.b., & 2.c.) ☐ Snowmelt

2.a. Duration of the rainfall event (hours): 2.b. Rainfall amount (inches): 2.c. Time since previous measurable storm event (days):

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
031	☐ Substantially identical to outfall:	☒							☐	☐
030	☒ Substantially identical to outfall: 031	☐							☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

031: NODI: C

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: ☐ Rainfall (Complete line items 2.a., 2.b., & 2.c.) ☐ Snowmelt

2.a. Duration of the rainfall event (hours): 2.b. Rainfall amount (inches): 2.c. Time since previous measurable storm event (days):

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
036	☐ Substantially identical to outfall:	☒							☐	☐
037	☒ Substantially identical to outfall: 036	☒							☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

036: NODI: C

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: ☐ Rainfall (Complete line items 2.a., 2.b., & 2.c.) ☐ Snowmelt

2.a. Duration of the rainfall event (hours): 2.b. Rainfall amount (inches): 2.c. Time since previous measurable storm event (days):

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
039	☐ Substantially identical to outfall:	☒							☐	☐
038	☒ Substantially identical to outfall: 039	☒							☐	☐
040	☒ Substantially identical to outfall: 039	☒							☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

039: NODI: C

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: ☐ Rainfall (Complete line items 2.a., 2.b., & 2.c.) ☐ Snowmelt

2.a. Duration of the rainfall event (hours): 2.b. Rainfall amount (inches): 2.c. Time since previous measurable storm event (days):

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
042	☐ Substantially identical to outfall:	☒							☐	☐
041	☒ Substantially identical to outfall: 042	☐							☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

042: NODI: C

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: ☐ Rainfall (Complete line items 2.a., 2.b., & 2.c.) ☐ Snowmelt

2.a. Duration of the rainfall event (hours): 2.b. Rainfall amount (inches): 2.c. Time since previous measurable storm event (days):

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
043	☐ Substantially identical to outfall:	☒							☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

043: NODI: C

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: ☐ Rainfall (Complete line items 2.a., 2.b., & 2.c.) ☐ Snowmelt

2.a. Duration of the rainfall event (hours): 2.b. Rainfall amount (inches): 2.c. Time since previous measurable storm event (days):

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
051	☐ Substantially identical to outfall:	☒							☐	☐
052	☒ Substantially identical to outfall: 051	☐							☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

051: NODI: C

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: ☐ Rainfall (Complete line items 2.a., 2.b., & 2.c.) ☐ Snowmelt

2.a. Duration of the rainfall event (hours): 2.b. Rainfall amount (inches): 2.c. Time since previous measurable storm event (days):

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
053	☐ Substantially identical to outfall:	☒							☐	☐
065	☒ Substantially identical to outfall: 053	☐							☐	☐
066	☒ Substantially identical to outfall: 053	☐							☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

053: NODI: C

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: ☐ Rainfall (Complete line items 2.a., 2.b., & 2.c.) ☐ Snowmelt

2.a. Duration of the rainfall event (hours): 2.b. Rainfall amount (inches): 2.c. Time since previous measurable storm event (days):

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
072	☐ Substantially identical to outfall:	☒							☐	☐
070	☒ Substantially identical to outfall: 072	☐							☐	☐
071	☒ Substantially identical to outfall: 072	☐							☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

072: NODI: C

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: ☐ Rainfall (Complete line items 2.a., 2.b., & 2.c.) ☐ Snowmelt

2.a. Duration of the rainfall event (hours): 2.b. Rainfall amount (inches): 2.c. Time since previous measurable storm event (days):

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
075	☐ Substantially identical to outfall:	☒							☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

075: NODI: C

G. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

First Name, Middle Initial, Last Name: Anthony R Grieggs

Title: EPC-CP Group Leader

Signature: 

Date 07/01/2016

E-mail: grieggst@lanl.gov

Los Alamos
NATIONAL LABORATORY
EST. 1943

memorandum

Environmental Protection & Compliance Division

To: Marc Gallegos, DESHF-STO, E509
Thru: Terrill Lemke, EPC-CP, (E-File) TL
From: Holly Wheeler, EPC-CP, (E-File) HW
Phone: 505-667-1312
Symbol: EPC-DO: 18-006
Date: JAN 12 2018

Subject: National Pollutant Discharge Elimination System (NPDES) Permit Tracking No. NMR053195, Multi-Sector General Permit (MSGP) Quarterly Visual Assessment (QVA) Forms for August and September of 2017 for the TA-3-66 Sigma Complex

Please find attached completed MSGP QVA forms documenting visual assessments performed during the third quarter of monitoring at the TA-3-66 Sigma Complex. Per Parts 3.2.2 and 5.5 of the 2015 MSGP, the signed certification statement and associated QVA forms shall be incorporated into your MSGP Stormwater Pollution Prevention Plan (SWPPP).

Part 3.2.1 of the 2015 MSGP requires the visual assessment of stormwater discharge samples collected from each outfall once each quarter for the entire permit term. Part 3.2.3 allows facilities that are located in an area with a semi-arid climate and/or in an area where freezing conditions exist for an extended period to distribute the quarterly visual assessments during seasons when precipitation runoff occurs. Accordingly, Los Alamos National Security, LLC (LANS) has designated the following MSGP monitoring quarters.

Quarter 1:	April – May	Quarter 2:	June – July
Quarter 3:	August – September	Quarter 4:	October - November

The attached QVA forms document the following information as required by Part 3.2.2 of the 2015 MSGP and were completed by Environmental Compliance Programs (EPC-CP) personnel.

- Sample location;
- Sample collection date and time, and visual assessment date and time for each sample;
- Personnel collecting the sample and performing the visual assessment, and their signatures;
- Nature of the discharge (i.e., runoff or snowmelt);
- Results of observations of the stormwater discharge;
- Probable sources of any observed stormwater contamination (if applicable);
- If applicable, why it was not possible to take a sample within the first 30 minutes of the storm event.

EPC-DO: 18-006
Marc Gallegos

The EPC-CP Group Leader has signed the certification statement to meet the duly authorized signatory requirements for the QVAs completed by EPC-CP representatives contained in Enclosure 1.

> I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information contained therein. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information contained is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.
>
> Taunia S. Van Valkenburg, EPC-CP Group Leader
> Los Alamos National Security, LLC
>
> Manager Signature _____ Date 1/12/18

Part 3.2.3 of the 2015 MSGP allows the facility to take a substitute sample during the next qualifying storm event when adverse weather conditions prevent the collection of samples during a specific quarter. Adverse weather conditions are those that are dangerous or create inaccessibility for personnel, or situations that otherwise make sampling impractical, such as drought or extended frozen conditions. Documentation of the rationale for no visual assessment for the quarter must be included in the facility-specific SWPPP.

Please contact Holly Wheeler at 667-1312 (hbenson@lanl.gov) if you have questions regarding the QVA documentation. Thank you for your assistance in meeting the requirements of the Laboratory's NPDES 2015 MSGP Permit.

Facility Name	**Sampling Station**	**Work Order #**
TA-3-66 Sigma Complex	MSGP02001	MSGP-60965
TA-3-66 Sigma Complex	MSGP01701	MSGP-61102
TA-3-66 Sigma Complex	MSGP01301	MSGP-61120
TA-3-66 Sigma Complex	MSGP01401	MSGP-61121
TA-3-66 Sigma Complex	MSGP01501	MSGP-61122
TA-3-66 Sigma Complex	MSGP01601	MSGP-61123
TA-3-66 Sigma Complex	MSGP01901	MSGP-61124

EPC-DO: 18-006
Marc Gallegos

TWL/HLW: am

Enclosure(s): 1) Quarterly Visual Assessment Forms, Third Quarter, 2017 Monitoring Year

Copy: Garry Schramm, DESHF-STO (E-File)
Adesh-records@lanl.gov, (E-File)
lasomailbox@nnsa.doe.gov, (E-File)
locatesteam@lanl.gov, (E-File)
epc-correspondence@lanl.gov, (E-File)

ENCLOSURE 1

Quarterly Visual Assessment Forms
Third Quarter, 2017 Monitoring Year

EPC-DO: 18-006

Date: _____

Los Alamos National Lab - ADESH

Work Order MSGP-60965

MSGP Monitoring Stations
Printed 10/17/2017 - 5:00 PM

Maintenance Details

Requested By: Banar, Alethea on 8/9/2017 10:45:00 AM
Taken By: Banar, Alethea
Procedure: MSGP Quarterly Visual Assessment (EPC Sig) (EPC-CP-Form-1021.23)
Last PM: 8/7/2017
Project: Visual Assessments 8/1/17 (P-MSGP-5208)

Target: 9/30/2017
Priority/Type: / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (020)
MSGP02001

Contact: Banar, Alethea
Phone: 699-5836

Reason: MSGP Quarterly Visual Assessment (EPC Sig)

Special Instructions: NMR053195

Tasks

#	Description	Meas.	No	N/A	Yes
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.				
	Sample information				
30	Document the monitoring Period (e.g., Apr-May)	Q3	☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)		☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	9/29/17 10:46	☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	9/29/17 10:46	☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	9/29/17 12:00	☐	☐	☑
70	Document the nature of discharge (e.g., rain, snowmelt). Document the TOTAL amount (in) in the "Reading" field of this line.	Rain 0.13 inches	☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide a reason.		☐	☐	☑
	Parameters				
110	Is sample colorless? If "Failed", describe.		☐	☐	☑
120	Is sample oderless? If "Failed", provide description (e.g. musty, sewage, sulfur, sour, solvent, petroleum/gas)		☐	☐	☑
130	Is sample clear? If "Failed", provide description (e.g., slightly cloudy, cloudy, opaque).		☐	☐	☑
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.		☐	☐	☑
150	Is sample free of settled solids? If "Failed", provide description (e.g., fine, course).		☐	☐	☑
160	Is sample free of suspended solids? If "Failed", provide description (e.g., fine, course).		☐	☐	☑
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location (e.g.,'on the surface' or 'in the sample').		☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs).		☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe.		☐	☐	☑

Labor Report

Completed: 9/29/2017 12:00:00 PM

Report: Brad Schilling

10/3/2017

Signature / Name | Date | Signature / Name | Date

I confirm the information as recorded is true, accurate and complete.

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg. FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Grieggs, EPC-CP Group Leader

Signature: (See signature on file) Date:

Los Alamos National Lab - ADESH

Work Order MSGP-61102

MSGP Monitoring Stations
Printed 10/17/2017 - 5:02 PM

Maintenance Details

Requested By: Banar, Alethea on 8/8/2017 3:26:00 PM
Taken By: Banar, Alethea
Procedure: MSGP Quarterly Visual Assessment (EPC Sig) (EPC-CP-Form-1021.23)
Last PM: 8/7/2017
Project: Visual Assessments 8/1/17 (P-MSGP-5208)

Target: 9/30/2017
Priority/Type: / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (017)
MSGP01701

Contact: Banar, Alethea
Phone: 699-5836

Reason: MSGP Quarterly Visual Assessment (EPC Sig)

Special Instructions: NMR053195

Tasks

#	Description	Meas.	No	N/A	Yes
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.				
	Sample information				
30	Document the monitoring Period (e.g., Apr-May) **Comments: Aug-Sept**		☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)		☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format). **Comments: 8/11/17 at 14:17**		☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format). **Comments: 8/11/17 at 14:17**		☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format). **Comments: 8/15/17 at 12:28**		☐	☐	☑
70	Document the nature of discharge (e.g., rain, snowmelt). Document the TOTAL amount (in) in the "Reading" field of this line. **Comments: rain 0.48 inches**		☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide a reason.		☐	☐	☑
	Parameters				
110	Is sample colorless? If "Failed", describe.		☐	☐	☑
120	Is sample oderless? If "Failed", provide description (e.g. musty, sewage, sulfur, sour, solvent, petroleum/gas)		☐	☐	☑
130	Is sample clear? If "Failed", provide description (e.g., slightly cloudy, cloudy, opaque). **Comments: slightly cloudy**		☒	☐	☐
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.		☐	☐	☑
150	Is sample free of settled solids? If "Failed", provide description (e.g., fine, course). **Comments: fine**		☒	☐	☐
160	Is sample free of suspended solids? If "Failed", provide description (e.g., fine, course).		☐	☐	☑
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location (e.g.,'on the surface' or 'in the sample').		☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs).		☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe.		☐	☐	☑

Labor Report

Completed: 8/15/2017 12:28:00 PM

Report: Brad Schilling

Signature / Name	Date	Signature / Name	Date
	8/15/2017		

I confirm the information as recorded is true, accurate and complete.

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg. FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Grieggs, EPC-CP Group Leader

Signature: (See signature on file) Date:

Los Alamos National Lab - ADESH

Work Order MSGP-61120

MSGP Monitoring Stations
Printed 10/17/2017 - 5:04 PM

Maintenance Details

Requested: 8/9/2017 2:44:00 PM
Procedure: MSGP Quarterly Visual Assessment (EPC Sig) (EPC-CP-Form-1021.2 3)
Last PM: 8/9/2017
Project: SIO Visual Assessments 8/1/17 (P-MSGP-5209)

Target: 9/30/2017
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (017)
Substantially Identical Outfall (013)
MSGP01301

Contact:
Phone:

Reason: MSGP Quarterly Visual Assessment (EPC Sig)

Special Instructions: NMR053195

Tasks

#	Description	Meas.	No	N/A	Yes
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.				
	Sample information				
30	Document the monitoring Period (e.g., Apr-May)	aug-sept	☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)		☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/20/17 1:29	☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/20/17 1:29	☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/22/17 10:41	☐	☐	☑
70	Document the nature of discharge (e.g., rain, snowmelt). Document the TOTAL amount (in) in the "Reading" field of this line.	rain .31	☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide a reason.		☐	☐	☑
	Parameters				
110	Is sample colorless? If "Failed", describe.	brown	☒	☐	☐
120	Is sample oderless? If "Failed", provide description (e.g. musty, sewage, sulfur, sour, solvent, petroleum/gas)	musty	☒	☐	☐
130	Is sample clear? If "Failed", provide description (e.g., slightly cloudy, cloudy, opaque).	cloudy	☒	☐	☐
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.	vegetation	☒	☐	☐
150	Is sample free of settled solids? If "Failed", provide description (e.g., fine, course).	coarse	☒	☐	☐
160	Is sample free of suspended solids? If "Failed", provide description (e.g., fine, course).	coarse	☒	☐	☐
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location (e.g.,'on the surface' or 'in the sample').		☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs).		☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe.		☐	☐	☑

Labor Report

Completed: 8/22/2017 10:41:00 AM

Report: Marwin Shendo

8/25/2017

Signature / Name	Date	Signature / Name	Date

I confirm the information as recorded is true, accurate and complete.

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg. FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Grieggs, EPC-CP Group Leader

Signature: (See signature on file) Date:

Los Alamos National Lab - ADESH

Work Order MSGP-61121

MSGP Monitoring Stations
Printed 10/17/2017 - 5:05 PM

Maintenance Details

Requested: 8/9/2017 2:44:00 PM
Procedure: MSGP Quarterly Visual Assessment (EPC Sig) (EPC-CP-Form-1021.2 3)
Last PM: 8/9/2017
Project: SIO Visual Assessments 8/1/17 (P-MSGP-5209)

Target: 9/30/2017
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (017)
Substantially Identical Outfall (014)
MSGP01401

Contact:
Phone:

Reason: MSGP Quarterly Visual Assessment (EPC Sig)

Special Instructions: NMR053195

Tasks

#	Description	Meas.	No	N/A	Yes
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.				
	Sample information				
30	Document the monitoring Period (e.g., Apr-May)	aug-sept	☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)		☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/11/17 13:56	☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/11/17 13:56	☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/16/17 15:11	☐	☐	☑
70	Document the nature of discharge (e.g., rain, snowmelt). Document the TOTAL amount (in) in the "Reading" field of this line.	rain .48	☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide a reason.		☐	☐	☑
	Parameters				
110	Is sample colorless? If "Failed", describe.	brown	☒	☐	☐
120	Is sample oderless? If "Failed", provide description (e.g. musty, sewage, sulfur, sour, solvent, petroleum/gas)	musty	☒	☐	☐
130	Is sample clear? If "Failed", provide description (e.g., slightly cloudy, cloudy, opaque).	opaque	☒	☐	☐
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.	veg	☒	☐	☐
150	Is sample free of settled solids? If "Failed", provide description (e.g., fine, course).	coarse	☒	☐	☐
160	Is sample free of suspended solids? If "Failed", provide description (e.g., fine, course).	coarse	☒	☐	☐
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location (e.g.,'on the surface' or 'in the sample').		☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs).		☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe.		☐	☐	☑

Labor Report

Completed: 8/16/2017 3:11:00 PM

Report: Marwin Shendo

8/21/2017

Signature / Name	Date	Signature / Name	Date

I confirm the information as recorded is true, accurate and complete.

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg. FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Grieggs, EPC-CP Group Leader

Signature: (See signature on file) Date:

Los Alamos National Lab - ADESH

Work Order MSGP-61122

MSGP Monitoring Stations
Printed 10/17/2017 - 5:06 PM

Maintenance Details

Requested: 8/9/2017 2:44:00 PM
Procedure: MSGP Quarterly Visual Assessment (EPC Sig) (EPC-CP-Form-1021.2 3)
Last PM: 8/9/2017
Project: SIO Visual Assessments 8/1/17 (P-MSGP-5209)

Target: 9/30/2017
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (017)
Substantially Identical Outfall (015)
MSGP01501

Contact:
Phone:

Reason: MSGP Quarterly Visual Assessment (EPC Sig)

Special Instructions: NMR053195

Tasks

#	Description	Meas.	No	N/A	Yes
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.				
	Sample information				
30	Document the monitoring Period (e.g., Apr-May)	aug-sept	☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)		☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/11/17 13:52	☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/11/17 13:52	☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/16/17 15:14	☐	☐	☑
70	Document the nature of discharge (e.g., rain, snowmelt). Document the TOTAL amount (in) in the "Reading" field of this line.	rain .48	☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide a reason.		☐	☐	☑
	Parameters				
110	Is sample colorless? If "Failed", describe.	brown	☒	☐	☐
120	Is sample oderless? If "Failed", provide description (e.g. musty, sewage, sulfur, sour, solvent, petroleum/gas)	musty	☒	☐	☐
130	Is sample clear? If "Failed", provide description (e.g., slightly cloudy, cloudy, opaque).	opaque	☒	☐	☐
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.	veg	☒	☐	☐
150	Is sample free of settled solids? If "Failed", provide description (e.g., fine, course).	fine	☒	☐	☐
160	Is sample free of suspended solids? If "Failed", provide description (e.g., fine, course).	coarse	☒	☐	☐
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location (e.g.,'on the surface' or 'in the sample').		☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs).		☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe.		☐	☐	☑

Labor Report

Completed: 8/16/2017 3:14:00 PM

Report: Marwin Shendo

8/21/2017

Signature / Name	Date	Signature / Name	Date

I confirm the information as recorded is true, accurate and complete.

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg. FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Grieggs, EPC-CP Group Leader

Signature: (See signature on file) Date:

Los Alamos National Lab - ADESH

Work Order MSGP-61123

MSGP Monitoring Stations
Printed 10/17/2017 - 5:07 PM

Maintenance Details

Requested: 8/9/2017 2:44:00 PM
Procedure: MSGP Quarterly Visual Assessment (EPC Sig) (EPC-CP-Form-1021.2 3)
Last PM: 8/9/2017
Project: SIO Visual Assessments 8/1/17 (P-MSGP-5209)

Target: 9/30/2017
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (017)
Substantially Identical Outfall (016)
MSGP01601

Contact:
Phone:

Reason: MSGP Quarterly Visual Assessment (EPC Sig)

Special Instructions: NMR053195

Tasks

#	Description	Meas.	No	N/A	Yes
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.				
	Sample information				
30	Document the monitoring Period (e.g., Apr-May)	aug-sept	☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)		☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/11/17 13:54	☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/11/17 13:54	☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/16/17 15:22	☐	☐	☑
70	Document the nature of discharge (e.g., rain, snowmelt). Document the TOTAL amount (in) in the "Reading" field of this line.	rain .48	☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide a reason.		☐	☐	☑
	Parameters				
110	Is sample colorless? If "Failed", describe.		☐	☐	☑
120	Is sample oderless? If "Failed", provide description (e.g. musty, sewage, sulfur, sour, solvent, petroleum/gas)		☐	☐	☑
130	Is sample clear? If "Failed", provide description (e.g., slightly cloudy, cloudy, opaque).		☐	☐	☑
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.	veg	☒	☐	☐
150	Is sample free of settled solids? If "Failed", provide description (e.g., fine, course).		☐	☐	☑
160	Is sample free of suspended solids? If "Failed", provide description (e.g., fine, course).	coarse	☒	☐	☐
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location (e.g.,'on the surface' or 'in the sample').		☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs).		☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe.		☐	☐	☑

Labor Report

Completed: 8/16/2017 3:22:00 PM

Report: Marwin Shendo

8/21/2017

Signature / Name	Date	Signature / Name	Date

I confirm the information as recorded is true, accurate and complete.

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg. FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Grieggs, EPC-CP Group Leader

Signature: (See signature on file) Date:

Los Alamos National Lab - ADESH

Work Order MSGP-61124

MSGP Monitoring Stations
Printed 10/17/2017 - 5:07 PM

Maintenance Details

Requested: 8/9/2017 2:44:00 PM
Procedure: MSGP Quarterly Visual Assessment (EPC Sig) (EPC-CP-Form-1021.2 3)
Last PM: 8/9/2017
Project: SIO Visual Assessments 8/1/17 (P-MSGP-5209)

Target: 9/30/2017
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex
Monitored Outfall (017)
Substantially Identical Outfall (019)
MSGP01901

Contact:
Phone:

Reason: MSGP Quarterly Visual Assessment (EPC Sig)

Special Instructions: NMR053195

Tasks

#	Description	Meas.	No	N/A	Yes
	The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.				
	Sample information				
30	Document the monitoring Period (e.g., Apr-May)	aug-sept	☐	☐	☑
35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)		☐	☐	☑
40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/11/17 13:45	☐	☐	☑
50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/11/17 13:45	☐	☐	☑
60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).	8/16/17 15:19	☐	☐	☑
70	Document the nature of discharge (e.g., rain, snowmelt). Document the TOTAL amount (in) in the "Reading" field of this line.	rain .48	☐	☐	☑
80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide a reason.		☐	☐	☑
	Parameters				
110	Is sample colorless? If "Failed", describe.		☐	☐	☑
120	Is sample oderless? If "Failed", provide description (e.g. musty, sewage, sulfur, sour, solvent, petroleum/gas)		☐	☐	☑
130	Is sample clear? If "Failed", provide description (e.g., slightly cloudy, cloudy, opaque).		☐	☐	☑
140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.	veg	☒	☐	☐
150	Is sample free of settled solids? If "Failed", provide description (e.g., fine, course).		☐	☐	☑
160	Is sample free of suspended solids? If "Failed", provide description (e.g., fine, course).	coarse	☒	☐	☐
170	Is sample foamless after gently shaking? If "Failed" describe foam color and location (e.g.,'on the surface' or 'in the sample').		☐	☐	☑
180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs).		☐	☐	☑
190	Is sample free of other obvious indicators of pollution? If "Failed", describe.		☐	☐	☑

Labor Report

Completed: 8/16/2017 3:19:00 PM

Report: Marwin Shendo

8/21/2017

Signature / Name	Date	Signature / Name	Date

I confirm the information as recorded is true, accurate and complete.

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg. FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title: Anthony R. Grieggs, EPC-CP Group Leader

Signature: (See signature on file) Date:

NPDES FORM 6100-29	EPA	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460 MSGP INDUSTRIAL DISCHARGE MONITORING REPORT (DMR) FORM	Form Approved. OMB No. 2040-0004

A. Approval to User Paper DMR Form

1. Have you been granted a waiver from electronic reporting from EPA Regional Office*? [X] YES [ ] NO

If yes, check which waiver you have been granted, the name of the EPA Regional Office staff person who granted the waiver, and the date of approval:

Waiver granted:

[ ] The owner/operator's headquarters is physically located in a geographic area (i.e., ZIP code or census tract) that is identified as under-served for broadband Internet access in the most recent report from the Federal Communications Commission.

[X] The owner/operator has issues regarding available computer access or computer capability.

Name of EPA staff person that granted the waiver: Everett Spencer

Date approval obtained: 06/17/2016

*** Note: You are required to obtain approval from the applicable EPA Regional Office prior to using this paper DMR form. If you have not obtained a waiver, you must file this form electronically using the NetDMR at http://www.epa.gov/netdmr/**

B. Permit Information

1. NPDES ID: NMR053195

2. Reason(s) for Submission (Check all that apply):

[X] Submitting monitoring data (Fill in all Sections).

[ ] Reporting no discharge for all outfalls for this monitoring period (Fill in Sections A, B, C, D, E.1, and G).

[ ] Reporting that your site status has changed to inactive and unstaffed (Fill in Sections A, B, C, D, and F and include date of status change in comment field in Section F.4).

[ ] Reporting that your site status has changed to active (Fill in all Sections and include date of status change in comment field in Section F.4).

[ ] Reporting that no further pollutant reductions are achievable for all outfalls and for all pollutants via Part 6.2.1.2 of the MSGP (Fill in Sections A, B, C, D, and G).

C. Facility Operator Information

1. Operator Information

Operator Name: Los Alamos National Security, LLC

Mailing Address:

Street: P.O. Box 1663, MS K490

City: Los Alamos State: NM ZIP Code: 87545 -

Phone: 505 667 0666

E-mail: grieggst@lanl.gov

2. DMR Preparer (Complete if DMR was prepared by someone other than the certifier):

First Name, Middle Initial, Last Name: Holly L. Wheeler

Organization: EPC-CP

Phone: 505 667 1312 Ext.

E-mail: hbenson@lanl.gov

D. Facility Information

1. Facility Name: Los Alamos National Laboratory

2. Facility Address:

Street/Location: Bikini Atoll Rd. SM30 K490

City: Los Alamos State: NM ZIP Code: 87545 -

County or Similar Government Subdivision: Los Alamos

E. Discharge Information

1. Identify monitoring period:

[X] Check here if proposing alternative monitoring periods due to irregular stormwater runoff. Identify alternative monitoring schedule and indicate for which alternative monitoring period you are reporting monitoring data:

[ ] Quarter 1 (January 1 – March 31)	[X] Quarter 1: From	04 / 01	To 05 / 31
[ ] Quarter 2 (April 1 – June 30)	[ ] Quarter 2: From	06 / 01	To 07 / 31
[ ] Quarter 3 (July 1 – September 30)	[ ] Quarter 3: From	08 / 01	To 09 / 30
[ ] Quarter 4 (October 1 – December 31)	[ ] Quarter 4: From	10 / 01	To 11 / 30

2. Are you required to monitor for cadmium, copper, chromium, lead, nickel, silver, or zinc in freshwater? [X] Yes (Skip to 3) [ ] No (Skip to 4)

3. What is the hardness level of the receiving water? 57

4. Does your facility discharge into any saltwater receiving waters? [ ] Yes [X] No

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 2 2.b. Rainfall amount (inches): 0.2 2.c. Time since previous measurable storm event (days): 152

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
018	[ ] Substantially identical to outfall:	[ ]	I	Aluminum, total recoverable	183	ug/L		04/15/2016	[ ]	[ ]
018	[ ] Substantially identical to outfall:	[ ]	QBM	Aluminum, total recoverable	183	ug/L		04/15/2016	[ ]	[ ]
018	[ ] Substantially identical to outfall:	[ ]	QBM	Iron, total	784	ug/L		04/15/2016	[ ]	[ ]
013	[X] Substantially identical to outfall: 018	[X]							[ ]	[ ]
014	[X] Substantially identical to outfall: 018	[ ]							[ ]	[ ]
015	[X] Substantially identical to outfall: 018	[ ]							[ ]	[ ]
016	[X] Substantially identical to outfall: 018	[X]							[ ]	[ ]
017	[X] Substantially identical to outfall: 018	[X]							[ ]	[ ]

019	[X] Substantially identical to outfall: 018	[X]							☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 1.58 hours. Rainfall amount = 0.24 inches.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 2 2.b. Rainfall amount (inches): 0.2 2.c. Time since previous measurable storm event (days): 7

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
026	[ ] Substantially identical to outfall:	[ ]	I	Copper, dissolved	22.6	ug/L		04/15/2016	[ ]	[ ]
026	[ ] Substantially identical to outfall:	[ ]	I	Thallium, dissolved	ND		0.450 ug/L	04/15/2016	[ ]	[ ]
027	[X] Substantially identical to outfall: 026	[ ]							[ ]	[ ]
028	[X] Substantially identical to outfall: 026	[ ]							[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 1.58 hours. Rainfall amount = 0.24 inches.

026: The impaired water pollutant dissolved Copper exceeds the New Mexico water quality standard. The impaired water pollutant dissolved Thallium was not detected in stormwater discharge from this outfall. Therefore, annual monitoring for dissolved Thallium will be discontinued per Part 6.2.4.1.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 2 2.b. Rainfall amount (inches): 0.2 2.c. Time since previous measurable storm event (days): 7

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
029	[ ] Substantially identical to outfall:	[ ]	I	Copper, dissolved	34.4	ug/L		04/15/2016	[ ]	[ ]
029	[ ] Substantially identical to outfall:	[ ]	QBM	Copper, dissolved	34.4	ug/L		04/15/2016	[ ]	[ ]
029	[ ] Substantially identical to outfall:	[ ]	QBM	Lead, dissolved	BQL		2.00 ug/L	04/15/2016	[ ]	[ ]
029	[ ] Substantially identical to outfall:	[ ]	I	Thallium, dissolved	ND		0.450 ug/L	04/15/2016	[ ]	[ ]
029	[ ] Substantially identical to outfall:	[ ]	QBM	Zinc, dissolved	1530	ug/L		04/15/2016	[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 1.58 hours. Rainfall amount = 0.24 inches.

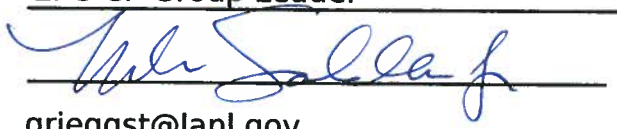
029: The impaired water pollutant dissolved Copper exceeds the New Mexico water quality standard. The average concentration of dissolved Copper is mathematically certain to exceed the benchmark value. The impaired water pollutant dissolved Thallium was not detected in stormwater discharge from this outfall. Therefore, annual monitoring for dissolved Thallium will be discontinued per Part 6.2.4.1. The average concentration of dissolved Zinc is mathematically certain to exceed the benchmark value.

G. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

First Name, Middle Initial, Last Name: Anthony R Grieggs

Title: EPC-CP Group Leader

Signature:  Date 07/01/2016

E-mail: grieggst@lanl.gov

NPDES FORM 6100-29	EPA	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460 MSGP INDUSTRIAL DISCHARGE MONITORING REPORT (DMR) FORM	Form Approved. OMB No. 2040-0004

A. Approval to User Paper DMR Form

1. Have you been granted a waiver from electronic reporting from EPA Regional Office*? [X] YES [ ] NO

If yes, check which waiver you have been granted, the name of the EPA Regional Office staff person who granted the waiver, and the date of approval:

Waiver granted:
- [ ] The owner/operator's headquarters is physically located in a geographic area (i.e., ZIP code or census tract) that is identified as under-served for broadband Internet access in the most recent report from the Federal Communications Commission.
- [X] The owner/operator has issues regarding available computer access or computer capability.

Name of EPA staff person that granted the waiver: Everett Spencer

Date approval obtained: 06/17/2016

*** Note: You are required to obtain approval from the applicable EPA Regional Office prior to using this paper DMR form. If you have not obtained a waiver, you must file this form electronically using the NetDMR at http://www.epa.gov/netdmr/**

B. Permit Information

1. NPDES ID: NMR053195

2. Reason(s) for Submission (Check all that apply):

- [X] Submitting monitoring data (Fill in all Sections).
- [ ] Reporting no discharge for all outfalls for this monitoring period (Fill in Sections A, B, C, D, E.1, and G).
- [ ] Reporting that your site status has changed to inactive and unstaffed (Fill in Sections A, B, C, D, and F and include date of status change in comment field in Section F.4).
- [ ] Reporting that your site status has changed to active (Fill in all Sections and include date of status change in comment field in Section F.4).
- [ ] Reporting that no further pollutant reductions are achievable for all outfalls and for all pollutants via Part 6.2.1.2 of the MSGP (Fill in Sections A, B, C, D, and G).

C. Facility Operator Information

1. Operator Information

Operator Name: Los Alamos National Security, LLC

Mailing Address:

Street: P.O. Box 1663, MS K490

City: Los Alamos State: NM ZIP Code: 87545 -

Phone: 505 667 0666

E-mail: grieggst@lanl.gov

2. DMR Preparer (Complete if DMR was prepared by someone other than the certifier):

First Name, Middle Initial, Last Name: Holly L. Wheeler

Organization: EPC-CP

Phone: 505 667 1312 Ext.

E-mail: hbenson@lanl.gov

D. Facility Information

1. Facility Name: Los Alamos National Laboratory

2. Facility Address:

Street/Location: Bikini Atoll Rd. SM30 K490

City: Los Alamos State: NM ZIP Code: 87545 -

County or Similar Government Subdivision: Los Alamos

E. Discharge Information

1. Identify monitoring period: [X] Check here if proposing alternative monitoring periods due to irregular stormwater runoff. Identify alternative monitoring schedule and indicate for which alternative monitoring period you are reporting monitoring data:

[ ] Quarter 1 (January 1 – March 31)	[X] Quarter 1: From	04	/	01	To	05	/	31
[ ] Quarter 2 (April 1 – June 30)	[ ] Quarter 2: From	06	/	01	To	07	/	31
[ ] Quarter 3 (July 1 – September 30)	[ ] Quarter 3: From	08	/	01	To	09	/	30
[ ] Quarter 4 (October 1 – December 31)	[ ] Quarter 4: From	10	/	01	To	11	/	30

2. Are you required to monitor for cadmium, copper, chromium, lead, nickel, silver, or zinc in freshwater? [X] Yes (Skip to 3) [ ] No (Skip to 4)

3. What is the hardness level of the receiving water? 57

4. Does your facility discharge into any saltwater receiving waters? [ ] Yes [X] No

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: ☐ Rainfall (Complete line items 2.a., 2.b., & 2.c.) ☒ Snowmelt

2.a. Duration of the rainfall event (hours): 2.b. Rainfall amount (inches): 2.c. Time since previous measurable storm event (days):

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
004	☐ Substantially identical to outfall:	☐	I	Adjusted Gross Alpha	3.19	pCi/L		04/18/2016	☐	☐
004	☐ Substantially identical to outfall:	☐	I	Aluminum, total recoverable	9060	ug/L		04/18/2016	☐	☐
004	☐ Substantially identical to outfall:	☐	QBM	Aluminum, total recoverable	9060	ug/L		04/18/2016	☐	☐
004	☐ Substantially identical to outfall:	☐	I	Aroclor, total	BQL		0.103 ug/L	04/18/2016	☐	☐
004	☐ Substantially identical to outfall:	☐	QBM	Iron, total	1590	ug/L		04/18/2016	☐	☐
004	☐ Substantially identical to outfall:	☐	QBM	Nitrate plus Nitrite Nitrogen	0.163	mg/L		04/18/2016	☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

004: The impaired water pollutant total recoverable Aluminum exceeds the New Mexico water quality standard. The average concentration of total recoverable Aluminum is mathematically certain to exceed the benchmark value.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: ☐ Rainfall (Complete line items 2.a., 2.b., & 2.c.) ☒ Snowmelt

2.a. Duration of the rainfall event (hours): 2.b. Rainfall amount (inches): 2.c. Time since previous measurable storm event (days):

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
018	☐ Substantially identical to outfall:	☐	I	Copper, dissolved	4.7	ug/L		04/18/2016	☐	☐
018	☐ Substantially identical to outfall:	☐	QBM	Copper, dissolved	4.7	ug/L		04/18/2016	☐	☐
018	☐ Substantially identical to outfall:	☐	I	Thallium, dissolved	ND		0.450 ug/L	04/18/2016	☐	☐
018	☐ Substantially identical to outfall:	☐	QBM	Zinc, dissolved	2230	ug/L		04/18/2016	☐	☐
013	☒ Substantially identical to outfall: 018	☐							☐	☐
014	☒ Substantially identical to outfall: 018	☐							☐	☐
015	☒ Substantially identical to outfall: 018	☐							☐	☐
016	☒ Substantially identical to outfall: 018	☐							☐	☐

017	[X] Substantially identical to outfall: 018	☐							☐	☐
019	[X] Substantially identical to outfall: 018	☐							☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

018: The impaired water pollutant dissolved Thallium was not detected in stormwater discharge from this outfall. Therefore, annual monitoring for dissolved Thallium will be discontinued per Part 6.2.4.1. The average concentration of dissolved Zinc is mathematically certain to exceed the benchmark value.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: ☐ Rainfall (Complete line items 2.a., 2.b., & 2.c.) ☒ Snowmelt

2.a. Duration of the rainfall event (hours): 2.b. Rainfall amount (inches): 2.c. Time since previous measurable storm event (days):

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
032	☐ Substantially identical to outfall:	☐	I	Copper, dissolved	3.72	ug/L		04/18/2016	☐	☐
032	☐ Substantially identical to outfall:	☐	I	Thallium, dissolved	ND		0.450 ug/L	04/18/2016	☐	☐
033	☒ Substantially identical to outfall: 032	☐							☐	☐
034	☒ Substantially identical to outfall: 032	☐							☐	☐
035	☒ Substantially identical to outfall: 032	☐							☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

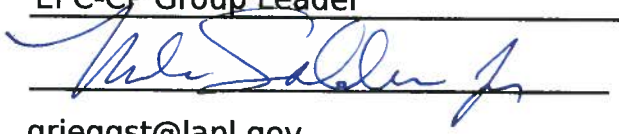
032: The impaired water pollutant dissolved Thallium was not detected in stormwater discharge from this outfall. Therefore, annual monitoring for dissolved Thallium will be discontinued per Part 6.2.4.1.

G. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

First Name, Middle Initial, Last Name: Anthony R Grieggs

Title: EPC-CP Group Leader

Signature:  Date 07/01/2016

E-mail: grieggst@lanl.gov

NPDES FORM 6100-29	EPA	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460 MSGP INDUSTRIAL DISCHARGE MONITORING REPORT (DMR) FORM	Form Approved. OMB No. 2040-0004

A. Approval to User Paper DMR Form

1. Have you been granted a waiver from electronic reporting from EPA Regional Office*? [X] YES [ ] NO

If yes, check which waiver you have been granted, the name of the EPA Regional Office staff person who granted the waiver, and the date of approval:

Waiver granted:

- [ ] The owner/operator's headquarters is physically located in a geographic area (i.e., ZIP code or census tract) that is identified as under-served for broadband Internet access in the most recent report from the Federal Communications Commission.
- [X] The owner/operator has issues regarding available computer access or computer capability.

Name of EPA staff person that granted the waiver: Everett Spencer

Date approval obtained: 06/17/2016

*** Note: You are required to obtain approval from the applicable EPA Regional Office prior to using this paper DMR form. If you have not obtained a waiver, you must file this form electronically using the NetDMR at http://www.epa.gov/netdmr/**

B. Permit Information

1. NPDES ID: NMR053195

2. Reason(s) for Submission (Check all that apply):

- [X] Submitting monitoring data (Fill in all Sections).
- [ ] Reporting no discharge for all outfalls for this monitoring period (Fill in Sections A, B, C, D, E.1, and G).
- [ ] Reporting that your site status has changed to inactive and unstaffed (Fill in Sections A, B, C, D, and F and include date of status change in comment field in Section F.4).
- [ ] Reporting that your site status has changed to active (Fill in all Sections and include date of status change in comment field in Section F.4).
- [ ] Reporting that no further pollutant reductions are achievable for all outfalls and for all pollutants via Part 6.2.1.2 of the MSGP (Fill in Sections A, B, C, D, and G).

C. Facility Operator Information

1. Operator Information

Operator Name: Los Alamos National Security, LLC

Mailing Address:

Street: P.O. Box 1663, MS K490

City: Los Alamos State: NM ZIP Code: 87545 -

Phone: 505 667 0666

E-mail: grieggst@lanl.gov

2. DMR Preparer (Complete if DMR was prepared by someone other than the certifier):

First Name, Middle Initial, Last Name: Holly L. Wheeler

Organization: EPC-CP

Phone: 505 667 1312 Ext.

E-mail: hbenson@lanl.gov

D. Facility Information

1. Facility Name: Los Alamos National Laboratory

2. Facility Address:

Street/Location: Bikini Atoll Rd. SM30 K490

City: Los Alamos State: NM ZIP Code: 87545 -

County or Similar Government Subdivision: Los Alamos

E. Discharge Information

1. Identify monitoring period: [X] Check here if proposing alternative monitoring periods due to irregular stormwater runoff. Identify alternative monitoring schedule and indicate for which alternative monitoring period you are reporting monitoring data:

[ ] Quarter 1 (January 1 – March 31)	[X] Quarter 1: From	04 / 01	To	05 / 31
[ ] Quarter 2 (April 1 – June 30)	[ ] Quarter 2: From	06 / 01	To	07 / 31
[ ] Quarter 3 (July 1 – September 30)	[ ] Quarter 3: From	08 / 01	To	09 / 30
[ ] Quarter 4 (October 1 – December 31)	[ ] Quarter 4: From	10 / 01	To	11 / 30

2. Are you required to monitor for cadmium, copper, chromium, lead, nickel, silver, or zinc in freshwater? [X] Yes (Skip to 3) [ ] No (Skip to 4)

3. What is the hardness level of the receiving water? 57

4. Does your facility discharge into any saltwater receiving waters? [ ] Yes [X] No

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: ☐ Rainfall (Complete line items 2.a., 2.b., & 2.c.) ☒ Snowmelt

2.a. Duration of the rainfall event (hours): 2.b. Rainfall amount (inches): 2.c. Time since previous measurable storm event (days):

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
002	☐ Substantially identical to outfall:	☐	I	Adjusted Gross Alpha	4.35	pCi/L		04/19/2016	☐	☐
002	☐ Substantially identical to outfall:	☐	I	Aluminum, total recoverable	643	ug/L		04/19/2016	☐	☐
002	☐ Substantially identical to outfall:	☐	QBM	Aluminum, total recoverable	643	ug/L		04/19/2016	☐	☐
002	☐ Substantially identical to outfall:	☐	I	Aroclor, total	ND		0.107 ug/L	04/19/2016	☐	☐
002	☐ Substantially identical to outfall:	☐	I	Copper, dissolved	7.35	ug/L		04/19/2016	☐	☐
002	☐ Substantially identical to outfall:	☐	QBM	Iron, total	2270	ug/L		04/19/2016	☐	☐
002	☐ Substantially identical to outfall:	☐	QBM	Nitrate plus Nitrite Nitrogen	0.188	mg/L		04/19/2016	☐	☐
002	☐ Substantially identical to outfall:	☐	I	Thallium, dissolved	ND		0.450 ug/L	04/19/2016	☐	☐

002	☐ Substantially identical to outfall:	☐	QBM	Zinc, dissolved	32	ug/L		04/19/2016	☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

002: The impaired water pollutant total Aroclors was not detected in stormwater discharge from this outfall. Therefore, annual monitoring for total Aroclors will be discontinued per Part 6.2.4.1. The impaired water pollutant dissolved Copper exceeds the New Mexico water quality standard. The impaired water pollutant dissolved Thallium was not detected in stormwater discharge from this outfall. Therefore, annual monitoring for dissolved Thallium will be discontinued per Part 6.2.4.1.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: ☐ Rainfall (Complete line items 2.a., 2.b., & 2.c.) ☒ Snowmelt

2.a. Duration of the rainfall event (hours): 2.b. Rainfall amount (inches): 2.c. Time since previous measurable storm event (days):

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
009	☐ Substantially identical to outfall:	☐	I	Copper, dissolved	9.01	ug/L		04/19/2016	☐	☐
009	☐ Substantially identical to outfall:	☐	I	Thallium, dissolved	BQL		2.00 ug/L	04/19/2016	☐	☐
007	☒ Substantially identical to outfall: 009	☐							☐	☐
008	☒ Substantially identical to outfall: 009	☒							☐	☐
010	☒ Substantially identical to outfall: 009	☐							☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

009: The impaired water pollutant dissolved Copper exceeds the New Mexico water quality standard. The impaired water pollutant dissolved Thallium exceeds the New Mexico water quality standard.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: ☐ Rainfall (Complete line items 2.a., 2.b., & 2.c.) ☒ Snowmelt

2.a. Duration of the rainfall event (hours): 2.b. Rainfall amount (inches): 2.c. Time since previous measurable storm event (days):

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
026	☐ Substantially identical to outfall:	☐	I	Adjusted Gross Alpha	ND			04/19/2016	☐	☐
026	☐ Substantially identical to outfall:	☐	I	Aluminum, total recoverable	1500	ug/L		04/19/2016	☐	☐
026	☐ Substantially identical to outfall:	☐	I	Aroclor, total	ND		0.0351 ug/L	04/19/2016	☐	☐
027	☒ Substantially identical to outfall: 026	☐							☐	☐
028	☒ Substantially identical to outfall: 026	☐							☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

026: The impaired water pollutant Adjusted Gross Alpha was not detected in stormwater discharge from this outfall. Therefore, annual monitoring for Adjusted Gross Alpha will be discontinued per Part 6.2.4.1. The impaired water pollutant total recoverable Aluminum exceeds the New Mexico water quality standard. The impaired water pollutant total Aroclors was not detected in stormwater discharge from this outfall. Therefore, annual monitoring for total Aroclors will be discontinued per Part 6.2.4.1.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: ☐ Rainfall (Complete line items 2.a., 2.b., & 2.c.) ☒ Snowmelt

2.a. Duration of the rainfall event (hours): 2.b. Rainfall amount (inches): 2.c. Time since previous measurable storm event (days):

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
029	☐ Substantially identical to outfall:	☐	I	Adjusted Gross Alpha	2.51	pCi/L		04/19/2016	☐	☐
029	☐ Substantially identical to outfall:	☐	I	Aluminum, total recoverable	954	ug/L		04/19/2016	☐	☐
029	☐ Substantially identical to outfall:	☐	QBM	Aluminum, total recoverable	954	ug/L		04/19/2016	☐	☐
029	☐ Substantially identical to outfall:	☐	QBM	Chemical Oxygen Demand (COD)	BQL		20.0 mg/L	04/19/2016	☐	☐
029	☐ Substantially identical to outfall:	☐	QBM	Iron, total	786	ug/L		04/19/2016	☐	☐
029	☐ Substantially identical to outfall:	☐	QBM	Total Suspended Solids (TSS)	36.8	mg/L		04/19/2016	☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

029: The impaired water pollutant total recoverable Aluminum exceeds the New Mexico water quality standard.

G. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

First Name, Middle Initial, Last Name: Anthony R Grieggs

Title: EPC-CP Group Leader

Signature:  Date 07/01/2016

E-mail: grieggst@lanl.gov

NPDES FORM 6100-29	EPA	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460 MSGP INDUSTRIAL DISCHARGE MONITORING REPORT (DMR) FORM	Form Approved. OMB No. 2040-0004

A. Approval to User Paper DMR Form

1. Have you been granted a waiver from electronic reporting from EPA Regional Office*? [X] YES [ ] NO

If yes, check which waiver you have been granted, the name of the EPA Regional Office staff person who granted the waiver, and the date of approval:

Waiver granted:
- [ ] The owner/operator's headquarters is physically located in a geographic area (i.e., ZIP code or census tract) that is identified as under-served for broadband Internet access in the most recent report from the Federal Communications Commission.
- [X] The owner/operator has issues regarding available computer access or computer capability.

Name of EPA staff person that granted the waiver: Everett Spencer

Date approval obtained: 06/17/2016

*** Note: You are required to obtain approval from the applicable EPA Regional Office prior to using this paper DMR form. If you have not obtained a waiver, you must file this form electronically using the NetDMR at http://www.epa.gov/netdmr/**

B. Permit Information

1. NPDES ID: NMR053195

2. Reason(s) for Submission (Check all that apply):

- [ ] Submitting monitoring data (Fill in all Sections).
- [X] Reporting no discharge for all outfalls for this monitoring period (Fill in Sections A, B, C, D, E.1, and G).
- [ ] Reporting that your site status has changed to inactive and unstaffed (Fill in Sections A, B, C, D, and F and include date of status change in comment field in Section F.4).
- [ ] Reporting that your site status has changed to active (Fill in all Sections and include date of status change in comment field in Section F.4).
- [ ] Reporting that no further pollutant reductions are achievable for all outfalls and for all pollutants via Part 6.2.1.2 of the MSGP (Fill in Sections A, B, C, D, and G).

C. Facility Operator Information

1. Operator Information

Operator Name: Los Alamos National Security, LLC

Mailing Address:

Street: P.O. Box 1663, MS K490

City: Los Alamos State: NM ZIP Code: 87545 -

Phone: 505 667 0666

E-mail: grieggst@lanl.gov

2. DMR Preparer (Complete if DMR was prepared by someone other than the certifier):

First Name, Middle Initial, Last Name: Holly L. Wheeler

Organization: EPC-CP

Phone: 505 667 1312 Ext.

E-mail: hbenson@lanl.gov

D. Facility Information

1. Facility Name: Los Alamos National Laboratory

2. Facility Address:

Street/Location: Bikini Atoll Rd. SM30 K490

City: Los Alamos State: NM ZIP Code: 87545 -

County or Similar Government Subdivision: Los Alamos

E. Discharge Information

1. Identify monitoring period: [X] Check here if proposing alternative monitoring periods due to irregular stormwater runoff. Identify alternative monitoring schedule and indicate for which alternative monitoring period you are reporting monitoring data:

[ ] Quarter 1 (January 1 – March 31)	[X] Quarter 1: From	04 / 01	To 05 / 31
[ ] Quarter 2 (April 1 – June 30)	[ ] Quarter 2: From	06 / 01	To 07 / 31
[ ] Quarter 3 (July 1 – September 30)	[ ] Quarter 3: From	08 / 01	To 09 / 30
[ ] Quarter 4 (October 1 – December 31)	[ ] Quarter 4: From	10 / 01	To 11 / 30

2. Are you required to monitor for cadmium, copper, chromium, lead, nickel, silver, or zinc in freshwater? [X] Yes (Skip to 3) [ ] No (Skip to 4)

3. What is the hardness level of the receiving water? 57

4. Does your facility discharge into any saltwater receiving waters? [ ] Yes [X] No

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: ☐ Rainfall (Complete line items 2.a., 2.b., & 2.c.) ☐ Snowmelt

2.a. Duration of the rainfall event (hours): 2.b. Rainfall amount (inches): 2.c. Time since previous measurable storm event (days):

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
012	☐ Substantially identical to outfall:	☒							☐	☐
011	☒ Substantially identical to outfall: 012	☐							☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

012: NODI: C

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: ☐ Rainfall (Complete line items 2.a., 2.b., & 2.c.) ☐ Snowmelt

2.a. Duration of the rainfall event (hours): 2.b. Rainfall amount (inches): 2.c. Time since previous measurable storm event (days):

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
020	☐ Substantially identical to outfall:	☒							☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

020: NODI: C

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: ☐ Rainfall (Complete line items 2.a., 2.b., & 2.c.) ☐ Snowmelt

2.a. Duration of the rainfall event (hours): 2.b. Rainfall amount (inches): 2.c. Time since previous measurable storm event (days):

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
031	☐ Substantially identical to outfall:	☒							☐	☐
030	☒ Substantially identical to outfall: 031	☐							☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

031: NODI: C

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: ☐ Rainfall (Complete line items 2.a., 2.b., & 2.c.) ☐ Snowmelt

2.a. Duration of the rainfall event (hours): 2.b. Rainfall amount (inches): 2.c. Time since previous measurable storm event (days):

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
036	☐ Substantially identical to outfall:	☒							☐	☐
037	☒ Substantially identical to outfall: 036	☒							☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

036: NODI: C

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: ☐ Rainfall (Complete line items 2.a., 2.b., & 2.c.) ☐ Snowmelt

2.a. Duration of the rainfall event (hours): 2.b. Rainfall amount (inches): 2.c. Time since previous measurable storm event (days):

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
039	☐ Substantially identical to outfall:	☒							☐	☐
038	☒ Substantially identical to outfall: 039	☒							☐	☐
040	☒ Substantially identical to outfall: 039	☒							☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

039: NODI: C

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: ☐ Rainfall (Complete line items 2.a., 2.b., & 2.c.) ☐ Snowmelt

2.a. Duration of the rainfall event (hours): 2.b. Rainfall amount (inches): 2.c. Time since previous measurable storm event (days):

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
042	☐ Substantially identical to outfall:	☒							☐	☐
041	☒ Substantially identical to outfall: 042	☐							☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

042: NODI: C

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: ☐ Rainfall (Complete line items 2.a., 2.b., & 2.c.) ☐ Snowmelt

2.a. Duration of the rainfall event (hours): 2.b. Rainfall amount (inches): 2.c. Time since previous measurable storm event (days):

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
043	☐ Substantially identical to outfall:	☒							☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

043: NODI: C

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: ☐ Rainfall (Complete line items 2.a., 2.b., & 2.c.) ☐ Snowmelt

2.a. Duration of the rainfall event (hours): 2.b. Rainfall amount (inches): 2.c. Time since previous measurable storm event (days):

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
051	☐ Substantially identical to outfall:	☒							☐	☐
052	☒ Substantially identical to outfall: 051	☐							☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

051: NODI: C

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: ☐ Rainfall (Complete line items 2.a., 2.b., & 2.c.) ☐ Snowmelt

2.a. Duration of the rainfall event (hours): 2.b. Rainfall amount (inches): 2.c. Time since previous measurable storm event (days):

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
053	☐ Substantially identical to outfall:	☒							☐	☐
065	☒ Substantially identical to outfall: 053	☐							☐	☐
066	☒ Substantially identical to outfall: 053	☐							☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

053: NODI: C

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: ☐ Rainfall (Complete line items 2.a., 2.b., & 2.c.) ☐ Snowmelt

2.a. Duration of the rainfall event (hours): 2.b. Rainfall amount (inches): 2.c. Time since previous measurable storm event (days):

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
072	☐ Substantially identical to outfall:	☒							☐	☐
070	☒ Substantially identical to outfall: 072	☐							☐	☐
071	☒ Substantially identical to outfall: 072	☐							☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

072: NODI: C

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: ☐ Rainfall (Complete line items 2.a., 2.b., & 2.c.) ☐ Snowmelt

2.a. Duration of the rainfall event (hours): 2.b. Rainfall amount (inches): 2.c. Time since previous measurable storm event (days):

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
075	☐ Substantially identical to outfall:	☒							☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

075: NODI: C

G. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

First Name, Middle Initial, Last Name: Anthony R Grieggs

Title: EPC-CP Group Leader

Signature: 

Date 07/01/2016

E-mail: grieggst@lanl.gov

Los Alamos
NATIONAL LABORATORY
EST. 1943

Environmental Protection & Compliance Division (EPC-DO)
Environmental Compliance Programs (EPC-CP)
PO Box 1663, K490
Los Alamos, New Mexico 87545
(505) 667-0666

Date: AUG 2 5 2016
Symbol: EPC-DO-16-247
LA-UR: 16-26488
Locates Action No.: N/A

U.S. EPA Region 6
NPDES Stormwater Program (WQ-PP)
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

To whom it may concern:

Subject: **National Pollutant Discharge Elimination System (NPDES) Permit Tracking No. NMR053195, Multi-Sector General Permit (MSGP) Industrial Discharge Monitoring Reports (MDMRs) for June 23, and July 01, 2016 and a "No Discharge" MDMR for the Second Quarter (June 1 – July 31, 2016)**

Enclosed are Los Alamos National Laboratory's MDMRs (Enclosure 1) for June 23, and July 01, 2016 and a "No Discharge" MDMR for the second quarter of monitoring (June 1 through July 31), as required under MSGP Permit Tracking No. NMR053195. These reports are being submitted on behalf of Los Alamos National Security LLC and contain analytical results for quarterly benchmark and impaired water monitoring at outfalls 069, 004, 005, 020, 029, 047, and 075.

Please contact Holly Wheeler at (505) 667-1312 or Terrill Lemke at (505) 665-2397 if you have questions regarding these MDMRs.

Sincerely,

Anthony R. Grieggs
Group Leader
Environmental Compliance Programs (EPC-CP)
Los Alamos National Security, LLC

ARG:TWL:HLW/lm

Enclosure: 1. NPDES Permit Tracking No. NMR053195, MDMRs for June 23, and July 01, 2016 and a "No Discharge" MDMR for the Second Quarter (June 1 – July 31, 2016)

Cy: Everett Spencer, EPA Region 6, Dallas TX (E-File)
Helen Nguyen, EPA Region 6, Dallas TX (E-File)
Michelle Hunter, NMED/GWQB, Santa Fe, NM (E-File)
Shelly Lemon, NMED/SWQB, Santa Fe, NM (E-File)
Craig S. Leasure, PADOPS, (E-File)
William R. Mairson, PADOPS, (E-File)
Michael T. Brandt, ADESH, (E-File)
Raeanna Sharp-Geiger, ADESH, (E-File)
Karen E. Armijo, NA-LA, (E-File)
Terrill W. Lemke, EPC-CP, (E-File)
Holly L. Wheeler, EPC-CP, (E-File)
Leslie J. Dale, EPC-CP, (E-File)
lasomailbox@nnsa.doe.gov, (E-File)
locatesteam@lanl.gov, (E-File)
epc-correspondence@lanl.gov

ENCLOSURE 1

NPDES Permit Tracking No. NMR053195, MDMRs for June 23, and July 01, 2016 and a "No Discharge" MDMR for the Second Quarter (June 1 – July 31, 2016)

EPC-DO-16-247

LA-UR-16-26488

Date: AUG 2 5 2016

NPDES FORM 6100-29	EPA	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460 MSGP INDUSTRIAL DISCHARGE MONITORING REPORT (DMR) FORM	Form Approved. OMB No. 2040-0004

A. Approval to User Paper DMR Form

1. Have you been granted a waiver from electronic reporting from EPA Regional Office*? [X] YES [ ] NO

If yes, check which waiver you have been granted, the name of the EPA Regional Office staff person who granted the waiver, and the date of approval:

Waiver granted:

[ ] The owner/operator's headquarters is physically located in a geographic area (i.e., ZIP code or census tract) that is identified as under-served for broadband Internet access in the most recent report from the Federal Communications Commission.

[X] The owner/operator has issues regarding available computer access or computer capability.

Name of EPA staff person that granted the waiver: Everett Spencer

Date approval obtained: 06/17/2016

*** Note: You are required to obtain approval from the applicable EPA Regional Office prior to using this paper DMR form. If you have not obtained a waiver, you must file this form electronically using the NetDMR at http://www.epa.gov/netdmr/**

B. Permit Information

1. NPDES ID: NMR053195

2. Reason(s) for Submission (Check all that apply):

[X] Submitting monitoring data (Fill in all Sections).

[ ] Reporting no discharge for all outfalls for this monitoring period (Fill in Sections A, B, C, D, E.1, and G).

[ ] Reporting that your site status has changed to inactive and unstaffed (Fill in Sections A, B, C, D, and F and include date of status change in comment field in Section F.4).

[ ] Reporting that your site status has changed to active (Fill in all Sections and include date of status change in comment field in Section F.4).

[ ] Reporting that no further pollutant reductions are achievable for all outfalls and for all pollutants via Part 6.2.1.2 of the MSGP (Fill in Sections A, B, C, D, and G).

C. Facility Operator Information

1. Operator Information

Operator Name: Los Alamos National Security, LLC

Mailing Address:

Street: P.O. Box 1663, MS K490

City: Los Alamos State: NM ZIP Code: 87545 -

Phone: 505 667 0666

E-mail: grieggst@lanl.gov

2. DMR Preparer (Complete if DMR was prepared by someone other than the certifier):

First Name, Middle Initial, Last Name: Holly L. Wheeler

Organization: EPC-CP

Phone: 505 667 1312 Ext.

E-mail: hbenson@lanl.gov

D. Facility Information

1. Facility Name: Los Alamos National Laboratory

2. Facility Address:

Street/Location: Bikini Atoll Rd. SM30 K490

City: Los Alamos State: NM ZIP Code: 87545 -

County or Similar Government Subdivision: Los Alamos

E. Discharge Information

1. Identify monitoring period: [X] Check here if proposing alternative monitoring periods due to irregular stormwater runoff. Identify alternative monitoring schedule and indicate for which alternative monitoring period you are reporting monitoring data:

[ ] Quarter 1 (January 1 – March 31)	[ ] Quarter 1: From	04 / 01	To 05 / 31
[ ] Quarter 2 (April 1 – June 30)	[X] Quarter 2: From	06 / 01	To 07 / 31
[ ] Quarter 3 (July 1 – September 30)	[ ] Quarter 3: From	08 / 01	To 09 / 30
[ ] Quarter 4 (October 1 – December 31)	[ ] Quarter 4: From	10 / 01	To 11 / 30

2. Are you required to monitor for cadmium, copper, chromium, lead, nickel, silver, or zinc in freshwater? [X] Yes (Skip to 3) [ ] No (Skip to 4)

3. What is the hardness level of the receiving water? 57

4. Does your facility discharge into any saltwater receiving waters? [ ] Yes [X] No

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 1 2.b. Rainfall amount (inches): 0.1 2.c. Time since previous measurable storm event (days): 35

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
069	[ ] Substantially identical to outfall:	[ ]	QBM	Ammonia, total	1.58	mg/L		06/23/2016	[ ]	[ ]
069	[ ] Substantially identical to outfall:	[ ]	QBM	Arsenic, dissolved	ND		1.70 ug/L	06/23/2016	[ ]	[ ]
069	[ ] Substantially identical to outfall:	[ ]	QBM	Cadmium, dissolved	BQL		1.00 ug/L	06/23/2016	[ ]	[ ]
069	[ ] Substantially identical to outfall:	[ ]	QBM	Chemical Oxygen Demand (COD)	227	mg/L		06/23/2016	[ ]	[ ]
069	[ ] Substantially identical to outfall:	[ ]	QBM	Cyanide, total	BQL		0.005 mg/L	06/23/2016	[ ]	[ ]
069	[ ] Substantially identical to outfall:	[ ]	QBM	Lead, dissolved	2.03	ug/L		06/23/2016	[ ]	[ ]
069	[ ] Substantially identical to outfall:	[ ]	QBM	Magnesium, total	2.16	mg/L		06/23/2016	[ ]	[ ]
069	[ ] Substantially identical to outfall:	[ ]	QBM	Mercury, total	ND		0.067 ug/L	06/23/2016	[ ]	[ ]

069	☐ Substantially identical to outfall:	☐	QBM	Selenium, total	ND		1.50 ug/L	06/23/2016	☐	☐
069	☐ Substantially identical to outfall:	☐	QBM	Silver, dissolved	ND		0.200 ug/L	06/23/2016	☐	☐
059	☒ Substantially identical to outfall: 069	☒							☐	☐
058	☒ Substantially identical to outfall: 069	☒							☐	☐
057	☒ Substantially identical to outfall: 069	☒							☐	☐
056	☒ Substantially identical to outfall: 069	☒							☐	☐
055	☒ Substantially identical to outfall: 069	☒							☐	☐
054	☒ Substantially identical to outfall: 069	☒							☐	☐
067	☒ Substantially identical to outfall: 069	☒							☐	☐
068	☒ Substantially identical to outfall: 069	☒							☐	☐

060	[X] Substantially identical to outfall: 069	[X]							☐	☐
061	[X] Substantially identical to outfall: 069	[X]							☐	☐
062	[X] Substantially identical to outfall: 069	[X]							☐	☐
063	[X] Substantially identical to outfall: 069	[X]							☐	☐
064	[X] Substantially identical to outfall: 069	[X]							☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 0.75 hours. Rainfall amount = 0.09 inches.

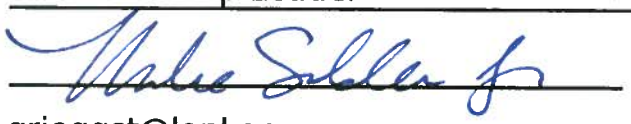
069: The average concentration of total Magnesium is mathematically certain to exceed the benchmark value.

G. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

First Name, Middle Initial, Last Name: Anthony R Grieggs

Title: EPC-CP Group Leader

Signature:  Date 08/25/2016

E-mail: grieggst@lanl.gov

NPDES FORM 6100-29	EPA	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460 MSGP INDUSTRIAL DISCHARGE MONITORING REPORT (DMR) FORM	Form Approved. OMB No. 2040-0004

A. Approval to User Paper DMR Form

1. Have you been granted a waiver from electronic reporting from EPA Regional Office*? [X] YES [ ] NO

If yes, check which waiver you have been granted, the name of the EPA Regional Office staff person who granted the waiver, and the date of approval:

Waiver granted:
- [ ] The owner/operator's headquarters is physically located in a geographic area (i.e., ZIP code or census tract) that is identified as under-served for broadband Internet access in the most recent report from the Federal Communications Commission.
- [X] The owner/operator has issues regarding available computer access or computer capability.

Name of EPA staff person that granted the waiver: Everett Spencer

Date approval obtained: 06/17/2016

*** Note: You are required to obtain approval from the applicable EPA Regional Office prior to using this paper DMR form. If you have not obtained a waiver, you must file this form electronically using the NetDMR at http://www.epa.gov/netdmr/**

B. Permit Information

1. NPDES ID: NMR053195

2. Reason(s) for Submission (Check all that apply):

- [X] Submitting monitoring data (Fill in all Sections).
- [ ] Reporting no discharge for all outfalls for this monitoring period (Fill in Sections A, B, C, D, E.1, and G).
- [ ] Reporting that your site status has changed to inactive and unstaffed (Fill in Sections A, B, C, D, and F and include date of status change in comment field in Section F.4).
- [ ] Reporting that your site status has changed to active (Fill in all Sections and include date of status change in comment field in Section F.4).
- [ ] Reporting that no further pollutant reductions are achievable for all outfalls and for all pollutants via Part 6.2.1.2 of the MSGP (Fill in Sections A, B, C, D, and G).

C. Facility Operator Information

1. Operator Information

Operator Name: Los Alamos National Security, LLC

Mailing Address:

Street: P.O. Box 1663, MS K490

City: Los Alamos State: NM ZIP Code: 87545 -

Phone: 505 667 0666

E-mail: grieggst@lanl.gov

2. DMR Preparer (Complete if DMR was prepared by someone other than the certifier):

First Name, Middle Initial, Last Name: Holly L. Wheeler

Organization: EPC-CP

Phone: 505 667 1312 Ext.

E-mail: hbenson@lanl.gov

D. Facility Information

1. Facility Name: Los Alamos National Laboratory

2. Facility Address:

Street/Location: Bikini Atoll Rd. SM30 K490

City: Los Alamos State: NM ZIP Code: 87545 -

County or Similar Government Subdivision: Los Alamos

E. Discharge Information

1. Identify monitoring period: [X] Check here if proposing alternative monitoring periods due to irregular stormwater runoff. Identify alternative monitoring schedule and indicate for which alternative monitoring period you are reporting monitoring data:

[ ] Quarter 1 (January 1 – March 31)	[ ] Quarter 1: From	04 / 01	To 05 / 31
[ ] Quarter 2 (April 1 – June 30)	[X] Quarter 2: From	06 / 01	To 07 / 31
[ ] Quarter 3 (July 1 – September 30)	[ ] Quarter 3: From	08 / 01	To 09 / 30
[ ] Quarter 4 (October 1 – December 31)	[ ] Quarter 4: From	10 / 01	To 11 / 30

2. Are you required to monitor for cadmium, copper, chromium, lead, nickel, silver, or zinc in freshwater? [X] Yes (Skip to 3) [ ] No (Skip to 4)

3. What is the hardness level of the receiving water? 57

4. Does your facility discharge into any saltwater receiving waters? [ ] Yes [X] No

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 1 2.b. Rainfall amount (inches): 0.3 2.c. Time since previous measurable storm event (days): 2

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
004	[ ] Substantially identical to outfall:	[ ]	QBM	Zinc, dissolved	BQL		10.0 ug/L	07/01/2016	[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 0.58 hours. Rainfall amount = 0.28 inches.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 1 2.b. Rainfall amount (inches): 0.3 2.c. Time since previous measurable storm event (days): 27

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
005	[ ] Substantially identical to outfall:	[ ]	I	Adjusted Gross Alpha	86.1	pCi/L		07/01/2016	[ ]	[ ]
005	[ ] Substantially identical to outfall:	[ ]	I	Aluminum, total recoverable	2140	ug/L		07/01/2016	[ ]	[ ]
005	[ ] Substantially identical to outfall:	[ ]	I	Aroclor, total	ND		0.0351 ug/L	07/01/2016	[ ]	[ ]
005	[ ] Substantially identical to outfall:	[ ]	QBM	Iron, total	9980	ug/L		07/01/2016	[ ]	[ ]
006	[X] Substantially identical to outfall: 005	[X]							[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 0.58 hours. Rainfall amount = 0.28 inches.

005: The impaired water pollutant Adjusted Gross Alpha exceeds the New Mexico water quality standard. The impaired water pollutant total recoverable Aluminum exceeds the New Mexico water quality standard. The impaired water pollutant total Aroclors was not detected in stormwater discharge from this outfall. Therefore, annual monitoring for total Aroclors will be discontinued per Part 6.2.4.1. The average concentration of total Iron is mathematically certain to exceed the benchmark value.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 1 2.b. Rainfall amount (inches): 0.3 2.c. Time since previous measurable storm event (days): 61

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
020	[ ] Substantially identical to outfall:	[ ]	I	Adjusted Gross Alpha	ND		0.00 pCi/L *	07/01/2016	[ ]	[ ]
020	[ ] Substantially identical to outfall:	[ ]	QBM	Aluminum, total recoverable	BQL		50.0 ug/L	07/01/2016	[ ]	[ ]
020	[ ] Substantially identical to outfall:	[ ]	I	Aluminum, total recoverable	BQL		50.0 ug/L	07/01/2016	[ ]	[ ]
020	[ ] Substantially identical to outfall:	[ ]	I	Aroclor, total	ND		0.0358 ug/L	07/01/2016	[ ]	[ ]
020	[ ] Substantially identical to outfall:	[ ]	QBM	Copper, dissolved	5.88	ug/L		07/01/2016	[ ]	[ ]
020	[ ] Substantially identical to outfall:	[ ]	I	Copper, dissolved	5.88	ug/L		07/01/2016	[ ]	[ ]
020	[ ] Substantially identical to outfall:	[ ]	QBM	Iron, total	387	ug/L		07/01/2016	[ ]	[ ]
020	[ ] Substantially identical to outfall:	[ ]	QBM	Nitrate plus Nitrite Nitrogen	0.577	mg/L		07/01/2016	[ ]	[ ]

020	☐ Substantially identical to outfall:	☐	I	Thallium, dissolved	ND		0.450 ug/L	07/01/2016	☐	☐
020	☐ Substantially identical to outfall:	☐	QBM	Zinc, dissolved	169	ug/L		07/01/2016	☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 0.58 hours. Rainfall amount = 0.28 inches.

020: The impaired water pollutant Adjusted Gross Alpha was not detected in stormwater discharge from this outfall. Therefore, annual monitoring for Adjusted Gross Alpha will be discontinued per Part 6.2.4.1. *The result for Adjusted Gross Alpha was -0.19 pCi/L. Therefore, the result reported in column 3.h. is 0.00 pCi/L. The impaired water pollutant total Aroclors was not detected in stormwater discharge from this outfall. Therefore, annual monitoring for total Aroclors will be discontinued per Part 6.2.4.1. The impaired water pollutant dissolved Thallium was not detected in stormwater discharge from this outfall. Therefore, annual monitoring for dissolved Thallium will be discontinued per Part 6.2.4.1.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 1 2.b. Rainfall amount (inches): 0.3 2.c. Time since previous measurable storm event (days): 27

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
029	[ ] Substantially identical to outfall:	[ ]	QBM	Aluminum, total recoverable	923	ug/L		07/01/2016	[ ]	[ ]
029	[ ] Substantially identical to outfall:	[ ]	QBM	Chemical Oxygen Demand (COD)	233	mg/L		07/01/2016	[ ]	[ ]
029	[ ] Substantially identical to outfall:	[ ]	QBM	Copper, dissolved	25.3	ug/L		07/01/2016	[ ]	[ ]
029	[ ] Substantially identical to outfall:	[ ]	QBM	Iron, total	2530	ug/L		07/01/2016	[ ]	[ ]
029	[ ] Substantially identical to outfall:	[ ]	QBM	Lead, dissolved	2.97	ug/L		07/01/2016	[ ]	[ ]
029	[ ] Substantially identical to outfall:	[ ]	QBM	Total Suspended Solids (TSS)	63.6	mg/L		07/01/2016	[ ]	[ ]
029	[ ] Substantially identical to outfall:	[ ]	QBM	Zinc, dissolved	122	ug/L		07/01/2016	[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 0.58 hours. Rainfall amount = 0.28 inches.

029: 029: Aluminum, total recoverable (I) - NODI 9. 029: Copper, dissolved (I) - NODI 9. The average concentration of dissolved Copper is mathematically certain to exceed the benchmark value.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 1 2.b. Rainfall amount (inches): 0.3 2.c. Time since previous measurable storm event (days): 61

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
047	[ ] Substantially identical to outfall:	[ ]	QBM	Ammonia, total	1.65	mg/L		07/01/2016	[ ]	[ ]
047	[ ] Substantially identical to outfall:	[ ]	I	Aroclor, total	ND		0.0333 ug/L	07/01/2016	[ ]	[ ]
047	[ ] Substantially identical to outfall:	[ ]	QBM	Chemical Oxygen Demand (COD)	238	mg/L		07/01/2016	[ ]	[ ]
047	[ ] Substantially identical to outfall:	[ ]	QBM	Cyanide, total	BQL		0.005 mg/L	07/01/2016	[ ]	[ ]
047	[ ] Substantially identical to outfall:	[ ]	QBM	Magnesium, total	1.69	mg/L		07/01/2016	[ ]	[ ]
047	[ ] Substantially identical to outfall:	[ ]	QBM	Mercury, total	ND		0.067 ug/L	07/01/2016	[ ]	[ ]
047	[ ] Substantially identical to outfall:	[ ]	QBM	Selenium, total	ND		1.50 ug/L	07/01/2016	[ ]	[ ]
046	[X] Substantially identical to outfall: 047	[ ]							[ ]	[ ]

045	[X] Substantially identical to outfall: 047	☐							☐	☐
048	[X] Substantially identical to outfall: 047	☐							☐	☐
044	[X] Substantially identical to outfall: 047	☐							☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 1.42 hours. Rainfall amount = 0.30 inches.

047: The impaired water pollutant total Aroclors was not detected in stormwater discharge from this outfall. Therefore, annual monitoring for total Aroclors will be discontinued per Part 6.2.4.1. The average concentration of total Magnesium is mathematically certain to exceed the benchmark value.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 1 2.b. Rainfall amount (inches): 0.3 2.c. Time since previous measurable storm event (days): 61

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
075	[ ] Substantially identical to outfall:	[ ]	I	Copper, dissolved	24	ug/L		07/01/2016	[ ]	[ ]
075	[ ] Substantially identical to outfall:	[ ]	I	Thallium, dissolved	ND		0.450 ug/L	07/01/2016	[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 0.58 hours. Rainfall amount = 0.28 inches.

075: The impaired water pollutant dissolved Copper exceeds the New Mexico water quality standard. The impaired water pollutant dissolved Thallium was not detected in stormwater discharge from this outfall. Therefore, annual monitoring for dissolved Thallium will be discontinued per Part 6.2.4.1.

G. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

First Name, Middle Initial, Last Name: Anthony R Grieggs

Title: EPC-CP Group Leader

Signature:  Date 08/25/2016

E-mail: grieggst@lanl.gov

NPDES FORM 6100-29	EPA	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460 MSGP INDUSTRIAL DISCHARGE MONITORING REPORT (DMR) FORM	Form Approved. OMB No. 2040-0004

A. Approval to User Paper DMR Form

1. Have you been granted a waiver from electronic reporting from EPA Regional Office*? [X] YES [ ] NO

If yes, check which waiver you have been granted, the name of the EPA Regional Office staff person who granted the waiver, and the date of approval:

Waiver granted:
- [ ] The owner/operator's headquarters is physically located in a geographic area (i.e., ZIP code or census tract) that is identified as under-served for broadband Internet access in the most recent report from the Federal Communications Commission.
- [X] The owner/operator has issues regarding available computer access or computer capability.

Name of EPA staff person that granted the waiver: Everett Spencer

Date approval obtained: 06/17/2016

*** Note: You are required to obtain approval from the applicable EPA Regional Office prior to using this paper DMR form. If you have not obtained a waiver, you must file this form electronically using the NetDMR at http://www.epa.gov/netdmr/**

B. Permit Information

1. NPDES ID: NMR053195

2. Reason(s) for Submission (Check all that apply):

- [ ] Submitting monitoring data (Fill in all Sections).
- [X] Reporting no discharge for all outfalls for this monitoring period (Fill in Sections A, B, C, D, E.1, and G).
- [ ] Reporting that your site status has changed to inactive and unstaffed (Fill in Sections A, B, C, D, and F and include date of status change in comment field in Section F.4).
- [ ] Reporting that your site status has changed to active (Fill in all Sections and include date of status change in comment field in Section F.4).
- [ ] Reporting that no further pollutant reductions are achievable for all outfalls and for all pollutants via Part 6.2.1.2 of the MSGP (Fill in Sections A, B, C, D, and G).

C. Facility Operator Information

1. Operator Information

Operator Name: Los Alamos National Security, LLC

Mailing Address:

Street: P.O. Box 1663, MS K490

City: Los Alamos State: NM ZIP Code: 87545 -

Phone: 505 667 0666

E-mail: grieggst@lanl.gov

2. DMR Preparer (Complete if DMR was prepared by someone other than the certifier):

First Name, Middle Initial, Last Name: Holly L. Wheeler

Organization: EPC-CP

Phone: 505 667 1312 Ext.

E-mail: hbenson@lanl.gov

D. Facility Information

1. Facility Name: Los Alamos National Laboratory

2. Facility Address:

Street/Location: Bikini Atoll Rd. SM30 K490

City: Los Alamos State: NM ZIP Code: 87545 -

County or Similar Government Subdivision: Los Alamos

E. Discharge Information

1. Identify monitoring period: [X] Check here if proposing alternative monitoring periods due to irregular stormwater runoff. Identify alternative monitoring schedule and indicate for which alternative monitoring period you are reporting monitoring data:

[ ] Quarter 1 (January 1 – March 31)	[ ] Quarter 1: From	04 / 01	To 05 / 31
[ ] Quarter 2 (April 1 – June 30)	[X] Quarter 2: From	06 / 01	To 07 / 31
[ ] Quarter 3 (July 1 – September 30)	[ ] Quarter 3: From	08 / 01	To 09 / 30
[ ] Quarter 4 (October 1 – December 31)	[ ] Quarter 4: From	10 / 01	To 11 / 30

2. Are you required to monitor for cadmium, copper, chromium, lead, nickel, silver, or zinc in freshwater? [X] Yes (Skip to 3) [ ] No (Skip to 4)

3. What is the hardness level of the receiving water? 57

4. Does your facility discharge into any saltwater receiving waters? [ ] Yes [X] No

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: ☐ Rainfall (Complete line items 2.a., 2.b., & 2.c.) ☐ Snowmelt

2.a. Duration of the rainfall event (hours): 2.b. Rainfall amount (inches): 2.c. Time since previous measurable storm event (days):

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
012	☐ Substantially identical to outfall:	☒							☐	☐
011	☒ Substantially identical to outfall: 012	☐							☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

012: NODI: C

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: ☐ Rainfall (Complete line items 2.a., 2.b., & 2.c.) ☐ Snowmelt

2.a. Duration of the rainfall event (hours): 2.b. Rainfall amount (inches): 2.c. Time since previous measurable storm event (days):

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
018	☐ Substantially identical to outfall:	☒							☐	☐
013	☒ Substantially identical to outfall: 018	☐							☐	☐
014	☒ Substantially identical to outfall: 018	☐							☐	☐
015	☒ Substantially identical to outfall: 018	☐							☐	☐
016	☒ Substantially identical to outfall: 018	☐							☐	☐
017	☒ Substantially identical to outfall: 018	☐							☐	☐
019	☒ Substantially identical to outfall: 018	☐							☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

018: NODI: C

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: ☐ Rainfall (Complete line items 2.a., 2.b., & 2.c.) ☐ Snowmelt

2.a. Duration of the rainfall event (hours): 2.b. Rainfall amount (inches): 2.c. Time since previous measurable storm event (days):

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
036	☐ Substantially identical to outfall:	☒							☐	☐
037	☒ Substantially identical to outfall: 036	☒							☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

036: NODI: C

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: ☐ Rainfall (Complete line items 2.a., 2.b., & 2.c.) ☐ Snowmelt

2.a. Duration of the rainfall event (hours): 2.b. Rainfall amount (inches): 2.c. Time since previous measurable storm event (days):

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
039	☐ Substantially identical to outfall:	☒							☐	☐
038	☒ Substantially identical to outfall: 039	☒							☐	☐
040	☒ Substantially identical to outfall: 039	☒							☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

039: NODI: C

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: ☐ Rainfall (Complete line items 2.a., 2.b., & 2.c.) ☐ Snowmelt

2.a. Duration of the rainfall event (hours): 2.b. Rainfall amount (inches): 2.c. Time since previous measurable storm event (days):

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
042	☐ Substantially identical to outfall:	☒							☐	☐
041	☒ Substantially identical to outfall: 042	☐							☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

042: NODI: F Automated sampler tripped, however there was insufficient flow for sample collection.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: ☐ Rainfall (Complete line items 2.a., 2.b., & 2.c.) ☐ Snowmelt

2.a. Duration of the rainfall event (hours): 2.b. Rainfall amount (inches): 2.c. Time since previous measurable storm event (days):

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
043	☐ Substantially identical to outfall:	☒							☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

043: NODI: C

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: ☐ Rainfall (Complete line items 2.a., 2.b., & 2.c.) ☐ Snowmelt

2.a. Duration of the rainfall event (hours): 2.b. Rainfall amount (inches): 2.c. Time since previous measurable storm event (days):

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
053	☐ Substantially identical to outfall:	☒							☐	☐
065	☒ Substantially identical to outfall: 053	☐							☐	☐
066	☒ Substantially identical to outfall: 053	☐							☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

053: NODI: C

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: ☐ Rainfall (Complete line items 2.a., 2.b., & 2.c.) ☐ Snowmelt

2.a. Duration of the rainfall event (hours): 2.b. Rainfall amount (inches): 2.c. Time since previous measurable storm event (days):

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
073	☐ Substantially identical to outfall:	☒							☐	☐
074	☒ Substantially identical to outfall: 073	☐							☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

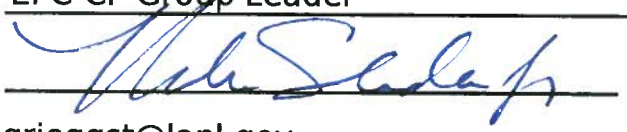
073: NODI: C

G. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

First Name, Middle Initial, Last Name: Anthony R Grieggs

Title: EPC-CP Group Leader

Signature:  Date 08/25/2016

E-mail: grieggst@lanl.gov

Environmental Protection & Compliance Division (EPC-DO)
Environmental Compliance Programs (EPC-CP)
PO Box 1663, K490
Los Alamos, New Mexico 87545
(505) 667-0666

Date: SEP 2 2 2016
Symbol: EPC-DO-16-283
LA-UR: 16-27215
Locates Action No.: N/A

U.S. EPA Region 6
NPDES Stormwater Program (WQ-PP)
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

To whom it may concern:

Subject: **National Pollutant Discharge Elimination System (NPDES) Permit Tracking No. NMR053195, Multi-Sector General Permit (MSGP) Industrial Discharge Monitoring Reports (MDMRs) for July 15, 21 and 25, 2016**

Enclosed are Los Alamos National Laboratory's MDMRs (Enclosure 1) for July 15, 21 and 25, 2016, as required under MSGP Permit Tracking No. NMR053195. These reports are being submitted on behalf of Los Alamos National Security LLC and contain analytical results for impaired waters and quarterly benchmark monitoring at outfalls 005, 020, 031, 047, 049, 051, and 072 .

Please contact Holly Wheeler at (505) 667-1312 or Terrill Lemke at (505) 665-2397 if you have questions regarding these MDMRs.

Sincerely,

Anthony R. Grieggs
Group Leader
Environmental Compliance Programs (EPC-CP)
Los Alamos National Security, LLC

ARG:TWL:HLW/lm

Enclosure: 1. NPDES Permit Tracking No. NMR053195, MDMRs for July 15, 21 and 25, 2016

Cy: Everett Spencer, USEPA/Region 6, Dallas TX (E-File)
Helen Nguyen, USEPA/Region 6, Dallas TX (E-File)
Michelle Hunter, NMED/GWQB, Santa Fe, NM (E-File)
Shelly Lemon, NMED/SWQB, Santa Fe, NM (E-File)
Craig S. Leasure, PADOPS, (E-File)
William R. Mairson, PADOPS, (E-File)
Michael T. Brandt, ADESH, (E-File)
Raeanna Sharp-Geiger, ADESH, (E-File)
Karen E. Armijo, NA-LA, (E-File)
Terrill W. Lemke, EPC-CP, (E-File)
Holly L. Wheeler, EPC-CP, (E-File)
Leslie J. Dale, EPC-CP, (E-File)
Ellena I. Martinez, EPC-DP, (E-File)
Saundra Martinez, ADEM-PO, (E-File)
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locatesteam@lanl.gov, (E-File)
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ENCLOSURE 1

NPDES Permit Tracking No. NMR053195, MDMRs
for July 15, 21 and 25, 2016

EPC-DO-16-283

LA-UR-16-27215

Date: SEP 2 2 2016

NPDES FORM 6100-29	EPA	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460 MSGP INDUSTRIAL DISCHARGE MONITORING REPORT (DMR) FORM	Form Approved. OMB No. 2040-0004

A. Approval to User Paper DMR Form

1. Have you been granted a waiver from electronic reporting from EPA Regional Office*? [X] YES [ ] NO

If yes, check which waiver you have been granted, the name of the EPA Regional Office staff person who granted the waiver, and the date of approval:

Waiver granted:

[ ] The owner/operator's headquarters is physically located in a geographic area (i.e., ZIP code or census tract) that is identified as under-served for broadband Internet access in the most recent report from the Federal Communications Commission.

[X] The owner/operator has issues regarding available computer access or computer capability.

Name of EPA staff person that granted the waiver: Everett Spencer

Date approval obtained: 06/17/2016

*** Note: You are required to obtain approval from the applicable EPA Regional Office prior to using this paper DMR form. If you have not obtained a waiver, you must file this form electronically using the NetDMR at http://www.epa.gov/netdmr/**

B. Permit Information

1. NPDES ID: NMR053195

2. Reason(s) for Submission (Check all that apply):

[X] Submitting monitoring data (Fill in all Sections).

[ ] Reporting no discharge for all outfalls for this monitoring period (Fill in Sections A, B, C, D, E.1, and G).

[ ] Reporting that your site status has changed to inactive and unstaffed (Fill in Sections A, B, C, D, and F and include date of status change in comment field in Section F.4).

[ ] Reporting that your site status has changed to active (Fill in all Sections and include date of status change in comment field in Section F.4).

[ ] Reporting that no further pollutant reductions are achievable for all outfalls and for all pollutants via Part 6.2.1.2 of the MSGP (Fill in Sections A, B, C, D, and G).

C. Facility Operator Information

1. Operator Information

Operator Name: Los Alamos National Security, LLC

Mailing Address:

Street: P.O. Box 1663, MS K490

City: Los Alamos State: NM ZIP Code: 87545 -

Phone: 505 667 0666

E-mail: grieggst@lanl.gov

2. DMR Preparer (Complete if DMR was prepared by someone other than the certifier):

First Name, Middle Initial, Last Name: Holly L. Wheeler

Organization: EPC-CP

Phone: 505 667 1312 Ext.

E-mail: hbenson@lanl.gov

D. Facility Information

1. Facility Name: Los Alamos National Laboratory

2. Facility Address:

Street/Location: Bikini Atoll Rd. SM30 K490

City: Los Alamos State: NM ZIP Code: 87545 -

County or Similar Government Subdivision: Los Alamos

E. Discharge Information

1. Identify monitoring period: [X] Check here if proposing alternative monitoring periods due to irregular stormwater runoff. Identify alternative monitoring schedule and indicate for which alternative monitoring period you are reporting monitoring data:

[ ] Quarter 1 (January 1 – March 31)	[ ] Quarter 1: From	04 / 01	To 05 / 31
[ ] Quarter 2 (April 1 – June 30)	[X] Quarter 2: From	06 / 01	To 07 / 31
[ ] Quarter 3 (July 1 – September 30)	[ ] Quarter 3: From	08 / 01	To 09 / 30
[ ] Quarter 4 (October 1 – December 31)	[ ] Quarter 4: From	10 / 01	To 11 / 30

2. Are you required to monitor for cadmium, copper, chromium, lead, nickel, silver, or zinc in freshwater? [X] Yes (Skip to 3) [ ] No (Skip to 4)

3. What is the hardness level of the receiving water? 57

4. Does your facility discharge into any saltwater receiving waters? [ ] Yes [X] No

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 1 2.b. Rainfall amount (inches): 0.3 2.c. Time since previous measurable storm event (days): 14

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
005	[ ] Substantially identical to outfall:	[ ]	QBM	Iron, total	4450	ug/L		07/15/2016	[ ]	[ ]
006	[X] Substantially identical to outfall: 005	[ ]							[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 0.67 hours. Rainfall amount = 0.31 inches.

005: The average concentration of total Iron is mathematically certain to exceed the benchmark value.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 1 2.b. Rainfall amount (inches): 0.3 2.c. Time since previous measurable storm event (days): 14

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 0.67 hours. Rainfall amount = 0.31 inches.

005: Adjusted Gross Alpha (I) - NODI 9. Aluminum, total recoverable (I) - NODI 9. Aroclor, total (I) - NODI B. Copper, dissolved (I) - NODI 9. Thallium, dissolved (I) - NODI B.

G. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

First Name, Middle Initial, Last Name: Anthony R Grieggs

Title: EPC-CP Group Leader

Signature: A R Grieggs Date 09/22/2016

E-mail: grieggst@lanl.gov

NPDES FORM 6100-29	EPA	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460 MSGP INDUSTRIAL DISCHARGE MONITORING REPORT (DMR) FORM	Form Approved. OMB No. 2040-0004

A. Approval to User Paper DMR Form

1. Have you been granted a waiver from electronic reporting from EPA Regional Office*? [X] YES [ ] NO

If yes, check which waiver you have been granted, the name of the EPA Regional Office staff person who granted the waiver, and the date of approval:

Waiver granted:

- [ ] The owner/operator's headquarters is physically located in a geographic area (i.e., ZIP code or census tract) that is identified as under-served for broadband Internet access in the most recent report from the Federal Communications Commission.
- [X] The owner/operator has issues regarding available computer access or computer capability.

Name of EPA staff person that granted the waiver: Everett Spencer

Date approval obtained: 06/17/2016

*** Note: You are required to obtain approval from the applicable EPA Regional Office prior to using this paper DMR form. If you have not obtained a waiver, you must file this form electronically using the NetDMR at http://www.epa.gov/netdmr/**

B. Permit Information

1. NPDES ID: NMR053195

2. Reason(s) for Submission (Check all that apply):

- [X] Submitting monitoring data (Fill in all Sections).
- [ ] Reporting no discharge for all outfalls for this monitoring period (Fill in Sections A, B, C, D, E.1, and G).
- [ ] Reporting that your site status has changed to inactive and unstaffed (Fill in Sections A, B, C, D, and F and include date of status change in comment field in Section F.4).
- [ ] Reporting that your site status has changed to active (Fill in all Sections and include date of status change in comment field in Section F.4).
- [ ] Reporting that no further pollutant reductions are achievable for all outfalls and for all pollutants via Part 6.2.1.2 of the MSGP (Fill in Sections A, B, C, D, and G).

C. Facility Operator Information

1. Operator Information

Operator Name: Los Alamos National Security, LLC

Mailing Address:

Street: P,O. Box 1663, MS K490

City: Los Alamos State: NM ZIP Code: 87545 -

Phone: 505 667 0666

E-mail: grieggst@lanl.gov

2. DMR Preparer (Complete if DMR was prepared by someone other than the certifier):

First Name, Middle Initial, Last Name: Holly L. Wheeler

Organization: EPC-CP

Phone: 505 667 1312 Ext.

E-mail: hbenson@lanl.gov

D. Facility Information

1. Facility Name: Los Alamos National Laboratory

2. Facility Address:

Street/Location: Bikini Atoll Rd. SM30 K490

City: Los Alamos State: NM ZIP Code: 87545 -

County or Similar Government Subdivision: Los Alamos

E. Discharge Information

1. Identify monitoring period: [X] Check here if proposing alternative monitoring periods due to irregular stormwater runoff. Identify alternative monitoring schedule and indicate for which alternative monitoring period you are reporting monitoring data:

[ ] Quarter 1 (January 1 – March 31)	[ ] Quarter 1: From	04 / 01	To	05 / 31
[ ] Quarter 2 (April 1 – June 30)	[X] Quarter 2: From	06 / 01	To	07 / 31
[ ] Quarter 3 (July 1 – September 30)	[ ] Quarter 3: From	08 / 01	To	09 / 30
[ ] Quarter 4 (October 1 – December 31)	[ ] Quarter 4: From	10 / 01	To	11 / 30

2. Are you required to monitor for cadmium, copper, chromium, lead, nickel, silver, or zinc in freshwater? [X] Yes (Skip to 3) [ ] No (Skip to 4)

3. What is the hardness level of the receiving water? 57

4. Does your facility discharge into any saltwater receiving waters? [ ] Yes [X] No

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 1 2.b. Rainfall amount (inches): 0.2 2.c. Time since previous measurable storm event (days): 6

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
020	[ ] Substantially identical to outfall:	[ ]	QBM	Aluminum, total recoverable	97.1	ug/L		07/21/2016	[ ]	[ ]
020	[ ] Substantially identical to outfall:	[ ]	I	Aluminum, total recoverable	97.1	ug/L		07/21/2016	[ ]	[ ]
020	[ ] Substantially identical to outfall:	[ ]	QBM	Copper, dissolved	4.24	ug/L		07/21/2016	[ ]	[ ]
020	[ ] Substantially identical to outfall:	[ ]	I	Copper, dissolved	4.24	ug/L		07/21/2016	[ ]	[ ]
020	[ ] Substantially identical to outfall:	[ ]	QBM	Iron, total	128	ug/L		07/21/2016	[ ]	[ ]
020	[ ] Substantially identical to outfall:	[ ]	QBM	Nitrate plus Nitrite Nitrogen	0.443	mg/L		07/21/2016	[ ]	[ ]
020	[ ] Substantially identical to outfall:	[ ]	QBM	Zinc, dissolved	130	ug/L		07/21/2016	[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 0.83 hours. Rainfall amount = 0.21 inches.

020: Adjusted Gross Alpha (I) - NODI B. Aroclor, total (I) - NODI B. Thallium, dissolved (I) - NODI B.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 1 2.b. Rainfall amount (inches): 0.4 2.c. Time since previous measurable storm event (days): 81

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
031	[ ] Substantially identical to outfall:	[ ]	I	Adjusted Gross Alpha	38.9	pCi/L		07/21/2016	[ ]	[ ]
031	[ ] Substantially identical to outfall:	[ ]	I	Aluminum, total recoverable	2990	ug/L		07/21/2016	[ ]	[ ]
031	[ ] Substantially identical to outfall:	[ ]	I	Aroclor, total	ND		0.172 ug/L	07/21/2016	[ ]	[ ]
031	[ ] Substantially identical to outfall:	[ ]	I	Copper, dissolved	11.3	ug/L		07/21/2016	[ ]	[ ]
030	[X] Substantially identical to outfall: 031	[ ]							[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 0.75 hours. Rainfall amount = 0.36 inches.

031: The impaired water pollutant Adjusted Gross Alpha exceeds the New Mexico water quality standard. The impaired water pollutant total recoverable Aluminum exceeds the New Mexico water quality standard. The impaired water pollutant total Aroclor was not detected in stormwater discharge from this outfall. Therefore, annual monitoring for total Aroclor will be discontinued per Part 6.2.4.1. The impaired water pollutant dissolved Copper exceeds the New Mexico water quality standard.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 0 2.b. Rainfall amount (inches): 0.1 2.c. Time since previous measurable storm event (days): 3

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
047	[ ] Substantially identical to outfall:	[ ]	I	Adjusted Gross Alpha	17.5	pCi/L		07/21/2016	[ ]	[ ]
046	[X] Substantially identical to outfall: 047	[ ]							[ ]	[ ]
045	[X] Substantially identical to outfall: 047	[ ]							[ ]	[ ]
048	[X] Substantially identical to outfall: 047	[ ]							[ ]	[ ]
044	[X] Substantially identical to outfall: 047	[ ]							[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 0.50 hours. Rainfall amount = 0.09 inches.

047: The impaired water pollutant Adjusted Gross Alpha exceeds the New Mexico water quality standard.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 0 2.b. Rainfall amount (inches): 0.1 2.c. Time since previous measurable storm event (days): 3

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 0.50 hours. Rainfall amount = 0.09 inches.

047: Aluminum, total recoverable (I) - NODI 9. Aroclor, total (I) - NODI B.

G. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

First Name, Middle Initial, Last Name: Anthony R Grieggs

Title: EPC-CP Group Leader

Signature: A R Grieggs Date 09/22/2016

E-mail: grieggst@lanl.gov

NPDES FORM 6100-29	EPA	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460 MSGP INDUSTRIAL DISCHARGE MONITORING REPORT (DMR) FORM	Form Approved. OMB No. 2040-0004

A. Approval to User Paper DMR Form

1. Have you been granted a waiver from electronic reporting from EPA Regional Office*? [X] YES [ ] NO

If yes, check which waiver you have been granted, the name of the EPA Regional Office staff person who granted the waiver, and the date of approval:

Waiver granted:

- [ ] The owner/operator's headquarters is physically located in a geographic area (i.e., ZIP code or census tract) that is identified as under-served for broadband Internet access in the most recent report from the Federal Communications Commission.
- [X] The owner/operator has issues regarding available computer access or computer capability.

Name of EPA staff person that granted the waiver: Everett Spencer

Date approval obtained: 06/17/2016

*** Note: You are required to obtain approval from the applicable EPA Regional Office prior to using this paper DMR form. If you have not obtained a waiver, you must file this form electronically using the NetDMR at http://www.epa.gov/netdmr/**

B. Permit Information

1. NPDES ID: NMR053195

2. Reason(s) for Submission (Check all that apply):

- [X] Submitting monitoring data (Fill in all Sections).
- [ ] Reporting no discharge for all outfalls for this monitoring period (Fill in Sections A, B, C, D, E.1, and G).
- [ ] Reporting that your site status has changed to inactive and unstaffed (Fill in Sections A, B, C, D, and F and include date of status change in comment field in Section F.4).
- [ ] Reporting that your site status has changed to active (Fill in all Sections and include date of status change in comment field in Section F.4).
- [ ] Reporting that no further pollutant reductions are achievable for all outfalls and for all pollutants via Part 6.2.1.2 of the MSGP (Fill in Sections A, B, C, D, and G).

C. Facility Operator Information

1. Operator Information

Operator Name: Los Alamos National Security, LLC

Mailing Address:

Street: P.O. Box 1663, MS K490

City: Los Alamos State: NM ZIP Code: 87545 -

Phone: 505 667 0666

E-mail: grieggst@lanl.gov

2. DMR Preparer (Complete if DMR was prepared by someone other than the certifier):

First Name, Middle Initial, Last Name: Holly L. Wheeler

Organization: EPC-CP

Phone: 505 667 1312 Ext.

E-mail: hbenson@lanl.gov

D. Facility Information

1. Facility Name: Los Alamos National Laboratory

2. Facility Address:

Street/Location: Bikini Atoll Rd. SM30 K490

City: Los Alamos State: NM ZIP Code: 87545 -

County or Similar Government Subdivision: Los Alamos

E. Discharge Information

1. Identify monitoring period: [X] Check here if proposing alternative monitoring periods due to irregular stormwater runoff. Identify alternative monitoring schedule and indicate for which alternative monitoring period you are reporting monitoring data:

[ ] Quarter 1 (January 1 – March 31)	[ ] Quarter 1: From	04 / 01	To 05 / 31
[ ] Quarter 2 (April 1 – June 30)	[X] Quarter 2: From	06 / 01	To 07 / 31
[ ] Quarter 3 (July 1 – September 30)	[ ] Quarter 3: From	08 / 01	To 09 / 30
[ ] Quarter 4 (October 1 – December 31)	[ ] Quarter 4: From	10 / 01	To 11 / 30

2. Are you required to monitor for cadmium, copper, chromium, lead, nickel, silver, or zinc in freshwater? [X] Yes (Skip to 3) [ ] No (Skip to 4)

3. What is the hardness level of the receiving water? 57

4. Does your facility discharge into any saltwater receiving waters? [ ] Yes [X] No

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 1 2.b. Rainfall amount (inches): 0.4 2.c. Time since previous measurable storm event (days): 4

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
047	[ ] Substantially identical to outfall:	[ ]	QBM	Arsenic, dissolved	ND		1.70 ug/L	07/25/2016	[ ]	[ ]
047	[ ] Substantially identical to outfall:	[ ]	QBM	Cadmium, dissolved	BQL		1.00 ug/L	07/25/2016	[ ]	[ ]
047	[ ] Substantially identical to outfall:	[ ]	QBM	Lead, dissolved	BQL		2.00 ug/L	07/25/2016	[ ]	[ ]
047	[ ] Substantially identical to outfall:	[ ]	QBM	Silver, dissolved	ND		0.200 ug/L	07/25/2016	[ ]	[ ]
046	[X] Substantially identical to outfall: 047	[ ]							[ ]	[ ]
045	[X] Substantially identical to outfall: 047	[ ]							[ ]	[ ]
048	[X] Substantially identical to outfall: 047	[ ]							[ ]	[ ]
044	[X] Substantially identical to outfall: 047	[ ]							[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 1.00 hours. Rainfall amount = 0.38 inches.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 1 2.b. Rainfall amount (inches): 0.4 2.c. Time since previous measurable storm event (days): 4

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 1.00 hours. Rainfall amount = 0.38 inches.

047: Adjusted Gross Alpha (I) - NODI 9. Aluminum, total recoverable (I) - NODI 9. Aroclor, total (I) - NODI B.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 1 2.b. Rainfall amount (inches): 0.4 2.c. Time since previous measurable storm event (days): 24

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
049	[ ] Substantially identical to outfall:	[ ]	I	Aluminum, total recoverable	4670	ug/L		07/25/2016	[ ]	[ ]
049	[ ] Substantially identical to outfall:	[ ]	I	Aroclor, total	ND		0.0351 ug/L	07/25/2016	[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 1.00 hours. Rainfall amount = 0.38 inches.

049: The impaired water pollutant total recoverable Aluminum exceeds the New Mexico water quality standard. The impaired water pollutant total Aroclor was not detected in stormwater discharge from this outfall. Therefore, annual monitoring for total Aroclor will be discontinued per Part 6.2.4.1.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 1 2.b. Rainfall amount (inches): 0.2 2.c. Time since previous measurable storm event (days): 86

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
051	[ ] Substantially identical to outfall:	[ ]	I	Aluminum, total recoverable	14100	ug/L		07/25/2016	[ ]	[ ]
051	[ ] Substantially identical to outfall:	[ ]	QBM	Ammonia, total	0.242	mg/L		07/25/2016	[ ]	[ ]
051	[ ] Substantially identical to outfall:	[ ]	I	Aroclor, total	ND		0.0354 ug/L	07/25/2016	[ ]	[ ]
051	[ ] Substantially identical to outfall:	[ ]	QBM	Arsenic, dissolved	ND		1.70 ug/L	07/25/2016	[ ]	[ ]
051	[ ] Substantially identical to outfall:	[ ]	QBM	Cadmium, dissolved	BQL		1.00 ug/L	07/25/2016	[ ]	[ ]
051	[ ] Substantially identical to outfall:	[ ]	QBM	Chemical Oxygen Demand (COD)	407	mg/L		07/25/2016	[ ]	[ ]
051	[ ] Substantially identical to outfall:	[ ]	QBM	Cyanide, total	ND		0.00167 mg/L	07/25/2016	[ ]	[ ]
051	[ ] Substantially identical to outfall:	[ ]	QBM	Lead, dissolved	BQL		2.00 ug/L	07/25/2016	[ ]	[ ]

051	☐ Substantially identical to outfall:	☐	QBM	Magnesium, total	8.79	mg/L		07/25/2016	☐	☐
051	☐ Substantially identical to outfall:	☐	QBM	Mercury, total	ND		0.067 ug/L	07/25/2016	☐	☐
051	☐ Substantially identical to outfall:	☐	QBM	Selenium, total	ND		1.50 ug/L	07/25/2016	☐	☐
051	☐ Substantially identical to outfall:	☐	QBM	Silver, dissolved	ND		0.200 ug/L	07/25/2016	☐	☐
052	☒ Substantially identical to outfall: 051	☐							☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 0.75 hours. Rainfall amount = 0.24 inches.

051: The impaired water pollutant total recoverable Aluminum exceeds the New Mexico water quality standard. The impaired water pollutant total Aroclor was not detected in stormwater discharge from this outfall. Therefore, annual monitoring for total Aroclor will be discontinued per Part 6.2.4.1. The average concentration of total Magnesium is mathematically certain to exceed the benchmark value.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 1 2.b. Rainfall amount (inches): 0.2 2.c. Time since previous measurable storm event (days): 278

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
072	[ ] Substantially identical to outfall:	[ ]	I	Aluminum, total recoverable	836	ug/L		07/25/2016	[ ]	[ ]
072	[ ] Substantially identical to outfall:	[ ]	QBM	Ammonia, total	4.07	mg/L		07/25/2016	[ ]	[ ]
072	[ ] Substantially identical to outfall:	[ ]	QBM	Arsenic, dissolved	BQL		5.00 ug/L	07/25/2016	[ ]	[ ]
072	[ ] Substantially identical to outfall:	[ ]	QBM	Cadmium, dissolved	2.28	ug/L		07/25/2016	[ ]	[ ]
072	[ ] Substantially identical to outfall:	[ ]	QBM	Chemical Oxygen Demand (COD)	1220	mg/L		07/25/2016	[ ]	[ ]
072	[ ] Substantially identical to outfall:	[ ]	QBM	Cyanide, total	BQL		0.005 mg/L	07/25/2016	[ ]	[ ]
072	[ ] Substantially identical to outfall:	[ ]	QBM	Lead, dissolved	6.69	ug/L		07/25/2016	[ ]	[ ]
072	[ ] Substantially identical to outfall:	[ ]	QBM	Magnesium, total	6.9	mg/L		07/25/2016	[ ]	[ ]

072	☐ Substantially identical to outfall:	☐	QBM	Mercury, total	BQL		0.200 ug/L	07/25/2016	☐	☐
072	☐ Substantially identical to outfall:	☐	QBM	Selenium, total	BQL		5.00 ug/L	07/25/2016	☐	☐
072	☐ Substantially identical to outfall:	☐	QBM	Silver, dissolved	ND		0.200 ug/L	07/25/2016	☐	☐
070	☒ Substantially identical to outfall: 072	☐							☐	☐
071	☒ Substantially identical to outfall: 072	☐							☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 0.75 hours. Rainfall amount = 0.24 inches.

072: The average concentration of Chemical Oxygen Demand is mathematically certain to exceed the benchmark value. The average concentration of total Magnesium is mathematically certain to exceed the benchmark value.

G. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

First Name, Middle Initial, Last Name: Anthony R Grieggs

Title: EPC-CP Group Leader

Signature: A R Grieggs Date 09/22/2016

E-mail: grieggst@lanl.gov

Environmental Protection & Compliance Division (EPC-DO)
Environmental Compliance Programs (EPC-CP)
PO Box 1663, K490
Los Alamos, New Mexico 87545
(505) 667-0666

Date: OCT 0 6 2016
Symbol: EPC-DO-16-291
LA-UR: 16-27686
Locates Action No.: N/A

U.S. EPA Region 6
NPDES Stormwater Program (WQ-PP)
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

To whom it may concern:

Subject: **National Pollutant Discharge Elimination System (NPDES) Permit Tracking No. NMR053195, Multi-Sector General Permit (MSGP) Industrial Discharge Monitoring Reports (MDMRs) for July 31, August 1, 2, 3, 4, and 8, 2016**

Enclosed are Los Alamos National Laboratory's MDMRs (Enclosure 1) for July 31, August 1, 2, 3, 4 and 8, 2016, as required under MSGP Permit Tracking No. NMR053195. These reports are being submitted on behalf of Los Alamos National Security LLC and contain analytical results for impaired waters and quarterly benchmark monitoring at outfalls 042, 075, 029, 047, 050, 069, 072, 004, 020, 051, 002, 005, 009, 012, and 018.

Please contact Holly Wheeler at (505) 667-1312 or Terrill Lemke at (505) 665-2397 if you have questions regarding these MDMRs.

Sincerely,

Anthony R. Grieggs
Group Leader
Environmental Compliance Programs (EPC-CP)
Los Alamos National Security, LLC

ARG:TWL:HLW/lm

Enclosure: 1. NPDES Permit Tracking No. NMR053195, MDMRs for July 31, August 1, 2, 3, 4 and 8, 2016

Cy: Everett Spencer, USEPA/Region 6, Dallas, TX, (E-File)
Helen Nguyen, USEPA/Region 6, Dallas, TX, (E-File)
Michelle Hunter, NMED/GWQB, Santa Fe, NM, (E-File)
Shelly Lemon, NMED/SWQB, Santa Fe, NM, (E-File)
Craig S. Leasure, PADOPS, (E-File)
William R. Mairson, PADOPS, (E-File)
Michael T. Brandt, ADESH, (E-File)
Raeanna Sharp-Geiger, ADESH, (E-File)
Karen E. Armijo, NA-LA, (E-File)
Terrill W. Lemke, EPC-CP, (E-File)
Holly L. Wheeler, EPC-CP, (E-File)
Leslie J. Dale, EPC-CP, (E-File)
Ellena I. Martinez, EPC-DP, (E-File)
Saundra Martinez, ADEM-PO, (E-File)
lasomailbox@nnsa.doe.gov, (E-File)
locatesteam@lanl.gov, (E-File)
epc-correspondence@lanl.gov

ENCLOSURE 1

NPDES Permit Tracking No. NMR053195, MDMRs
for July 31, August 1, 2, 3, 4 and 8, 2016

EPC-DO-16-291

LA-UR-16-27686

Date: OCT 0 6 2016

NPDES FORM 6100-29	EPA	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460 MSGP INDUSTRIAL DISCHARGE MONITORING REPORT (DMR) FORM	Form Approved. OMB No. 2040-0004

A. Approval to User Paper DMR Form

1. Have you been granted a waiver from electronic reporting from EPA Regional Office*? [X] YES [ ] NO

If yes, check which waiver you have been granted, the name of the EPA Regional Office staff person who granted the waiver, and the date of approval:

Waiver granted:

- [ ] The owner/operator's headquarters is physically located in a geographic area (i.e., ZIP code or census tract) that is identified as under-served for broadband Internet access in the most recent report from the Federal Communications Commission.
- [X] The owner/operator has issues regarding available computer access or computer capability.

Name of EPA staff person that granted the waiver: Everett Spencer

Date approval obtained: 06/17/2016

*** Note: You are required to obtain approval from the applicable EPA Regional Office prior to using this paper DMR form. If you have not obtained a waiver, you must file this form electronically using the NetDMR at http://www.epa.gov/netdmr/**

B. Permit Information

1. NPDES ID: NMR053195

2. Reason(s) for Submission (Check all that apply):

- [X] Submitting monitoring data (Fill in all Sections).
- [ ] Reporting no discharge for all outfalls for this monitoring period (Fill in Sections A, B, C, D, E.1, and G).
- [ ] Reporting that your site status has changed to inactive and unstaffed (Fill in Sections A, B, C, D, and F and include date of status change in comment field in Section F.4).
- [ ] Reporting that your site status has changed to active (Fill in all Sections and include date of status change in comment field in Section F.4).
- [ ] Reporting that no further pollutant reductions are achievable for all outfalls and for all pollutants via Part 6.2.1.2 of the MSGP (Fill in Sections A, B, C, D, and G).

C. Facility Operator Information

1. Operator Information

Operator Name: Los Alamos National Security, LLC

Mailing Address:

Street: P.O. Box 1663, MS K490

City: Los Alamos State: NM ZIP Code: 87545 -

Phone: 505 667 0666

E-mail: grieggst@lanl.gov

2. DMR Preparer (Complete if DMR was prepared by someone other than the certifier):

First Name, Middle Initial, Last Name: Holly L. Wheeler

Organization: EPC-CP

Phone: 505 667 1312 Ext.

E-mail: hbenson@lanl.gov

D. Facility Information

1. Facility Name: Los Alamos National Laboratory

2. Facility Address:

Street/Location: Bikini Atoll Rd. SM30 K490

City: Los Alamos State: NM ZIP Code: 87545 -

County or Similar Government Subdivision: Los Alamos

E. Discharge Information

1. Identify monitoring period: [X] Check here if proposing alternative monitoring periods due to irregular stormwater runoff. Identify alternative monitoring schedule and indicate for which alternative monitoring period you are reporting monitoring data:

[ ] Quarter 1 (January 1 – March 31)	[ ] Quarter 1: From	04 / 01	To 05 / 31
[ ] Quarter 2 (April 1 – June 30)	[X] Quarter 2: From	06 / 01	To 07 / 31
[ ] Quarter 3 (July 1 – September 30)	[ ] Quarter 3: From	08 / 01	To 09 / 30
[ ] Quarter 4 (October 1 – December 31)	[ ] Quarter 4: From	10 / 01	To 11 / 30

2. Are you required to monitor for cadmium, copper, chromium, lead, nickel, silver, or zinc in freshwater? [X] Yes (Skip to 3) [ ] No (Skip to 4)

3. What is the hardness level of the receiving water? 57

4. Does your facility discharge into any saltwater receiving waters? [ ] Yes [X] No

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 4 2.b. Rainfall amount (inches): 0.6 2.c. Time since previous measurable storm event (days): 9

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
042	[ ] Substantially identical to outfall:	[ ]	I	Copper, dissolved	4.96	ug/L		08/01/2016	[ ]	[ ]
042	[ ] Substantially identical to outfall:	[ ]	I	Thallium, dissolved	ND		0.450 ug/L	08/01/2016	[ ]	[ ]
041	[X] Substantially identical to outfall: 042	[ ]							[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 3.58 hours. Rainfall amount = 0.59 inches.

042: Sample was collected on 8/1/2016 at 00:26, which falls within the 7/31/2016 storm day, defined as occurring between 06:05 and 06:00. The impaired water pollutant dissolved Thallium was not detected in stormwater discharge from this outfall. Therefore, annual monitoring for dissolved Thallium will be discontinued per Part 6.2.4.1.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 4 2.b. Rainfall amount (inches): 1.0 2.c. Time since previous measurable storm event (days): 16

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
075	[ ] Substantially identical to outfall:	[ ]	I	Adjusted Gross Alpha	36.3	pCi/L		07/31/2016	[ ]	[ ]
075	[ ] Substantially identical to outfall:	[ ]	I	Aluminum, total recoverable	9240	ug/L		07/31/2016	[ ]	[ ]
075	[ ] Substantially identical to outfall:	[ ]	I	Aroclor, total	ND		0.034 ug/L	07/31/2016	[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 3.92 hours. Rainfall amount = 1.00 inches.

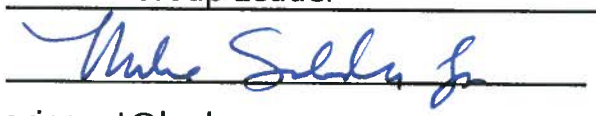
075: The impaired water pollutant Adjusted Gross Alpha exceeds the New Mexico water quality standard. The impaired water pollutant total recoverable Aluminum exceeds the New Mexico water quality standard. The impaired water pollutant total Aroclor was not detected in stormwater discharge from this outfall. Therefore, annual monitoring for total Aroclor will be discontinued per Part 6.2.4.1. Copper, dissolved (I) - NODI 9. Thallium, dissolved (I) - NODI B.

G. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

First Name, Middle Initial, Last Name: Anthony R Grieggs

Title: EPC-CP Group Leader

Signature:  Date 10/06/2016

E-mail: grieggst@lanl.gov

NPDES FORM 6100-29	EPA	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460 MSGP INDUSTRIAL DISCHARGE MONITORING REPORT (DMR) FORM	Form Approved. OMB No. 2040-0004

A. Approval to User Paper DMR Form

1. Have you been granted a waiver from electronic reporting from EPA Regional Office*? [X] YES [ ] NO

If yes, check which waiver you have been granted, the name of the EPA Regional Office staff person who granted the waiver, and the date of approval:

Waiver granted:

[ ] The owner/operator's headquarters is physically located in a geographic area (i.e., ZIP code or census tract) that is identified as under-served for broadband Internet access in the most recent report from the Federal Communications Commission.

[X] The owner/operator has issues regarding available computer access or computer capability.

Name of EPA staff person that granted the waiver: Everett Spencer

Date approval obtained: 06/17/2016

*** Note: You are required to obtain approval from the applicable EPA Regional Office prior to using this paper DMR form. If you have not obtained a waiver, you must file this form electronically using the NetDMR at http://www.epa.gov/netdmr/**

B. Permit Information

1. NPDES ID: NMR053195

2. Reason(s) for Submission (Check all that apply):

[X] Submitting monitoring data (Fill in all Sections).

[ ] Reporting no discharge for all outfalls for this monitoring period (Fill in Sections A, B, C, D, E.1, and G).

[ ] Reporting that your site status has changed to inactive and unstaffed (Fill in Sections A, B, C, D, and F and include date of status change in comment field in Section F.4).

[ ] Reporting that your site status has changed to active (Fill in all Sections and include date of status change in comment field in Section F.4).

[ ] Reporting that no further pollutant reductions are achievable for all outfalls and for all pollutants via Part 6.2.1.2 of the MSGP (Fill in Sections A, B, C, D, and G).

C. Facility Operator Information

1. Operator Information

Operator Name: Los Alamos National Security, LLC

Mailing Address:

Street: P.O. Box 1663, MS K490

City: Los Alamos State: NM ZIP Code: 87545 -

Phone: 505 667 0666

E-mail: grieggst@lanl.gov

2. DMR Preparer (Complete if DMR was prepared by someone other than the certifier):

First Name, Middle Initial, Last Name: Holly L. Wheeler

Organization: EPC-CP

Phone: 505 667 1312 Ext.

E-mail: hbenson@lanl.gov

D. Facility Information

1. Facility Name: Los Alamos National Laboratory

2. Facility Address:

Street/Location: Bikini Atoll Rd. SM30 K490

City: Los Alamos State: NM ZIP Code: 87545 -

County or Similar Government Subdivision: Los Alamos

E. Discharge Information

1. Identify monitoring period: [X] Check here if proposing alternative monitoring periods due to irregular stormwater runoff. Identify alternative monitoring schedule and indicate for which alternative monitoring period you are reporting monitoring data:

[ ] Quarter 1 (January 1 – March 31)	[ ] Quarter 1: From	04 / 01	To 05 / 31
[ ] Quarter 2 (April 1 – June 30)	[ ] Quarter 2: From	06 / 01	To 07 / 31
[ ] Quarter 3 (July 1 – September 30)	[X] Quarter 3: From	08 / 01	To 09 / 30
[ ] Quarter 4 (October 1 – December 31)	[ ] Quarter 4: From	10 / 01	To 11 / 30

2. Are you required to monitor for cadmium, copper, chromium, lead, nickel, silver, or zinc in freshwater? [X] Yes (Skip to 3) [ ] No (Skip to 4)

3. What is the hardness level of the receiving water? 57

4. Does your facility discharge into any saltwater receiving waters? [ ] Yes [X] No

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 0 2.b. Rainfall amount (inches): 0.0 2.c. Time since previous measurable storm event (days): 1

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
029	[ ] Substantially identical to outfall:	[ ]	QBM	Copper, dissolved	17.7	ug/L		08/01/2016	[ ]	[ ]
029	[ ] Substantially identical to outfall:	[ ]	QBM	Lead, dissolved	ND		0.500 ug/L	08/01/2016	[ ]	[ ]
029	[ ] Substantially identical to outfall:	[ ]	QBM	Zinc, dissolved	35	ug/L		08/01/2016	[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 0.08 hours. Rainfall amount = 0.01 inches.

029: Adjusted Gross Alpha (I) - NODI 9. Aluminum, total recoverable (I) - NODI 9. Aroclor, total (I) - NODI B. Thallium, dissolved (I) - NODI B. Copper, dissolved (I) - NODI 9.

G. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

First Name, Middle Initial, Last Name: Anthony R Grieggs

Title: EPC-CP Group Leader

Signature:  Date 10/06/2016

E-mail: grieggst@lanl.gov

NPDES FORM 6100-29	EPA	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460 MSGP INDUSTRIAL DISCHARGE MONITORING REPORT (DMR) FORM	Form Approved. OMB No. 2040-0004

A. Approval to User Paper DMR Form

1. Have you been granted a waiver from electronic reporting from EPA Regional Office*? [X] YES [ ] NO

If yes, check which waiver you have been granted, the name of the EPA Regional Office staff person who granted the waiver, and the date of approval:

Waiver granted:

[ ] The owner/operator's headquarters is physically located in a geographic area (i.e., ZIP code or census tract) that is identified as under-served for broadband Internet access in the most recent report from the Federal Communications Commission.

[X] The owner/operator has issues regarding available computer access or computer capability.

Name of EPA staff person that granted the waiver: Everett Spencer

Date approval obtained: 06/17/2016

*** Note: You are required to obtain approval from the applicable EPA Regional Office prior to using this paper DMR form. If you have not obtained a waiver, you must file this form electronically using the NetDMR at http://www.epa.gov/netdmr/**

B. Permit Information

1. NPDES ID: NMR053195

2. Reason(s) for Submission (Check all that apply):

[X] Submitting monitoring data (Fill in all Sections).

[ ] Reporting no discharge for all outfalls for this monitoring period (Fill in Sections A, B, C, D, E.1, and G).

[ ] Reporting that your site status has changed to inactive and unstaffed (Fill in Sections A, B, C, D, and F and include date of status change in comment field in Section F.4).

[ ] Reporting that your site status has changed to active (Fill in all Sections and include date of status change in comment field in Section F.4).

[ ] Reporting that no further pollutant reductions are achievable for all outfalls and for all pollutants via Part 6.2.1.2 of the MSGP (Fill in Sections A, B, C, D, and G).

C. Facility Operator Information

1. Operator Information

Operator Name: Los Alamos National Security, LLC

Mailing Address:

Street: P.O. Box 1663, MS K490

City: Los Alamos State: NM ZIP Code: 87545 -

Phone: 505 667 0666

E-mail: grieggst@lanl.gov

2. DMR Preparer (Complete if DMR was prepared by someone other than the certifier):

First Name, Middle Initial, Last Name: Holly L. Wheeler

Organization: EPC-CP

Phone: 505 667 1312 Ext.

E-mail: hbenson@lanl.gov

D. Facility Information

1. Facility Name: Los Alamos National Laboratory

2. Facility Address:

Street/Location: Bikini Atoll Rd. SM30 K490

City: Los Alamos State: NM ZIP Code: 87545 -

County or Similar Government Subdivision: Los Alamos

E. Discharge Information

1. Identify monitoring period: [X] Check here if proposing alternative monitoring periods due to irregular stormwater runoff. Identify alternative monitoring schedule and indicate for which alternative monitoring period you are reporting monitoring data:

[ ] Quarter 1 (January 1 – March 31)	[ ] Quarter 1: From	04 / 01 To 05 / 31
[ ] Quarter 2 (April 1 – June 30)	[ ] Quarter 2: From	06 / 01 To 07 / 31
[ ] Quarter 3 (July 1 – September 30)	[X] Quarter 3: From	08 / 01 To 09 / 30
[ ] Quarter 4 (October 1 – December 31)	[ ] Quarter 4: From	10 / 01 To 11 / 30

2. Are you required to monitor for cadmium, copper, chromium, lead, nickel, silver, or zinc in freshwater? [X] Yes (Skip to 3) [ ] No (Skip to 4)

3. What is the hardness level of the receiving water? 57

4. Does your facility discharge into any saltwater receiving waters? [ ] Yes [X] No

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 2 2.b. Rainfall amount (inches): 0.2 2.c. Time since previous measurable storm event (days): 2

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
047	[ ] Substantially identical to outfall:	[ ]	QBM	Arsenic, dissolved	ND		1.70 ug/L	08/03/2016	[ ]	[ ]
047	[ ] Substantially identical to outfall:	[ ]	QBM	Cadmium, dissolved	BQL		1.00 ug/L	08/03/2016	[ ]	[ ]
047	[ ] Substantially identical to outfall:	[ ]	QBM	Lead, dissolved	ND		0.500 ug/L	08/03/2016	[ ]	[ ]
047	[ ] Substantially identical to outfall:	[ ]	QBM	Silver, dissolved	ND		0.200 ug/L	08/03/2016	[ ]	[ ]
046	[X] Substantially identical to outfall: 047	[ ]							[ ]	[ ]
045	[X] Substantially identical to outfall: 047	[ ]							[ ]	[ ]
048	[X] Substantially identical to outfall: 047	[ ]							[ ]	[ ]
044	[X] Substantially identical to outfall: 047	[ ]							[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 1.75 hours. Rainfall amount = 0.22 inches.

047: Sample was collected on 8/3/2016 at 00:56, which falls within the 8/2/2016 storm day, defined as occurring between 06:05 and 06:00. Adjusted Gross Alpha (I) - NODI 9. Aluminum, total recoverable (I) - NODI 9. Aroclor, total (I) - NODI B.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 2 2.b. Rainfall amount (inches): 0.2 2.c. Time since previous measurable storm event (days): 2

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
050	[ ] Substantially identical to outfall:	[ ]	QBM	Ammonia, total	1.05	mg/L		08/02/2016	[ ]	[ ]
050	[ ] Substantially identical to outfall:	[ ]	QBM	Arsenic, dissolved	ND		1.70 ug/L	08/02/2016	[ ]	[ ]
050	[ ] Substantially identical to outfall:	[ ]	QBM	Cadmium, dissolved	2	ug/L		08/02/2016	[ ]	[ ]
050	[ ] Substantially identical to outfall:	[ ]	QBM	Chemical Oxygen Demand (COD)	228	mg/L		08/02/2016	[ ]	[ ]
050	[ ] Substantially identical to outfall:	[ ]	QBM	Cyanide, total	BQL		0.005 mg/L	08/02/2016	[ ]	[ ]
050	[ ] Substantially identical to outfall:	[ ]	QBM	Lead, dissolved	ND		0.500 ug/L	08/02/2016	[ ]	[ ]
050	[ ] Substantially identical to outfall:	[ ]	QBM	Magnesium, total	1.57	mg/L		08/02/2016	[ ]	[ ]
050	[ ] Substantially identical to outfall:	[ ]	QBM	Mercury, total	ND		0.067 ug/L	08/02/2016	[ ]	[ ]

050	☐ Substantially identical to outfall:	☐	QBM	Selenium, total	ND		1.50 ug/L	08/02/2016	☐	☐
050	☐ Substantially identical to outfall:	☐	QBM	Silver, dissolved	ND		0.200 ug/L	08/02/2016	☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 1.75 hours. Rainfall amount = 0.22 inches.

050: The average concentration of Chemical Oxygen Demand (COD) is mathematically certain to exceed the benchmark value. The average concentration of total Magnesium is mathematically certain to exceed the benchmark value. Adjusted Gross Alpha (I) - NODI 9. Aluminum, total recoverable (I) - NODI 9. Aroclor, total (I) - NODI B.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 3 2.b. Rainfall amount (inches): 0.7 2.c. Time since previous measurable storm event (days): 2

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
069	[ ] Substantially identical to outfall:	[ ]	QBM	Ammonia, total	0.175	mg/L		08/03/2016	[ ]	[ ]
069	[ ] Substantially identical to outfall:	[ ]	QBM	Arsenic, dissolved	ND		1.70 ug/L	08/03/2016	[ ]	[ ]
069	[ ] Substantially identical to outfall:	[ ]	QBM	Cadmium, dissolved	ND		0.110 ug/L	08/03/2016	[ ]	[ ]
069	[ ] Substantially identical to outfall:	[ ]	QBM	Chemical Oxygen Demand (COD)	ND		8.95 mg/L	08/03/2016	[ ]	[ ]
069	[ ] Substantially identical to outfall:	[ ]	QBM	Cyanide, total	ND		0.00167 mg/L	08/03/2016	[ ]	[ ]
069	[ ] Substantially identical to outfall:	[ ]	QBM	Lead, dissolved	ND		0.500 ug/L	08/03/2016	[ ]	[ ]
069	[ ] Substantially identical to outfall:	[ ]	QBM	Magnesium, total	0.547	mg/L		08/03/2016	[ ]	[ ]
069	[ ] Substantially identical to outfall:	[ ]	QBM	Mercury, total	ND		0.067 ug/L	08/03/2016	[ ]	[ ]

069	☐ Substantially identical to outfall:	☐	QBM	Selenium, total	ND		1.50 ug/L	08/03/2016	☐	☐
069	☐ Substantially identical to outfall:	☐	QBM	Silver, dissolved	ND		0.200 ug/L	08/03/2016	☐	☐
059	☒ Substantially identical to outfall: 069	☐							☐	☐
058	☒ Substantially identical to outfall: 069	☐							☐	☐
057	☒ Substantially identical to outfall: 069	☐							☐	☐
056	☒ Substantially identical to outfall: 069	☐							☐	☐
055	☒ Substantially identical to outfall: 069	☐							☐	☐
054	☒ Substantially identical to outfall: 069	☐							☐	☐
067	☒ Substantially identical to outfall: 069	☐							☐	☐
068	☒ Substantially identical to outfall: 069	☐							☐	☐

060	[X] Substantially identical to outfall: 069	☐							☐	☐
061	[X] Substantially identical to outfall: 069	☐							☐	☐
062	[X] Substantially identical to outfall: 069	☐							☐	☐
063	[X] Substantially identical to outfall: 069	☐							☐	☐
064	[X] Substantially identical to outfall: 069	☐							☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 2.75 hours. Rainfall amount = 0.68 inches.

069: The average concentration of total Magnesium is mathematically certain to exceed the benchmark value. Sample was collected on 8/3/2016 from two different samplers. The Avalanche sampler collected at 03:35 and the 3700 collected at 03:33, both of which fall within the 8/2/2016 storm day, defined as occurring between 06:05 and 06:00. Aluminum, total recoverable (I) - NODI 9. Aroclor, total (I) - NODI B.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 3 2.b. Rainfall amount (inches): 0.7 2.c. Time since previous measurable storm event (days): 286

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
072	[ ] Substantially identical to outfall:	[ ]	QBM	Arsenic, dissolved	ND		1.70 ug/L	08/03/2016	[ ]	[ ]
072	[ ] Substantially identical to outfall:	[ ]	QBM	Cadmium, dissolved	1.39	ug/L		08/03/2016	[ ]	[ ]
072	[ ] Substantially identical to outfall:	[ ]	QBM	Lead, dissolved	2.47	ug/L		08/03/2016	[ ]	[ ]
072	[ ] Substantially identical to outfall:	[ ]	QBM	Silver, dissolved	ND		0.200 ug/L	08/03/2016	[ ]	[ ]
070	[X] Substantially identical to outfall: 072	[ ]							[ ]	[ ]
071	[X] Substantially identical to outfall: 072	[ ]							[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 2.75 hours. Rainfall amount = 0.68 inches.

072: Sample was collected on 8/3/2016 at 00:50, which falls within the 8/2/2016 storm day, defined as occurring between 06:05 and 06:00. Aluminum, total recoverable (I) - NODI 9.

G. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

First Name, Middle Initial, Last Name: Anthony R Grieggs

Title: EPC-CP Group Leader

Signature:  Date 10/06/2016

E-mail: grieggst@lanl.gov

NPDES FORM 6100-29	EPA	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460 MSGP INDUSTRIAL DISCHARGE MONITORING REPORT (DMR) FORM	Form Approved. OMB No. 2040-0004

A. Approval to User Paper DMR Form

1. Have you been granted a waiver from electronic reporting from EPA Regional Office*? [X] YES [ ] NO

If yes, check which waiver you have been granted, the name of the EPA Regional Office staff person who granted the waiver, and the date of approval:

Waiver granted:

[ ] The owner/operator's headquarters is physically located in a geographic area (i.e., ZIP code or census tract) that is identified as under-served for broadband Internet access in the most recent report from the Federal Communications Commission.

[X] The owner/operator has issues regarding available computer access or computer capability.

Name of EPA staff person that granted the waiver: Everett Spencer

Date approval obtained: 06/17/2016

*** Note: You are required to obtain approval from the applicable EPA Regional Office prior to using this paper DMR form. If you have not obtained a waiver, you must file this form electronically using the NetDMR at http://www.epa.gov/netdmr/**

B. Permit Information

1. NPDES ID: NMR053195

2. Reason(s) for Submission (Check all that apply):

[X] Submitting monitoring data (Fill in all Sections).

[ ] Reporting no discharge for all outfalls for this monitoring period (Fill in Sections A, B, C, D, E.1, and G).

[ ] Reporting that your site status has changed to inactive and unstaffed (Fill in Sections A, B, C, D, and F and include date of status change in comment field in Section F.4).

[ ] Reporting that your site status has changed to active (Fill in all Sections and include date of status change in comment field in Section F.4).

[ ] Reporting that no further pollutant reductions are achievable for all outfalls and for all pollutants via Part 6.2.1.2 of the MSGP (Fill in Sections A, B, C, D, and G).

C. Facility Operator Information

1. Operator Information

Operator Name: Los Alamos National Security, LLC

Mailing Address:

Street: P.O. Box 1663, MS K490

City: Los Alamos State: NM ZIP Code: 87545 -

Phone: 505 667 0666

E-mail: grieggst@lanl.gov

2. DMR Preparer (Complete if DMR was prepared by someone other than the certifier):

First Name, Middle Initial, Last Name: Holly L. Wheeler

Organization: EPC-CP

Phone: 505 667 1312 Ext.

E-mail: hbenson@lanl.gov

D. Facility Information

1. Facility Name: Los Alamos National Laboratory

2. Facility Address:

Street/Location: Bikini Atoll Rd. SM30 K490

City: Los Alamos State: NM ZIP Code: 87545 -

County or Similar Government Subdivision: Los Alamos

E. Discharge Information

1. Identify monitoring period: [X] Check here if proposing alternative monitoring periods due to irregular stormwater runoff. Identify alternative monitoring schedule and indicate for which alternative monitoring period you are reporting monitoring data:

[ ] Quarter 1 (January 1 – March 31)	[ ] Quarter 1: From	04 / 01 To 05 / 31
[ ] Quarter 2 (April 1 – June 30)	[ ] Quarter 2: From	06 / 01 To 07 / 31
[ ] Quarter 3 (July 1 – September 30)	[X] Quarter 3: From	08 / 01 To 09 / 30
[ ] Quarter 4 (October 1 – December 31)	[ ] Quarter 4: From	10 / 01 To 11 / 30

2. Are you required to monitor for cadmium, copper, chromium, lead, nickel, silver, or zinc in freshwater? [X] Yes (Skip to 3) [ ] No (Skip to 4)

3. What is the hardness level of the receiving water? 57

4. Does your facility discharge into any saltwater receiving waters? [ ] Yes [X] No

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 2 2.b. Rainfall amount (inches): 0.6 2.c. Time since previous measurable storm event (days): 1

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
004	[ ] Substantially identical to outfall:	[ ]	QBM	Aluminum, total recoverable	428	ug/L		08/03/2016	[ ]	[ ]
004	[ ] Substantially identical to outfall:	[ ]	QBM	Iron, total	1420	ug/L		08/03/2016	[ ]	[ ]
004	[ ] Substantially identical to outfall:	[ ]	QBM	Nitrate plus Nitrite Nitrogen	2.66	mg/L		08/03/2016	[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 2.00 hours. Rainfall amount = 0.61 inches.

004: The average concentration of Nitrate plus Nitrite Nitrogen is mathematically certain to exceed the benchmark value. Adjusted Gross Alpha (I) - NODI 9. Aroclor, total (I) - NODI 9. Aluminum, total recoverable (I) - NODI 9.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 2 2.b. Rainfall amount (inches): 0.6 2.c. Time since previous measurable storm event (days): 1

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
005	[ ] Substantially identical to outfall:	[ ]	QBM	Iron, total	1380	ug/L		08/03/2016	[ ]	[ ]
006	[X] Substantially identical to outfall: 005	[X]							[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 2.00 hours. Rainfall amount = 0.61 inches.

005: Adjusted Gross Alpha (I) - NODI 9. Aluminum, total recoverable (I) - NODI 9. Aroclor, total (I) - NODI B. Copper, dissolved (I) - NODI 9. Thallium, dissolved (I) - NODI B.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 2 2.b. Rainfall amount (inches): 0.6 2.c. Time since previous measurable storm event (days): 1

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
020	[ ] Substantially identical to outfall:	[ ]	QBM	Aluminum, total recoverable	BQL		50.0 ug/L	08/03/2016	[ ]	[ ]
020	[ ] Substantially identical to outfall:	[ ]	I	Aluminum, total recoverable	BQL		50.0 ug/L	08/03/2016	[ ]	[ ]
020	[ ] Substantially identical to outfall:	[ ]	QBM	Copper, dissolved	3.71	ug/L		08/03/2016	[ ]	[ ]
020	[ ] Substantially identical to outfall:	[ ]	I	Copper, dissolved	3.71	ug/L		08/03/2016	[ ]	[ ]
020	[ ] Substantially identical to outfall:	[ ]	QBM	Iron, total	BQL		100 ug/L	08/03/2016	[ ]	[ ]
020	[ ] Substantially identical to outfall:	[ ]	QBM	Nitrate plus Nitrite Nitrogen	0.186	mg/L		08/03/2016	[ ]	[ ]
020	[ ] Substantially identical to outfall:	[ ]	QBM	Zinc, dissolved	153	ug/L		08/03/2016	[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 2.00 hours. Rainfall amount = 0.61 inches.

020: The average concentration of dissolved Zinc is mathematically certain to exceed the benchmark value. Adjusted Gross Alpha (I) - NODI B. Aroclor, total (I) - NODI B. Thallium, dissolved (I) - NODI B.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 2 2.b. Rainfall amount (inches): 0.6 2.c. Time since previous measurable storm event (days): 1

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
029	[ ] Substantially identical to outfall:	[ ]	QBM	Aluminum, total recoverable	192	ug/L		08/03/2016	[ ]	[ ]
029	[ ] Substantially identical to outfall:	[ ]	QBM	Chemical Oxygen Demand (COD)	79.2	mg/L		08/03/2016	[ ]	[ ]
029	[ ] Substantially identical to outfall:	[ ]	QBM	Iron, total	649	ug/L		08/03/2016	[ ]	[ ]
029	[ ] Substantially identical to outfall:	[ ]	QBM	Total Suspended Solids (TSS)	25.2	mg/L		08/03/2016	[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 2.00 hours. Rainfall amount = 0.61 inches.

029: Adjusted Gross Alpha (I) - NODI 9. Aroclor, total (I) - NODI B. Copper, dissolved (I) - NODI 9. Thallium, dissolved (I) - NODI B. Aluminum, total recoverable (I) - NODI 9.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 2 2.b. Rainfall amount (inches): 0.4 2.c. Time since previous measurable storm event (days): 3

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
042	[ ] Substantially identical to outfall:	[ ]	I	Adjusted Gross Alpha	49.6	pCi/L		08/03/2016	[ ]	[ ]
042	[ ] Substantially identical to outfall:	[ ]	I	Aluminum, total recoverable	4480	ug/L		08/03/2016	[ ]	[ ]
042	[ ] Substantially identical to outfall:	[ ]	I	Aroclor, total	ND		0.034 ug/L	08/03/2016	[ ]	[ ]
041	[X] Substantially identical to outfall: 042	[ ]							[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 2.42 hours. Rainfall amount = 0.42 inches.

042: The impaired water pollutant Adjusted Gross Alpha exceeds the New Mexico water quality standard. The impaired water pollutant total recoverable Aluminum exceeds the New Mexico water quality standard. The impaired water pollutant total Aroclor was not detected in stormwater discharge from this outfall. Therefore, annual monitoring for total Aroclor will be discontinued per Part 6.2.4.1.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 1 2.b. Rainfall amount (inches): 0.4 2.c. Time since previous measurable storm event (days): 1

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
047	[ ] Substantially identical to outfall:	[ ]	QBM	Ammonia, total	0.270	mg/L		08/03/2016	[ ]	[ ]
047	[ ] Substantially identical to outfall:	[ ]	QBM	Chemical Oxygen Demand (COD)	ND		8.95 mg/L	08/03/2016	[ ]	[ ]
047	[ ] Substantially identical to outfall:	[ ]	QBM	Cyanide, total	ND		0.00167 mg/L	08/03/2016	[ ]	[ ]
047	[ ] Substantially identical to outfall:	[ ]	QBM	Magnesium, total	0.368	mg/L		08/03/2016	[ ]	[ ]
047	[ ] Substantially identical to outfall:	[ ]	QBM	Mercury, total	ND		0.067 ug/L	08/03/2016	[ ]	[ ]
047	[ ] Substantially identical to outfall:	[ ]	QBM	Selenium, total	ND		1.50 ug/L	08/03/2016	[ ]	[ ]
046	[X] Substantially identical to outfall: 047	[ ]							[ ]	[ ]
045	[X] Substantially identical to outfall: 047	[ ]							[ ]	[ ]

048	[X] Substantially identical to outfall: 047	☐							☐	☐
044	[X] Substantially identical to outfall: 047	☐							☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 1.50 hours. Rainfall amount = 0.37 inches.

047: The average concentration of total Magnesium is mathematically certain to exceed the benchmark value. Adjusted Gross Alpha (I) - NODI 9. Aluminum, total recoverable (I) - NODI 9. Aroclor, total (I) - NODI B.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 2 2.b. Rainfall amount (inches): 0.9 2.c. Time since previous measurable storm event (days): 1

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
051	[ ] Substantially identical to outfall:	[ ]	QBM	Ammonia, total	0.157	mg/L		08/03/2016	[ ]	[ ]
051	[ ] Substantially identical to outfall:	[ ]	QBM	Arsenic, dissolved	ND		1.70 ug/L	08/03/2016	[ ]	[ ]
051	[ ] Substantially identical to outfall:	[ ]	QBM	Cadmium, dissolved	BQL		1.00 ug/L	08/03/2016	[ ]	[ ]
051	[ ] Substantially identical to outfall:	[ ]	QBM	Chemical Oxygen Demand (COD)	41.0	mg/L		08/03/2016	[ ]	[ ]
051	[ ] Substantially identical to outfall:	[ ]	QBM	Cyanide, total	ND		0.00167 mg/L	08/03/2016	[ ]	[ ]
051	[ ] Substantially identical to outfall:	[ ]	QBM	Lead, dissolved	ND		0.500 ug/L	08/03/2016	[ ]	[ ]
051	[ ] Substantially identical to outfall:	[ ]	QBM	Magnesium, total	1.41	mg/L		08/03/2016	[ ]	[ ]
051	[ ] Substantially identical to outfall:	[ ]	QBM	Mercury, total	ND		0.067 ug/L	08/03/2016	[ ]	[ ]

051	☐ Substantially identical to outfall:	☐	QBM	Selenium, total	ND		1.50 ug/L	08/03/2016	☐	☐
051	☐ Substantially identical to outfall:	☐	QBM	Silver, dissolved	ND		0.200 ug/L	08/03/2016	☐	☐
052	☒ Substantially identical to outfall: 051	☐							☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 2.00 hours. Rainfall amount = 0.91 inches.

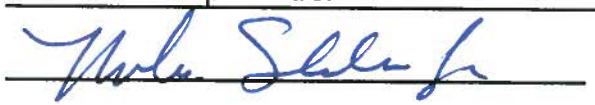
051: The average concentration of total Magnesium is mathematically certain to exceed the benchmark value. Aluminum, total recoverable (I) - NODI 9. Aroclor, total (I) - NODI B.

G. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

First Name, Middle Initial, Last Name: Anthony R Grieggs

Title: EPC-CP Group Leader

Signature:  Date 10/06/2016

E-mail: grieggst@lanl.gov

NPDES FORM 6100-29	EPA	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460 MSGP INDUSTRIAL DISCHARGE MONITORING REPORT (DMR) FORM	Form Approved. OMB No. 2040-0004

A. Approval to User Paper DMR Form

1. Have you been granted a waiver from electronic reporting from EPA Regional Office*? [X] YES [ ] NO

If yes, check which waiver you have been granted, the name of the EPA Regional Office staff person who granted the waiver, and the date of approval:

Waiver granted:

[ ] The owner/operator's headquarters is physically located in a geographic area (i.e., ZIP code or census tract) that is identified as under-served for broadband Internet access in the most recent report from the Federal Communications Commission.

[X] The owner/operator has issues regarding available computer access or computer capability.

Name of EPA staff person that granted the waiver: Everett Spencer

Date approval obtained: 06/17/2016

*** Note: You are required to obtain approval from the applicable EPA Regional Office prior to using this paper DMR form. If you have not obtained a waiver, you must file this form electronically using the NetDMR at http://www.epa.gov/netdmr/**

B. Permit Information

1. NPDES ID: NMR053195

2. Reason(s) for Submission (Check all that apply):

[X] Submitting monitoring data (Fill in all Sections).

[ ] Reporting no discharge for all outfalls for this monitoring period (Fill in Sections A, B, C, D, E.1, and G).

[ ] Reporting that your site status has changed to inactive and unstaffed (Fill in Sections A, B, C, D, and F and include date of status change in comment field in Section F.4).

[ ] Reporting that your site status has changed to active (Fill in all Sections and include date of status change in comment field in Section F.4).

[ ] Reporting that no further pollutant reductions are achievable for all outfalls and for all pollutants via Part 6.2.1.2 of the MSGP (Fill in Sections A, B, C, D, and G).

C. Facility Operator Information

1. Operator Information

Operator Name: Los Alamos National Security, LLC

Mailing Address:

Street: P.O. Box 1663, MS K490

City: Los Alamos State: NM ZIP Code: 87545 -

Phone: 505 667 0666

E-mail: grieggst@lanl.gov

2. DMR Preparer (Complete if DMR was prepared by someone other than the certifier):

First Name, Middle Initial, Last Name: Holly L. Wheeler

Organization: EPC-CP

Phone: 505 667 1312 Ext.

E-mail: hbenson@lanl.gov

D. Facility Information

1. Facility Name: Los Alamos National Laboratory

2. Facility Address:

Street/Location: Bikini Atoll Rd. SM30 K490

City: Los Alamos State: NM ZIP Code: 87545 -

County or Similar Government Subdivision: Los Alamos

E. Discharge Information

1. Identify monitoring period: [X] Check here if proposing alternative monitoring periods due to irregular stormwater runoff. Identify alternative monitoring schedule and indicate for which alternative monitoring period you are reporting monitoring data:

[ ] Quarter 1 (January 1 – March 31)	[ ] Quarter 1: From	04 / 01	To 05 / 31
[ ] Quarter 2 (April 1 – June 30)	[ ] Quarter 2: From	06 / 01	To 07 / 31
[ ] Quarter 3 (July 1 – September 30)	[X] Quarter 3: From	08 / 01	To 09 / 30
[ ] Quarter 4 (October 1 – December 31)	[ ] Quarter 4: From	10 / 01	To 11 / 30

2. Are you required to monitor for cadmium, copper, chromium, lead, nickel, silver, or zinc in freshwater? [X] Yes (Skip to 3) [ ] No (Skip to 4)

3. What is the hardness level of the receiving water? 57

4. Does your facility discharge into any saltwater receiving waters? [ ] Yes [X] No

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 1 2.b. Rainfall amount (inches): 0.3 2.c. Time since previous measurable storm event (days): 1

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
002	[ ] Substantially identical to outfall:	[ ]	QBM	Aluminum, total recoverable	2770	ug/L		08/04/2016	[ ]	[ ]
002	[ ] Substantially identical to outfall:	[ ]	QBM	Iron, total	4860	ug/L		08/04/2016	[ ]	[ ]
002	[ ] Substantially identical to outfall:	[ ]	QBM	Nitrate plus Nitrite Nitrogen	0.856	mg/L		08/04/2016	[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 1.42 hours. Rainfall amount = 0.28 inches.

002: The average concentration of total recoverable Aluminum is mathematically certain to exceed the benchmark value. The average concentration of total Iron is mathematically certain to exceed the benchmark value. Adjusted Gross Alpha (I) - NODI 9. Aroclor, total (I) - NODI B. Copper, dissolved (I) - NODI 9. Thallium, dissolved (I) - NODI B. Aluminum, total recoverable (I) - NODI 9.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 1 2.b. Rainfall amount (inches): 0.3 2.c. Time since previous measurable storm event (days): 1

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
009	[ ] Substantially identical to outfall:	[ ]	QBM	Iron, total	1090	ug/L		08/04/2016	[ ]	[ ]
007	[X] Substantially identical to outfall: 009	[X]							[ ]	[ ]
008	[X] Substantially identical to outfall: 009	[X]							[ ]	[ ]
010	[X] Substantially identical to outfall: 009	[X]							[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 1.42 hours. Rainfall amount = 0.28 inches.

009: Adjusted Gross Alpha (I) - NODI 9. Aluminum, total recoverable (I) - NODI 9. Aroclor, total (I) - NODI B. Copper, dissolved (I) - NODI 9. Thallium, dissolved (I) - NODI 9.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 1 2.b. Rainfall amount (inches): 0.3 2.c. Time since previous measurable storm event (days): 1

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
012	[ ] Substantially identical to outfall:	[ ]	I	Aluminum, total recoverable	1040	ug/L		08/04/2016	[ ]	[ ]
012	[ ] Substantially identical to outfall:	[ ]	I	Aroclor, total	ND		0.0343 ug/L	08/04/2016	[ ]	[ ]
012	[ ] Substantially identical to outfall:	[ ]	I	Copper, dissolved	2.13	ug/L		08/04/2016	[ ]	[ ]
012	[ ] Substantially identical to outfall:	[ ]	QBM	Iron, total	5150	ug/L		08/04/2016	[ ]	[ ]
012	[ ] Substantially identical to outfall:	[ ]	I	Thallium, dissolved	ND		0.450 ug/L	08/04/2016	[ ]	[ ]
011	[X] Substantially identical to outfall: 012	[X]							[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 1.42 hours. Rainfall amount = 0.28 inches.

012: The impaired water pollutant total recoverable Aluminum exceeds the New Mexico water quality standard. The impaired water pollutant total Aroclor was not detected in stormwater discharge from this outfall. Therefore, annual monitoring for total Aroclor will be discontinued per Part 6.2.4.1. The average concentration of total Iron is mathematically certain to exceed the benchmark value. The impaired water pollutant dissolved Thallium was not detected in stormwater discharge from this outfall. Therefore, annual monitoring for dissolved Thallium will be discontinued per Part 6.2.4.1.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 1 2.b. Rainfall amount (inches): 0.3 2.c. Time since previous measurable storm event (days): 1

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
018	[ ] Substantially identical to outfall:	[ ]	I	Adjusted Gross Alpha	5.06	pCi/L		08/04/2016	[ ]	[ ]
018	[ ] Substantially identical to outfall:	[ ]	QBM	Aluminum, total recoverable	94.8	ug/L		08/04/2016	[ ]	[ ]
018	[ ] Substantially identical to outfall:	[ ]	QBM	Iron, total	1150	ug/L		08/04/2016	[ ]	[ ]
018	[ ] Substantially identical to outfall:	[ ]	QBM	Nitrate plus Nitrite Nitrogen	0.0544	mg/L		08/04/2016	[ ]	[ ]
013	[X] Substantially identical to outfall: 018	[X]							[ ]	[ ]
014	[X] Substantially identical to outfall: 018	[ ]							[ ]	[ ]
015	[X] Substantially identical to outfall: 018	[ ]							[ ]	[ ]
016	[X] Substantially identical to outfall: 018	[X]							[ ]	[ ]

017	[X] Substantially identical to outfall: 018	[X]							☐	☐
019	[X] Substantially identical to outfall: 018	[X]							☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 1.42 hours. Rainfall amount = 0.28 inches.

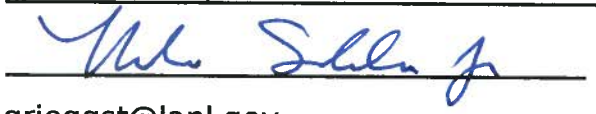
018: Copper, dissolved (I) - NODI 9. Thallium, dissolved (I) - NODI B. Aluminum, total recoverable (I) - NODI 9.

G. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

First Name, Middle Initial, Last Name: Anthony R Grieggs

Title: EPC-CP Group Leader

Signature:  Date 10/06/2016

E-mail: grieggst@lanl.gov

NPDES FORM 6100-29	EPA	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460 MSGP INDUSTRIAL DISCHARGE MONITORING REPORT (DMR) FORM	Form Approved. OMB No. 2040-0004

A. Approval to User Paper DMR Form

1. Have you been granted a waiver from electronic reporting from EPA Regional Office*? [X] YES [ ] NO

If yes, check which waiver you have been granted, the name of the EPA Regional Office staff person who granted the waiver, and the date of approval:

Waiver granted:

[ ] The owner/operator's headquarters is physically located in a geographic area (i.e., ZIP code or census tract) that is identified as under-served for broadband Internet access in the most recent report from the Federal Communications Commission.

[X] The owner/operator has issues regarding available computer access or computer capability.

Name of EPA staff person that granted the waiver: Everett Spencer

Date approval obtained: 06/17/2016

*** Note: You are required to obtain approval from the applicable EPA Regional Office prior to using this paper DMR form. If you have not obtained a waiver, you must file this form electronically using the NetDMR at http://www.epa.gov/netdmr/**

B. Permit Information

1. NPDES ID: NMR053195

2. Reason(s) for Submission (Check all that apply):

[X] Submitting monitoring data (Fill in all Sections).

[ ] Reporting no discharge for all outfalls for this monitoring period (Fill in Sections A, B, C, D, E.1, and G).

[ ] Reporting that your site status has changed to inactive and unstaffed (Fill in Sections A, B, C, D, and F and include date of status change in comment field in Section F.4).

[ ] Reporting that your site status has changed to active (Fill in all Sections and include date of status change in comment field in Section F.4).

[ ] Reporting that no further pollutant reductions are achievable for all outfalls and for all pollutants via Part 6.2.1.2 of the MSGP (Fill in Sections A, B, C, D, and G).

C. Facility Operator Information

1. Operator Information

Operator Name: Los Alamos National Security, LLC

Mailing Address:

Street: P.O. Box 1663, MS K490

City: Los Alamos State: NM ZIP Code: 87545 -

Phone: 505 667 0666

E-mail: grieggst@lanl.gov

2. DMR Preparer (Complete if DMR was prepared by someone other than the certifier):

First Name, Middle Initial, Last Name: Holly L. Wheeler

Organization: EPC-CP

Phone: 505 667 1312 Ext.

E-mail: hbenson@lanl.gov

D. Facility Information

1. Facility Name: Los Alamos National Laboratory

2. Facility Address:

Street/Location: Bikini Atoll Rd. SM30 K490

City: Los Alamos State: NM ZIP Code: 87545 -

County or Similar Government Subdivision: Los Alamos

E. Discharge Information

1. Identify monitoring period: [X] Check here if proposing alternative monitoring periods due to irregular stormwater runoff. Identify alternative monitoring schedule and indicate for which alternative monitoring period you are reporting monitoring data:

[ ] Quarter 1 (January 1 – March 31)	[ ] Quarter 1: From	04 / 01	To 05 / 31
[ ] Quarter 2 (April 1 – June 30)	[ ] Quarter 2: From	06 / 01	To 07 / 31
[ ] Quarter 3 (July 1 – September 30)	[X] Quarter 3: From	08 / 01	To 09 / 30
[ ] Quarter 4 (October 1 – December 31)	[ ] Quarter 4: From	10 / 01	To 11 / 30

2. Are you required to monitor for cadmium, copper, chromium, lead, nickel, silver, or zinc in freshwater? [X] Yes (Skip to 3) [ ] No (Skip to 4)

3. What is the hardness level of the receiving water? 57

4. Does your facility discharge into any saltwater receiving waters? [ ] Yes [X] No

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 1 2.b. Rainfall amount (inches): 0.4 2.c. Time since previous measurable storm event (days): 1

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
002	[ ] Substantially identical to outfall:	[ ]	QBM	Zinc, dissolved	54.3	ug/L		08/08/2016	[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 0.83 hours. Rainfall amount = 0.37 inches.

002: Adjusted Gross Alpha (I) - NODI 9. Aluminum, total recoverable (I) - NODI 9. Aroclor, total (I) - NODI B. Copper, dissolved (I) - NODI 9. Thallium, dissolved (I) - NODI B.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 1 2.b. Rainfall amount (inches): 0.4 2.c. Time since previous measurable storm event (days): 1

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
004	[ ] Substantially identical to outfall:	[ ]	QBM	Zinc, dissolved	10.3	ug/L		08/08/2016	[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 0.83 hours. Rainfall amount = 0.37 inches.

004: Adjusted Gross Alpha (I) - NODI 9. Aluminum, total recoverable (I) - NODI 9. Aroclor, total (I) - NODI 9.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 1 2.b. Rainfall amount (inches): 0.4 2.c. Time since previous measurable storm event (days): 4

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
018	[ ] Substantially identical to outfall:	[ ]	QBM	Copper, dissolved	11.2	ug/L		08/08/2016	[ ]	[ ]
018	[ ] Substantially identical to outfall:	[ ]	QBM	Zinc, dissolved	463	ug/L		08/08/2016	[ ]	[ ]
013	[X] Substantially identical to outfall: 018	[ ]							[ ]	[ ]
014	[X] Substantially identical to outfall: 018	[ ]							[ ]	[ ]
015	[X] Substantially identical to outfall: 018	[ ]							[ ]	[ ]
016	[X] Substantially identical to outfall: 018	[ ]							[ ]	[ ]
017	[X] Substantially identical to outfall: 018	[ ]							[ ]	[ ]
019	[X] Substantially identical to outfall: 018	[X]							[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 0.83 hours. Rainfall amount = 0.37 inches.

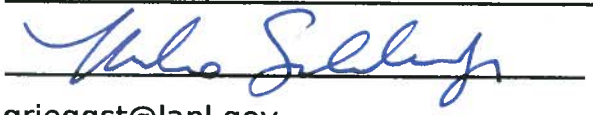
018: Adjusted Gross Alpha (I) - NODI 9. The average concentration of dissolved Zinc is mathematically certain to exceed the benchmark value. Aluminum, total recoverable (I) - NODI 9. Thallium, dissolved (I) - NODI B. Copper, dissolved (I) - NODI 9.

G. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

First Name, Middle Initial, Last Name: Anthony R Grieggs

Title: EPC-CP Group Leader

Signature:  Date 10/06/2016

E-mail: grieggst@lanl.gov

Los Alamos
NATIONAL LABORATORY
EST. 1943

Environmental Protection & Compliance Division (EPC-DO)
Environmental Compliance Programs (EPC-CP)
PO Box 1663, K490
Los Alamos, New Mexico 87545
(505) 667-0666

Date: OCT 2 0 2016
Symbol: EPC-DO-16-315
LA-UR: 16-28029
Locates Action No.: N/A

U.S. EPA Region 6
NPDES Stormwater Program (WQ-PP)
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

To whom it may concern:

Subject: **National Pollutant Discharge Elimination System (NPDES) Permit Tracking No. NMR053195, Multi-Sector General Permit (MSGP) Industrial Discharge Monitoring Reports (MDMRs) for August 11 and 13, 2016**

Enclosed are Los Alamos National Laboratory's MDMRs (Enclosure 1) for August 11 and 13, 2016, as required under MSGP Permit Tracking No. NMR053195. These reports are being submitted on behalf of Los Alamos National Security LLC and contain analytical results for impaired waters and quarterly benchmark monitoring at outfall 018.

Please contact Holly Wheeler at (505) 667-1312 or Terrill Lemke at (505) 665-2397 if you have questions regarding these MDMRs.

Sincerely,

Anthony R. Grieggs
Group Leader
Environmental Compliance Programs (EPC-CP)
Los Alamos National Security, LLC

ARG:TWL:HLW/lm

Enclosure: 1. NPDES Permit Tracking No. NMR053195, MDMRs for August 11 and 13, 2016

Cy: Everett Spencer, USEPA Region 6, Dallas, TX, (E-File)
Helen Nguyen, USEPA Region 6, Dallas, TX, (E-File)
Nasim Jahan, USEPA Region 6, Dallas, TX, (E-File)
Michelle Hunter, NMED/GWQB, Santa Fe, NM (E-File)
Shelly Lemon, NMED/SWQB, Santa Fe, NM (E-File)
Craig S. Leasure, PADOPS, (E-File)
William R. Mairson, PADOPS, (E-File)
Michael T. Brandt, ADESH, (E-File)
Raeanna Sharp-Geiger, ADESH, (E-File)
Karen E. Armijo, NA-LA, (E-File)
Terrill W. Lemke, EPC-CP, (E-File)
Holly L. Wheeler, EPC-CP, (E-File)
Leslie J. Dale, EPC-CP, (E-File)
Ellena I. Martinez, EPC-DP, (E-File)
lasomailbox@nnsa.doe.gov, (E-File)
locatesteam@lanl.gov, (E-File)
epc-correspondence@lanl.gov

ENCLOSURE 1

NPDES Permit Tracking No. NMR053195, MDMRs
for August 11 and 13, 2016

EPC-DO-16-315

LA-UR-16-28029

Date: OCT 2 0 2016

NPDES FORM 6100-29	EPA	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460 MSGP INDUSTRIAL DISCHARGE MONITORING REPORT (DMR) FORM	Form Approved. OMB No. 2040-0004

A. Approval to User Paper DMR Form

1. Have you been granted a waiver from electronic reporting from EPA Regional Office*? [X] YES [ ] NO

If yes, check which waiver you have been granted, the name of the EPA Regional Office staff person who granted the waiver, and the date of approval:

Waiver granted:

[ ] The owner/operator's headquarters is physically located in a geographic area (i.e., ZIP code or census tract) that is identified as under-served for broadband Internet access in the most recent report from the Federal Communications Commission.

[X] The owner/operator has issues regarding available computer access or computer capability.

Name of EPA staff person that granted the waiver: Everett Spencer

Date approval obtained: 06/17/2016

*** Note: You are required to obtain approval from the applicable EPA Regional Office prior to using this paper DMR form. If you have not obtained a waiver, you must file this form electronically using the NetDMR at http://www.epa.gov/netdmr/**

B. Permit Information

1. NPDES ID: NMR053195

2. Reason(s) for Submission (Check all that apply):

[X] Submitting monitoring data (Fill in all Sections).

[ ] Reporting no discharge for all outfalls for this monitoring period (Fill in Sections A, B, C, D, E.1, and G).

[ ] Reporting that your site status has changed to inactive and unstaffed (Fill in Sections A, B, C, D, and F and include date of status change in comment field in Section F.4).

[ ] Reporting that your site status has changed to active (Fill in all Sections and include date of status change in comment field in Section F.4).

[ ] Reporting that no further pollutant reductions are achievable for all outfalls and for all pollutants via Part 6.2.1.2 of the MSGP (Fill in Sections A, B, C, D, and G).

C. Facility Operator Information

1. Operator Information

Operator Name: Los Alamos National Security, LLC

Mailing Address:

Street: P.O. Box 1663, MS K490

City: Los Alamos State: NM ZIP Code: 87545 -

Phone: 505 667 0666

E-mail: grieggst@lanl.gov

2. DMR Preparer (Complete if DMR was prepared by someone other than the certifier):

First Name, Middle Initial, Last Name: Holly L. Wheeler

Organization: EPC-CP

Phone: 505 667 1312 Ext.

E-mail: hbenson@lanl.gov

D. Facility Information

1. Facility Name: Los Alamos National Laboratory

2. Facility Address:

Street/Location: Bikini Atoll Rd. SM30 K490

City: Los Alamos State: NM ZIP Code: 87545 -

County or Similar Government Subdivision: Los Alamos

E. Discharge Information

1. Identify monitoring period: [X] Check here if proposing alternative monitoring periods due to irregular stormwater runoff. Identify alternative monitoring schedule and indicate for which alternative monitoring period you are reporting monitoring data:

[ ] Quarter 1 (January 1 – March 31)	[ ] Quarter 1: From	04 / 01	To 05 / 31
[ ] Quarter 2 (April 1 – June 30)	[ ] Quarter 2: From	06 / 01	To 07 / 31
[ ] Quarter 3 (July 1 – September 30)	[X] Quarter 3: From	08 / 01	To 09 / 30
[ ] Quarter 4 (October 1 – December 31)	[ ] Quarter 4: From	10 / 01	To 11 / 30

2. Are you required to monitor for cadmium, copper, chromium, lead, nickel, silver, or zinc in freshwater? [X] Yes (Skip to 3) [ ] No (Skip to 4)

3. What is the hardness level of the receiving water? 57

4. Does your facility discharge into any saltwater receiving waters? [ ] Yes [X] No

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 0 2.b. Rainfall amount (inches): 0.0 2.c. Time since previous measurable storm event (days): 3

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
018	[ ] Substantially identical to outfall:	[ ]	I	Aroclor, total	ND		0.0343 ug/L	08/11/2016	[ ]	[ ]
013	[X] Substantially identical to outfall: 018	[X]							[ ]	[ ]
014	[X] Substantially identical to outfall: 018	[X]							[ ]	[ ]
015	[X] Substantially identical to outfall: 018	[X]							[ ]	[ ]
016	[X] Substantially identical to outfall: 018	[X]							[ ]	[ ]
017	[X] Substantially identical to outfall: 018	[X]							[ ]	[ ]
019	[X] Substantially identical to outfall: 018	[X]							[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 0.00 hours. Rainfall amount = 0.00 inches.

018: Adjusted Gross Alpha (I) - NODI 9. Scattered showers throughout the area resulted in precipitation recorded at a nearby rain gauge (Rainfall duration = 0.25 hours; Rainfall amount = 0.03 inches). The impaired water pollutant total Aroclor was not detected in stormwater discharge from this outfall. Therefore, annual monitoring for total Aroclor will be discontinued per Part 6.2.4.1. Aluminum, total recoverable (I) - NODI 9. Copper, dissolved (I) - NODI 9. Thallium, dissolved (I) - NODI B.

G. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

First Name, Middle Initial, Last Name: Anthony R Grieggs

Title: EPC-CP Group Leader

Signature: A R Grieggs Date 10/20/2016

E-mail: grieggst@lanl.gov

NPDES FORM 6100-29	EPA	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460 MSGP INDUSTRIAL DISCHARGE MONITORING REPORT (DMR) FORM	Form Approved. OMB No. 2040-0004

A. Approval to User Paper DMR Form

1. Have you been granted a waiver from electronic reporting from EPA Regional Office*? [X] YES [ ] NO

If yes, check which waiver you have been granted, the name of the EPA Regional Office staff person who granted the waiver, and the date of approval:

Waiver granted:

- [ ] The owner/operator's headquarters is physically located in a geographic area (i.e., ZIP code or census tract) that is identified as under-served for broadband Internet access in the most recent report from the Federal Communications Commission.
- [X] The owner/operator has issues regarding available computer access or computer capability.

Name of EPA staff person that granted the waiver: Everett Spencer

Date approval obtained: 06/17/2016

*** Note: You are required to obtain approval from the applicable EPA Regional Office prior to using this paper DMR form. If you have not obtained a waiver, you must file this form electronically using the NetDMR at http://www.epa.gov/netdmr/**

B. Permit Information

1. NPDES ID: NMR053195

2. Reason(s) for Submission (Check all that apply):

- [X] Submitting monitoring data (Fill in all Sections).
- [ ] Reporting no discharge for all outfalls for this monitoring period (Fill in Sections A, B, C, D, E.1, and G).
- [ ] Reporting that your site status has changed to inactive and unstaffed (Fill in Sections A, B, C, D, and F and include date of status change in comment field in Section F.4).
- [ ] Reporting that your site status has changed to active (Fill in all Sections and include date of status change in comment field in Section F.4).
- [ ] Reporting that no further pollutant reductions are achievable for all outfalls and for all pollutants via Part 6.2.1.2 of the MSGP (Fill in Sections A, B, C, D, and G).

C. Facility Operator Information

1. Operator Information

Operator Name: Los Alamos National Security, LLC

Mailing Address:

Street: P.O. Box 1663, MS K490

City: Los Alamos State: NM ZIP Code: 87545 -

Phone: 505 667 0666

E-mail: grieggst@lanl.gov

2. DMR Preparer (Complete if DMR was prepared by someone other than the certifier):

First Name, Middle Initial, Last Name: Holly L. Wheeler

Organization: EPC-CP

Phone: 505 667 1312 Ext.

E-mail: hbenson@lanl.gov

D. Facility Information

1. Facility Name: Los Alamos National Laboratory

2. Facility Address:

Street/Location: Bikini Atoll Rd. SM30 K490

City: Los Alamos State: NM ZIP Code: 87545 -

County or Similar Government Subdivision: Los Alamos

E. Discharge Information

1. Identify monitoring period:

[X] Check here if proposing alternative monitoring periods due to irregular stormwater runoff. Identify alternative monitoring schedule and indicate for which alternative monitoring period you are reporting monitoring data:

[ ] Quarter 1 (January 1 – March 31)	[ ] Quarter 1: From	04 / 01	To 05 / 31
[ ] Quarter 2 (April 1 – June 30)	[ ] Quarter 2: From	06 / 01	To 07 / 31
[ ] Quarter 3 (July 1 – September 30)	[X] Quarter 3: From	08 / 01	To 09 / 30
[ ] Quarter 4 (October 1 – December 31)	[ ] Quarter 4: From	10 / 01	To 11 / 30

2. Are you required to monitor for cadmium, copper, chromium, lead, nickel, silver, or zinc in freshwater? [X] Yes (Skip to 3) [ ] No (Skip to 4)

3. What is the hardness level of the receiving water? 57

4. Does your facility discharge into any saltwater receiving waters? [ ] Yes [X] No

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 1 2.b. Rainfall amount (inches): 0.3 2.c. Time since previous measurable storm event (days): 2

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
018	[ ] Substantially identical to outfall:	[ ]	QBM	Aluminum, total recoverable	408	ug/L		08/13/2016	[ ]	[ ]
018	[ ] Substantially identical to outfall:	[ ]	QBM	Iron, total	1120	ug/L		08/13/2016	[ ]	[ ]
018	[ ] Substantially identical to outfall:	[ ]	QBM	Nitrate plus Nitrite Nitrogen	0.0841	mg/L		08/13/2016	[ ]	[ ]
013	[X] Substantially identical to outfall: 018	[X]							[ ]	[ ]
014	[X] Substantially identical to outfall: 018	[ ]							[ ]	[ ]
015	[X] Substantially identical to outfall: 018	[ ]							[ ]	[ ]
016	[X] Substantially identical to outfall: 018	[X]							[ ]	[ ]
017	[X] Substantially identical to outfall: 018	[ ]							[ ]	[ ]

019	[X] Substantially identical to outfall: 018	[X]							☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 0.92 hours. Rainfall amount = 0.30 inches.

018: Adjusted Gross Alpha (I) - NODI 9. Aroclor, total (I) - NODI B. Copper, dissolved (I) - NODI 9. Thallium, dissolved (I) - NODI B. Aluminum, total recoverable (I) - NODI 9.

G. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

First Name, Middle Initial, Last Name: Anthony R Grieggs

Title: EPC-CP Group Leader

Signature: A R Grieggs Date 10/20/2016

E-mail: grieggst@lanl.gov

Environmental Protection & Compliance Division (EPC-DO)
Environmental Compliance Programs (EPC-CP)
PO Box 1663, K490
Los Alamos, New Mexico 87545
(505) 667-0666

Date: NOV 0 3 2016
Symbol: EPC-DO-16-342
LA-UR: 16-28480
Locates Action No.: N/A

U.S. EPA Region 6
NPDES Stormwater Program (WQ-PP)
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

To whom it may concern:

Subject: National Pollutant Discharge Elimination System (NPDES) Permit Tracking No. NMR053195, Multi-Sector General Permit (MSGP) Industrial Discharge Monitoring Reports (MDMRs) for August 24 and 27, 2016

Enclosed are Los Alamos National Laboratory's MDMRs (Enclosure 1) for August 24 and 27, 2016, as required under MSGP Permit Tracking No. NMR053195. These reports are being submitted on behalf of Los Alamos National Security LLC and contain analytical results for impaired waters and quarterly benchmark monitoring at outfalls 018 and 012.

Please contact Holly Wheeler at (505) 667-1312 or Terrill Lemke at (505) 665-2397 if you have questions regarding these MDMRs.

Sincerely,

Anthony R. Grieggs
Group Leader
Environmental Compliance Programs (EPC-CP)
Los Alamos National Security, LLC

ARG:TWL:HLW/hw

Enclosure: 1. NPDES Permit Tracking No. NMR053195, MDMRs for August 24 and 27, 2016

Cy: Helen Nguyen, EPA Region 6, Dallas TX (E-File)
Nasim Jahan, EPA Region 6, Dallas TX (E-File)
Michelle Hunter, NMED/GWQB, Santa Fe, NM (E-File)
Shelly Lemon, NMED/SWQB, Santa Fe, NM (E-File)
Craig S. Leasure, PADOPS, (E-File)
William R. Mairson, PADOPS, (E-File)
Michael T. Brandt, ADESH, (E-File)
Raeanna Sharp-Geiger, ADESH, (E-File)
Karen Armijo, DOE, (E-File)
Terrill W. Lemke, EPC-CP, (E-File)
Holly L. Wheeler, EPC-CP, (E-File)
Leslie J. Dale, EPC-CP, (E-File)
Ellena I. Martinez, EPC-DP, (E-File)
Saundra Martinez, ADEM-PO, (E-File)
lasomailbox@nnsa.doe.gov, (E-File)
locatesteam@lanl.gov, (E-File)
epc-correspondence@lanl.gov

ENCLOSURE 1

NPDES Permit Tracking No. NMR053195, MDMRs
for August 24 and 27, 2016

EPC-DO-16-342

LA-UR-16-28480

Date: NOV 0 3 2016

NPDES FORM 6100-29	EPA	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460 MSGP INDUSTRIAL DISCHARGE MONITORING REPORT (DMR) FORM	Form Approved. OMB No. 2040-0004

A. Approval to User Paper DMR Form

1. Have you been granted a waiver from electronic reporting from EPA Regional Office*? [X] YES [ ] NO

If yes, check which waiver you have been granted, the name of the EPA Regional Office staff person who granted the waiver, and the date of approval:

Waiver granted:
- [ ] The owner/operator's headquarters is physically located in a geographic area (i.e., ZIP code or census tract) that is identified as under-served for broadband Internet access in the most recent report from the Federal Communications Commission.
- [X] The owner/operator has issues regarding available computer access or computer capability.

Name of EPA staff person that granted the waiver: Everett Spencer

Date approval obtained: 06/17/2016

*** Note: You are required to obtain approval from the applicable EPA Regional Office prior to using this paper DMR form. If you have not obtained a waiver, you must file this form electronically using the NetDMR at http://www.epa.gov/netdmr/**

B. Permit Information

1. NPDES ID: NMR053195

2. Reason(s) for Submission (Check all that apply):

- [X] Submitting monitoring data (Fill in all Sections).
- [ ] Reporting no discharge for all outfalls for this monitoring period (Fill in Sections A, B, C, D, E.1, and G).
- [ ] Reporting that your site status has changed to inactive and unstaffed (Fill in Sections A, B, C, D, and F and include date of status change in comment fiel in Section F.4).
- [ ] Reporting that your site status has changed to active (Fill in all Sections and include date of status change in comment field in Section F.4).
- [ ] Reporting that no further pollutant reductions are achievable for all outfalls and for all pollutants via Part 6.2.1.2 of the MSGP (Fill in Sections A, B, C, D, and G).

C. Facility Operator Information

1. Operator Information

Operator Name: Los Alamos National Security, LLC

Mailing Address:

Street: P.O. Box 1663, MS K490

City: Los Alamos State: NM ZIP Code: 87545 -

Phone: 505 667 0666

E-mail: grieggst@lanl.gov

2. DMR Preparer (Complete if DMR was prepared by someone other than the certifier):

First Name, Middle Initial, Last Name: Holly L. Wheeler

Organization: EPC-CP

Phone: 505 667 1312 Ext.

E-mail: hbenson@lanl.gov

D. Facility Information

1. Facility Name: Los Alamos National Laboratory

2. Facility Address:

Street/Location: Bikini Atoll Rd. SM30 K490

City: Los Alamos State: NM ZIP Code: 87545 -

County or Similar Government Subdivision: Los Alamos

E. Discharge Information

1. Identify monitoring period:

[X] Check here if proposing alternative monitoring periods due to irregular stormwater runoff. Identify alternative monitoring schedule and indicate for which alternative monitoring period you are reporting monitoring data:

[ ] Quarter 1 (January 1 - March 31)	[ ] Quarter 1: From	04 / 01 To 05 / 31
[ ] Quarter 2 (April 1 - June 30)	[ ] Quarter 2: From	06 / 01 To 07 / 31
[ ] Quarter 3 (July 1 - September 30)	[X] Quarter 3: From	08 / 01 To 09 / 30
[ ] Quarter 4 (October 1 - December 31)	[ ] Quarter 4: From	10 / 01 To 11 / 30

2. Are you required to monitor for cadmium, copper, chromium, lead, nickel, silver, or zinc in freshwater? [X] Yes (Skip to 3) [ ] No (Skip to 4)

3. What is the hardness level of the receiving water? 57

4. Does your facility discharge into any saltwater receiving waters? [ ] Yes [X] No

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 2 2.b. Rainfall amount (inches): 0.4 2.c. Time since previous measurable storm event (days): 11

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
018	[ ] Substantially identical to outfall:	[ ]	QBM	Copper, dissolved	4.96	ug/L		08/24/2016	[ ]	[ ]
018	[ ] Substantially identical to outfall:	[ ]	QBM	Zinc, dissolved	787	ug/L		08/24/2016	[ ]	[ ]
013	[X] Substantially identical to outfall: 018	[X]							[ ]	[ ]
014	[X] Substantially identical to outfall: 018	[ ]							[ ]	[ ]
015	[X] Substantially identical to outfall: 018	[ ]							[ ]	[ ]
016	[X] Substantially identical to outfall: 018	[X]							[ ]	[ ]
017	[X] Substantially identical to outfall: 018	[ ]							[ ]	[ ]
019	[X] Substantially identical to outfall: 018	[X]							[ ]	[ ]

(QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 1.58 hours. Rainfall amount = 0.35 inches.

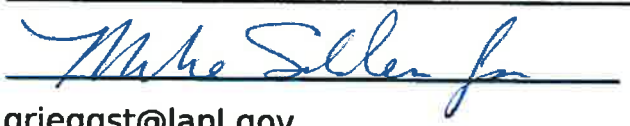
018: The average concentration of dissolved Zinc is mathematically certain to exceed the benchmark value. Adjusted Gross Alpha (I) - NODI 9. Aluminum, total recoverable (I) - NODI 9. Aroclor, total (I) - NODI B. Thallium, dissolved (I) - NODI B. Copper, dissolved (I) - NODI 9.

G. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

First Name, Middle Initial, Last Name: Anthony R Grieggs

Title: EPC-CP Group Leader

Signature: 

Date 11/03/2016

E-mail: grieggst@lanl.gov

NPDES FORM 6100-29	EPA	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460 MSGP INDUSTRIAL DISCHARGE MONITORING REPORT (DMR) FORM	Form Approved. OMB No. 2040-0004

A. Approval to User Paper DMR Form

1. Have you been granted a waiver from electronic reporting from EPA Regional Office*? [X] YES [ ] NO

If yes, check which waiver you have been granted, the name of the EPA Regional Office staff person who granted the waiver, and the date of approval:

Waiver granted:
- [ ] The owner/operator's headquarters is physically located in a geographic area (i.e., ZIP code or census tract) that is identified as under-served for broadband Internet access in the most recent report from the Federal Communications Commission.
- [X] The owner/operator has issues regarding available computer access or computer capability.

Name of EPA staff person that granted the waiver: Everett Spencer

Date approval obtained: 06/17/2016

*** Note: You are required to obtain approval from the applicable EPA Regional Office prior to using this paper DMR form. If you have not obtained a waiver, you must file this form electronically using the NetDMR at http://www.epa.gov/netdmr/**

B. Permit Information

1. NPDES ID: NMR053195

2. Reason(s) for Submission (Check all that apply):

- [X] Submitting monitoring data (Fill in all Sections).
- [ ] Reporting no discharge for all outfalls for this monitoring period (Fill in Sections A, B, C, D, E.1, and G).
- [ ] Reporting that your site status has changed to inactive and unstaffed (Fill in Sections A, B, C, D, and F and include date of status change in comment fiel in Section F.4).
- [ ] Reporting that your site status has changed to active (Fill in all Sections and include date of status change in comment field in Section F.4).
- [ ] Reporting that no further pollutant reductions are achievable for all outfalls and for all pollutants via Part 6.2.1.2 of the MSGP (Fill in Sections A, B, C, D, and G).

C. Facility Operator Information

1. Operator Information

Operator Name: Los Alamos National Security, LLC

Mailing Address:

Street: P.O. Box 1663, MS K490

City: Los Alamos State: NM ZIP Code: 87545 -

Phone: 505 667 0666

E-mail: grieggst@lanl.gov

2. DMR Preparer (Complete if DMR was prepared by someone other than the certifier):

First Name, Middle Initial, Last Name: Holly L. Wheeler

Organization: EPC-CP

Phone: 505 667 1312 Ext.

E-mail: hbenson@lanl.gov

D. Facility Information

1. Facility Name: Los Alamos National Laboratory

2. Facility Address:

Street/Location: Bikini Atoll Rd. SM30 K490

City: Los Alamos State: NM ZIP Code: 87545 -

County or Similar Government Subdivision: Los Alamos

E. Discharge Information

1. Identify monitoring period: [X] Check here if proposing alternative monitoring periods due to irregular stormwater runoff. Identify alternative monitoring schedule and indicate for which alternative monitoring period you are reporting monitoring data:

[ ] Quarter 1 (January 1 – March 31)	[ ] Quarter 1: From	04	/ 01	To	05	/ 31
[ ] Quarter 2 (April 1 – June 30)	[ ] Quarter 2: From	06	/ 01	To	07	/ 31
[ ] Quarter 3 (July 1 – September 30)	[X] Quarter 3: From	08	/ 01	To	09	/ 30
[ ] Quarter 4 (October 1 – December 31)	[ ] Quarter 4: From	10	/ 01	To	11	/ 30

2. Are you required to monitor for cadmium, copper, chromium, lead, nickel, silver, or zinc in freshwater? [X] Yes (Skip to 3) [ ] No (Skip to 4)

3. What is the hardness level of the receiving water? 57

4. Does your facility discharge into any saltwater receiving waters? [ ] Yes [X] No

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 2 2.b. Rainfall amount (inches): 0.8 2.c. Time since previous measurable storm event (days): 3

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
012	[ ] Substantially identical to outfall:	[ ]	I	Adjusted Gross Alpha	.519	pCi/L		08/27/2016	[ ]	[ ]
012	[ ] Substantially identical to outfall:	[ ]	QBM	Iron, total	219	ug/L		08/27/2016	[ ]	[ ]
011	[X] Substantially identical to outfall: 012	[X]							[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 2.17 hours. Rainfall amount = 0.85 inches.

012: Aluminum, total recoverable (I) - NODI 9. Aroclor, total (I) - NODI B. Copper, dissolved (I) - NODI 9. Thallium, dissolved (I) - NODI B.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 2 2.b. Rainfall amount (inches): 0.8 2.c. Time since previous measurable storm event (days): 3

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
018	[ ] Substantially identical to outfall:	[ ]	QBM	Nitrate plus Nitrite Nitrogen	BQL		0.050 mg/L	08/27/2016	[ ]	[ ]
013	[X] Substantially identical to outfall: 018	[ ]							[ ]	[ ]
014	[X] Substantially identical to outfall: 018	[ ]							[ ]	[ ]
015	[X] Substantially identical to outfall: 018	[ ]							[ ]	[ ]
016	[X] Substantially identical to outfall: 018	[ ]							[ ]	[ ]
017	[X] Substantially identical to outfall: 018	[ ]							[ ]	[ ]
019	[X] Substantially identical to outfall: 018	[X]							[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

G. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

First Name, Middle Initial, Last Name: Anthony R Grieggs

Title: EPC-CP Group Leader

Signature: 

Date 11/03/2016

E-mail: grieggst@lanl.gov

Environmental Protection & Compliance Division
Los Alamos National Laboratory
PO Box 1663, K491
Los Alamos, New Mexico 87545
(505) 667-2211

Date: SEP 1 3 2017
Symbol: EPC-DO: 17-367
LA-UR: 17-28206
Locates Action No.: N/A

U.S. EPA Region 6
NPDES Stormwater Program (WQ-PP)
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

Subject: National Pollutant Discharge Elimination System (NPDES) Permit Tracking No. NMR053195, Multi-Sector General Permit (MSGP) Industrial Discharge Monitoring Reports (MDMRs) for July 12 and 18, 2017

To whom it may concern:

Enclosed are Los Alamos National Laboratory's MDMRs (Enclosure 1) for July 12 and 18, 2017 as required under MSGP Permit Tracking No. NMR053195. These reports are being submitted on behalf of Los Alamos National Security, LLC and contain analytical results for impaired waters and quarterly benchmark monitoring at outfalls 020 and 073.

Please contact Holly Wheeler at (505) 667-1312 or Terrill Lemke at (505) 665-2397 if you have questions regarding these MDMRs.

Sincerely,

ARG

Anthony R. Grieggs
Group Leader

ARG/TWL/HLW: am

Enclosure(s): 1.): NPDES Permit Tracking No. NMR053195, MDMRs for July 12 and 18, 2017

Copy: Helen Nguyen, EPA Region 6, Dallas TX (E-File)
Nasim Jahan, EPA Region 6, Dallas TX (E-File)
Michelle Hunter, NMED/GWQB, Santa Fe, NM (E-File)
Shelly Lemon, NMED/SWQB, Santa Fe, NM (E-File)
Karen Armijo, NA-LA, (E-File)
Arturo Duran, EM-SG, (E-File)
David Rhodes, EM-SG, (E-File)
Craig S. Leasure, PADOPS, (E-File)
William R. Mairson, PADOPS, (E-File)
Michael T. Brandt, ADESH, (E-File)
Raeanna Sharp-Geiger, ADESH, (E-File)
Bruce Robinson, ADEM-PO, (E-File)
Andrew Erickson, UI-DO, (E-File)
Clifford Kirkland, STO-DO, (E-File)
Stephanie Archuleta, DESHF-DO, (E-File)
Theresa Cull, DESHS-DO, (E-File)
Russel Stone, DESHS-UIS, (E-File)
Garry Schramm, DESHF-STO, (E-File)
Jillian Burgin, DESHS-UIS, (E-File)
Marc Gallegos, DESHF-STO, (E-File)
Courtney Perkins, DESHF-STO, (E-File)
Terrill W. Lemke, EPC-CP, (E-File)
Holly L. Wheeler, EPC-CP, (E-File)
Leslie J. Dale, EPC-CP, (E-File)
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epc-correspondence@lanl.gov, (E-File)

ENCLOSURE 1

NPDES Permit Tracking No. NMR053195, MDMRs for
July 12 and 18, 2017

EPC-DO: 17-367

LA-UR-17-28206

Date: SEP 13 2017

NPDES FORM 6100-29	EPA	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460 MSGP INDUSTRIAL DISCHARGE MONITORING REPORT (DMR) FORM	Form Approved. OMB No. 2040-0004

A. Approval to User Paper DMR Form

1. Have you been granted a waiver from electronic reporting from EPA Regional Office*? [X] YES [ ] NO

If yes, check which waiver you have been granted, the name of the EPA Regional Office staff person who granted the waiver, and the date of approval:

Waiver granted:
- [ ] The owner/operator's headquarters is physically located in a geographic area (i.e., ZIP code or census tract) that is identified as under-served for broadband Internet access in the most recent report from the Federal Communications Commission.
- [X] The owner/operator has issues regarding available computer access or computer capability.

Name of EPA staff person that granted the waiver: Everett Spencer

Date approval obtained: 06/17/2016

*** Note: You are required to obtain approval from the applicable EPA Regional Office prior to using this paper DMR form. If you have not obtained a waiver, you must file this form electronically using the NetDMR at http://www.epa.gov/netdmr/**

B. Permit Information

1. NPDES ID: NMR053195

2. Reason(s) for Submission (Check all that apply):

- [X] Submitting monitoring data (Fill in all Sections).
- [ ] Reporting no discharge for all outfalls for this monitoring period (Fill in Sections A, B, C, D, E.1, and G).
- [ ] Reporting that your site status has changed to inactive and unstaffed (Fill in Sections A, B, C, D, and F and include date of status change in comment field in Section F.4).
- [ ] Reporting that your site status has changed to active (Fill in all Sections and include date of status change in comment field in Section F.4).
- [ ] Reporting that no further pollutant reductions are achievable for all outfalls and for all pollutants via Part 6.2.1.2 of the MSGP (Fill in Sections A, B, C, D, and G).

C. Facility Operator Information

1. Operator Information

Operator Name: Los Alamos National Security, LLC

Mailing Address:

Street: P.O. Box 1663, MS K490

City: Los Alamos State: NM ZIP Code: 87545 -

Phone: 505 667 0666

E-mail: grieggst@lanl.gov

2. DMR Preparer (Complete if DMR was prepared by someone other than the certifier):

First Name, Middle Initial, Last Name: Holly L. Wheeler

Organization: EPC-CP

Phone: 505 667 1312 Ext.

E-mail: hbenson@lanl.gov

D. Facility Information

1. Facility Name: Los Alamos National Laboratory

2. Facility Address:

Street/Location: Bikini Atoll Rd. SM30 K490

City: Los Alamos State: NM ZIP Code: 87545 -

County or Similar Government Subdivision: Los Alamos

E. Discharge Information

1. Identify monitoring period: [X] Check here if proposing alternative monitoring periods due to irregular stormwater runoff. Identify alternative monitoring schedule and indicate for which alternative monitoring period you are reporting monitoring data:

[ ] Quarter 1 (January 1 – March 31)	[ ] Quarter 1: From	04 / 01	To 05 / 31
[ ] Quarter 2 (April 1 – June 30)	[X] Quarter 2: From	06 / 01	To 07 / 31
[ ] Quarter 3 (July 1 – September 30)	[ ] Quarter 3: From	08 / 01	To 09 / 30
[ ] Quarter 4 (October 1 – December 31)	[ ] Quarter 4: From	10 / 01	To 11 / 30

2. Are you required to monitor for cadmium, copper, chromium, lead, nickel, silver, or zinc in freshwater? [X] Yes (Skip to 3) [ ] No (Skip to 4)

3. What is the hardness level of the receiving water? 57

4. Does your facility discharge into any saltwater receiving waters? [ ] Yes [X] No

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 1 2.b. Rainfall amount (inches): 0.2 2.c. Time since previous measurable storm event (days): 16

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
020	[ ] Substantially identical to outfall:	[ ]	QBM	Aluminum, total recoverable	443	ug/L		07/12/2017	[ ]	[ ]
020	[ ] Substantially identical to outfall:	[ ]	I	Aluminum, total recoverable	443	ug/L		07/12/2017	[ ]	[ ]
020	[ ] Substantially identical to outfall:	[ ]	QBM	Iron, total	318	ug/L		07/12/2017	[ ]	[ ]
020	[ ] Substantially identical to outfall:	[ ]	QBM	Nitrate plus Nitrite Nitrogen	0.847	mg/L		07/12/2017	[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 0.75 hours. Rainfall amount = 0.15 inches.

020: The average of four monitoring values for total recoverable Aluminum does not exceed the benchmark value, therefore quarterly monitoring will be discontinued per Part 6.2.1.2. The average of four monitoring values for total Iron does not exceed the benchmark value, therefore quarterly monitoring will be discontinued per Part 6.2.1.2. The average of four monitoring values for Nitrate plus Nitrite Nitrogen does not exceed the benchmark value, therefore quarterly monitoring will be discontinued per Part 6.2.1.2. Adjusted Gross Alpha (I) - NODI B. Aroclor, total (I) - NODI B. Thallium, dissolved (I) - NODI B.

G. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

First Name, Middle Initial, Last Name: Anthony R Grieggs

Title: EPC-CP Group Leader

Signature: ARGrieggs Date 09/13/2017

E-mail: grieggst@lanl.gov

NPDES FORM 6100-29	EPA	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460 MSGP INDUSTRIAL DISCHARGE MONITORING REPORT (DMR) FORM	Form Approved. OMB No. 2040-0004

A. Approval to User Paper DMR Form

1. Have you been granted a waiver from electronic reporting from EPA Regional Office*? [X] YES [ ] NO

If yes, check which waiver you have been granted, the name of the EPA Regional Office staff person who granted the waiver, and the date of approval:

Waiver granted:

- [ ] The owner/operator's headquarters is physically located in a geographic area (i.e., ZIP code or census tract) that is identified as under-served for broadband Internet access in the most recent report from the Federal Communications Commission.
- [X] The owner/operator has issues regarding available computer access or computer capability.

Name of EPA staff person that granted the waiver: Everett Spencer

Date approval obtained: 06/17/2016

*** Note: You are required to obtain approval from the applicable EPA Regional Office prior to using this paper DMR form. If you have not obtained a waiver, you must file this form electronically using the NetDMR at http://www.epa.gov/netdmr/**

B. Permit Information

1. NPDES ID: NMR053195

2. Reason(s) for Submission (Check all that apply):

- [X] Submitting monitoring data (Fill in all Sections).
- [ ] Reporting no discharge for all outfalls for this monitoring period (Fill in Sections A, B, C, D, E.1, and G).
- [ ] Reporting that your site status has changed to inactive and unstaffed (Fill in Sections A, B, C, D, and F and include date of status change in comment field in Section F.4).
- [ ] Reporting that your site status has changed to active (Fill in all Sections and include date of status change in comment field in Section F.4).
- [ ] Reporting that no further pollutant reductions are achievable for all outfalls and for all pollutants via Part 6.2.1.2 of the MSGP (Fill in Sections A, B, C, D, and G).

C. Facility Operator Information

1. Operator Information

Operator Name: Los Alamos National Security, LLC

Mailing Address:

Street: P.O. Box 1663, MS K490

City: Los Alamos State: NM ZIP Code: 87545 -

Phone: 505 667 0666

E-mail: grieggst@lanl.gov

2. DMR Preparer (Complete if DMR was prepared by someone other than the certifier):

First Name, Middle Initial, Last Name: Holly L. Wheeler

Organization: EPC-CP

Phone: 505 667 1312 Ext.

E-mail: hbenson@lanl.gov

D. Facility Information

1. Facility Name: Los Alamos National Laboratory

2. Facility Address:

Street/Location: Bikini Atoll Rd. SM30 K490

City: Los Alamos State: NM ZIP Code: 87545 -

County or Similar Government Subdivision: Los Alamos

E. Discharge Information

1. Identify monitoring period: [X] Check here if proposing alternative monitoring periods due to irregular stormwater runoff. Identify alternative monitoring schedule and indicate for which alternative monitoring period you are reporting monitoring data:

[ ] Quarter 1 (January 1 – March 31)	[ ] Quarter 1: From	04 / 01	To 05 / 31
[ ] Quarter 2 (April 1 – June 30)	[X] Quarter 2: From	06 / 01	To 07 / 31
[ ] Quarter 3 (July 1 – September 30)	[ ] Quarter 3: From	08 / 01	To 09 / 30
[ ] Quarter 4 (October 1 – December 31)	[ ] Quarter 4: From	10 / 01	To 11 / 30

2. Are you required to monitor for cadmium, copper, chromium, lead, nickel, silver, or zinc in freshwater? [X] Yes (Skip to 3) [ ] No (Skip to 4)

3. What is the hardness level of the receiving water? 57

4. Does your facility discharge into any saltwater receiving waters? [ ] Yes [X] No

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 1 2.b. Rainfall amount (inches): 0.3 2.c. Time since previous measurable storm event (days): 6

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
073	[ ] Substantially identical to outfall:	[ ]	I	Copper, dissolved	41.8	ug/L		07/18/2017	[ ]	[ ]
074	[X] Substantially identical to outfall: 073	[X]							[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 0.83 hours. Rainfall amount = 0.29 inches.

073: The impaired water pollutant dissolved Copper exceeds the New Mexico water quality standard. Thallium, dissolved (I) - NODI B.

G. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

First Name, Middle Initial, Last Name: Anthony R Grieggs

Title: EPC-CP Group Leader

Signature: A R Grieggs Date 09/13/2017

E-mail: grieggst@lanl.gov

Environmental Protection & Compliance Division
Los Alamos National Laboratory
PO Box 1663, K491
Los Alamos, New Mexico 87545
(505) 667-2211

Date: SEP 25 2017
Symbol: EPC-DO: 17-401
LA-UR: 17-28621
Locates Action No.: N/A

U.S. EPA Region 6
NPDES Stormwater Program (WQ-PP)
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

Subject: National Pollutant Discharge Elimination System (NPDES) Permit Tracking No. NMR053195, Multi-Sector General Permit (MSGP) Industrial Discharge Monitoring Reports (MDMRs) for July 26 and 29, 2017

To whom it may concern:

Enclosed are Los Alamos National Laboratory's MDMRs (Enclosure 1) for July 26 and 29, 2017 as required under MSGP Permit Tracking No. NMR053195. These reports are being submitted on behalf of Los Alamos National Security, LLC and contain analytical results for impaired waters and quarterly benchmark monitoring at outfalls 012, 020, 031, 039 and 073.

Please contact Holly Wheeler at (505) 667-1312 or Terrill Lemke at (505) 665-2397 if you have questions regarding these MDMRs.

Sincerely,

Anthony R. Grieggs
Group Leader

ARG/TWL/HLW: am

Enclosure(s): 1): NPDES Permit Tracking No. NMR053195, MDMRs for July 26 and 29, 2017

Copy: Helen Nguyen, EPA Region 6, Dallas TX (E-File)
Nasim Jahan, EPA Region 6, Dallas TX (E-File)
Michelle Hunter, NMED/GWQB, Santa Fe, NM (E-File)
Shelly Lemon, NMED/SWQB, Santa Fe, NM (E-File)
Karen Armijo, NA-LA, (E-File)
Arturo Duran, EM-SG, (E-File)
David Rhodes, EM-SG, (E-File)
Craig S. Leasure, PADOPS, (E-File)
William R. Mairson, PADOPS, (E-File)
Michael T. Brandt, ADESH, (E-File)
Raeanna Sharp-Geiger, ADESH, (E-File)
Bruce Robinson, ADEM-PO, (E-File)
Andrew Erickson, UI-DO, (E-File)
Clifford Kirkland, STO-DO, (E-File)
Stephanie Archuleta, DESHF-DO, (E-File)
Theresa Cull, DESHS-DO, (E-File)
Russel Stone, DESHS-UIS, (E-File)
Garry Schramm, DESHF-STO, (E-File)
Jillian Burgin, DESHS-UIS, (E-File)
Marc Gallegos, DESHF-STO, (E-File)
Courtney Perkins, DESHF-STO, (E-File)
Terrill W. Lemke, EPC-CP, (E-File)
Holly L. Wheeler, EPC-CP, (E-File)
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Adesh-records@lanl.gov, (E-File)
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epc-correspondence@lanl.gov, (E-File)

ENCLOSURE 1

NPDES Permit Tracking No. NMR053195, MDMRs for
July 26 and 29, 2017

EPC-DO: 17-401

LA-UR-17-28621

Date: SEP 25 2017

NPDES FORM 6100-29	EPA	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460 MSGP INDUSTRIAL DISCHARGE MONITORING REPORT (DMR) FORM	Form Approved. OMB No. 2040-0004

A. Approval to User Paper DMR Form

1. Have you been granted a waiver from electronic reporting from EPA Regional Office*? [X] YES [ ] NO

If yes, check which waiver you have been granted, the name of the EPA Regional Office staff person who granted the waiver, and the date of approval:

Waiver granted:

[ ] The owner/operator's headquarters is physically located in a geographic area (i.e., ZIP code or census tract) that is identified as under-served for broadband Internet access in the most recent report from the Federal Communications Commission.

[X] The owner/operator has issues regarding available computer access or computer capability.

Name of EPA staff person that granted the waiver: Everett Spencer

Date approval obtained: 06/17/2016

*** Note: You are required to obtain approval from the applicable EPA Regional Office prior to using this paper DMR form. If you have not obtained a waiver, you must file this form electronically using the NetDMR at http://www.epa.gov/netdmr/**

B. Permit Information

1. NPDES ID: NMR053195

2. Reason(s) for Submission (Check all that apply):

[X] Submitting monitoring data (Fill in all Sections).

[ ] Reporting no discharge for all outfalls for this monitoring period (Fill in Sections A, B, C, D, E.1, and G).

[ ] Reporting that your site status has changed to inactive and unstaffed (Fill in Sections A, B, C, D, and F and include date of status change in comment field in Section F.4).

[ ] Reporting that your site status has changed to active (Fill in all Sections and include date of status change in comment field in Section F.4).

[ ] Reporting that no further pollutant reductions are achievable for all outfalls and for all pollutants via Part 6.2.1.2 of the MSGP (Fill in Sections A, B, C, D, and G).

C. Facility Operator Information

1. Operator Information

Operator Name: Los Alamos National Security, LLC

Mailing Address:

Street: P.O. Box 1663, MS K490

City: Los Alamos State: NM ZIP Code: 87545 -

Phone: 505 667 0666

E-mail: grieggst@lanl.gov

2. DMR Preparer (Complete if DMR was prepared by someone other than the certifier):

First Name, Middle Initial, Last Name: Holly L. Wheeler

Organization: EPC-CP

Phone: 505 667 1312 Ext.

E-mail: hbenson@lanl.gov

D. Facility Information

1. Facility Name: Los Alamos National Laboratory

2. Facility Address:

Street/Location: Bikini Atoll Rd. SM30 K490

City: Los Alamos State: NM ZIP Code: 87545 -

County or Similar Government Subdivision: Los Alamos

E. Discharge Information

1. Identify monitoring period: [X] Check here if proposing alternative monitoring periods due to irregular stormwater runoff. Identify alternative monitoring schedule and indicate for which alternative monitoring period you are reporting monitoring data:

[ ] Quarter 1 (January 1 – March 31)	[ ] Quarter 1: From	04 / 01	To 05 / 31
[ ] Quarter 2 (April 1 – June 30)	[X] Quarter 2: From	06 / 01	To 07 / 31
[ ] Quarter 3 (July 1 – September 30)	[ ] Quarter 3: From	08 / 01	To 09 / 30
[ ] Quarter 4 (October 1 – December 31)	[ ] Quarter 4: From	10 / 01	To 11 / 30

2. Are you required to monitor for cadmium, copper, chromium, lead, nickel, silver, or zinc in freshwater? [X] Yes (Skip to 3) [ ] No (Skip to 4)

3. What is the hardness level of the receiving water? 57

4. Does your facility discharge into any saltwater receiving waters? [ ] Yes [X] No

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 0 2.b. Rainfall amount (inches): 1.0 2.c. Time since previous measurable storm event (days): 8

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
012	[ ] Substantially identical to outfall:	[ ]	I	Adjusted Gross Alpha	31.1	pCi/L		07/26/2017	[ ]	[ ]
012	[ ] Substantially identical to outfall:	[ ]	I	Aluminum, total recoverable	709	ug/L		07/26/2017	[ ]	[ ]
012	[ ] Substantially identical to outfall:	[ ]	I	Copper, dissolved	2.08	ug/L		07/26/2017	[ ]	[ ]
012	[ ] Substantially identical to outfall:	[ ]	QBM	Iron, total	636	ug/L		07/26/2017	[ ]	[ ]
011	[X] Substantially identical to outfall: 012	[ ]							[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 0.50 hours. Rainfall amount = 0.99 inches.

012: The impaired water pollutant Adjusted Gross Alpha exceeds the New Mexico water quality standard. The impaired water pollutant total recoverable Aluminum exceeds the New Mexico water quality standard. Aroclor, total (I) - NODI B. Thallium, dissolved (I) - NODI B.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 0 2.b. Rainfall amount (inches): 1.0 2.c. Time since previous measurable storm event (days): 8

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
020	[ ] Substantially identical to outfall:	[ ]	QBM	Aluminum, total recoverable	BQL		50.0 ug/L	07/26/2017	[ ]	[ ]
020	[ ] Substantially identical to outfall:	[ ]	QBM	Iron, total	ND		33.0 ug/L	07/26/2017	[ ]	[ ]
020	[ ] Substantially identical to outfall:	[ ]	QBM	Nitrate plus Nitrite Nitrogen	0.150	mg/L		07/26/2017	[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 0.50 hours. Rainfall amount = 0.99 inches.

020: The average of four monitoring values for total recoverable Aluminum does not exceed the benchmark value, therefore quarterly monitoring will be discontinued per Part 6.2.1.2. The average of four monitoring values for total Iron does not exceed the benchmark value, therefore quarterly monitoring will be discontinued per Part 6.2.1.2. The average of four monitoring values for Nitrate plus Nitrate Nitrogen does not exceed the benchmark value, therefore quarterly monitoring will be discontinued per Part 6.2.1.2. Adjusted Gross Alpha (I) - NODI B. Aroclor, total (I) - NODI B. Thallium, dissolved (I) - NODI B. Aluminum, total recoverable (I) - NODI 9.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 1 2.b. Rainfall amount (inches): 1.1 2.c. Time since previous measurable storm event (days): 18

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
031	[ ] Substantially identical to outfall:	[ ]	I	Copper, dissolved	11.8	ug/L		07/26/2017	[ ]	[ ]
030	[X] Substantially identical to outfall: 031	[ ]							[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 0.58 hours. Rainfall amount = 1.10 inches.

031: The impaired water pollutant dissolved Copper exceeds the New Mexico water quality standard. Aroclor, total (I) - NODI B.

F. Monitoring Information — Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 1 2.b. Rainfall amount (inches): 1.1 2.c. Time since previous measurable storm event (days): 644

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
039	[ ] Substantially identical to outfall:	[ ]	I	Adjusted Gross Alpha	409	pCi/L		07/26/2017	[ ]	[ ]
039	[ ] Substantially identical to outfall:	[ ]	I	Aluminum, total recoverable	16100	ug/L		07/26/2017	[ ]	[ ]
039	[ ] Substantially identical to outfall:	[ ]	I	Copper, dissolved	6.55	ug/L		07/26/2017	[ ]	[ ]
039	[ ] Substantially identical to outfall:	[ ]	I	Thallium, dissolved	ND		0.600 ug/L	07/26/2017	[ ]	[ ]
038	[X] Substantially identical to outfall: 039	[ ]							[ ]	[ ]
040	[X] Substantially identical to outfall: 039	[X]							[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 0.58 hours. Rainfall amount = 1.10 inches.

039: The impaired water pollutant Adjusted Gross Alpha exceeds the New Mexico water quality standard. The impaired water pollutant total recoverable Aluminum exceeds the New Mexico water quality standard.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 0 2.b. Rainfall amount (inches): 1.0 2.c. Time since previous measurable storm event (days): 1

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
073	[ ] Substantially identical to outfall:	[ ]	I	Aluminum, total recoverable	85	ug/L		07/26/2017	[ ]	[ ]
073	[ ] Substantially identical to outfall:	[ ]	QBM	Chemical Oxygen Demand (COD)	80.5	mg/L		07/26/2017	[ ]	[ ]
073	[ ] Substantially identical to outfall:	[ ]	QBM	Total Suspended Solids (TSS)	BQL		18.1 mg/L	07/26/2017	[ ]	[ ]
074	[X] Substantially identical to outfall: 073	[ ]							[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 0.50 hours. Rainfall amount = 0.99 inches.

073: Copper, dissolved (I) - NODI 9. Thallium, dissolved (I) - NODI B.

G. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

First Name, Middle Initial, Last Name: Anthony R Grieggs

Title: EPC-CP Group Leader

Signature:  Date 09/25/2017

E-mail: grieggst@lanl.gov

NPDES FORM 6100-29	EPA	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460 MSGP INDUSTRIAL DISCHARGE MONITORING REPORT (DMR) FORM	Form Approved. OMB No. 2040-0004

A. Approval to User Paper DMR Form

1. Have you been granted a waiver from electronic reporting from EPA Regional Office*? [X] YES [ ] NO

If yes, check which waiver you have been granted, the name of the EPA Regional Office staff person who granted the waiver, and the date of approval:

Waiver granted:

[ ] The owner/operator's headquarters is physically located in a geographic area (i.e., ZIP code or census tract) that is identified as under-served for broadband Internet access in the most recent report from the Federal Communications Commission.

[X] The owner/operator has issues regarding available computer access or computer capability.

Name of EPA staff person that granted the waiver: Everett Spencer

Date approval obtained: 06/17/2016

*** Note: You are required to obtain approval from the applicable EPA Regional Office prior to using this paper DMR form. If you have not obtained a waiver, you must file this form electronically using the NetDMR at http://www.epa.gov/netdmr/**

B. Permit Information

1. NPDES ID: NMR053195

2. Reason(s) for Submission (Check all that apply):

[X] Submitting monitoring data (Fill in all Sections).

[ ] Reporting no discharge for all outfalls for this monitoring period (Fill in Sections A, B, C, D, E.1, and G).

[ ] Reporting that your site status has changed to inactive and unstaffed (Fill in Sections A, B, C, D, and F and include date of status change in comment field in Section F.4).

[ ] Reporting that your site status has changed to active (Fill in all Sections and include date of status change in comment field in Section F.4).

[ ] Reporting that no further pollutant reductions are achievable for all outfalls and for all pollutants via Part 6.2.1.2 of the MSGP (Fill in Sections A, B, C, D, and G).

C. Facility Operator Information

1. Operator Information

Operator Name: Los Alamos National Security, LLC

Mailing Address:

Street: P.O. Box 1663, MS K490

City: Los Alamos State: NM ZIP Code: 87545 -

Phone: 505 667 0666

E-mail: grieggst@lanl.gov

2. DMR Preparer (Complete if DMR was prepared by someone other than the certifier):

First Name, Middle Initial, Last Name: Holly L. Wheeler

Organization: EPC-CP

Phone: 505 667 1312 Ext.

E-mail: hbenson@lanl.gov

D. Facility Information

1. Facility Name: Los Alamos National Laboratory

2. Facility Address:

Street/Location: Bikini Atoll Rd. SM30 K490

City: Los Alamos State: NM ZIP Code: 87545 -

County or Similar Government Subdivision: Los Alamos

E. Discharge Information

1. Identify monitoring period: [X] Check here if proposing alternative monitoring periods due to irregular stormwater runoff. Identify alternative monitoring schedule and indicate for which alternative monitoring period you are reporting monitoring data:

[ ] Quarter 1 (January 1 – March 31)	[ ] Quarter 1: From	04 / 01	To 05 / 31
[ ] Quarter 2 (April 1 – June 30)	[X] Quarter 2: From	06 / 01	To 07 / 31
[ ] Quarter 3 (July 1 – September 30)	[ ] Quarter 3: From	08 / 01	To 09 / 30
[ ] Quarter 4 (October 1 – December 31)	[ ] Quarter 4: From	10 / 01	To 11 / 30

2. Are you required to monitor for cadmium, copper, chromium, lead, nickel, silver, or zinc in freshwater? [X] Yes (Skip to 3) [ ] No (Skip to 4)

3. What is the hardness level of the receiving water? 57

4. Does your facility discharge into any saltwater receiving waters? [ ] Yes [X] No

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 1 2.b. Rainfall amount (inches): 0.4 2.c. Time since previous measurable storm event (days): 3

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
031	[ ] Substantially identical to outfall:	[ ]	I	Adjusted Gross Alpha	3.46	pCi/L		07/29/2017	[ ]	[ ]
031	[ ] Substantially identical to outfall:	[ ]	I	Aluminum, total recoverable	1060	ug/L		07/29/2017	[ ]	[ ]
030	[X] Substantially identical to outfall: 031	[ ]							[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 1.08 hours. Rainfall amount = 0.35 inches.

031: Aroclor, total (I) - NODI B. Copper, dissolved (I) - NODI 9.

G. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

First Name, Middle Initial, Last Name: Anthony R Grieggs

Title: EPC-CP Group Leader

Signature:  Date 09/25/2017

E-mail: grieggst@lanl.gov

Environmental Protection & Compliance Division
Los Alamos National Laboratory
PO Box 1663, K491
Los Alamos, New Mexico 87545
(505) 667-2211

Date: OCT 0 5 2017
Symbol: EPC-DO: 17-409
LA-UR: 17-28994
Locates Action No.: N/A

U.S. EPA Region 6
NPDES Stormwater Program (WQ-PP)
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

Subject: National Pollutant Discharge Elimination System (NPDES) Permit Tracking No. NMR053195, Multi-Sector General Permit (MSGP) Industrial Discharge Monitoring Reports (MDMRs) for August 03, 07, 08, and 11, 2017

To whom it may concern:

Enclosed are Los Alamos National Laboratory's MDMRs (Enclosure 1) for August 03, 07, 08, and 11, 2017 as required under MSGP Permit Tracking No. NMR053195. These reports are being submitted on behalf of Los Alamos National Security, LLC and contain analytical results for impaired waters and quarterly benchmark monitoring at outfalls 005, 009, 017, 020, 029, 050, and 069.

Please contact Holly Wheeler at (505) 667-1312 or Terrill Lemke at (505) 665-2397 if you have questions regarding these MDMRs.

Sincerely,

Anthony R. Grieggs
Group Leader

ARG/TWL/HLW: am

Enclosure(s): 1) NPDES Permit Tracking No. NMR053195, MDMRs for August 03, 07, 08, and 11, 2017

Copy: Helen Nguyen, EPA Region 6, Dallas TX (E-File)
Nasim Jahan, EPA Region 6, Dallas TX (E-File)
Michelle Hunter, NMED/GWQB, Santa Fe, NM (E-File)
Shelly Lemon, NMED/SWQB, Santa Fe, NM (E-File)
Karen Armijo, NA-LA, (E-File)
Arturo Duran, EM-SG, (E-File)
David Rhodes, EM-SG, (E-File)
Craig S. Leasure, PADOPS, (E-File)
William R. Mairson, PADOPS, (E-File)
Michael T. Brandt, ADESH, (E-File)
Raeanna Sharp-Geiger, ADESH, (E-File)
Bruce Robinson, ADEM-PO, (E-File)
Andrew Erickson, UI-DO, (E-File)
Clifford Kirkland, STO-DO, (E-File)
Stephanie Archuleta, DESHF-DO, (E-File)
Theresa Cull, DESHS-DO, (E-File)
Russel Stone, DESHS-UIS, (E-File)
Garry Schramm, DESHF-STO, (E-File)
Jillian Burgin, DESHS-UIS, (E-File)
Leonard Sandoval, DESHS-UIS, (E-File)
Marc Gallegos, DESHF-STO, (E-File)
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Terrill W. Lemke, EPC-CP, (E-File)
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Adesh-records@lanl.gov, (E-File)
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epc-correspondence@lanl.gov, (E-File)

ENCLOSURE 1

NPDES Permit Tracking No. NMR053195, MDMRs for
August 03, 07, 08 and 11, 2017

EPC-DO: 17-409

LA-UR-17-28994

Date: OCT 0 5 2017

NPDES FORM 6100-29	EPA	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460 MSGP INDUSTRIAL DISCHARGE MONITORING REPORT (DMR) FORM	Form Approved. OMB No. 2040-0004

A. Approval to User Paper DMR Form

1. Have you been granted a waiver from electronic reporting from EPA Regional Office*? [X] YES [ ] NO

If yes, check which waiver you have been granted, the name of the EPA Regional Office staff person who granted the waiver, and the date of approval:

Waiver granted:

- [ ] The owner/operator's headquarters is physically located in a geographic area (i.e., ZIP code or census tract) that is identified as under-served for broadband Internet access in the most recent report from the Federal Communications Commission.
- [X] The owner/operator has issues regarding available computer access or computer capability.

Name of EPA staff person that granted the waiver: Everett Spencer

Date approval obtained: 06/17/2016

*** Note: You are required to obtain approval from the applicable EPA Regional Office prior to using this paper DMR form. If you have not obtained a waiver, you must file this form electronically using the NetDMR at http://www.epa.gov/netdmr/**

B. Permit Information

1. NPDES ID: NMR053195

2. Reason(s) for Submission (Check all that apply):

- [X] Submitting monitoring data (Fill in all Sections).
- [ ] Reporting no discharge for all outfalls for this monitoring period (Fill in Sections A, B, C, D, E.1, and G).
- [ ] Reporting that your site status has changed to inactive and unstaffed (Fill in Sections A, B, C, D, and F and include date of status change in comment field in Section F.4).
- [ ] Reporting that your site status has changed to active (Fill in all Sections and include date of status change in comment field in Section F.4).
- [ ] Reporting that no further pollutant reductions are achievable for all outfalls and for all pollutants via Part 6.2.1.2 of the MSGP (Fill in Sections A, B, C, D, and G).

C. Facility Operator Information

1. Operator Information

Operator Name: Los Alamos National Security, LLC

Mailing Address:

Street: P.O. Box 1663, MS K490

City: Los Alamos State: NM ZIP Code: 87545 -

Phone: 505 667 0666

E-mail: grieggst@lanl.gov

2. DMR Preparer (Complete if DMR was prepared by someone other than the certifier):

First Name, Middle Initial, Last Name: Holly L. Wheeler

Organization: EPC-CP

Phone: 505 667 1312 Ext.

E-mail: hbenson@lanl.gov

D. Facility Information

1. Facility Name: Los Alamos National Laboratory

2. Facility Address:

Street/Location: Bikini Atoll Rd. SM30 K490

City: Los Alamos State: NM ZIP Code: 87545 -

County or Similar Government Subdivision: Los Alamos

E. Discharge Information

1. Identify monitoring period: [X] Check here if proposing alternative monitoring periods due to irregular stormwater runoff. Identify alternative monitoring schedule and indicate for which alternative monitoring period you are reporting monitoring data:

[ ] Quarter 1 (January 1 – March 31)	[ ] Quarter 1: From	04 / 01 To 05 / 31
[ ] Quarter 2 (April 1 – June 30)	[ ] Quarter 2: From	06 / 01 To 07 / 31
[ ] Quarter 3 (July 1 – September 30)	[X] Quarter 3: From	08 / 01 To 09 / 30
[ ] Quarter 4 (October 1 – December 31)	[ ] Quarter 4: From	10 / 01 To 11 / 30

2. Are you required to monitor for cadmium, copper, chromium, lead, nickel, silver, or zinc in freshwater? [X] Yes (Skip to 3) [ ] No (Skip to 4)

3. What is the hardness level of the receiving water? 57

4. Does your facility discharge into any saltwater receiving waters? [ ] Yes [X] No

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 0 2.b. Rainfall amount (inches): 0.1 2.c. Time since previous measurable storm event (days): 3

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
050	[ ] Substantially identical to outfall:	[ ]	QBM	Chemical Oxygen Demand (COD)	110	mg/L		08/03/2017	[ ]	[ ]
050	[ ] Substantially identical to outfall:	[ ]	QBM	Magnesium, total	1.04	mg/L		08/03/2017	[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 0.50 hours. Rainfall amount = 0.13 inches.

050: The average concentration of total Magnesium is mathematically certain to exceed the benchmark value. Adjusted Gross Alpha (I) - NODI 9. Aluminum, total recoverable (I) - NODI 9. Ammonia, total (QBM) - NODI B. Aroclor, total (I) - NODI B. Arsenic, dissolved (QBM) - NODI B. Cadmium, dissolved (QBM) - NODI B. Cyanide, total (QBM) - NODI B. Lead, dissolved (QBM) - NODI B. Mercury, total (QBM) - NODI B. Selenium, total (QBM) - NODI B. Silver, dissolved (QBM) - NODI B.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 0 2.b. Rainfall amount (inches): 0.0 2.c. Time since previous measurable storm event (days): 5

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
069	[ ] Substantially identical to outfall:	[ ]	QBM	Chemical Oxygen Demand (COD)	121	mg/L		08/03/2017	[ ]	[ ]
069	[ ] Substantially identical to outfall:	[ ]	QBM	Magnesium, total	2.86	mg/L		08/03/2017	[ ]	[ ]
059	[X] Substantially identical to outfall: 069	[X]							[ ]	[ ]
058	[X] Substantially identical to outfall: 069	[X]							[ ]	[ ]
057	[X] Substantially identical to outfall: 069	[X]							[ ]	[ ]
056	[X] Substantially identical to outfall: 069	[X]							[ ]	[ ]
055	[X] Substantially identical to outfall: 069	[X]							[ ]	[ ]
054	[X] Substantially identical to outfall: 069	[X]							[ ]	[ ]

067	[X] Substantially identical to outfall: 069	[X]							☐	☐
068	[X] Substantially identical to outfall: 069	[X]							☐	☐
060	[X] Substantially identical to outfall: 069	[X]							☐	☐
061	[X] Substantially identical to outfall: 069	[X]							☐	☐
062	[X] Substantially identical to outfall: 069	[X]							☐	☐
063	[X] Substantially identical to outfall: 069	[X]							☐	☐
064	[X] Substantially identical to outfall: 069	[X]							☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 0.50 hours. Rainfall amount = 0.04 inches.

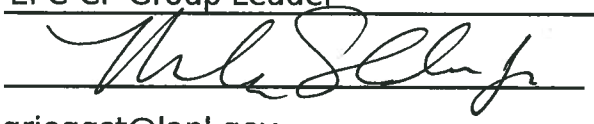
069: The average concentration of total Magnesium is mathematically certain to exceed the benchmark value. Aluminum, total recoverable (I) - NODI 9. Ammonia, total (QBM) - NODI B. Aroclor, total (I) - NODI B. Arsenic, dissolved (QBM) - NODI B. Cadmium, dissolved (QBM) - NODI B. Cyanide, total (QBM) - NODI B. Lead, dissolved (QBM) - NODI B. Mercury, total (QBM) - NODI B. Selenium, total (QBM) - NODI B. Silver, dissolved (QBM) - NODI B.

G. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

First Name, Middle Initial, Last Name: Anthony R Grieggs

Title: EPC-CP Group Leader

Signature:  Date 10/05/2017

E-mail: grieggst@lanl.gov

NPDES FORM 6100-29	EPA	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460 MSGP INDUSTRIAL DISCHARGE MONITORING REPORT (DMR) FORM	Form Approved. OMB No. 2040-0004

A. Approval to User Paper DMR Form

1. Have you been granted a waiver from electronic reporting from EPA Regional Office*? [X] YES [ ] NO

If yes, check which waiver you have been granted, the name of the EPA Regional Office staff person who granted the waiver, and the date of approval:

Waiver granted:

- [ ] The owner/operator's headquarters is physically located in a geographic area (i.e., ZIP code or census tract) that is identified as under-served for broadband Internet access in the most recent report from the Federal Communications Commission.
- [X] The owner/operator has issues regarding available computer access or computer capability.

Name of EPA staff person that granted the waiver: Everett Spencer

Date approval obtained: 06/17/2016

*** Note: You are required to obtain approval from the applicable EPA Regional Office prior to using this paper DMR form. If you have not obtained a waiver, you must file this form electronically using the NetDMR at http://www.epa.gov/netdmr/**

B. Permit Information

1. NPDES ID: NMR053195

2. Reason(s) for Submission (Check all that apply):

- [X] Submitting monitoring data (Fill in all Sections).
- [ ] Reporting no discharge for all outfalls for this monitoring period (Fill in Sections A, B, C, D, E.1, and G).
- [ ] Reporting that your site status has changed to inactive and unstaffed (Fill in Sections A, B, C, D, and F and include date of status change in comment field in Section F.4).
- [ ] Reporting that your site status has changed to active (Fill in all Sections and include date of status change in comment field in Section F.4).
- [ ] Reporting that no further pollutant reductions are achievable for all outfalls and for all pollutants via Part 6.2.1.2 of the MSGP (Fill in Sections A, B, C, D, and G).

C. Facility Operator Information

1. Operator Information

Operator Name: Los Alamos National Security, LLC

Mailing Address:

Street: P.O. Box 1663, MS K490

City: Los Alamos State: NM ZIP Code: 87545 -

Phone: 505 667 0666

E-mail: grieggst@lanl.gov

2. DMR Preparer (Complete if DMR was prepared by someone other than the certifier):

First Name, Middle Initial, Last Name: Holly L. Wheeler

Organization: EPC-CP

Phone: 505 667 1312 Ext.

E-mail: hbenson@lanl.gov

D. Facility Information

1. Facility Name: Los Alamos National Laboratory

2. Facility Address:

Street/Location: Bikini Atoll Rd. SM30 K490

City: Los Alamos State: NM ZIP Code: 87545 -

County or Similar Government Subdivision: Los Alamos

E. Discharge Information

1. Identify monitoring period: [X] Check here if proposing alternative monitoring periods due to irregular stormwater runoff. Identify alternative monitoring schedule and indicate for which alternative monitoring period you are reporting monitoring data:

[ ] Quarter 1 (January 1 – March 31)	[ ] Quarter 1: From	04 / 01	To 05 / 31
[ ] Quarter 2 (April 1 – June 30)	[ ] Quarter 2: From	06 / 01	To 07 / 31
[ ] Quarter 3 (July 1 – September 30)	[X] Quarter 3: From	08 / 01	To 09 / 30
[ ] Quarter 4 (October 1 – December 31)	[ ] Quarter 4: From	10 / 01	To 11 / 30

2. Are you required to monitor for cadmium, copper, chromium, lead, nickel, silver, or zinc in freshwater? [X] Yes (Skip to 3) [ ] No (Skip to 4)

3. What is the hardness level of the receiving water? 57

4. Does your facility discharge into any saltwater receiving waters? [ ] Yes [X] No

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 1 2.b. Rainfall amount (inches): 0.3 2.c. Time since previous measurable storm event (days): 7

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
005	[ ] Substantially identical to outfall:	[ ]	QBM	Iron, total	2750	ug/L		08/07/2017	[ ]	[ ]
006	[X] Substantially identical to outfall: 005	[ ]							[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 0.66 hours. Rainfall amount = 0.26 inches.

005: The average concentration of total Iron is mathematically certain to exceed the benchmark value. Adjusted Gross Alpha (I) - NODI 9. Aluminum, total recoverable (I) - NODI 9. Aroclor, total (I) - NODI B. Copper, dissolved (I) - NODI 9. Thallium, dissolved (I) - NODI B.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 1 2.b. Rainfall amount (inches): 0.3 2.c. Time since previous measurable storm event (days): 9

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
020	[ ] Substantially identical to outfall:	[ ]	QBM	Copper, dissolved	6.11	ug/L		08/08/2017	[ ]	[ ]
020	[ ] Substantially identical to outfall:	[ ]	I	Copper, dissolved	6.11	ug/L		08/08/2017	[ ]	[ ]
020	[ ] Substantially identical to outfall:	[ ]	QBM	Zinc, dissolved	130	ug/L		08/08/2017	[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 0.66 hours. Rainfall amount = 0.26 inches.

020: The average of four monitoring values for dissolved Copper does not exceed the benchmark value, therefore quarterly monitoring will be discontinued per Part 6.2.1.2. The impaired water pollutant dissolved Copper exceeds the New Mexico water quality standard. Adjusted Gross Alpha (I) - NODI B. Aluminum, total recoverable (QBM) - NODI B. Aluminum, total recoverable (I) - NODI 9. Aroclor, total (I) - NODI B. Iron, total (QBM) - NODI B. Nitrate plus Nitrite Nitrogen (QBM) - NODI B. Thallium, dissolved (I) - NODI B.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 1 2.b. Rainfall amount (inches): 0.3 2.c. Time since previous measurable storm event (days): 7

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
029	[ ] Substantially identical to outfall:	[ ]	QBM	Chemical Oxygen Demand (COD)	54.7	mg/L		08/07/2017	[ ]	[ ]
029	[ ] Substantially identical to outfall:	[ ]	QBM	Iron, total	6620	ug/L		08/07/2017	[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 0.66 hours. Rainfall amount = 0.26 inches.

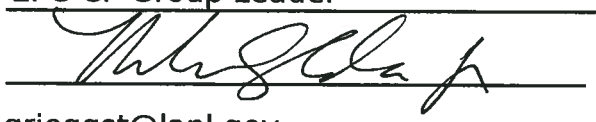
029: Adjusted Gross Alpha (I) - NODI 9. Aluminum, total recoverable (QBM) - NODI B. Aluminum, total recoverable (I) - NODI 9. Aroclor, total (I) - NODI B. Copper, dissolved (I) - NODI 9. Thallium, dissolved (I) - NODI B. Total Suspended Solids (TSS) (QBM) - NODI B.

G. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

First Name, Middle Initial, Last Name: Anthony R Grieggs

Title: EPC-CP Group Leader

Signature:  Date 12/05/2017

E-mail: grieggst@lanl.gov

NPDES FORM 6100-29	EPA	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460 MSGP INDUSTRIAL DISCHARGE MONITORING REPORT (DMR) FORM	Form Approved. OMB No. 2040-0004

A. Approval to User Paper DMR Form

1. Have you been granted a waiver from electronic reporting from EPA Regional Office*? [X] YES [ ] NO

If yes, check which waiver you have been granted, the name of the EPA Regional Office staff person who granted the waiver, and the date of approval:

Waiver granted:

- [ ] The owner/operator's headquarters is physically located in a geographic area (i.e., ZIP code or census tract) that is identified as under-served for broadband Internet access in the most recent report from the Federal Communications Commission.
- [X] The owner/operator has issues regarding available computer access or computer capability.

Name of EPA staff person that granted the waiver: Everett Spencer

Date approval obtained: 06/17/2016

*** Note: You are required to obtain approval from the applicable EPA Regional Office prior to using this paper DMR form. If you have not obtained a waiver, you must file this form electronically using the NetDMR at http://www.epa.gov/netdmr/**

B. Permit Information

1. NPDES ID: NMR053195

2. Reason(s) for Submission (Check all that apply):

- [X] Submitting monitoring data (Fill in all Sections).
- [ ] Reporting no discharge for all outfalls for this monitoring period (Fill in Sections A, B, C, D, E.1, and G).
- [ ] Reporting that your site status has changed to inactive and unstaffed (Fill in Sections A, B, C, D, and F and include date of status change in comment field in Section F.4).
- [ ] Reporting that your site status has changed to active (Fill in all Sections and include date of status change in comment field in Section F.4).
- [ ] Reporting that no further pollutant reductions are achievable for all outfalls and for all pollutants via Part 6.2.1.2 of the MSGP (Fill in Sections A, B, C, D, and G).

C. Facility Operator Information

1. Operator Information

Operator Name: Los Alamos National Security, LLC

Mailing Address:

Street: P.O. Box 1663, MS K490

City: Los Alamos State: NM ZIP Code: 87545 -

Phone: 505 667 0666

E-mail: grieggst@lanl.gov

2. DMR Preparer (Complete if DMR was prepared by someone other than the certifier):

First Name, Middle Initial, Last Name: Holly L. Wheeler

Organization: EPC-CP

Phone: 505 667 1312 Ext.

E-mail: hbenson@lanl.gov

D. Facility Information

1. Facility Name: Los Alamos National Laboratory

2. Facility Address:

Street/Location: Bikini Atoll Rd. SM30 K490

City: Los Alamos State: NM ZIP Code: 87545 -

County or Similar Government Subdivision: Los Alamos

E. Discharge Information

1. Identify monitoring period:

[X] Check here if proposing alternative monitoring periods due to irregular stormwater runoff. Identify alternative monitoring schedule and indicate for which alternative monitoring period you are reporting monitoring data:

[ ] Quarter 1 (January 1 – March 31)	[ ] Quarter 1: From	04 / 01	To 05 / 31
[ ] Quarter 2 (April 1 – June 30)	[ ] Quarter 2: From	06 / 01	To 07 / 31
[ ] Quarter 3 (July 1 – September 30)	[X] Quarter 3: From	08 / 01	To 09 / 30
[ ] Quarter 4 (October 1 – December 31)	[ ] Quarter 4: From	10 / 01	To 11 / 30

2. Are you required to monitor for cadmium, copper, chromium, lead, nickel, silver, or zinc in freshwater? [X] Yes (Skip to 3) [ ] No (Skip to 4)

3. What is the hardness level of the receiving water? 57

4. Does your facility discharge into any saltwater receiving waters? [ ] Yes [X] No

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 0 2.b. Rainfall amount (inches): 0.0 2.c. Time since previous measurable storm event (days): 1

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
009	[ ] Substantially identical to outfall:	[ ]	QBM	Iron, total	2390	ug/L		08/08/2017	[ ]	[ ]
007	[X] Substantially identical to outfall: 009	[X]							[ ]	[ ]
008	[X] Substantially identical to outfall: 009	[X]							[ ]	[ ]
010	[X] Substantially identical to outfall: 009	[X]							[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 0.08 hours. Rainfall amount = 0.01 inches.

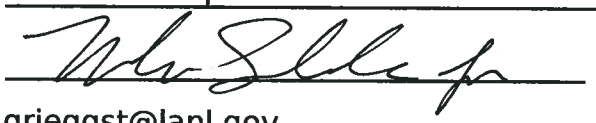
009: Adjusted Gross Alpha (I) - NODI 9. Aluminum, total recoverable (I) - NODI 9. Aroclor, total (I) - NODI B. Copper, dissolved (I) - NODI 9. Thallium, dissolved (I) - NODI B.

G. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

First Name, Middle Initial, Last Name: Anthony R Grieggs

Title: EPC-CP Group Leader

Signature:  Date 10/5/2017

E-mail: grieggst@lanl.gov

NPDES FORM 6100-29	EPA	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460 MSGP INDUSTRIAL DISCHARGE MONITORING REPORT (DMR) FORM	Form Approved. OMB No. 2040-0004

A. Approval to User Paper DMR Form

1. Have you been granted a waiver from electronic reporting from EPA Regional Office*? [X] YES [ ] NO

If yes, check which waiver you have been granted, the name of the EPA Regional Office staff person who granted the waiver, and the date of approval:

Waiver granted:

- [ ] The owner/operator's headquarters is physically located in a geographic area (i.e., ZIP code or census tract) that is identified as under-served for broadband Internet access in the most recent report from the Federal Communications Commission.
- [X] The owner/operator has issues regarding available computer access or computer capability.

Name of EPA staff person that granted the waiver: Everett Spencer

Date approval obtained: 06/17/2016

*** Note: You are required to obtain approval from the applicable EPA Regional Office prior to using this paper DMR form. If you have not obtained a waiver, you must file this form electronically using the NetDMR at http://www.epa.gov/netdmr/**

B. Permit Information

1. NPDES ID: NMR053195

2. Reason(s) for Submission (Check all that apply):

- [X] Submitting monitoring data (Fill in all Sections).
- [ ] Reporting no discharge for all outfalls for this monitoring period (Fill in Sections A, B, C, D, E.1, and G).
- [ ] Reporting that your site status has changed to inactive and unstaffed (Fill in Sections A, B, C, D, and F and include date of status change in comment field in Section F.4).
- [ ] Reporting that your site status has changed to active (Fill in all Sections and include date of status change in comment field in Section F.4).
- [ ] Reporting that no further pollutant reductions are achievable for all outfalls and for all pollutants via Part 6.2.1.2 of the MSGP (Fill in Sections A, B, C, D, and G).

C. Facility Operator Information

1. Operator Information

Operator Name: Los Alamos National Security, LLC

Mailing Address:

Street: P.O. Box 1663, MS K490

City: Los Alamos State: NM ZIP Code: 87545 -

Phone: 505 667 0666

E-mail: grieggst@lanl.gov

2. DMR Preparer (Complete if DMR was prepared by someone other than the certifier):

First Name, Middle Initial, Last Name: Holly L. Wheeler

Organization: EPC-CP

Phone: 505 667 1312 Ext.

E-mail: hbenson@lanl.gov

D. Facility Information

1. Facility Name: Los Alamos National Laboratory

2. Facility Address:

Street/Location: Bikini Atoll Rd. SM30 K490

City: Los Alamos State: NM ZIP Code: 87545 -

County or Similar Government Subdivision: Los Alamos

E. Discharge Information

1. Identify monitoring period: [X] Check here if proposing alternative monitoring periods due to irregular stormwater runoff. Identify alternative monitoring schedule and indicate for which alternative monitoring period you are reporting monitoring data:

[ ] Quarter 1 (January 1 – March 31)	[ ] Quarter 1: From	04	/	01	To	05	/	31
[ ] Quarter 2 (April 1 – June 30)	[ ] Quarter 2: From	06	/	01	To	07	/	31
[ ] Quarter 3 (July 1 – September 30)	[X] Quarter 3: From	08	/	01	To	09	/	30
[ ] Quarter 4 (October 1 – December 31)	[ ] Quarter 4: From	10	/	01	To	11	/	30

2. Are you required to monitor for cadmium, copper, chromium, lead, nickel, silver, or zinc in freshwater? [X] Yes (Skip to 3) [ ] No (Skip to 4)

3. What is the hardness level of the receiving water? 57

4. Does your facility discharge into any saltwater receiving waters? [ ] Yes [X] No

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 3 2.b. Rainfall amount (inches): 0.5 2.c. Time since previous measurable storm event (days): 13

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
017	[ ] Substantially identical to outfall:	[ ]	QBM	Aluminum, total recoverable	1350	ug/L		08/11/2017	[ ]	[ ]
017	[ ] Substantially identical to outfall:	[ ]	QBM	Copper, dissolved	13.9	ug/L		08/11/2017	[ ]	[ ]
017	[ ] Substantially identical to outfall:	[ ]	QBM	Iron, total	7210	ug/L		08/11/2017	[ ]	[ ]
017	[ ] Substantially identical to outfall:	[ ]	QBM	Nitrate plus Nitrite Nitrogen	0.567	mg/L		08/11/2017	[ ]	[ ]
017	[ ] Substantially identical to outfall:	[ ]	QBM	Zinc, dissolved	24.8	ug/L		08/11/2017	[ ]	[ ]
013	[X] Substantially identical to outfall: 017	[X]							[ ]	[ ]
014	[X] Substantially identical to outfall: 017	[ ]							[ ]	[ ]
015	[X] Substantially identical to outfall: 017	[ ]							[ ]	[ ]

016	[X] Substantially identical to outfall: 017	☐							☐	☐
019	[X] Substantially identical to outfall: 017	☐							☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 2.66 hours. Rainfall amount = 0.48 inches.

017: The average concentration of total Iron is mathematically certain to exceed the benchmark value. Adjusted Gross Alpha (I) - NODI 9. Aroclor, total (I) - NODI 9. Thallium, dissolved (I) - NODI B. Aluminum, total recoverable (I) - NODI 9. Copper, dissolved (I) - NODI 9.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 3 2.b. Rainfall amount (inches): 0.5 2.c. Time since previous measurable storm event (days): 4

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
029	[ ] Substantially identical to outfall:	[ ]	QBM	Copper, dissolved	23.1	ug/L		08/11/2017	[ ]	[ ]
029	[ ] Substantially identical to outfall:	[ ]	QBM	Lead, dissolved	BQL		2.00 ug/L	08/11/2017	[ ]	[ ]
029	[ ] Substantially identical to outfall:	[ ]	QBM	Zinc, dissolved	41.6	ug/L		08/11/2017	[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 2.66 hours. Rainfall amount = 0.48 inches.

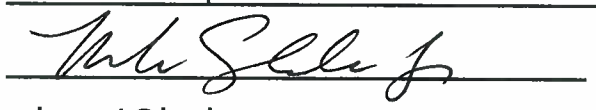
029: Adjusted Gross Alpha (I) - NODI 9. Aluminum, total recoverable (QBM) - NODI B. Aluminum, total recoverable (I) - NODI 9. Aroclor, total (I) - NODI B. Thallium, dissolved (I) - NODI B. Total Suspended Solids (TSS) (QBM) - NODI B. Copper, dissolved (I) - NODI 9.

G. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

First Name, Middle Initial, Last Name: Anthony R Grieggs

Title: EPC-CP Group Leader

Signature:  Date 12/05/2017

E-mail: grieggst@lanl.gov

Environmental Protection & Compliance Division
Los Alamos National Laboratory
PO Box 1663, K491
Los Alamos, New Mexico 87545
(505) 667-2211

Date: OCT 2 7 2017
Symbol: EPC-DO: 17-448
LA-UR: 17- 29659
Locates Action No.: N/A

U.S. EPA Region 6
NPDES Stormwater Program (WQ-PP)
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

Subject: National Pollutant Discharge Elimination System (NPDES) Permit Tracking No. NMR053195, Multi-Sector General Permit (MSGP) Industrial "No Discharge" Monitoring Report (MDMR) for the Third Quarter (August 1 – September 30, 2017)

To whom it may concern:

Enclosed is Los Alamos National Laboratory's "no discharge" MDMR (Enclosure 1) for the third quarter (August 1, through September 30, 2017), as required under MSGP Permit Tracking No. NMR053195. This report is being submitted on behalf of Los Alamos National Security, LLC.

Please contact Holly Wheeler at (505) 667-1312 or Terrill Lemke at (505) 665-2397 if you have questions regarding this MDMR.

Sincerely,

Taunia S. Van Valkenburg
Group Leader

TSV:TWL:HLW/am

Enclosure(s): 1) NPDES Permit Tracking No. NMR053195, "No Discharge" MDMR for the Third Quarter (August 1 – September 30, 2017)

Copy: Helen Nguyen, EPA Region 6, Dallas TX (E-File)
Nasim Jahan, EPA Region 6, Dallas TX (E-File)
Michelle Hunter, NMED/GWQB, Santa Fe, NM (E-File)
Shelly Lemon, NMED/SWQB, Santa Fe, NM (E-File)
Karen Armijo, NA-LA, (E-File)
Arturo Duran, EM-SG, (E-File)
David Rhodes, EM-SG, (E-File)
Craig S. Leasure, PADOPS, (E-File)
William R. Mairson, PADOPS, (E-File)
Michael T. Brandt, ADESH, (E-File)
Raeanna Sharp-Geiger, ADESH, (E-File)
Bruce Robinson, ADEM-PO, (E-File)
Stephanie Archuleta, DESHF-DO, (E-File)
Theresa Cull, DESHS-DO, (E-File)
Andrew Erickson, UI-DO, (E-File)
Clifford Kirkland, STO-DO, (E-File)
Stephanie Griego, EWMO-DO, (E-File)
Russel Stone, DESHS-UIS, (E-File)
Garry Schramm, DESHF-STO, (E-File)
Robert Stokes, DESHS-EWMS, (E-File)
Jillian Burgin, DESHS-UIS, (E-File)
Leonard Sandoval, DESHS-UIS, (E-File)
Marc Gallegos, DESHF-STO, (E-File)
Courtney Perkins, DESHF-STO, (E-File)
Terrill W. Lemke, EPC-CP, (E-File)
Holly L. Wheeler, EPC-CP, (E-File)
Leslie J. Dale, EPC-CP, (E-File)
Ellena I. Martinez, EPC-DP, (E-File)
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lasomailbox@nnsa.doe.gov, (E-File)
locatesteam@lanl.gov, (E-File)
epc-correspondence@lanl.gov, (E-File)

ENCLOSURE 1

NPDES Permit Tracking No. NMR053195, "No Discharge"
MDMR for the Third Quarter
(August 1 – September 30, 2017)

EPC-DO: 17-448

LA-UR-17-29659

Date: OCT 2 7 2017

NPDES FORM 6100-29	EPA	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460 MSGP INDUSTRIAL DISCHARGE MONITORING REPORT (DMR) FORM	Form Approved. OMB No. 2040-0004

A. Approval to User Paper DMR Form

1. Have you been granted a waiver from electronic reporting from EPA Regional Office*? [X] YES [ ] NO

If yes, check which waiver you have been granted, the name of the EPA Regional Office staff person who granted the waiver, and the date of approval:

Waiver granted:
- [ ] The owner/operator's headquarters is physically located in a geographic area (i.e., ZIP code or census tract) that is identified as under-served for broadband Internet access in the most recent report from the Federal Communications Commission.
- [X] The owner/operator has issues regarding available computer access or computer capability.

Name of EPA staff person that granted the waiver: Everett Spencer

Date approval obtained: 06/17/2016

*** Note: You are required to obtain approval from the applicable EPA Regional Office prior to using this paper DMR form. If you have not obtained a waiver, you must file this form electronically using the NetDMR at http://www.epa.gov/netdmr/**

B. Permit Information

1. NPDES ID: NMR053195

2. Reason(s) for Submission (Check all that apply):

- [ ] Submitting monitoring data (Fill in all Sections).
- [X] Reporting no discharge for all outfalls for this monitoring period (Fill in Sections A, B, C, D, E.1, and G).
- [ ] Reporting that your site status has changed to inactive and unstaffed (Fill in Sections A, B, C, D, and F and include date of status change in comment field in Section F.4).
- [ ] Reporting that your site status has changed to active (Fill in all Sections and include date of status change in comment field in Section F.4).
- [ ] Reporting that no further pollutant reductions are achievable for all outfalls and for all pollutants via Part 6.2.1.2 of the MSGP (Fill in Sections A, B, C, D, and G).

C. Facility Operator Information

1. Operator Information

Operator Name: Los Alamos National Security, LLC

Mailing Address:

Street: P.O. Box 1663, MS K490

City: Los Alamos State: NM ZIP Code: 87545 -

Phone: 505 667 0666

E-mail: tauniav@lanl.gov

2. DMR Preparer (Complete if DMR was prepared by someone other than the certifier):

First Name, Middle Initial, Last Name: Holly L. Wheeler

Organization: EPC-CP

Phone: 505 667 1312 Ext.

E-mail: hbenson@lanl.gov

D. Facility Information

1. Facility Name: Los Alamos National Laboratory

2. Facility Address:

Street/Location: Bikini Atoll Rd. SM30 K490

City: Los Alamos State: NM ZIP Code: 87545 -

County or Similar Government Subdivision: Los Alamos

E. Discharge Information

1. Identify monitoring period: [X] Check here if proposing alternative monitoring periods due to irregular stormwater runoff. Identify alternative monitoring schedule and indicate for which alternative monitoring period you are reporting monitoring data:

[ ] Quarter 1 (January 1 – March 31)	[ ] Quarter 1: From	04	/	01	To	05	/	31
[ ] Quarter 2 (April 1 – June 30)	[ ] Quarter 2: From	06	/	01	To	07	/	31
[ ] Quarter 3 (July 1 – September 30)	[X] Quarter 3: From	08	/	01	To	09	/	30
[ ] Quarter 4 (October 1 – December 31)	[ ] Quarter 4: From	10	/	01	To	11	/	30

2. Are you required to monitor for cadmium, copper, chromium, lead, nickel, silver, or zinc in freshwater? [X] Yes (Skip to 3) [ ] No (Skip to 4)

3. What is the hardness level of the receiving water? 57

4. Does your facility discharge into any saltwater receiving waters? [ ] Yes [X] No

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: ☐ Rainfall (Complete line items 2.a., 2.b., & 2.c.) ☐ Snowmelt

2.a. Duration of the rainfall event (hours): 2.b. Rainfall amount (inches): 2.c. Time since previous measurable storm event (days):

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
002	☐ Substantially identical to outfall:	☒							☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

002: NODI C

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: ☐ Rainfall (Complete line items 2.a., 2.b., & 2.c.) ☐ Snowmelt

2.a. Duration of the rainfall event (hours): 2.b. Rainfall amount (inches): 2.c. Time since previous measurable storm event (days):

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
012	☐ Substantially identical to outfall:	☒							☐	☐
011	☒ Substantially identical to outfall: 012	☐							☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

012: NODI C

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: ☐ Rainfall (Complete line items 2.a., 2.b., & 2.c.) ☐ Snowmelt

2.a. Duration of the rainfall event (hours): 2.b. Rainfall amount (inches): 2.c. Time since previous measurable storm event (days):

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
036	☐ Substantially identical to outfall:	☒							☐	☐
037	☒ Substantially identical to outfall: 036	☒							☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

036: NODI C

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: ☐ Rainfall (Complete line items 2.a., 2.b., & 2.c.) ☐ Snowmelt

2.a. Duration of the rainfall event (hours): 2.b. Rainfall amount (inches): 2.c. Time since previous measurable storm event (days):

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
073	☐ Substantially identical to outfall:	☒							☐	☐
074	☒ Substantially identical to outfall: 073	☐							☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

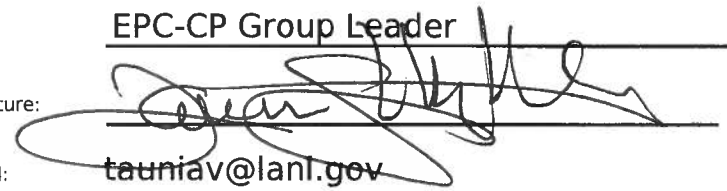
073: NODI C

G. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

First Name, Middle Initial, Last Name: Taunia S Van Valkenburg

Title: EPC-CP Group Leader

Signature: 

Date 10/27/2017

E-mail: tauniav@lanl.gov

Environmental Protection & Compliance Division
Los Alamos National Laboratory
PO Box 1663, K491
Los Alamos, New Mexico 87545
(505) 667-2211

DEC 07 2017

Date:
Symbol: EPC-DO: 17-518
LA-UR: 17-31023
Locates Action No.: N/A

U.S. EPA Region 6
NPDES Stormwater Program (WQ-PP)
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

Subject: National Pollutant Discharge Elimination System (NPDES) Permit Tracking No. NMR053195, Multi-Sector General Permit (MSGP) Industrial Discharge Monitoring Report (MDMR) for October 04, 2017

To whom it may concern:

Enclosed is Los Alamos National Laboratory's MDMR (Enclosure 1) for October 04, 2017 as required under MSGP Permit Tracking No. NMR053195. This report is being submitted on behalf of Los Alamos National Security, LLC and contains analytical results for quarterly benchmark monitoring at outfalls 002, 005, 017, 020, 047, 050, 051, 069, and 073.

Please contact Holly Wheeler at (505) 667-1312 or Terrill Lemke at (505) 665-2397 if you have questions regarding this MDMR.

Sincerely,

Taunia S. Van Valkenburg
Group Leader

TSV/TWL/HLW: am

Enclosure(s): 1) NPDES Permit Tracking No. NMR053195, MDMR for October 04, 2017

Copy: Helen Nguyen, EPA Region 6, Dallas TX (E-File)
Nasim Jahan, EPA Region 6, Dallas TX (E-File)
Michelle Hunter, NMED/GWQB, Santa Fe, NM (E-File)
Shelly Lemon, NMED/SWQB, Santa Fe, NM (E-File)
Karen Armijo, NA-LA, (E-File)
Arturo Duran, EM-SG, (E-File)
David Rhodes, EM-SG, (E-File)
Craig Leasure, PADOPS, (E-File)
William Mairson, PADOPS, (E-File)
Michael Brandt, ADESH, (E-File)
Raeanna Sharp-Geiger, ADESH, (E-File)
Bruce Robinson, ADEM-PO, (E-File)
Stephanie Archuleta, DESHF-DO, (E-File)
Theresa Cull, DESHS-DO, (E-File)
Stephanie Griego, EWMO-DO, (E-File)
Clifford Kirkland, STO-DO, (E-File)
Andrew Erickson, UI-DO, (E-File)
Robert Stokes, DESHS-EWMS, (E-File)
Garry Schramm, DESHF-STO, (E-File)
Russel Stone, DESHS-UIS, (E-File)
Victoria Baca, DESHS-EWMS, (E-File)
Marc Gallegos, DESHF-STO, (E-File)
Jillian Burgin, DESHS-UIS, (E-File)
Terrill Lemke, EPC-CP, (E-File)
Holly Wheeler, EPC-CP, (E-File)
Leslie Dale, EPC-CP, (E-File)
Ellena Martinez, EPC-CP, (E-File)
Adesh-records@lanl.gov, (E-File)
lasomailbox@nnsa.doe.gov, (E-File)
locatesteam@lanl.gov, (E-File)
epc-correspondence@lanl.gov, (E-File)

ENCLOSURE 1

NPDES Permit Tracking No. NMR053195, MDMR for October 04, 2017

EPC-DO: 17-518

LA-UR-17-31023

DEC 0 7 2017

Date: _____

NPDES FORM 6100-29	EPA	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460 MSGP INDUSTRIAL DISCHARGE MONITORING REPORT (DMR) FORM	Form Approved. OMB No. 2040-0004

A. Approval to User Paper DMR Form

1. Have you been granted a waiver from electronic reporting from EPA Regional Office*? [X] YES [ ] NO

If yes, check which waiver you have been granted, the name of the EPA Regional Office staff person who granted the waiver, and the date of approval:

Waiver granted:

- [ ] The owner/operator's headquarters is physically located in a geographic area (i.e., ZIP code or census tract) that is identified as under-served for broadband Internet access in the most recent report from the Federal Communications Commission.
- [X] The owner/operator has issues regarding available computer access or computer capability.

Name of EPA staff person that granted the waiver: Everett Spencer

Date approval obtained: 06/17/2016

*** Note: You are required to obtain approval from the applicable EPA Regional Office prior to using this paper DMR form. If you have not obtained a waiver, you must file this form electronically using the NetDMR at http://www.epa.gov/netdmr/**

B. Permit Information

1. NPDES ID: NMR053195

2. Reason(s) for Submission (Check all that apply):

- [X] Submitting monitoring data (Fill in all Sections).
- [ ] Reporting no discharge for all outfalls for this monitoring period (Fill in Sections A, B, C, D, E.1, and G).
- [ ] Reporting that your site status has changed to inactive and unstaffed (Fill in Sections A, B, C, D, and F and include date of status change in comment field in Section F.4).
- [ ] Reporting that your site status has changed to active (Fill in all Sections and include date of status change in comment field in Section F.4).
- [ ] Reporting that no further pollutant reductions are achievable for all outfalls and for all pollutants via Part 6.2.1.2 of the MSGP (Fill in Sections A, B, C, D, and G).

C. Facility Operator Information

1. Operator Information

Operator Name: Los Alamos National Security, LLC

Mailing Address:

Street: P.O. Box 1663, MS K490

City: Los Alamos State: NM ZIP Code: 87545 -

Phone: 505 667 0666

E-mail: tauniav@lanl.gov

2. DMR Preparer (Complete if DMR was prepared by someone other than the certifier):

First Name, Middle Initial, Last Name: Holly L. Wheeler

Organization: EPC-CP

Phone: 505 667 1312 Ext.

E-mail: hbenson@lanl.gov

D. Facility Information

1. Facility Name: Los Alamos National Laboratory

2. Facility Address:

Street/Location: Bikini Atoll Rd. SM30 K490

City: Los Alamos State: NM ZIP Code: 87545 -

County or Similar Government Subdivision: Los Alamos

E. Discharge Information

1. Identify monitoring period:

[X] Check here if proposing alternative monitoring periods due to irregular stormwater runoff. Identify alternative monitoring schedule and indicate for which alternative monitoring period you are reporting monitoring data:

[ ] Quarter 1 (January 1 – March 31)	[ ] Quarter 1: From	04 / 01	To 05 / 31
[ ] Quarter 2 (April 1 – June 30)	[ ] Quarter 2: From	06 / 01	To 07 / 31
[ ] Quarter 3 (July 1 – September 30)	[ ] Quarter 3: From	08 / 01	To 09 / 30
[ ] Quarter 4 (October 1 – December 31)	[X] Quarter 4: From	10 / 01	To 11 / 30

2. Are you required to monitor for cadmium, copper, chromium, lead, nickel, silver, or zinc in freshwater? [X] Yes (Skip to 3) [ ] No (Skip to 4)

3. What is the hardness level of the receiving water? 57

4. Does your facility discharge into any saltwater receiving waters? [ ] Yes [X] No

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 2 2.b. Rainfall amount (inches): 0.9 2.c. Time since previous measurable storm event (days): 4

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
002	[ ] Substantially identical to outfall:	[ ]	QBM	Iron, total	1520	ug/L		10/04/2017	[ ]	[ ]
002	[ ] Substantially identical to outfall:	[ ]	QBM	Nitrate plus Nitrite Nitrogen	0.271	mg/L		10/04/2017	[ ]	[ ]
002	[ ] Substantially identical to outfall:	[ ]	QBM	Zinc, dissolved	137	ug/L		10/04/2017	[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 1.75 hours. Rainfall amount = 0.92 inches.

002: Adjusted Gross Alpha (I) - NODI 9. Aluminum, total recoverable (I) - NODI 9. Aroclor, total (I) - NODI B. Copper, dissolved (I) - NODI 9. Thallium, dissolved (I) - NODI B.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 2 2.b. Rainfall amount (inches): 0.9 2.c. Time since previous measurable storm event (days): 4

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
005	[ ] Substantially identical to outfall:	[ ]	QBM	Iron, total	2830	ug/L		10/04/2017	[ ]	[ ]
006	[X] Substantially identical to outfall: 005	[ ]							[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 1.75 hours. Rainfall amount = 0.92 inches.

005: Adjusted Gross Alpha (I) - NODI 9. Aluminum, total recoverable (I) - NODI 9. Aroclor, total (I) - NODI B. Copper, dissolved (I) - NODI 9. Thallium, dissolved (I) - NODI B.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 2 2.b. Rainfall amount (inches): 0.9 2.c. Time since previous measurable storm event (days): 4

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
017	[ ] Substantially identical to outfall:	[ ]	QBM	Aluminum, total recoverable	72400	ug/L		10/04/2017	[ ]	[ ]
017	[ ] Substantially identical to outfall:	[ ]	QBM	Copper, dissolved	68.9	ug/L		10/04/2017	[ ]	[ ]
017	[ ] Substantially identical to outfall:	[ ]	QBM	Iron, total	83100	ug/L		10/04/2017	[ ]	[ ]
017	[ ] Substantially identical to outfall:	[ ]	QBM	Nitrate plus Nitrite Nitrogen	0.0923	mg/L		10/04/2017	[ ]	[ ]
017	[ ] Substantially identical to outfall:	[ ]	QBM	Zinc, dissolved	246	ug/L		10/04/2017	[ ]	[ ]
013	[X] Substantially identical to outfall: 017	[ ]							[ ]	[ ]
014	[X] Substantially identical to outfall: 017	[ ]							[ ]	[ ]
015	[X] Substantially identical to outfall: 017	[ ]							[ ]	[ ]

016	[X] Substantially identical to outfall: 017	☐							☐	☐
019	[X] Substantially identical to outfall: 017	☐							☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 1.75 hours. Rainfall amount = 0.92 inches.

017: The average concentration of total recoverable Aluminum is mathematically certain to exceed the benchmark value. The average concentration of dissolved Copper is mathematically certain to exceed the benchmark value. The average concentration of total Iron is mathematically certain to exceed the benchmark value. The average of four monitoring values for Nitrate plus Nitrite Nitrogen does not exceed the benchmark value, therefore quarterly monitoring will be discontinued per Part 6.2.1.2. The average of four monitoring values for dissolved Zinc exceeds the benchmark value. Adjusted Gross Alpha (I) - NODI 9. Aroclor, total (I) - NODI 9. Thallium, dissolved (I) - NODI B. Aluminum, total recoverable (I) - NODI 9. Copper, dissolved (I) - NODI 9.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 2 2.b. Rainfall amount (inches): 0.9 2.c. Time since previous measurable storm event (days): 4

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
020	[ ] Substantially identical to outfall:	[ ]	QBM	Zinc, dissolved	173	ug/L		10/04/2017	[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 1.75 hours. Rainfall amount = 0.92 inches.

020: The average concentration of dissolved Zinc is mathematically certain to exceed the benchmark value. Adjusted Gross Alpha (I) - NODI B. Aluminum, total recoverable (QBM) - NODI B. Aluminum, total recoverable (I) - NODI 9. Aroclor, total (I) - NODI B. Copper, dissolved (QBM) - NODI B. Copper, dissolved (I) - NODI 9. Iron, total (QBM) - NODI B. Nitrate plus Nitrite Nitrogen (QBM) - NODI B. Thallium, dissolved (I) - NODI B.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 2 2.b. Rainfall amount (inches): 0.8 2.c. Time since previous measurable storm event (days): 4

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
047	[ ] Substantially identical to outfall:	[ ]	QBM	Magnesium, total	0.37	mg/L		10/04/2017	[ ]	[ ]
046	[X] Substantially identical to outfall: 047	[ ]							[ ]	[ ]
045	[X] Substantially identical to outfall: 047	[ ]							[ ]	[ ]
048	[X] Substantially identical to outfall: 047	[ ]							[ ]	[ ]
044	[X] Substantially identical to outfall: 047	[ ]							[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 1.83 hours. Rainfall amount = 0.78 inches.

047: The average concentration of total Magnesium is mathematically certain to exceed the benchmark value. Adjusted Gross Alpha (I) - NODI B. Aluminum, total recoverable (I) - NODI 9. Ammonia, total (QBM) - NODI B. Aroclor, total (I) - NODI B. Arsenic, dissolved (QBM) - NODI B. Cadmium, dissolved (QBM) - NODI B. Chemical Oxygen Demand (COD) (QBM) - NODI B. Cyanide, total (QBM) - NODI B. Lead, dissolved (QBM) - NODI B. Mercury, total (QBM) - NODI B. Selenium, total (QBM) - NODI B. Silver, dissolved (QBM) - NODI B.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 2 2.b. Rainfall amount (inches): 0.8 2.c. Time since previous measurable storm event (days): 4

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
050	[ ] Substantially identical to outfall:	[ ]	QBM	Chemical Oxygen Demand (COD)	ND		8.95 mg/L	10/04/2017	[ ]	[ ]
050	[ ] Substantially identical to outfall:	[ ]	QBM	Magnesium, total	1.32	mg/L		10/04/2017	[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 1.83 hours. Rainfall amount = 0.78 inches.

050: The average concentration of total Magnesium is mathematically certain to exceed the benchmark value. Adjusted Gross Alpha (I) - NODI 9. Aluminum, total recoverable (I) - NODI 9. Ammonia, total (QBM) - NODI B. Aroclor, total (I) - NODI B. Arsenic, dissolved (QBM) - NODI B. Cadmium, dissolved (QBM) - NODI B. Cyanide, total (QBM) - NODI B. Lead, dissolved (QBM) - NODI B. Mercury, total (QBM) - NODI B. Selenium, total (QBM) - NODI B. Silver, dissolved (QBM) - NODI B.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 2 2.b. Rainfall amount (inches): 0.3 2.c. Time since previous measurable storm event (days): 6

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
051	[ ] Substantially identical to outfall:	[ ]	QBM	Chemical Oxygen Demand (COD)	ND		8.95 mg/L	10/05/2017	[ ]	[ ]
052	[X] Substantially identical to outfall: 051	[ ]							[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 2.50 hours. Rainfall amount = 0.34 inches.

051: Aluminum, total recoverable (I) - NODI 9. The average of four monitoring values for Chemical Oxygen Demand does not exceed the benchmark value, therefore quarterly monitoring will be discontinued per Part 6.2.1.2. Ammonia, total (QBM) - NODI B. Aroclor, total (I) - NODI B. Arsenic, dissolved (QBM) - NODI B. Cadmium, dissolved (QBM) - NODI B. Cyanide, total (QBM) - NODI B. Lead, dissolved (QBM) - NODI B. Mercury, total (QBM) - NODI B. Selenium, total (QBM) - NODI B. Silver, dissolved (QBM) - NODI B.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 2 2.b. Rainfall amount (inches): 0.3 2.c. Time since previous measurable storm event (days): 4

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
069	[ ] Substantially identical to outfall:	[ ]	QBM	Chemical Oxygen Demand (COD)	ND		8.95 mg/L	10/04/2017	[ ]	[ ]
069	[ ] Substantially identical to outfall:	[ ]	QBM	Magnesium, total	0.223	mg/L		10/04/2017	[ ]	[ ]
059	[X] Substantially identical to outfall: 069	[ ]							[ ]	[ ]
058	[X] Substantially identical to outfall: 069	[ ]							[ ]	[ ]
057	[X] Substantially identical to outfall: 069	[ ]							[ ]	[ ]
056	[X] Substantially identical to outfall: 069	[ ]							[ ]	[ ]
055	[X] Substantially identical to outfall: 069	[ ]							[ ]	[ ]
054	[X] Substantially identical to outfall: 069	[ ]							[ ]	[ ]

067	[X] Substantially identical to outfall: 069	☐							☐	☐
068	[X] Substantially identical to outfall: 069	☐							☐	☐
060	[X] Substantially identical to outfall: 069	☐							☐	☐
061	[X] Substantially identical to outfall: 069	☐							☐	☐
062	[X] Substantially identical to outfall: 069	☐							☐	☐
063	[X] Substantially identical to outfall: 069	☐							☐	☐
064	[X] Substantially identical to outfall: 069	☐							☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 2.50 hours. Rainfall amount = 0.34 inches.

069: Aluminum, total recoverable (I) - NODI 9. Ammonia, total (QBM) - NODI B. Aroclor, total (I) - NODI B. Arsenic, dissolved (QBM) - NODI B. Cadmium, dissolved (QBM) - NODI B. Cyanide, total (QBM) - NODI B. Lead, dissolved (QBM) - NODI B. Mercury, total (QBM) - NODI B. Selenium, total (QBM) - NODI B. Silver, dissolved (QBM) - NODI B.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 2 2.b. Rainfall amount (inches): 0.9 2.c. Time since previous measurable storm event (days): 4

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
073	[ ] Substantially identical to outfall:	[ ]	QBM	Chemical Oxygen Demand (COD)	ND		8.95 mg/L	10/04/2017	[ ]	[ ]
074	[X] Substantially identical to outfall: 073	[ ]							[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 1.75 hours. Rainfall amount = 0.92 inches.

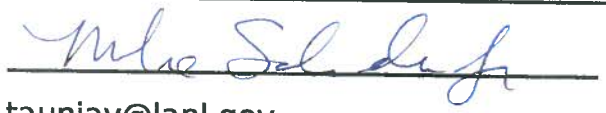
073: Aluminum, total recoverable (I) - NODI 9. Copper, dissolved (I) - NODI 9. Thallium, dissolved (I) - NODI B.

G. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

First Name, Middle Initial, Last Name: Taunia S Van Valkenburg

Title: EPC-CP Group Leader

Signature:  Date 12/07/2017

E-mail: tauniav@lanl.gov

Los Alamos
NATIONAL LABORATORY
EST. 1943

Environmental Protection & Compliance Division
Environmental Compliance Programs
Los Alamos National Laboratory
PO Box 1663, K491
Los Alamos, New Mexico 87545
(505) 667-2211

DEC 13 2017

Date:
Symbol: EPC-DO: 17-543
LA-UR: 17-31206
Locates Action No.: N/A

U.S. EPA Region 6
NPDES Stormwater Program (WQ-PP)
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

Subject: National Pollutant Discharge Elimination System (NPDES) Permit Tracking No. NMR053195, Multi-Sector General Permit (MSGP) Industrial Discharge Monitoring Reports (MDMRs) for 9/28/2017, 9/29/2017 and 10/05/2017

To whom it may concern:

Enclosed are Los Alamos National Laboratory's MDMRs (Enclosure 1) for 9/28/2017, 9/29/2017 and 10/05/2017, as required under MSGP Permit Tracking No. NMR053195. These reports are being submitted on behalf of Los Alamos National Security, LLC and contain analytical results for impaired water and quarterly benchmark monitoring at outfalls 002, 009, 020, 043, 047, 051, 053, 072 and 075.

Please contact Holly Wheeler at (505) 667-1312 or Terrill Lemke at (505) 665-2397 if you have questions regarding these MDMRs.

Sincerely,

Taunia S. Van Valkenburg
Group Leader

TSV/TWL/HLW: eim

Enclosure: 1) NPDES Permit Tracking No. NMR053195, MDMRs for 9/28/2017, 9/29/2017 and 10/05/2017

Copy: Helen Nguyen, EPA Region 6, Dallas TX (E-File)
Nasim Jahan, EPA Region 6, Dallas TX (E-File)
Michelle Hunter, NMED/GWQB, Santa Fe, NM (E-File)
Shelly Lemon, NMED/SWQB, Santa Fe, NM (E-File)
Karen Armijo, NA-LA, (E-File)
Arturo Duran, EM-SG, (E-File)
David Rhodes, EM-SG, (E-File)
Craig Leasure, PADOPS, (E-File)
William Mairson, PADOPS, (E-File)
Michael Brandt, ADESH, (E-File)
Raeanna Sharp-Geiger, ADESH, (E-File)
Bruce Robinson, ADEM-PO, (E-File)
Stephanie Archuleta, DESHF-DO, (E-File)
Theresa Cull, DESHS-DO, (E-File)
Stephanie Griego, EWMO-DO, (E-File)
Clifford Kirkland, STO-DO, (E-File)
Andrew Erickson, UI-DO, (E-File)
Robert Stokes, DESHS-EWMS, (E-File)
Garry Schramm, DESHF-STO, (E-File)
Russel Stone, DESHS-UIS, (E-File)
Victoria Baca, DESHS-EWMS, (E-File)
Marc Gallegos, DESHF-STO, (E-File)
Jillian Burgin, DESHS-UIS, (E-File)
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ENCLOSURE 1

NPDES Permit Tracking No. NMR053195, MDMRs for 9/28/2017, 9/29/2017 and 10/05/2017

EPC-DO: 17-543

LA-UR-17-31206

Date: DEC 13 2017

NPDES FORM 6100-29	EPA	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460 MSGP INDUSTRIAL DISCHARGE MONITORING REPORT (DMR) FORM	Form Approved. OMB No. 2040-0004

A. Approval to User Paper DMR Form

1. Have you been granted a waiver from electronic reporting from EPA Regional Office*? [X] YES [ ] NO

If yes, check which waiver you have been granted, the name of the EPA Regional Office staff person who granted the waiver, and the date of approval:

Waiver granted:
- [ ] The owner/operator's headquarters is physically located in a geographic area (i.e., ZIP code or census tract) that is identified as under-served for broadband Internet access in the most recent report from the Federal Communications Commission.
- [X] The owner/operator has issues regarding available computer access or computer capability.

Name of EPA staff person that granted the waiver: Everett Spencer

Date approval obtained: 06/17/2016

*** Note: You are required to obtain approval from the applicable EPA Regional Office prior to using this paper DMR form. If you have not obtained a waiver, you must file this form electronically using the NetDMR at http://www.epa.gov/netdmr/**

B. Permit Information

1. NPDES ID: NMR053195

2. Reason(s) for Submission (Check all that apply):

- [X] Submitting monitoring data (Fill in all Sections).
- [ ] Reporting no discharge for all outfalls for this monitoring period (Fill in Sections A, B, C, D, E.1, and G).
- [ ] Reporting that your site status has changed to inactive and unstaffed (Fill in Sections A, B, C, D, and F and include date of status change in comment field in Section F.4).
- [ ] Reporting that your site status has changed to active (Fill in all Sections and include date of status change in comment field in Section F.4).
- [ ] Reporting that no further pollutant reductions are achievable for all outfalls and for all pollutants via Part 6.2.1.2 of the MSGP (Fill in Sections A, B, C, D, and G).

C. Facility Operator Information

1. Operator Information

Operator Name: Los Alamos National Security, LLC

Mailing Address:

Street: P.O. Box 1663, MS K490

City: Los Alamos State: NM ZIP Code: 87545 -

Phone: 505 667 0666

E-mail: tauniav@lanl.gov

2. DMR Preparer (Complete if DMR was prepared by someone other than the certifier):

First Name, Middle Initial, Last Name: Holly L. Wheeler

Organization: EPC-CP

Phone: 505 667 1312 Ext.

E-mail: hbenson@lanl.gov

D. Facility Information

1. Facility Name: Los Alamos National Laboratory

2. Facility Address:

Street/Location: Bikini Atoll Rd. SM30 K490

City: Los Alamos State: NM ZIP Code: 87545 -

County or Similar Government Subdivision: Los Alamos

E. Discharge Information

1. Identify monitoring period: [X] Check here if proposing alternative monitoring periods due to irregular stormwater runoff. Identify alternative monitoring schedule and indicate for which alternative monitoring period you are reporting monitoring data:

[ ] Quarter 1 (January 1 – March 31)	[ ] Quarter 1: From	04	/	01	To	05	/	31
[ ] Quarter 2 (April 1 – June 30)	[ ] Quarter 2: From	06	/	01	To	07	/	31
[ ] Quarter 3 (July 1 – September 30)	[X] Quarter 3: From	08	/	01	To	09	/	30
[ ] Quarter 4 (October 1 – December 31)	[ ] Quarter 4: From	10	/	01	To	11	/	30

2. Are you required to monitor for cadmium, copper, chromium, lead, nickel, silver, or zinc in freshwater? [X] Yes (Skip to 3) [ ] No (Skip to 4)

3. What is the hardness level of the receiving water? 57

4. Does your facility discharge into any saltwater receiving waters? [ ] Yes [X] No

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 4 2.b. Rainfall amount (inches): 0.7 2.c. Time since previous measurable storm event (days): 1

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
043	[ ] Substantially identical to outfall:	[ ]	I	Copper, dissolved	3.51	ug/L		09/29/2017	[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 4.16 hours. Rainfall amount = 0.73 inches.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 7 2.b. Rainfall amount (inches): 1.2 2.c. Time since previous measurable storm event (days): 1

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
051	[ ] Substantially identical to outfall:	[ ]	QBM	Chemical Oxygen Demand (COD)	ND		8.95 mg/L	09/28/2017	[ ]	[ ]
052	[X] Substantially identical to outfall: 051	[X]							[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 7.00 hours. Rainfall amount = 1.25 inches.

051: Aluminum, total recoverable (I) - NODI 9. Ammonia, total (QBM) - NODI B. Aroclor, total (I) - NODI B. Arsenic, dissolved (QBM) - NODI B. Cadmium, dissolved (QBM) - NODI B. Cyanide, total (QBM) - NODI B. Lead, dissolved (QBM) - NODI B. Mercury, total (QBM) - NODI B. Selenium, total (QBM) - NODI B. Silver, dissolved (QBM) - NODI B.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 7 2.b. Rainfall amount (inches): 1.2 2.c. Time since previous measurable storm event (days): 1

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
053	[ ] Substantially identical to outfall:	[ ]	QBM	Arsenic, dissolved	ND		2.00 ug/L	09/29/2017	[ ]	[ ]
053	[ ] Substantially identical to outfall:	[ ]	QBM	Cadmium, dissolved	BQL		1.00 ug/L	09/29/2017	[ ]	[ ]
053	[ ] Substantially identical to outfall:	[ ]	QBM	Lead, dissolved	BQL		2.00 ug/L	09/29/2017	[ ]	[ ]
053	[ ] Substantially identical to outfall:	[ ]	QBM	Silver, dissolved	ND		0.300 ug/L	09/29/2017	[ ]	[ ]
065	[X] Substantially identical to outfall: 053	[X]							[ ]	[ ]
066	[X] Substantially identical to outfall: 053	[X]							[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 7.00 hours. Rainfall amount = 1.25 inches.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 7 2.b. Rainfall amount (inches): 1.2 2.c. Time since previous measurable storm event (days): 1

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
072	[ ] Substantially identical to outfall:	[ ]	I	Aluminum, total recoverable	6290	ug/L		09/28/2017	[ ]	[ ]
072	[ ] Substantially identical to outfall:	[ ]	QBM	Ammonia, total	0.294	mg/L		09/28/2017	[ ]	[ ]
072	[ ] Substantially identical to outfall:	[ ]	QBM	Arsenic, dissolved	ND		2.00 ug/L	09/28/2017	[ ]	[ ]
072	[ ] Substantially identical to outfall:	[ ]	QBM	Cadmium, dissolved	ND		0.300 ug/L	09/28/2017	[ ]	[ ]
072	[ ] Substantially identical to outfall:	[ ]	QBM	Chemical Oxygen Demand (COD)	ND		8.95 mg/L	09/28/2017	[ ]	[ ]
072	[ ] Substantially identical to outfall:	[ ]	QBM	Cyanide, total	0.057	mg/L		09/28/2017	[ ]	[ ]
072	[ ] Substantially identical to outfall:	[ ]	QBM	Lead, dissolved	ND		0.500 ug/L	09/28/2017	[ ]	[ ]
072	[ ] Substantially identical to outfall:	[ ]	QBM	Magnesium, total	6.95	mg/L		09/28/2017	[ ]	[ ]

072	☐ Substantially identical to outfall:	☐	QBM	Mercury, total	ND		0.067 ug/L	09/28/2017	☐	☐
072	☐ Substantially identical to outfall:	☐	QBM	Selenium, total	ND		2.00 ug/L	09/28/2017	☐	☐
072	☐ Substantially identical to outfall:	☐	QBM	Silver, dissolved	ND		0.300 ug/L	09/28/2017	☐	☐
070	☒ Substantially identical to outfall: 072	☒							☐	☐
071	☒ Substantially identical to outfall: 072	☒							☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 7.00 hours. Rainfall amount = 1.25 inches.

072: The impaired water pollutant total recoverable Aluminum exceeds the New Mexico water quality standard. The average of four monitoring values for dissolved Arsenic does not exceed the benchmark value, therefore quarterly monitoring will be discontinued per Part 6.2.1.2. The average of four monitoring values for dissolved Cadmium does not exceed the benchmark value, therefore quarterly monitoring will be discontinued per Part 6.2.1.2. The average concentration of total Cyanide is mathematically certain to exceed the benchmark value. The average of four monitoring values for dissolved Lead does not exceed the benchmark value, therefore quarterly monitoring will be discontinued per Part 6.2.1.2. The average concentration of total Magnesium is mathematically certain to exceed the benchmark value. The average of four monitoring values for dissolved Silver does not exceed the benchmark value, therefore quarterly monitoring will be discontinued per Part 6.2.1.2. Adjusted Gross Alpha (I) - NODI 9. Aroclor, total (I) - NODI B.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 5 2.b. Rainfall amount (inches): 1.2 2.c. Time since previous measurable storm event (days): 1

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
075	[ ] Substantially identical to outfall:	[ ]	I	Copper, dissolved	13.5	ug/L		09/28/2017	[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 4.66 hours. Rainfall amount = 1.20 inches.

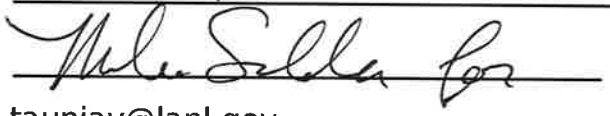
075: The impaired water pollutant dissolved Copper exceeds the New Mexico water quality standard. Aroclor, total (I) - NODI B. Thallium, dissolved (I) - NODI B.

G. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

First Name, Middle Initial, Last Name: Taunia S Van Valkenburg

Title: EPC-CP Group Leader

Signature: 

Date 12/13/2017

E-mail: tauniav@lanl.gov

NPDES FORM 6100-29	EPA	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460 MSGP INDUSTRIAL DISCHARGE MONITORING REPORT (DMR) FORM	Form Approved. OMB No. 2040-0004

A. Approval to User Paper DMR Form

1. Have you been granted a waiver from electronic reporting from EPA Regional Office*? [X] YES [ ] NO

If yes, check which waiver you have been granted, the name of the EPA Regional Office staff person who granted the waiver, and the date of approval:

Waiver granted:
- [ ] The owner/operator's headquarters is physically located in a geographic area (i.e., ZIP code or census tract) that is identified as under-served for broadband Internet access in the most recent report from the Federal Communications Commission.
- [X] The owner/operator has issues regarding available computer access or computer capability.

Name of EPA staff person that granted the waiver: Everett Spencer

Date approval obtained: 06/17/2016

*** Note: You are required to obtain approval from the applicable EPA Regional Office prior to using this paper DMR form. If you have not obtained a waiver, you must file this form electronically using the NetDMR at http://www.epa.gov/netdmr/**

B. Permit Information

1. NPDES ID: NMR053195

2. Reason(s) for Submission (Check all that apply):

- [X] Submitting monitoring data (Fill in all Sections).
- [ ] Reporting no discharge for all outfalls for this monitoring period (Fill in Sections A, B, C, D, E.1, and G).
- [ ] Reporting that your site status has changed to inactive and unstaffed (Fill in Sections A, B, C, D, and F and include date of status change in comment field in Section F.4).
- [ ] Reporting that your site status has changed to active (Fill in all Sections and include date of status change in comment field in Section F.4).
- [ ] Reporting that no further pollutant reductions are achievable for all outfalls and for all pollutants via Part 6.2.1.2 of the MSGP (Fill in Sections A, B, C, D, and G).

C. Facility Operator Information

1. Operator Information

Operator Name: Los Alamos National Security, LLC

Mailing Address:

Street: P.O. Box 1663, MS K490

City: Los Alamos State: NM ZIP Code: 87545 -

Phone: 505 667 0666

E-mail: tauniav@lanl.gov

2. DMR Preparer (Complete if DMR was prepared by someone other than the certifier):

First Name, Middle Initial, Last Name: Holly L. Wheeler

Organization: EPC-CP

Phone: 505 667 1312 Ext.

E-mail: hbenson@lanl.gov

D. Facility Information

1. Facility Name: Los Alamos National Laboratory

2. Facility Address:

Street/Location: Bikini Atoll Rd. SM30 K490

City: Los Alamos State: NM ZIP Code: 87545 -

County or Similar Government Subdivision: Los Alamos

E. Discharge Information

1. Identify monitoring period: [X] Check here if proposing alternative monitoring periods due to irregular stormwater runoff. Identify alternative monitoring schedule and indicate for which alternative monitoring period you are reporting monitoring data:

[ ] Quarter 1 (January 1 – March 31)	[ ] Quarter 1: From	04	/	01	To	05	/	31
[ ] Quarter 2 (April 1 – June 30)	[ ] Quarter 2: From	06	/	01	To	07	/	31
[ ] Quarter 3 (July 1 – September 30)	[X] Quarter 3: From	08	/	01	To	09	/	30
[ ] Quarter 4 (October 1 – December 31)	[ ] Quarter 4: From	10	/	01	To	11	/	30

2. Are you required to monitor for cadmium, copper, chromium, lead, nickel, silver, or zinc in freshwater? [X] Yes (Skip to 3) [ ] No (Skip to 4)

3. What is the hardness level of the receiving water? 57

4. Does your facility discharge into any saltwater receiving waters? [ ] Yes [X] No

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 1 2.b. Rainfall amount (inches): 0.1 2.c. Time since previous measurable storm event (days): 1

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
020	[ ] Substantially identical to outfall:	[ ]	QBM	Zinc, dissolved	118	ug/L		09/29/2017	[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 0.75 hours. Rainfall amount = 0.13 inches.

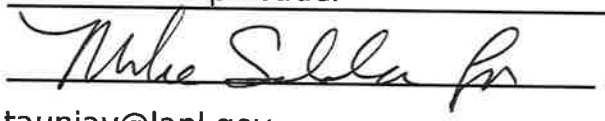
020: Adjusted Gross Alpha (I) - NODI B. Aluminum, total recoverable (QBM) - NODI B. Aluminum, total recoverable (I) - NODI 9. Aroclor, total (I) - NODI B. Copper, dissolved (QBM) - NODI B. Copper, dissolved (I) - NODI 9. Iron, total (QBM) - NODI B. Nitrate plus Nitrite Nitrogen (QBM) - NODI B. Thallium, dissolved (I) - NODI B.

G. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

First Name, Middle Initial, Last Name: Taunia S Van Valkenburg

Title: EPC-CP Group Leader

Signature: 

Date 12/13/2017

E-mail: tauniav@lanl.gov

NPDES FORM 6100-29	EPA	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460 MSGP INDUSTRIAL DISCHARGE MONITORING REPORT (DMR) FORM	Form Approved. OMB No. 2040-0004

A. Approval to User Paper DMR Form

1. Have you been granted a waiver from electronic reporting from EPA Regional Office*? [X] YES [ ] NO

If yes, check which waiver you have been granted, the name of the EPA Regional Office staff person who granted the waiver, and the date of approval:

Waiver granted:
- [ ] The owner/operator's headquarters is physically located in a geographic area (i.e., ZIP code or census tract) that is identified as under-served for broadband Internet access in the most recent report from the Federal Communications Commission.
- [X] The owner/operator has issues regarding available computer access or computer capability.

Name of EPA staff person that granted the waiver: Everett Spencer

Date approval obtained: 06/17/2016

*** Note: You are required to obtain approval from the applicable EPA Regional Office prior to using this paper DMR form. If you have not obtained a waiver, you must file this form electronically using the NetDMR at http://www.epa.gov/netdmr/**

B. Permit Information

1. NPDES ID: NMR053195

2. Reason(s) for Submission (Check all that apply):

- [X] Submitting monitoring data (Fill in all Sections).
- [ ] Reporting no discharge for all outfalls for this monitoring period (Fill in Sections A, B, C, D, E.1, and G).
- [ ] Reporting that your site status has changed to inactive and unstaffed (Fill in Sections A, B, C, D, and F and include date of status change in comment field in Section F.4).
- [ ] Reporting that your site status has changed to active (Fill in all Sections and include date of status change in comment field in Section F.4).
- [ ] Reporting that no further pollutant reductions are achievable for all outfalls and for all pollutants via Part 6.2.1.2 of the MSGP (Fill in Sections A, B, C, D, and G).

C. Facility Operator Information

1. Operator Information

Operator Name: Los Alamos National Security, LLC

Mailing Address:

Street: P.O. Box 1663, MS K490

City: Los Alamos State: NM ZIP Code: 87545 -

Phone: 505 667 0666

E-mail: tauniav@lanl.gov

2. DMR Preparer (Complete if DMR was prepared by someone other than the certifier):

First Name, Middle Initial, Last Name: Holly L. Wheeler

Organization: EPC-CP

Phone: 505 667 1312 Ext.

E-mail: hbenson@lanl.gov

D. Facility Information

1. Facility Name: Los Alamos National Laboratory

2. Facility Address:

Street/Location: Bikini Atoll Rd. SM30 K490

City: Los Alamos State: NM ZIP Code: 87545 -

County or Similar Government Subdivision: Los Alamos

E. Discharge Information

1. Identify monitoring period: [X] Check here if proposing alternative monitoring periods due to irregular stormwater runoff. Identify alternative monitoring schedule and indicate for which alternative monitoring period you are reporting monitoring data:

[ ] Quarter 1 (January 1 – March 31)	[ ] Quarter 1: From	04 / 01	To 05 / 31
[ ] Quarter 2 (April 1 – June 30)	[ ] Quarter 2: From	06 / 01	To 07 / 31
[ ] Quarter 3 (July 1 – September 30)	[ ] Quarter 3: From	08 / 01	To 09 / 30
[ ] Quarter 4 (October 1 – December 31)	[X] Quarter 4: From	10 / 01	To 11 / 30

2. Are you required to monitor for cadmium, copper, chromium, lead, nickel, silver, or zinc in freshwater? [X] Yes (Skip to 3) [ ] No (Skip to 4)

3. What is the hardness level of the receiving water? 57

4. Does your facility discharge into any saltwater receiving waters? [ ] Yes [X] No

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 2 2.b. Rainfall amount (inches): 0.4 2.c. Time since previous measurable storm event (days): 1

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
002	[ ] Substantially identical to outfall:	[ ]	QBM	Aluminum, total recoverable	1200	ug/L		10/05/2017	[ ]	[ ]
002	[ ] Substantially identical to outfall:	[ ]	QBM	Iron, total	1450	ug/L		10/05/2017	[ ]	[ ]
002	[ ] Substantially identical to outfall:	[ ]	QBM	Nitrate plus Nitrite Nitrogen	0.174	mg/L		10/05/2017	[ ]	[ ]
002	[ ] Substantially identical to outfall:	[ ]	QBM	Zinc, dissolved	93.8	ug/L		10/05/2017	[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 1.91 hours. Rainfall amount = 0.40 inches.

002: The average of four monitoring values for total recoverable Aluminum exceeds the benchmark value. The average concentration of total Iron is mathematically certain to exceed the benchmark value. The average of four monitoring values for Nitrate plus Nitrite Nitrogen does not exceed the benchmark value, therefore quarterly monitoring will be discontinued per Part 6.2.1.2. Adjusted Gross Alpha (I) - NODI 9. Aroclor, total (I) - NODI B. Copper, dissolved (I) - NODI 9. Thallium, dissolved (I) - NODI B. Aluminum, total recoverable (I) - NODI 9.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 2 2.b. Rainfall amount (inches): 0.4 2.c. Time since previous measurable storm event (days): 1

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
009	[ ] Substantially identical to outfall:	[ ]	QBM	Iron, total	1180	ug/L		10/05/2017	[ ]	[ ]
007	[X] Substantially identical to outfall: 009	[X]							[ ]	[ ]
008	[X] Substantially identical to outfall: 009	[X]							[ ]	[ ]
010	[X] Substantially identical to outfall: 009	[ ]							[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 1.91 hours. Rainfall amount = 0.40 inches.

009: The average concentration of total Iron is mathematically certain to exceed the benchmark value. Adjusted Gross Alpha (I) - NODI 9. Aluminum, total recoverable (I) - NODI 9. Aroclor, total (I) - NODI B. Copper, dissolved (I) - NODI 9. Thallium, dissolved (I) - NODI B.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 2 2.b. Rainfall amount (inches): 0.4 2.c. Time since previous measurable storm event (days): 1

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
020	[ ] Substantially identical to outfall:	[ ]	QBM	Zinc, dissolved	110	ug/L		10/05/2017	[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 1.91 hours. Rainfall amount = 0.40 inches.

020: Adjusted Gross Alpha (I) - NODI B. Aluminum, total recoverable (QBM) - NODI B. Aluminum, total recoverable (I) - NODI 9. Aroclor, total (I) - NODI B. Copper, dissolved (QBM) - NODI B. Copper, dissolved (I) - NODI 9. Iron, total (QBM) - NODI B. Nitrate plus Nitrite Nitrogen (QBM) - NODI B. Thallium, dissolved (I) - NODI B.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 2 2.b. Rainfall amount (inches): 0.5 2.c. Time since previous measurable storm event (days): 1

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
043	[ ] Substantially identical to outfall:	[ ]	ELG	pH	8.39	SU		10/05/2017	[ ]	[ ]
043	[ ] Substantially identical to outfall:	[ ]	I	Adjusted Gross Alpha	ND		2.95 pCi/L	10/05/2017	[ ]	[ ]
043	[ ] Substantially identical to outfall:	[ ]	I	Aluminum, total recoverable	1650	ug/L		10/05/2017	[ ]	[ ]
043	[ ] Substantially identical to outfall:	[ ]	I	Aroclor, total	ND		0.034 ug/L	10/05/2017	[ ]	[ ]
043	[ ] Substantially identical to outfall:	[ ]	ELG	Oil and Grease	ND		1.44 mg/L	10/05/2017	[ ]	[ ]
043	[ ] Substantially identical to outfall:	[ ]	ELG	Total Suspended Solids (TSS)	27.4	mg/L		10/05/2017	[ ]	[ ]
043	[ ] Substantially identical to outfall:	[ ]	QBM	Total Suspended Solids (TSS)	27.4	mg/L		10/05/2017	[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 2.16 hours. Rainfall amount = 0.48 inches.

043: The impaired water pollutant Adjusted Gross Alpha was not detected in stormwater discharge from this outfall, therefore annual monitoring will be discontinued per Part 6.2.4.1. The impaired water pollutant total Aroclor was not detected in stormwater discharge from this outfall, therefore annual monitoring will be discontinued per Part 6.2.4.1. The result for Total Suspended Solids exceeds the Daily Maximum Effluent Limitation.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 2 2.b. Rainfall amount (inches): 0.5 2.c. Time since previous measurable storm event (days): 1

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
047	[ ] Substantially identical to outfall:	[ ]	QBM	Magnesium, total	0.553	mg/L		10/05/2017	[ ]	[ ]
046	[X] Substantially identical to outfall: 047	[X]							[ ]	[ ]
045	[X] Substantially identical to outfall: 047	[X]							[ ]	[ ]
048	[X] Substantially identical to outfall: 047	[X]							[ ]	[ ]
044	[X] Substantially identical to outfall: 047	[X]							[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 2.08 hours. Rainfall amount = 0.53 inches.

047: The average concentration of total Magnesium is mathematically certain to exceed the benchmark value. Adjusted Gross Alpha (I) - NODI B. Aluminum, total recoverable (I) - NODI 9. Ammonia, total (QBM) - NODI B. Aroclor, total (I) - NODI B. Arsenic, dissolved (QBM) - NODI B. Cadmium, dissolved (QBM) - NODI B. Chemical Oxygen Demand (COD) (QBM) - NODI B. Cyanide, total (QBM) - NODI B. Lead, dissolved (QBM) - NODI B. Mercury, total (QBM) - NODI B. Selenium, total (QBM) - NODI B. Silver, dissolved (QBM) - NODI B.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 4 2.b. Rainfall amount (inches): 0.9 2.c. Time since previous measurable storm event (days): 7

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
053	[ ] Substantially identical to outfall:	[ ]	QBM	Arsenic, dissolved	ND		2.00 ug/L	10/05/2017	[ ]	[ ]
053	[ ] Substantially identical to outfall:	[ ]	QBM	Cadmium, dissolved	ND		0.300 ug/L	10/05/2017	[ ]	[ ]
053	[ ] Substantially identical to outfall:	[ ]	QBM	Lead, dissolved	BQL		2.00 ug/L	10/05/2017	[ ]	[ ]
053	[ ] Substantially identical to outfall:	[ ]	QBM	Silver, dissolved	ND		0.300 ug/L	10/05/2017	[ ]	[ ]
065	[X] Substantially identical to outfall: 053	[X]							[ ]	[ ]
066	[X] Substantially identical to outfall: 053	[X]							[ ]	[ ]

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 4.50 hours. Rainfall amount = 0.87 inches.

F. Monitoring Information

Note: Make additional copies of this form as necessary.

1. Nature of Discharge: [X] Rainfall (Complete line items 2.a., 2.b., & 2.c.) [ ] Snowmelt

2.a. Duration of the rainfall event (hours): 4 2.b. Rainfall amount (inches): 0.9 2.c. Time since previous measurable storm event (days): 7

3.a. Outfall ID (list the same 3-digit outfalls identified on the NOI form)	3.b. Check if Any Outfalls are Substantially Identical to Other Outfalls Listed	3.c. Check if No Discharge	3.d. Monitoring Type QBM, ELG, S/T, I, O*	3.e. Parameter	3.f. Quality or Concentration	3.g. Units	3.h. Results Description	3.i. Collection Date	3.j. Exceedance due to natural background pollutant levels	3.k. No further pollutant reductions achievable?
072	[ ] Substantially identical to outfall:	[ ]	QBM	Ammonia, total	0.449	mg/L		10/05/2017	[ ]	[ ]
072	[ ] Substantially identical to outfall:	[ ]	QBM	Ammonia, total	0.196	mg/L		10/05/2017	[ ]	[ ]
072	[ ] Substantially identical to outfall:	[ ]	QBM	Arsenic, dissolved	ND		2.00 ug/L	10/05/2017	[ ]	[ ]
072	[ ] Substantially identical to outfall:	[ ]	QBM	Arsenic, dissolved	ND		2.00 ug/L	10/05/2017	[ ]	[ ]
072	[ ] Substantially identical to outfall:	[ ]	QBM	Cadmium, dissolved	ND		0.300 ug/L	10/05/2017	[ ]	[ ]
072	[ ] Substantially identical to outfall:	[ ]	QBM	Cadmium, dissolved	ND		0.300 ug/L	10/05/2017	[ ]	[ ]
072	[ ] Substantially identical to outfall:	[ ]	QBM	Chemical Oxygen Demand (COD)	127	mg/L		10/05/2017	[ ]	[ ]
072	[ ] Substantially identical to outfall:	[ ]	QBM	Chemical Oxygen Demand (COD)	67.4	mg/L		10/05/2017	[ ]	[ ]

072	☐ Substantially identical to outfall:	☐	QBM	Cyanide, total	BQL		0.005 mg/L	10/05/2017	☐	☐
072	☐ Substantially identical to outfall:	☐	QBM	Lead, dissolved	BQL		2.00 ug/L	10/05/2017	☐	☐
072	☐ Substantially identical to outfall:	☐	QBM	Lead, dissolved	ND		0.500 ug/L	10/05/2017	☐	☐
072	☐ Substantially identical to outfall:	☐	QBM	Magnesium, total	15.1	mg/L		10/05/2017	☐	☐
072	☐ Substantially identical to outfall:	☐	QBM	Magnesium, total	7.09	mg/L		10/05/2017	☐	☐
072	☐ Substantially identical to outfall:	☐	QBM	Mercury, total	BQL		0.200 ug/L	10/05/2017	☐	☐
072	☐ Substantially identical to outfall:	☐	QBM	Mercury, total	BQL		0.200 ug/L	10/05/2017	☐	☐
072	☐ Substantially identical to outfall:	☐	QBM	Selenium, total	BQL		5.00 ug/L	10/05/2017	☐	☐
072	☐ Substantially identical to outfall:	☐	QBM	Selenium, total	ND		2.00 ug/L	10/05/2017	☐	☐
072	☐ Substantially identical to outfall:	☐	QBM	Silver, dissolved	ND		0.300 ug/L	10/05/2017	☐	☐

072	☐ Substantially identical to outfall:	☐	QBM	Silver, dissolved	ND		0.300 ug/L	10/05/2017	☐	☐
070	☒ Substantially identical to outfall: 072	☒							☐	☐
071	☒ Substantially identical to outfall: 072	☒							☐	☐

* (QBM) - Quarterly benchmark monitoring; (ELG) - Annual effluent limitations guidelines monitoring; (S/T) - State- or tribal-specific monitoring; (I) - Impaired waters monitoring; (O) - Other monitoring as required by EPA

4. Comment and/or Explanation of Any Violations (Reference all attachments here)

Rainfall duration = 4.50 hours. Rainfall amount = 0.87 inches.

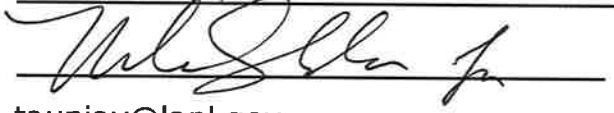
072: The average of four monitoring values for total Ammonia does not exceed the benchmark value, therefore quarterly monitoring will be discontinued per Part 6.2.1.2. The average of four monitoring values for Chemical Oxygen Demand does not exceed the benchmark value, therefore quarterly monitoring will be discontinued per Part 6.2.1.2. Second Cyanide sample missed analytical holding time; result rejected during validation. The average concentration of total Magnesium is mathematically certain to exceed the benchmark value. The average of four monitoring values for total Mercury does not exceed the benchmark value, therefore quarterly monitoring will be discontinued per Part 6.2.1.2. The average of four monitoring values for total Selenium does not exceed the benchmark value, therefore quarterly monitoring will be discontinued per Part 6.2.1.2.

G. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

First Name, Middle Initial, Last Name: Taunia S Van Valkenburg

Title: EPC-CP Group Leader

Signature: 

Date 12/13/2012

E-mail: tauniav@lanl.gov

Appendix F – Corrective Action Log

(See next page)

Insp Id	CA Number	Insp Date	RCRA Notify Date	Specific Location	Inspector	Problem Description	Corrective Action Description	Completed	Finding Other Desc	Inspection Type Other	SWPPP Modify	CA Initiate Date	CA Expected Date	CA Complete Date	Ca Status Desc
894	46387	28-Mar-16	28-Mar-16	TA-3-66 Sigma Complex	172470	Metal shavings on ground next to metal recycle bin need to be addressed.	Metal shavings have been vacuumed up and a magnet was also used to remove metal shavings. MST-6 has been made aware of finding to address.	Y	-	-	N	28-Mar-16	-	28-Mar-16	N/A
893	46383	28-Mar-16	28-Mar-16	TA-3-66 Sigma Complex	172470	Trash along east fence line east of TA-3-141 needs to be picked up.	Trash was picked up.	Y	Housekeeping	-	N	28-Mar-16	-	28-Mar-16	N/A
919	46832	22-Jun-16	22-Jun-16	Northside of bldg. 66 graphite drum collection area	172470	Graphite dust is on the ground on the Northside of bldg. 66 graphite area.	Graphite dust was swept up.	Y	Housekeeping and polluntant control	-	N	22-Jun-16	-	22-Jun-16	N/A
927	47191	7-Jul-16	7-Jul-16	Outfall 018 at TA-3-66 Sigma Complex	118432	At outfall 018 at the TA-3-66 Sigma Complex, the average concentration of dissoved Zinc was mathematically certain to exceed the benchmark value. This occurred during the storm event on 4/18/2016.	The facility must immediately take action to minimize off site discharge of Zinc at outfall 018 followed by implementation of specific follow-up actions within 14 days (if additional action is needed). If finalization of corrective action(s) exceeds 14 days, documentation of why it is infeasible to complete the corrective action within the 14 day timeframe must be provided along with a schedule for completion. Since outfall 018 has associated substantially identical outfalls (SIOs), the facility must assess the need for corrective action for all related SIOs (outfalls 013, 014, 015, 016, 017 and 019). Walkdown done by TA-3-66 Sigma Division Leader on 7/8/16. Another walk down occurred on 7/11/16 by STO-DEP and Sigma Division Leader. Identified several potential zinc galvanized items i.e. fenceline, guardrails, sampling weir etc. No obvious or blatant zinc sources identified. Meeting was held with EPC-CP representatives Holly Wheeler and Brad Schilling, STO DEP Marc Gallegos, and Sigma Division Leader Paul Dunn. to discuss exceedance, and analytical trending results of Zinc at that location. The conclusion was that perminant features such as the fence and weir were not the source due to the elevated concentration in this sample. Was determined that we will evaluate samples after April 2016 event and re-evaluate.	Y	-	-	N	7-Jul-16	-	19-Jul-16	N/A
947	48552	28-Jul-16	3-Aug-16	TA-3-66 Southside of dock area	172470	Metal support plates are not covered.	Metal support plates were covered with tarps.	Y	Housekeeping	3rd Qtr Inspection	N	28-Jul-16	-	29-Jul-16	N/A
946	48548	28-Jul-16	3-Aug-16	TA-3-66 Sigma Southside Storm Drain	172470	Southside storm drain is plugged with debris and sediment.	Storm drain has been cleaned and cleared.	Y	-	3rd Qtr Inspection	N	28-Jul-16	-	2-Aug-16	N/A
981	49501	7-Oct-16	7-Oct-16	Outfall 020 at the TA-3-66 Sigma Complex	118432	The average concentrations of dissolved Zinc discharged from outfalls 018 and 020 at the TA-3-66 Sigma Complex were mathematically certain to exceed the benchmark value. These averages were calculated from monitoring results associated with storm events occurring on 7/01/2016, 7/21/2016 and 8/03/2016 for outfall 020 and 8/08/2016 for outfall 018.	Facility personnel must immediately take action to minimize off site discharge of the dissolved Zinc at outfalls 018 and 020 followed by implementation of specific follow-up actions within 14 days (if additional action is needed). If finalization of corrective action(s) exceeds 14 days, documentation of why it is infeasible to complete the corrective action within the 14 day timeframe must be provided along with a schedule for completion. Since outfall 018 has associated substantially identical outfalls (SIOs), facility personnel must also assess the need for corrective action for all related SIOs (outfalls 013, 014, 015, 016, 017, and 019). If a SWPPP modification is required as a result of these exceedance it must be implemented within 14 days of completing corrective action work. Potential source of zinc can be attributed to higher vehicle traffic. IP Permit BMP work has been completed to contain more stormwater. DEP also did a walk down.	Y	-	-	Y	7-Oct-16	-	18-Oct-16	N/A
987	49839	18-Oct-16	18-Oct-16	TA-3-66 West of Butler Bldg. TA-3-169	172470	Warm water coming up from the asphalt. Suspect steam condensate line is leaking.	The leak was stopped by shutting the valve to the pit and the line on 10/19/2016. An Excavation Permit (EX-ID 16X-0879) was submitted and subsequently approved on 10/28/2016. The condensate line repair in SM 66 East of steam man hole 1035 will start on Monday, Nov. 7th, 2016 and should be complete by Wed. the 16th due to the short week for Veterans Day. A new 2 inch carbon pipe was installed and welded in on 11/17/2016.	Y	-	-	N	18-Oct-16	-	17-Nov-16	N/A
995	50796	8-Nov-16	8-Nov-16	Outfall 018 at the TA-3-66 Sigma Complex	118432	The average concentration of dissolved Zinc discharged from outfall 018 at the TA-3-66 Sigma Complex was mathematically certain to exceed the benchmark value. This average was calculated from monitoring results associated with the storm events occurring on August 24, 2016.	STO Deployed Env. Professional walked down the facility area to identify any zinc sources. Unable to identify any obvious ones. Will continue to asses the area and address ways to minimize future discharges.	Y	-	-	N	8-Nov-16	-	16-Nov-16	N/A
1044	52089	12-Dec-16	12-Dec-16	-	210081	West of TA-3-66, there is graphit dust present in the channel.	The graphit dust was swept out of the channel.	Y	-	-	N	12-Dec-16	-	14-Dec-16	N/A
1043	52070	12-Dec-16	12-Dec-16	North side of TA-3-141 within the TA-3-66 Sigma Facility	210081	Within the TA-3-66 Sigma Facility, on the north side of TA-3-141, stock machined metal on pallets needs to be covered or moved inside.	The metal was covered with a tarp.	Y	-	-	N	12-Dec-16	-	14-Dec-16	N/A
1042	52061	12-Dec-16	12-Dec-16	Southwest corner of the site by outfall 013	210081	At the southeast corner of the TA-3-66 Sigma Facility, the drop inlet discharging to outfall 013 needs to be cleaned out.	Clean out the drop inlet that discharges stormwater to outfall 013. A Facility Service Request was submitted. The drop inlet was cleaned out on 12/22/2016.	Y	-	-	N	12-Dec-16	-	22-Dec-16	N/A

Inspection Id	MSGP Facility Desc	Inspection Date	RCRA Notify Date	Specific Location	Finding	Finding Other Desc	Problem Description	Inspection Type	Inspection Type Other	Corrective Action Description	SIO	SIO Affected	Provide Action Taken at Affected SIOs	Swppp Modify	CA Initiate Date	CA Complete Date	Completed	CA Expected Date	CA Status Desc
1295	TA-3-66 Sigma Facility	12/21/2017 10:00	12/21/2017 10:00	South of TA-3-66	Control measures not properly operated or maintained	-	A culvert discharging stormwater south of TA-3-66 Sigma Complex is more that half full of sediment.	Routine facility inspection	-	Clean out the culvert.	Y	014, 013, 015, 016, 017, and 019	Culvert is specific to SIO 014. The clean out will not affect any other SIOs.	N	12/21/2017 13:57	-	N	1/26/2018 17:00	Clean out the culvert. Per Marc Gallegos, FSR submitted for culvert cleanout on 12/21/2017. Spoke with TA-3-66 Matainance Ops Manger about craft schedule. He informed me that this task is dependant on craft schedule.
1294	TA-3-66 Sigma Facility	12/21/2017 9:30	12/21/2017 9:30	East of TA-3-66	Control measures inadequate to meet non-numeric effluent limitations	-	East of TA-3-66, the cover for a roll off bin cotaining metal for recycle did not completely cover the bin.	Routine facility inspection	-	Completely cover the metal for recycle roll off bin. Recycle bin has been completely covered.	N	-	-	N	1/8/2018 8:33	1/16/2018 9:45	Y	-	Completely cover the metal for recycle roll off bin. Email was sent to Materials Recycling Facility to pick up and empty metal bin. DEP will request to MRF personnel to either fix or replace cover. Bin was completely covered.
1238	TA-3-66 Sigma Facility	12/7/2017 14:00	12/7/2017 14:00	Outfall 020 at TA-3-66 Sigma Complex	Average benchmark value exceedance	-	The average concentration of dissolved Zinc discharged from outfall 020 at TA-3-66 Sigma Complex was mathematically certain to exceed the benchmark value. This average was calculated from monitoring results associated with storm events occurring on 8/08/17, 9/29/17, and 10/04/17. The average was 140 ug/L. The benchmark value is 76 ug/L.	Benchmark monitoring	-	Facility personnel must immediately take action to minimize off site discharge of dissolved Zinc at outfall 020. Personnel shall evaluate potential pollutant sources of dissolved Zinc and implement additional controls to ensure discharge of this pollutant source in stormwater is minimized. Identified mulch, coir rolls, that may have heavy metals in them contributing to the heavy metal exceedances. Earthwork due to IP requirements also was done that could have contributed to exceedances. Finally, large rain events occurred during these sampling dates.	N	-	-	Y	12/21/2017 9:50	12/21/2017 9:50	Y	-	Facility personnel need to evaluate potential pollutant sources of dissolved Zinc and implement additional controls to ensure discharge of this pollutant source in stormwater is minimized. If finalization of corrective action(s) exceeds 14 days, documentation of why it is infeasible to complete the corrective action within the 14 day timeframe must be provided along with a schedule for completion. SWPPP modifications required as a result of this exceedance, if needed, must be implemented within 14 days of completing corrective action work.
1237	TA-3-66 Sigma Facility	12/7/2017 14:00	12/7/2017 14:00	Outfall 017 at TA-3-66 Sigma Complex	Average benchmark value exceedance	-	The average concentration of dissolved Zinc discharged from outfall 017 at TA-3-66 Sigma Complex was mathematically certain to exceed the benchmark value. This average was calculated from monitoring results associated with storm events occurring on 5/09/17, 6/25/17, 8/11/17 and 10/04/17. The average was 92 ug/L. The benchmark value is 76 ug/L.	Benchmark monitoring	-	Facility personnel must immediately take action to minimize off site discharge of dissolved Zinc at outfall 017. Personnel shall evaluate potential pollutant sources of dissolved Zinc and implement additional controls to ensure discharge of this pollutant source in stormwater is minimized. Identified mulch, coir rolls that may have heavy metals in them contributing to the heavy metal exceedances. Earthwork due to IP requirements also was done that could have contributed to exceedances. Finally, large rain events occurred durint these sampling dates.	Y	013, 014, 015, 016 and 019	Since outfall 017 is associated with substantially identical outfalls (SIOs) 013, 014, 015, 016 and 019, facility personnel must also assess the need for corrective action at these outfalls and document how the corrective action was appropriate for all SIOs, document why the exceedance would not affect these outfalls, or document additional corrective action taken specific to these outfalls.	Y	12/21/2017 9:50	12/21/2017 9:50	Y	-	Facility personnel need to evaluate potential pollutant sources of dissolved Zinc and implement additional controls to ensure discharge of this pollutant source in stormwater is minimized. If finalization of corrective action(s) exceeds 14 days, documentation of why it is infeasible to complete the corrective action within the 14 day timeframe must be provided along with a schedule for completion. SWPPP modifications required as a result of this exceedance, if needed, must be implemented within 14 days of completing corrective action work.
1236	TA-3-66 Sigma Facility	12/7/2017 14:00	12/7/2017 14:00	Outfall 017 at TA-3-66 Sigma Complex	Average benchmark value exceedance	-	The average concentration of total Iron discharged from outfall 017 at TA-3-66 Sigma Complex was mathematically certain to exceed the benchmark value. This average was calculated from monitoring results associated with the storm event occurring on 10/04/2017. The average was 83,100 ug/L. The benchmark value is 1,000 ug/L.	Benchmark monitoring	-	Facility personnel must immediately take action to minimize off site discharge of total Iron at outfall 017. Personnel shall evaluate potential pollutant sources of total Iron and implement additional controls to ensure discharge of this pollutant source in stormwater is minimized. Identified mulch, coir rolls that may have heavy metals in them contributing to the heavy metal exceedances. Earthwork due to IP requirments also was done that could have contributed to the exceedances. Finally, large rain events occurred during these sampling dates.	Y	013, 014, 015, 016, and 019	Since outfall 017 is associated with substantially identical outfalls (SIOs) 013, 014, 015, 016 and 019, facility personnel must also assess the need for corrective action at these outfalls and document how the corrective action was appropriate for all SIOs, document why the exceedance would not affect these outfalls, or document additional corrective action taken specific to these outfalls.	Y	12/21/2017 9:50	12/21/2017 9:50	Y	-	Facility personnel need to evaluate potential pollutant sources of total Iron and implement additional controls to ensure discharge of this pollutant source in stormwater is minimized. If finalization of corrective action(s) exceeds 14 days, documentation of why it is infeasible to complete the corrective action within the 14 day timeframe must be provided along with a schedule for completion. SWPPP modifications required as a result of this exceedance, if needed, must be implemented within 14 days of completing corrective action work.
1235	TA-3-66 Sigma Facility	12/7/2017 14:00	12/7/2017 14:00	Outfall 017 at TA-3-66 Sigma Complex	Average benchmark value exceedance	-	The average concentration of dissolved Copper discharged from outfall 017 at TA-3-66 Sigma Complex was mathematically certain to exceed the benchmark value. This average was calculated from monitoring results associated with storm events occurring on 8/11/17 and 10/04/17. The average was 41 ug/L. The benchmark value is 6 ug/L.	Benchmark monitoring	-	Facility personnel must immediately take action to minimize off site discharge of dissolved Copper at outfall 017. Personnel shall evaluate potential pollutant sources of dissolved Copper and implement additional controls to ensure discharge of this pollutant source in stormwater is minimized. Identified mulch,coir rolls that may have heavy metals in them contributing to the heavy metal exceedances. Earthwork due to IP requirments also was done that could have contributed to exceedances. Finally, large rain events occurred during these sample dates.	Y	013, 014, 015, 016 and 019	Since outfall 017 is associated with substantially identical outfalls (SIOs) 013, 014, 015, 016 and 019, facility personnel must also assess the need for corrective action at these outfalls and document how the corrective action was appropriate for all SIOs, document why the exceedance would not affect these outfalls, or document additional corrective action taken specific to these outfalls.	Y	12/21/2017 9:50	12/21/2017 9:50	Y	-	Facility personnel need to evaluate potential pollutant sources of dissolved Copper and implement additional controls to ensure discharge of this pollutant source in stormwater is minimized. If finalization of corrective action(s) exceeds 14 days, documentation of why it is infeasible to complete the corrective action within the 14 day timeframe must be provided along with a schedule for completion. SWPPP modifications required as a result of this exceedance, if needed, must be implemented within 14 days of completing corrective action work.
1234	TA-3-66 Sigma Facility	12/7/2017 14:00	12/7/2017 14:00	Outfall 017 at TA-3-66 Sigma Complex	Average benchmark value exceedance	-	The average concentration of total recoverable Aluminum discharged from outfall 017 at TA-3-66 Sigma Complex was mathematically certain to exceed the benchmark value. This average was calculated from monitoring results associated with storm events occurring on 6/25/17, 8/11/17 and 10/04/17. The average was 24,781 ug/L. The benchmark value is 681 ug/L.	Benchmark monitoring	-	Facility personnel must immediately take action to minimize off site discharge of total recoverable Aluminum at outfall 017. Personnel shall evaluate potential pollutant sources of total recoverable Aluminum and implement additional controls to ensure discharge of this pollutant source in stormwater is minimized. Walkdown of Sigma area/roof was done. Identified mulch, coir rolls that may have heavy metals in them contributing to exceedance. Earthwork due to IP requirments also was done that could have also contributed to exceedance. Finally, large rain events occurred during these sample dates.	Y	013, 014, 015, 016, 019	Since outfall 017 is associated with substantially identical outfalls (SIOs) 013, 014, 015, 016 and 019, facility personnel must also assess the need for corrective action at these outfalls and document how the corrective action was appropriate for all SIOs, document why the exceedance would not affect these outfalls, or document additional corrective action taken specific to these outfalls.	Y	12/21/2017 9:50	12/21/2017 9:50	Y	-	Facility personnel must immediately take action to minimize off site discharge of total recoverable Aluminum at outfall 017. If finalization of corrective action(s) exceeds 14 days, documentation of why it is infeasible to complete the corrective action within the 14 day timeframe must be provided along with a schedule for completion. SWPPP modifications required as a result of this exceedance, if needed, must be implemented within 14 days of completing corrective action work.

Inspection Id	MSGP Facility Desc	Inspection Date	RCRA Notify Date	Specific Location	Finding	Finding Other Desc	Problem Description	Inspection Type	Inspection Type Other	Corrective Action Description	SIO	SIO Affected	Provide Action Taken at Affected SIOs	Swppp Modify	CA Initiate Date	CA Complete Date	Completed	CA Expected Date	CA Status Desc
1190	TA-3-66 Sigma Facility	10/11/2017 15:43	10/11/2017 15:43	Outfall 017 at TA-3-66 Sigma Complex	Average benchmark value exceedance	-	The average concentration of total Iron discharged from outfall 017 at the TA-3-66 sigma Complex was mathematically certain to exceed the benchmark value. This average was calculated from monitoring results associated with storm events occurring on 06/25/2017 and 08/11/2017. The average result from these two storm events is 4065 ug/L. The permit limit is 1000 ug/L.	Benchmark monitoring	-	Facility personnel must immediately take action to minimize off site discharge of total Iron at outfall 017. Personnel shall evaluate potential pollutant sources of total Iron and implement additional controls to ensure discharge of this pollutant source in stormwater is minimized. Additional BMP's (Coir Logs) were placed 10/2/2017, also rusty unused pallets were placed in metal recycle bin.	Y	013, 014, 015, 016, and 019	Since outfall 017 is associated with substantially identical outfalls (SIOs) 013, 014, 015, 016 and 019, facility personnel must also assess the need for corrective action at these outfalls and document how the corrective action was appropriate for all SIOs, document why the exceedance would not affect these outfalls, or document additional corrective action taken specific to these outfalls.	Y	10/20/2017 9:00	10/20/2017 10:00	Y	-	If finalization of corrective action(s) exceeds 14 days, documentation of why it is infeasible to complete the corrective action within the 14 day timeframe must be provided along with a schedule for completion. SWPPP modifications required as a result of this exceedance, if needed, must be implemented within 14 days of completing corrective action work.
1189	TA-3-66 Sigma Facility	10/11/2017 15:22	10/11/2017 15:22	OUtfall 020 at TA-3-66 Sigma Complex	Impaired water quality exceedance	-	Discharge from outfall 020 at the TA-3-66 Sigma Complex exceeded the New Mexico water quality standard for dissolved Copper. The concentration of Copper discharged during the storm event on 08/08/2017 was 6.11 ug/L and the water quality standard is 6.0 ug/L.	Impaired waters monitoring	-	Facility personnel must immediately take action to minimize off site discharge of dissolved Copper at outfall 020. Personnel shall evaluate potential pollutant sources of dissolved Copper and implement additional controls to ensure discharge of this pollutant source in stormwater is minimized. STO-DEP and Maintenance Operatins Manager walked down site to look for Cu sources. None were found. We will continue to monitor.	N	-	-	Y	10/19/2017 10:00	10/19/2017 10:30	Y	-	If finalization of corrective action(s) exceeds 14 days, documentation of why it is infeasible to complete the corrective action within the 14 day timeframe must be provided along with a schedule for completion. SWPPP modifications required as a result of this exceedance, if needed, must be implemented within 14 days of completing corrective action work.
1183	TA-3-66 Sigma Facility	9/25/2017 11:35	9/26/2017 14:26	TA-3-66 Dock #6	Other (describe) :	Housekeeping	Misc. equipment on Dock #6 needs to be addressed.	Routine facility inspection	-	Misc. equipment needs to be placed into a roll off container. Misc. equipment has been removed from dock #6 and placed inside a covered bin.	N	no	-	N	9/25/2017 12:00	10/17/2017 0:00	Y	-	Sigma WMC has ordered proper containers. Once they are in misc. equipment will be placed inside covered container.
1182	TA-3-66 Sigma Facility	9/25/2017 11:20	9/26/2017 14:31	East of bldg. TA-3-66	Other (describe) :	Housekeeping	Salvage area east of bldg. 3-66 needs to be addressed.	Routine facility inspection	-	Salvage area need to be cleared out. Salvage area has been completely emptied of equipment.	N	no	-	N	9/26/2017 12:00	10/25/2017 5:04	Y	-	Sigma personnel did try to take the equipment to MRF but got turned back. Sigma personnel will try again and should be able to drop of items.
1157	TA-3-66 Sigma Facility	8/22/2017 14:50	8/22/2017 14:50	Outfall 017 at TA-3-66 Sigma Complex	Average benchmark value exceedance	-	The average concentration of dissolved Copper discharged from outfall 017 at TA-3-66 Sigma Complex (15.35 ug/L) is mathematically certain to exceed the benchmark value (6.0 ug/L). This average was calculated from monitoring results associated with storm events occurring on 05/09/2017 and 06/25/2017.	Benchmark monitoring	-	Facility personnel need to evaluate potential pollutant sources of dissolved Copper and implement additional controls to ensure discharge of this pollutant source in stormwater is minimized. DEP contacted FOD on 8/24/17 to schedule walkdown of facility. Facility walkdown on 8/29/17 by DEP and FOD identified erosion below a culvert near the outfall. Erosion is along stormwater control associated with NPDES Individual Permit (IP) controls. DEP contacted IP Program and is coordinating followup and enhancement of controls. Due to security access requirements and work to be completed, controls will not be installed within the 14 days. Installation of controls is expected to be completed by 10/06/17. New controls were installed by IP program on 10/2/17 to divert water into vegetated area and prevent further erosion and sediment transport in drainage path above monitored outfall.	Y	N/A	Does not appear to be affecting any of the other SIOs.	Y	8/22/2017 14:50	10/2/2017 15:00	Y	-	Facility personnel must immediately take action to minimize off site discharge of the dissolved Copper at outfall 017. Implementation of all follow-up actions must be completed within 14 days (if additional action is needed). If finalization of corrective action(s) exceeds 14 days, documentation of why it is infeasible to complete the corrective action within the 14 day timeframe must be provided along with a schedule for completion. Since outfall 017 has associated substantially identical outfalls (SIOs), facility personnel must also assess the need for corrective action for all related SIOs (outfalls 013, 014, 015, 016 and 019). If a SWPPP modification is required as a result of this exceedance it must be implemented within 14 days of completing corrective action work. SEE #7 above for details.
1136	TA-3-66 Sigma Facility	6/28/2017 0:00	6/28/2017 0:00	Outfall 017 at TA-3-66 Sigma Complex	Average benchmark value exceedance	Impaired water quality standard exceedance	Discharge from outfall 017 at the TA-3-66 Sigma Complex exceeded the New Mexico water quality standard for total recoverable Aluminum and dissolved Copper. This occurred during the storm event on 05/09/2017. In addition, the average concentration of total recoverable Aluminum and Iron were mathematically certain to exceed the benchmark value. For total recoverable Aluminum and total Iron, this average was calculated from monitoring results associated with the storm event occuring on 05/09/2017.	Benchmark monitoring	Impaired waters monitoring	Facility personnel need to evaluate potential pollutant sources of total recoverable Aluminum, dissolved Copper, and Iron and implement additional controls to ensure discharge of these pollutants in stormwater is minimized. STO-DEP's and Sigma OMC walked down and evaluated potential sources for exceedances. Iron flakes were discovered and addressed. No obvious Al or Cu sources were identified, will continue to monitor.	N	-	-	Y	6/28/2017 0:00	7/6/2017 0:00	Y	-	Facility personnel must immediately take action to minimize off site discharge of total recoverable Aluminum, dissolved Copper and total Iron at outfall 017. Implementation of all follow-up actions must be completed within 14 days (if additional action is needed). If finalization of corrective action exceeds 14 days, documentation of why it is infeasible to complete the corrective action within the 14 day timeframe must be provided along with a schedule for completion. Since outfall 017 has associated substantially identical outfalls (SIOs), facility personnel must also assess the need for corrective action for all related SIOs (outfalls 013, 014, 015, 016, and 019). SWPPP modifications required as a result of these exceedances must be implemented within 14 days of completing corrective action work.
1130	TA-3-66 Sigma Facility	6/22/2017 0:00	6/22/2017 0:00	TA-3-66 Dock 3 Eastside of Sigma Bldg.	Other (describe) :	Pile of Iron/Rusty Flakes near dock and salvage area	Iron Flakes likley to migrate off site during a precipitation event.	Routine facility inspection	-	Iron Flakes need to be picked up and placed into a covered metal recycle bin.	N	-	-	N	6/22/2017 0:00	6/27/2017 0:00	Y	-	Iron flakes have to be picked up and placed inside covered metal recycle bin. Iron flakes have been picked up and placed inside a metal recycle bin.
1083	TA-3-66 Sigma Facility	3/29/2017 0:00	3/29/2017 0:00	south of 3-66 next to HVAC system	Control measures not properly operated or maintained	-	Piece of metal stock needs to be addressed.	Routine facility inspection	-	Metal stock piece needs to be covered or placed somewhere where storm water will not come in contact with it.	N	-	-	N	3/29/2017 0:00	4/7/2017 0:00	Y	-	Metal stock piece needs to be covered or placed somewhere where storm water will not come in contact with it. Metal was removed from outside.

Inspection Id	MSGP Facility Desc	Inspection Date	RCRA Notify Date	Specific Location	Finding	Finding Other Desc	Problem Description	Inspection Type	Inspection Type Other	Corrective Action Description	SIO	SIO Affected	Provide Action Taken at Affected SIOs	Swppp Modify	CA Initiate Date	CA Complete Date	Completed	CA Expected Date	CA Status Desc
1082	TA-3-66 Sigma Facility	3/29/2017 0:00	3/29/2017 0:00	South side of bldg. 3-141 rip rap and fence	Control measures not properly operated or maintained	-	Area adjacent to fence shows evidence of erosion. Rip rap needs to be addressed to reduce flow velocity.	Routine facility inspection	-	Rip rap needs to be modified to slow down stormwater flow to reduce erosion.	N	-	-	N	3/29/2017 0:00	4/7/2017 0:00	Y	-	Erosion and rip rap need to be addressed. Rip rap has been placed in appropriate place.
1081	TA-3-66 Sigma Facility	3/29/2017 0:00	3/29/2017 0:00	north side and east side of 3-66	Control measures not properly operated or maintained	-	metal recycle bins (2) one on the north side and one on the east side need to be covered.	Routine facility inspection	-	Metal bins need to be covered or removed from site.	N	-	-	N	3/29/2017 0:00	4/5/2017 0:00	Y	-	Metal bins need to be covered or removed from site. Metal bins removed from site on 4/5/2017.
1080	TA-3-66 Sigma Facility	3/29/2017 0:00	3/29/2017 0:00	north side of 3-66 next to metal shavings bin	Control measures not properly operated or maintained	-	metal shavings are present next to metal shavings bin.	Routine facility inspection	-	Place metal shavings inside of metal drum. Sweep up metal shavings	N	-	-	N	3/29/2017 0:00	4/10/2017 0:00	Y	-	Metal shavings will be swept up and placed inside metal shavings bin. Metal shavings were swept up and handled appropriately.
1052	TA-3-66 Sigma Facility	1/31/2017 0:00	2/8/2017 0:00	Northside of TA-3-141 (BTF) Outside	Control measures not properly operated or maintained	-	Dust collector canister was breached at TA-3-141 BTF due to a failed gasket that allowed precipitation to accumulate inside the canister and freeze thus, causing a spill when temps. got warmer.	Other (describe) :	Daily ENV report	System has been isolated. Dust collection canister will be replaced and gasket fixed. A five gallon bucket was placed underneath the canister to collect anymore precipitation and booms placed around affected area. New canister has been installed and gasket fixed.	N	-	-	N	2/1/2017 0:00	2/8/2017 0:00	Y	-	Corrective Actions complete. New canister has been installed and gasket fixed.
1049	TA-3-66 Sigma Facility	1/23/2017 0:00	1/23/2017 0:00	Outfall 018 at TA-3-66 Sigma Complex	Average benchmark value exceedance	-	The average concentration of total Iron discharged from outfall 018 at TA-3-66 Sigma Complex exceeded the benchmark value. This average was calculated from monitoring results associated with storm events occurring on 4/15/2016, 8/4/2016, 8/13/2016, and 11/4/2016.	Benchmark monitoring	-	Sigma Division Manager, Sigma OMC, and STO FOD DEP walked around the Sigma Complex area and decided that the exceedance was from on old rusty corrugated pipe (that has been removed) and construction equipment (also gone) used to install BMP's for the MSGP Individual Permit (IP).	N	-	-	N	1/23/2017 0:00	1/25/2017 0:00	Y	-	N/A

Appendix G – 2015 MSGP

(Maintained on LANL site premises)

Appendix H– SWPP Plan Modifications Log

SWPPP Amendment Log

SWPPP Amendment Log

Date of Amendment	Plan Section	Reason for Amendment	Amendment	PE Certification needed?
Jan. 26, 2017	Various	Annual update	Attached all inspections, reports, MDMR's, data records, etc; text corrections, updates, additions to appendices.	No
Jan.23, 2018	Various	Annual update	Attached all inspections, reports, MDMR's, data records, etc; text corrections, updates, additions to appendices.	

Appendix I – Non-Storm Water Discharge Assessment and Certification

(Storm Water Monitoring Data, Discharge Monitoring Reports, Visual Sampling Events and Results Maintained on LANL site premises)

Non Storm water Discharge Certification

NON-STORMWATER DISCHARGE

ASSESSMENT AND CERTIFICATION

Sigma TA-3-66 Facility

Completed by: Marc R. Gallegos
Title: Deployed EIN professional
Date: 8/25/15

Date of Evaluation	Outfall Directly Observed During the Test (Location)	Identify Potential Significant Sources of Non- Stormwater	Method Used to Test or Evaluate Discharge	Is Non-Storm Water Present?	How Often?	Describe Results from Test for the Presence of Non-Storm Water Discharge
8/25/15	All	None	Walk down of facility	No	N/A	Non 2015 MSGP Permit

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and completed. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name & Official Title: DSESH-STO ESH MANAGER

Signature:

Date Signed: 8-26-15

Appendix J-Training

PLATEAU **Item Status Group By Items**

Items

Item: RR 35958 (Rev 1 - 1/12/2017 12:06 PM MT)

Description: Stormwater Pollution Prevention Plan

Users

User ID (Z#)	User Name	Completion Date	Status
[redacted]	Morrison, Terry A	1/13/2017 01:58 PM MT	Completed
[redacted]	Vargas, Victor Duane	1/18/2017 08:16 AM MT	Completed
[redacted]	DeAguero, Sandra V	1/12/2017 12:31 PM MT	Completed
[redacted]	DeAguero, Sandra V	1/12/2017 01:04 PM MT	Completed
[redacted]	Dunn, Paul Stanton	1/17/2017 07:50 AM MT	Completed
[redacted]	Garcia, Darryl Charles	1/13/2017 11:24 AM MT	Completed
[redacted]	Garcia, Frank Julio	1/17/2017 05:59 PM MT	Completed
[redacted]	Stafford, Darrik Gary	1/17/2017 04:21 PM MT	Completed
[redacted]	Lopez, Eric A	1/18/2017 11:11 AM MT	Completed
[redacted]	Cordova, Floyd C	1/19/2017 02:18 PM MT	Completed
[redacted]	Espinoza, Arturo P	1/18/2017 02:46 PM MT	Completed
[redacted]	Gallegos, Marc Raymond	1/19/2017 10:41 AM MT	Completed
[redacted]	Allen, Randi Beth Ann	1/17/2017 02:33 PM MT	Completed
[redacted]	Krause, Mark Richard	1/13/2017 08:01 AM MT	Completed
[redacted]	Perkins, Courtney Ann	1/18/2017 08:40 AM MT	Completed
[redacted]	Telles, Amber C	1/17/2017 12:55 PM MT	Completed
[redacted]	Gonzales, James Kirk	1/17/2017 04:53 PM MT	Completed

Total Completions: 17

Org Code Z#	First	Last	MI	Curriculum	Status	Item ID	Item Title	Complete	Sub Item
058000/COMPA: COM	Denise	Martinez	Donna	11302	Complete	35958	Stormwater Pollution Prevention Plan	3/16/2017	
30000A/PADSTE: SCIE	Randy	Flores	Alan	11302	Complete	35958	Stormwater Pollution Prevention Plan	3/7/2017	
3H060A/AET-6: APPLI	Dawn	Trujillo Voss	C.	11302	Complete	35958	Stormwater Pollution Prevention Plan	3/7/2017	
3L040A/PF-WFS: PF-W	Frank	Garcia	Julio	11302	Complete	35958	Stormwater Pollution Prevention Plan	1/17/2017	
3L040A/PF-WFS: PF-W	Steven	Gonzales	Gerard	11302	Complete	35958	Stormwater Pollution Prevention Plan	1/25/2017	
3L040A/PF-WFS: PF-W	Loretta	Gurule	Antonia	11302	Complete	35958	Stormwater Pollution Prevention Plan	6/13/2017	
3L040A/PF-WFS: PF-W	Martin	Herrera		11302	Complete	35958	Stormwater Pollution Prevention Plan	3/13/2017	
3L040A/PF-WFS: PF-W	Reina	Ledoux	Rebecc	11302	Complete	35958	Stormwater Pollution Prevention Plan	3/20/2017	
3L040A/PF-WFS: PF-W	Matthew	Martinez	G	11302	Complete	35958	Stormwater Pollution Prevention Plan	3/30/2017	
3L040A/PF-WFS: PF-W	Joshua	Montano	Daniel	11302	Complete	35958	Stormwater Pollution Prevention Plan	4/3/2017	
3L040A/PF-WFS: PF-W	Robert	Montoya	F	11302	Complete	35958	Stormwater Pollution Prevention Plan	2/7/2017	
3L040A/PF-WFS: PF-W	Aaron	Nohl	Keeton	11302	Complete	35958	Stormwater Pollution Prevention Plan	4/27/2017	
3L040A/PF-WFS: PF-W	Stephen	Pattinson	Jay	11302	Complete	35958	Stormwater Pollution Prevention Plan	1/31/2017	
3L040A/PF-WFS: PF-W	Jeff	Roybal	James	11302	Complete	35958	Stormwater Pollution Prevention Plan	2/15/2017	
3L040A/PF-WFS: PF-W	Lowell	Savage	Curtis	11302	Complete	35958	Stormwater Pollution Prevention Plan	3/7/2017	
3L040A/PF-WFS: PF-W	Joe	Silva	Ruben	11302	Complete	35958	Stormwater Pollution Prevention Plan	1/24/2017	
3L040A/PF-WFS: PF-W	Jacob	Tafoya	S	11302	Complete	35958	Stormwater Pollution Prevention Plan	7/12/2017	
3L040A/PF-WFS: PF-W	Erwin	Vest	Glen	11302	Complete	35958	Stormwater Pollution Prevention Plan	2/6/2017	
3L040A/PF-WFS: PF-W	Orbry	Wright	L	11302	Complete	35958	Stormwater Pollution Prevention Plan	2/14/2017	
3L050A/PF-LFS: PF-LA	Dino	Farfan	Anthon	11302	Complete	35958	Stormwater Pollution Prevention Plan	3/17/2017	
3L050A/PF-LFS: PF-LA	James	Gonzales	Kirk	11302	Complete	35958	Stormwater Pollution Prevention Plan	1/17/2017	
3L050A/PF-LFS: PF-LA	Leroy	Gutierrez	M	11302	Complete	35958	Stormwater Pollution Prevention Plan	2/9/2017	
3L050A/PF-LFS: PF-LA	James	Harris	C	11302	Complete	35958	Stormwater Pollution Prevention Plan	2/12/2017	
3L050A/PF-LFS: PF-LA	Jerry	Kephart	Scott	11302	Complete	35958	Stormwater Pollution Prevention Plan	3/7/2017	
3L050A/PF-LFS: PF-LA	Mario	Rodriguez	Francis	11302	Complete	35958	Stormwater Pollution Prevention Plan	1/24/2017	
3L050A/PF-LFS: PF-LA	Francisco	Sifuentes-Quintana	Manuel	11302	Complete	35958	Stormwater Pollution Prevention Plan	4/18/2017	
3L050A/PF-LFS: PF-LA	Darrik	Stafford	Gary	11302	Complete	35958	Stormwater Pollution Prevention Plan	1/17/2017	
3L050A/PF-LFS: PF-LA	Oliver	Trujillo	I	11302	Complete	35958	Stormwater Pollution Prevention Plan	3/8/2017	
3P000A/MST-DO: MA	David	Teter	Fredrick	11302	Complete	35958	Stormwater Pollution Prevention Plan	3/27/2017	
3P030A/MST-7: ENGI	Deanna	Capelli		5974	Complete	35958	Stormwater Pollution Prevention Plan	5/22/2017	
3P040A/MST-8: MATE	Carl	Cady	Mcelhir	11302	Complete	35958	Stormwater Pollution Prevention Plan	2/15/2017	
3S000A/SIGMA-DO: S	Robert	Aikin	M	5974	Complete	35958	Stormwater Pollution Prevention Plan	3/10/2017	36521
3S000A/SIGMA-DO: S	David	Alexander	John	11302	Complete	35958	Stormwater Pollution Prevention Plan	1/26/2017	
3S000A/SIGMA-DO: S	David	Alexander	John	5974	Complete	35958	Stormwater Pollution Prevention Plan	1/26/2017	
3S000A/SIGMA-DO: S	Paul	Burgardt		11302	Complete	35958	Stormwater Pollution Prevention Plan	2/27/2017	
3S000A/SIGMA-DO: S	Paul	Burgardt		5974	Complete	35958	Stormwater Pollution Prevention Plan	2/27/2017	
3S000A/SIGMA-DO: S	Isaac	Cordova	P	5974	Complete	35958	Stormwater Pollution Prevention Plan	2/15/2017	
3S000A/SIGMA-DO: S	Carl	Cross	Edward	11302	Complete	35958	Stormwater Pollution Prevention Plan	2/13/2017	
3S000A/SIGMA-DO: S	Dustin	Cummins	Ray	11302	Complete	35958	Stormwater Pollution Prevention Plan	3/10/2017	36521
3S000A/SIGMA-DO: S	Christina	Davis	Nicole	5974	Complete	35958	Stormwater Pollution Prevention Plan	3/10/2017	36521
3S000A/SIGMA-DO: S	Andrew	Duffield	Nathan	11302	Complete	35958	Stormwater Pollution Prevention Plan	3/10/2017	36521
3S000A/SIGMA-DO: S	Randall	Edwards	Lynn	5974	Complete	35958	Stormwater Pollution Prevention Plan	2/5/2017	
3S000A/SIGMA-DO: S	James	Foley	C	11302	Complete	35958	Stormwater Pollution Prevention Plan	2/21/2017	
3S000A/SIGMA-DO: S	Paul	Gibbs	Jacob	5974	Complete	35958	Stormwater Pollution Prevention Plan	3/10/2017	36521
3S000A/SIGMA-DO: S	Kendall	Hollis	Jon	11302	Complete	35958	Stormwater Pollution Prevention Plan	2/28/2017	
3S000A/SIGMA-DO: S	Kendall	Hollis	Jon	5974	Complete	35958	Stormwater Pollution Prevention Plan	2/28/2017	
3S000A/SIGMA-DO: S	Daniel	Javernick	Anthon	11302	Complete	35958	Stormwater Pollution Prevention Plan	3/10/2017	36521

Org Code	Z#	First	Last	MI	Curriculum	Status	Item ID	Item Title	Complete	Sub Item
3S000A/SIGMA-DO: S		Samantha	Lawrence	Kay	5974	Complete	35958	Stormwater Pollution Prevention Plan	3/10/2017	36521
3S000A/SIGMA-DO: S		Jesse	Martinez	Norris	11302	Complete	35958	Stormwater Pollution Prevention Plan	2/21/2017	
3S000A/SIGMA-DO: S		Jesse	Martinez	Norris	5974	Complete	35958	Stormwater Pollution Prevention Plan	2/21/2017	
3S000A/SIGMA-DO: S		Joel	Montalvo	Dwayne	11302	Complete	35958	Stormwater Pollution Prevention Plan	3/8/2017	
3S000A/SIGMA-DO: S		Joel	Montalvo	Dwayne	5974	Complete	35958	Stormwater Pollution Prevention Plan	3/8/2017	
3S000A/SIGMA-DO: S		Maria	Pena	Isela	5974	Complete	35958	Stormwater Pollution Prevention Plan	3/10/2017	36521
3S000A/SIGMA-DO: S		Jeffrey	Robison	Curt	5974	Complete	35958	Stormwater Pollution Prevention Plan	3/10/2017	36521
3S000A/SIGMA-DO: S		James	Smith	L	5974	Complete	35958	Stormwater Pollution Prevention Plan	2/9/2017	
3S000A/SIGMA-DO: S		Matthew	Strandy	Thomas	5974	Complete	35958	Stormwater Pollution Prevention Plan	3/10/2017	36521
3S000A/SIGMA-DO: S		Geoffrey	Swank	Dean	5974	Complete	35958	Stormwater Pollution Prevention Plan	3/10/2017	36521
3S000A/SIGMA-DO: S		Victor	Vargas	Duane	11302	Complete	35958	Stormwater Pollution Prevention Plan	1/18/2017	
3S000A/SIGMA-DO: S		Victor	Vargas	Duane	5974	Complete	35958	Stormwater Pollution Prevention Plan	1/18/2017	
3S000A/SIGMA-DO: S		Ruth Ann	Vargas	G	5974	Complete	35958	Stormwater Pollution Prevention Plan	3/13/2017	
3S000A/SIGMA-DO: S		Chastity	Vigil	J	11302	Complete	35958	Stormwater Pollution Prevention Plan	1/23/2017	
3S000A/SIGMA-DO: S		Lily	Wang	Lieling	5974	Complete	35958	Stormwater Pollution Prevention Plan	3/8/2017	
3S000A/SIGMA-DO: S		Joseph	Wermer	Raymor	5974	Complete	35958	Stormwater Pollution Prevention Plan	3/10/2017	36521
4R370A/ES-STO: SCIE		Michael	Adkins	Wayne	11302	Complete	35958	Stormwater Pollution Prevention Plan	3/15/2017	
4R370A/ES-STO: SCIE		Andrew	Espinoza	Amos	11302	Complete	35958	Stormwater Pollution Prevention Plan	5/23/2017	
4R500A/ES-EPD: ENG		Randy	Burditt	M	11302	Complete	35958	Stormwater Pollution Prevention Plan	5/16/2017	
5A130B/AMPP-3: ARI		Alexyia	Barraza	Marie	11302	Complete	35958	Stormwater Pollution Prevention Plan	3/22/2017	
5E000B/PAQ-DO: PRC		David	Mann	Bryan	11302	Complete	35958	Stormwater Pollution Prevention Plan	3/8/2017	
5E000B/PAQ-DO: PRC		Anthony	Vigil	Eugene	11302	Complete	35958	Stormwater Pollution Prevention Plan	3/14/2017	
5E110B/PAQ-1: QUAL		Kenneth	Pearl	Wayne	11302	Complete	35958	Stormwater Pollution Prevention Plan	2/28/2017	
5F070A/W-9: SURVEI		Beverly	Aikin		11302	Complete	35958	Stormwater Pollution Prevention Plan	3/10/2017	36521
5T180B/NPI-8: MATE		Guillermo	Atencio	M.	11302	Complete	35958	Stormwater Pollution Prevention Plan	3/8/2017	
7F000A/STO-DO: SCIE		Paul	Blumberg	A	11302	Complete	35958	Stormwater Pollution Prevention Plan	3/6/2017	
7F000A/STO-DO: SCIE		Marcos	Martinez	Rogers	11302	Complete	35958	Stormwater Pollution Prevention Plan	2/14/2017	
7F000A/STO-DO: SCIE		Marcos	Martinez	Rogers	5974	Complete	35958	Stormwater Pollution Prevention Plan	2/14/2017	
7F000A/STO-DO: SCIE		Terry	Morrison	A	11302	Complete	35958	Stormwater Pollution Prevention Plan	1/13/2017	
7F000A/STO-DO: SCIE		Terry	Morrison	A	5974	Complete	35958	Stormwater Pollution Prevention Plan	1/13/2017	
7N020A/WFO-WF: W		Christian	Lopez	David	11302	Complete	35958	Stormwater Pollution Prevention Plan	12/4/2017	
7S000A/FP-DO: FIRE F		Kyle	Hall	Lewis	11302	Complete	35958	Stormwater Pollution Prevention Plan	5/16/2017	
82010A/ADMASER-P		Georgette	Maestas	M	5974	Complete	35958	Stormwater Pollution Prevention Plan	3/15/2017	
8A030A/EPC-CP: ENV		Patricia	Vardaro-Charles	A	11302	Complete	35958	Stormwater Pollution Prevention Plan	2/6/2017	
8A090A/EPC-WMS: W		James	O'Grady	P	11302	Complete	35958	Stormwater Pollution Prevention Plan	3/20/2017	
8K040A/SAFE-IP: INF		Cheryl	Montoya	Andrea	11302	Complete	35958	Stormwater Pollution Prevention Plan	3/13/2017	
8L070A/SEC-PSS: PHY		Kristopher	Barnes	S	11302	Complete	35958	Stormwater Pollution Prevention Plan	2/22/2017	
8L070A/SEC-PSS: PHY		Ronald	Lopez	M	11302	Complete	35958	Stormwater Pollution Prevention Plan	2/23/2017	
8L070A/SEC-PSS: PHY		David	Mcmullan	Wayne	11302	Complete	35958	Stormwater Pollution Prevention Plan	3/16/2017	
8L070A/SEC-PSS: PHY		Michael	Rivera	Daniel	11302	Complete	35958	Stormwater Pollution Prevention Plan	5/9/2017	
8R090A/SEO-DS: SEO-		Steven	Mullins	C.	11302	Complete	35958	Stormwater Pollution Prevention Plan	3/9/2017	
8R200A/SEO-EP: EME		Richard	Norman	A	11302	Complete	35958	Stormwater Pollution Prevention Plan	3/13/2017	
8V030A/DESHF-STO: I		Rebekkah	Aguilar	Michell	11302	Complete	35958	Stormwater Pollution Prevention Plan	3/16/2017	
8V030A/DESHF-STO: I		Cynthia	Davis	M	11302	Complete	35958	Stormwater Pollution Prevention Plan	2/10/2017	
8V030A/DESHF-STO: I		Deborah	Davis	Musgra	11302	Complete	35958	Stormwater Pollution Prevention Plan	5/5/2017	
8V030A/DESHF-STO: I		Pete	Day	Howe	11302	Complete	35958	Stormwater Pollution Prevention Plan	3/10/2017	36521
8V030A/DESHF-STO: I		Scott	Engeman	Alan	11302	Complete	35958	Stormwater Pollution Prevention Plan	3/14/2017	

Org Code Z#	First	Last	MI	Curriculum	Status	Item ID	Item Title	Complete	Sub Item
8V030A/DESHF-STO: I	Frank	Espinoza		11302	Complete	35958	Stormwater Pollution Prevention Plan	10/12/2017	
8V030A/DESHF-STO: I	Darryl	Garcia	Charles	11302	Complete	35958	Stormwater Pollution Prevention Plan	1/13/2017	
8V030A/DESHF-STO: I	Tammy	Lopez	Ann	11302	Complete	35958	Stormwater Pollution Prevention Plan	12/15/2017	
8V030A/DESHF-STO: I	Antonio	Maestas	A	11302	Complete	35958	Stormwater Pollution Prevention Plan	3/20/2017	
8V030A/DESHF-STO: I	Antonio	Maestas	A	5974	Complete	35958	Stormwater Pollution Prevention Plan	3/20/2017	
8V030A/DESHF-STO: I	James	O'Connor	J	11302	Complete	35958	Stormwater Pollution Prevention Plan	2/22/2017	
8V030A/DESHF-STO: I	Christopher	Serazio	Martin	11302	Complete	35958	Stormwater Pollution Prevention Plan	3/3/2017	
8V030A/DESHF-STO: I	Susan	Trujillo	N	11302	Complete	35958	Stormwater Pollution Prevention Plan	2/10/2017	
8V050A/DESHF-TA55:	Frank	Lovato	Eli	11302	Complete	35958	Stormwater Pollution Prevention Plan	2/10/2017	
8V050A/DESHF-TA55:	Greg	Lower	La Moir	11302	Complete	35958	Stormwater Pollution Prevention Plan	2/10/2017	
8V050A/DESHF-TA55:	Michael	Margiotta	Vincent	11302	Complete	35958	Stormwater Pollution Prevention Plan	5/23/2017	
9M0C0A/ASM-SCL: AS	Mark	Anderson	H	11302	Complete	35958	Stormwater Pollution Prevention Plan	2/23/2017	
9UCS0A/XIT-CSS: CLA	April	Martinez	L	5974	Complete	35958	Stormwater Pollution Prevention Plan	2/23/2017	
9UCS0A/XIT-CSS: CLA	Jenelle	Montoya	Marie	11302	Complete	35958	Stormwater Pollution Prevention Plan	3/6/2017	
E1310A/MOF-CM-CE:	Delbert	Martinez	Prescili	11302	Complete	35958	Stormwater Pollution Prevention Plan	2/16/2017	
E1340A/MOF-CM-CS:	Roy	Epperson	L	11302	Complete	35958	Stormwater Pollution Prevention Plan	3/14/2017	
E1340A/MOF-CM-CS:	Adrian	Garcia	R	11302	Complete	35958	Stormwater Pollution Prevention Plan	6/12/2017	
E1340A/MOF-CM-CS:	William	Gonzales	G	11302	Complete	35958	Stormwater Pollution Prevention Plan	3/10/2017	
E1700A/MOF-SU: STA	Cindy	Dilworth		11302	Complete	35958	Stormwater Pollution Prevention Plan	3/14/2017	
GE080A/A-3: TECHNO	Tim	Tucker	Jeffrey	11302	Complete	35958	Stormwater Pollution Prevention Plan	3/7/2017	
GR000A/GS-IET: INTE	Dane	Spearing	Robert	5974	Complete	35958	Stormwater Pollution Prevention Plan	3/3/2017	
P2020A/MSS-STO: SC	Patrick	Gonzales	Arthur	11302	Complete	35958	Stormwater Pollution Prevention Plan	3/29/2017	
P2020A/MSS-STO: SC	Mark	Krause	Richard	11302	Complete	35958	Stormwater Pollution Prevention Plan	1/13/2017	
P2020A/MSS-STO: SC	Donald	Mathews	Ray	11302	Complete	35958	Stormwater Pollution Prevention Plan	8/9/2017	
P2020A/MSS-STO: SC	Bobby	Romero	Roy	11302	Complete	35958	Stormwater Pollution Prevention Plan	4/11/2017	
P2020A/MSS-STO: SC	Evan	Schmidt	Neal	11302	Complete	35958	Stormwater Pollution Prevention Plan	7/6/2017	
P2090A/MSS-MP: MA	Joshua	Williams	Cory	11302	Complete	35958	Stormwater Pollution Prevention Plan	12/15/2017	
P3010A/LOG-MSM: L	Janice	Naranjo	Ellen	11302	Complete	35958	Stormwater Pollution Prevention Plan	8/18/2017	
P3020A/LOG-CS: LOG	Juan	Abeyta	J	11302	Complete	35958	Stormwater Pollution Prevention Plan	9/14/2017	
P3020A/LOG-CS: LOG	Randy	Aderhold	V	11302	Complete	35958	Stormwater Pollution Prevention Plan	3/29/2017	
P3020A/LOG-CS: LOG	Danny	Archuleta	R	11302	Complete	35958	Stormwater Pollution Prevention Plan	6/22/2017	
P3020A/LOG-CS: LOG	Verges	Bahe	R.	11302	Complete	35958	Stormwater Pollution Prevention Plan	3/27/2017	
P3020A/LOG-CS: LOG	Jeremy	Bauer	M	11302	Complete	35958	Stormwater Pollution Prevention Plan	2/23/2017	
P3020A/LOG-CS: LOG	Stephen	Blea	A	11302	Complete	35958	Stormwater Pollution Prevention Plan	2/13/2017	
P3020A/LOG-CS: LOG	James	Boles	A	11302	Complete	35958	Stormwater Pollution Prevention Plan	3/30/2017	
P3020A/LOG-CS: LOG	Floyd	Cordova	C	11302	Complete	35958	Stormwater Pollution Prevention Plan	1/19/2017	
P3020A/LOG-CS: LOG	Santos	Corriz	A	11302	Complete	35958	Stormwater Pollution Prevention Plan	3/24/2017	
P3020A/LOG-CS: LOG	Arturo	Espinoza	P	11302	Complete	35958	Stormwater Pollution Prevention Plan	1/18/2017	
P3020A/LOG-CS: LOG	Floyd	Esquibel	Marsha	11302	Complete	35958	Stormwater Pollution Prevention Plan	3/13/2017	
P3020A/LOG-CS: LOG	Joseph	Esquibel	Anthon	11302	Complete	35958	Stormwater Pollution Prevention Plan	3/21/2017	
P3020A/LOG-CS: LOG	Julio	Garcia	Tomas	11302	Complete	35958	Stormwater Pollution Prevention Plan	2/15/2017	
P3020A/LOG-CS: LOG	Julian	Garcia	L	11302	Complete	35958	Stormwater Pollution Prevention Plan	3/21/2017	
P3020A/LOG-CS: LOG	Don	Gonzales	Celedor	11302	Complete	35958	Stormwater Pollution Prevention Plan	2/14/2017	
P3020A/LOG-CS: LOG	Luis	Gonzalez	M	11302	Complete	35958	Stormwater Pollution Prevention Plan	10/4/2017	
P3020A/LOG-CS: LOG	Richard	Griffiths	J	11302	Complete	35958	Stormwater Pollution Prevention Plan	3/2/2017	
P3020A/LOG-CS: LOG	Jacob	Gurule	Joseph	11302	Complete	35958	Stormwater Pollution Prevention Plan	12/1/2017	
P3020A/LOG-CS: LOG	Eric	Jacquez	James	11302	Complete	35958	Stormwater Pollution Prevention Plan	7/25/2017	

Org Code	Z#	First	Last	MI	Curriculum	Status	Item ID	Item Title	Complete	Sub Item
P3020A/LOG-CS: LOG		Dwight	Jaramillo	H	11302	Complete	35958	Stormwater Pollution Prevention Plan	5/25/2017	
P3020A/LOG-CS: LOG		Anthony	Leyba	R	11302	Complete	35958	Stormwater Pollution Prevention Plan	2/15/2017	
P3020A/LOG-CS: LOG		Rocky	Lopez	J	11302	Complete	35958	Stormwater Pollution Prevention Plan	6/22/2017	
P3020A/LOG-CS: LOG		Patrick	Lucero	John	11302	Complete	35958	Stormwater Pollution Prevention Plan	5/16/2017	
P3020A/LOG-CS: LOG		Leonard	Lujan	J	11302	Complete	35958	Stormwater Pollution Prevention Plan	3/16/2017	
P3020A/LOG-CS: LOG		Lukas	Madrid	E	11302	Complete	35958	Stormwater Pollution Prevention Plan	9/15/2017	
P3020A/LOG-CS: LOG		Leonard	Maestas	D	11302	Complete	35958	Stormwater Pollution Prevention Plan	2/14/2017	
P3020A/LOG-CS: LOG		Mario	Marez	L	11302	Complete	35958	Stormwater Pollution Prevention Plan	5/16/2017	
P3020A/LOG-CS: LOG		Paul	Martinez	R	11302	Complete	35958	Stormwater Pollution Prevention Plan	1/31/2017	
P3020A/LOG-CS: LOG		Paul	Martinez	Juan	11302	Complete	35958	Stormwater Pollution Prevention Plan	3/7/2017	
P3020A/LOG-CS: LOG		Rodger	Martinez	Jeray	11302	Complete	35958	Stormwater Pollution Prevention Plan	3/21/2017	
P3020A/LOG-CS: LOG		Richard	Mendoza	Alfonso	11302	Complete	35958	Stormwater Pollution Prevention Plan	6/9/2017	
P3020A/LOG-CS: LOG		Mark	Mutza	M.	11302	Complete	35958	Stormwater Pollution Prevention Plan	3/13/2017	
P3020A/LOG-CS: LOG		Raul	Padilla	E	11302	Complete	35958	Stormwater Pollution Prevention Plan	2/17/2017	
P3020A/LOG-CS: LOG		Victor	Rios	D.	11302	Complete	35958	Stormwater Pollution Prevention Plan	4/17/2017	
P3020A/LOG-CS: LOG		Edward	Sandoval		11302	Complete	35958	Stormwater Pollution Prevention Plan	2/6/2017	
P3020A/LOG-CS: LOG		Jonathan	Sandoval	Manuel	11302	Complete	35958	Stormwater Pollution Prevention Plan	3/31/2017	
P3020A/LOG-CS: LOG		Ricardo	Sedillo	P	11302	Complete	35958	Stormwater Pollution Prevention Plan	2/10/2017	
P3020A/LOG-CS: LOG		Gloria	Silver	J.	11302	Complete	35958	Stormwater Pollution Prevention Plan	3/10/2017	
P3020A/LOG-CS: LOG		Allen	Sisneros	A	11302	Complete	35958	Stormwater Pollution Prevention Plan	3/13/2017	
P3020A/LOG-CS: LOG		Sean	Smyth	Paul	11302	Complete	35958	Stormwater Pollution Prevention Plan	2/9/2017	
P3020A/LOG-CS: LOG		Mark	Staples	Edward	11302	Complete	35958	Stormwater Pollution Prevention Plan	2/9/2017	
P3020A/LOG-CS: LOG		Henry	Tapia	P.	11302	Complete	35958	Stormwater Pollution Prevention Plan	3/9/2017	
P3020A/LOG-CS: LOG		Kevin	Thronas	N	11302	Complete	35958	Stormwater Pollution Prevention Plan	3/14/2017	
P3020A/LOG-CS: LOG		Gilbert	Torrez	Clyde	11302	Complete	35958	Stormwater Pollution Prevention Plan	4/6/2017	
P3020A/LOG-CS: LOG		Richard	Ulibarri	Manuel	11302	Complete	35958	Stormwater Pollution Prevention Plan	3/14/2017	
P3020A/LOG-CS: LOG		Miguel	Ulibarri	N	11302	Complete	35958	Stormwater Pollution Prevention Plan	6/20/2017	
P3020A/LOG-CS: LOG		Roman	Valdez	E	11302	Complete	35958	Stormwater Pollution Prevention Plan	3/6/2017	
P3020A/LOG-CS: LOG		John	Vigil	William	11302	Complete	35958	Stormwater Pollution Prevention Plan	3/17/2017	
P3020A/LOG-CS: LOG		Charles	Wylie	G	11302	Complete	35958	Stormwater Pollution Prevention Plan	4/20/2017	
P3030A/LOG-HERG: L		Bernadette	Lopez	M	11302	Complete	35958	Stormwater Pollution Prevention Plan	4/14/2017	
P3030A/LOG-HERG: L		Bianca	Lucero	M	11302	Complete	35958	Stormwater Pollution Prevention Plan	3/13/2017	
P3030A/LOG-HERG: L		Ruben	Maestas	H	11302	Complete	35958	Stormwater Pollution Prevention Plan	2/17/2017	
P3030A/LOG-HERG: L		Juan	Marrufo	Manuel	11302	Complete	35958	Stormwater Pollution Prevention Plan	8/30/2017	
P3030A/LOG-HERG: L		Julian	Martinez	S	11302	Complete	35958	Stormwater Pollution Prevention Plan	6/2/2017	
P3030A/LOG-HERG: L		Earl	Valdez	B	11302	Complete	35958	Stormwater Pollution Prevention Plan	3/20/2017	
P3040A/LOG-SUP: LO		James	Clines	Edward	11302	Complete	35958	Stormwater Pollution Prevention Plan	3/27/2017	
P3040A/LOG-SUP: LO		Michael	Lucero	L	11302	Complete	35958	Stormwater Pollution Prevention Plan	3/11/2017	
P3040A/LOG-SUP: LO		Levi	Sawyer	Steven	11302	Complete	35958	Stormwater Pollution Prevention Plan	1/30/2017	

Appendix K-Monitoring Data

Location ID	Date Sampled	Parameter Name	Report Result	Report Units	Detected
03-0141E	04/04/2012	Zinc	11.8	ug/L	Y
03-0141E	04/04/2012	Mercury	0.2	ug/L	N
03-0141E	04/04/2012	Aluminum	822	ug/L	Y
03-0141E	04/04/2012	Aroclor-1016	0.105	ug/L	N
03-0141E	04/04/2012	Aroclor-1262	0.105	ug/L	N
03-0141E	04/04/2012	Aroclor-1242	0.0748	ug/L	Y
03-0141E	04/04/2012	Aroclor-1254	0.105	ug/L	N
03-0141E	04/04/2012	Aroclor-1260	0.105	ug/L	N
03-0141E	04/04/2012	Aroclor-1221	0.105	ug/L	N
03-0141E	04/04/2012	Aroclor-1232	0.105	ug/L	N
03-0141E	04/04/2012	Aroclor-1248	0.105	ug/L	N
03-0141E	04/04/2012	Gross alpha	1.9	pCi/L	N
03-0141E	04/04/2012	Copper	2.71	ug/L	Y
03-0141E	07/07/2012	Copper	8.59	ug/L	Y
03-0141E	07/07/2012	Zinc	47.2	ug/L	Y
03-0141E	08/02/2012	Zinc	44.7	ug/L	Y
03-0141E	08/02/2012	Copper	7.51	ug/L	Y
03-0141E	10/12/2012	Copper	9.71	ug/L	Y
03-0141E	10/12/2012	Zinc	49.2	ug/L	Y
03-0141E	06/14/2013	Aroclor-1248	0.114	ug/L	N
03-0141E	06/14/2013	Aroclor-1221	0.114	ug/L	N
03-0141E	06/14/2013	Aroclor-1232	0.114	ug/L	N
03-0141E	06/14/2013	Aroclor-1260	0.114	ug/L	N
03-0141E	06/14/2013	Aroclor-1254	0.114	ug/L	N
03-0141E	06/14/2013	Aroclor-1262	0.114	ug/L	N
03-0141E	06/14/2013	Aroclor-1242	0.114	ug/L	N
03-0141E	06/14/2013	Aroclor-1016	0.114	ug/L	N
03-0141E	05/15/2015	Thallium	0.45	ug/L	N

Appendix L-NOIs, Delegation of Authority Letter, and 45 Day Extension

(See next page)

2015 NPDES Multi-Sector General Permit For Stormwater Discharges Associated With Industrial Activity (MSGP) Forms

United States Environmental Protection Agency
1200 Pennsylvania Ave, NW Washington, DC 20460

Note: This is a "smart form"; as you fill out the form, additional questions willl appear that you will need to answer.

Permit Information

1. What action would you like to take? *

File a New Notice of Intent Form

Submission of this Notice of Intent (NOI) constitutes notice that the operator identified in the Facility Operator Information section of this form requests authorization to discharge pursuant to the NPDES Stormwater Multi-Sector General Permit (MSGP) permit number identified in the Permit Information section of this form. Submission of this NOI also constitutes notice that the operator identified in the Facility Operator Information section of this form meets the eligibility conditions of Part 1.1 of the MSGP for the facility identified in the Facility Information section of this form. To obtain authorization, you must submit a complete and accurate NOI form. Discharges are not authorized if your NOI is incomplete or inaccurate or if you were never eligible for permit coverage.

Operator Name (Organization Name) *

LOS ALAMOS NATIONAL LABORATORY

Operator Name as Noted by the NOI Preparer

Los Alamos National Security, LLC

2. Select the state/territory where your facility is located *

NM

3. Is your facility located on Indian Country lands? *

○ Yes ◉ No

4. Are you requesting coverage as a "federal operator" as defined in Appendix A? *

◉ Yes ○ No

5. Are you a new discharger or a new source as defined in Appendix A? * ○ Yes ◉ No

5a. Have stormwater discharges from your facility been covered previously under an NPDES permit? * ◉ Yes ○ No

5aa. Provide your most current NPDES ID (i.e., permit tracking number) if you had coverage under EPA's MSGP 2008 or the NPDES permit number if you had coverage under an EPA individual permit *

NMR05GB21

6. Do you directly discharge to any of the waters of the U.S. that are designated by the state or tribal authority under its antidegradation policy as a Tier 3 water (Outstanding Natural Resource Water) (See Appendix L)? Your project will be considered to discharge to a Tier 3 water if the first water of the US to which you discharge is identified by a state, tribe, or EPA as a Tier 3 water. For discharges that enter a storm sewer system prior to discharge, the first water of the US to which you discharge is the waterbody that receives the stormwater discharge from the storm sewer system. * ○ Yes ◉ No

7. Does your facility directly discharge to a Federal CERCLA site listed in Appendix P? For the purposes of this permit, a permittee discharges to a Federal CERCLA site if the discharge flows directly into the site through its own conveyance, or through a conveyance owned by others, such as a municipal separate storm sewer system. * ○ Yes ◉ No

8. Has the Stormwater Pollution Prevention Plan (SWPPP) been prepared in advance of filing this NOI, as required? * ◉ Yes ○ No

9. By indicating "Yes", I confirm that I understand that the MSGP only authorizes the allowable stormwater discharges in Part 1.1.2 and the allowable non-stormwater discharges in Part 1.1.3. Any discharges not expressly authorized under the MSGP are not covered by the MSGP and they cannot become authorized by disclosure to EPA and/or a state via this Notice of Intent to be covered by the permit or by any other means (e.g., in the Stormwater Pollution Prevention Plan or during an inspection). If any discharges requiring NPDES permit coverage other than the allowable stormwater and non-stormwater discharges listed in Parts 1.1.2 and 1.1.3 will be discharged, they must be covered under another NPDES permit. * ◉ Yes ○ No

10. Master Permit Number

NMR050000

A: Facility Operator Information

1. Operator Name (Organization Name) *

LOS ALAMOS NATIONAL LABORATORY

2. Street *

PO Box 1663

3. Supplemental Address

MS K490

4. City * | 5. State * | 6. Zip Code * | 7. Facility County or Similar Govt. Subdivision *

Los Alamos | NM | 87545 | Los Alamos

8. Phone (10-digits, No dashes) * | 9. Extension | 10. E-Mail *

5056671312 | | hbenson@lanl.gov

Operator point of contact information

11. First Name * | 12. Middle Initial | 13. Last Name * | 14. Professional Title *

Holly | | Wheeler | Environmental Professional

B: Facility Information

1. Facility Name *

Los Alamos National Laboratory

☒ Facility address same as facility operator address

2. Street/Location *

PO Box 1663

3. Supplemental Address

MS K490

4. City *

Los Alamos

5. State *

NM

6. Zip Code *

87545

7. Facility County or Similar Govt. Subdivision *

Los Alamos

Latitude/Longitude for the facility:

	8. Latitude (Decimal Degrees) *		9. Longitude (Decimal Degrees) *	10. Latitude/Longitude Data Source *	11. Horizontal Reference Datum
+	35.872777	-	106.321127	Other	WGS84

12. What is the ownership type of the facility *

Federal Facility (U.S. Government)

13. Estimated area of industrial activity at your facility exposed to stormwater (to the nearest quarter acre) *

126

Identify the applicable sector and subsector of your primary industrial activity (See Appendix D) that best represents the products produced or services rendered for which your facility is primarily engaged, as defined in the MSGP, and the 4-digit Standard Industrial Classification (SIC) code or 2-letter Activity Code:

15. Sector *

SECTOR AA: FABRICATED METAL PRODUCTS

16. Primary SIC Code *

3449: Miscellaneous Metal Work

17. Subsector

AA1: Fabricated Metal Products, Except Machinery and Transportation Equipment, and Coating, Engraving, and Allied Services.

18. Identify the applicable sectors(s) of any co-located industrial activity for which you are requesting permit coverage.

Sector	Subsector *	
SECTOR P: LAND TRANSPORTATION AND WAREHOUSING	P1: Motor Freight Transportation and Warehousing	Delete Sector
SECTOR K: HAZARDOUS WASTE TREATMENT, STORAGE, OR DISPOSAL FACILITIES	K1: Hazardous Waste Treatment, Storage, or Disposal Facilities, including those that are operati	Delete Sector
SECTOR A: TIMBER PRODUCTS	A4: Wood Products, Not Elsewhere Classified	Delete Sector
SECTOR D: ASPHALT PAVING AND ROOFING MATERIALS AND LUBRICANTS	D1: Asphalt Paving and Roofing Materials	Delete Sector
SECTOR O: STEAM ELECTRIC GENERATING FACILITIES	O1: Steam Electric Generating Facilities, including coal handling sites	Delete Sector
SECTOR F: PRIMARY METALS	F4: Nonferrous Foundries (Castings)	Delete Sector
SECTOR N: SCRAP RECYCLING FACILITIES	N2: Source-separated Recycling Facility	Delete Sector

Add Sector

22. Is your facility presently inactive and unstaffed? *

◯ Yes ◉ No

C: Discharge Information

1. Does your facility discharge into any saltwater receiving waters? *

◯ Yes ◉ No

2. What is the hardness of your receiving water(s) (see Appendix J) *

50-74.99 mg/L

3. Identify if the following Effluent Limitation Guideline(s) apply to any of your discharges

40 CFR Part/Subpart: Part 423	Eligible Discharges: Coal pile runoff at steam electric generating facilities	Affected MSGP Sector: O	New Source Date: 11/19/1982, 10/8/1974[1]	Does your facility have any discharges subject to this effluent limitation guideline? * ◯ Yes ◉ No
40 CFR Part/Subpart: Part 429, Subpart I	Eligible Discharges: Discharges resulting from spray down or intentional wetting of logs at wet deck storage areas	Affected MSGP Sector: A	New Source Date: 1/26/1981	Does your facility have any discharges subject to this effluent limitation guideline? * ◯ Yes ◉ No
40 CFR Part/Subpart: Part 443, Subpart A	Eligible Discharges: Runoff from asphalt emulsion facilities	Affected MSGP Sector: D	New Source Date: 7/28/1975	Does your facility have any discharges subject to this effluent limitation guideline? * ◉ Yes ◯ No

Outfalls

4. **List all of the stormwater outfalls from your facility. Each outfall must be identified by a unique 3-digit ID (e.g., 001, 002) or a 4-digit ID. Also provide the latitude and longitude in decimal degrees for each outfall.**

A. Outfall ID *		B. Latitude (Decimal Degrees) *		C. Longitude (Decimal Degrees) *
002	+	35.875801	-	106.327538

Lookup Receiving Waters Information

(This button will prepopulate the receiving water information associated with your outfall on your form. You may edit the information that is returned if you believe it is incorrect)

Delete Outfall

If for any reason the Lookup Receiving Water Information button does not prepopulate your form with receiving waters information, you must manually enter the information on your form.

Outfall Section

1. Provide the name of the first water of the U.S that receives stormwater directly from the outfall and/or from the MS4 that the outfall discharges to. (You may edit the name of the water of the U.S. that was returned if incorrect.) *

SANDIA CANYON (SIGMA CANYON TO NPDES OUTFALL 001)

2. Is the receiving water listed as impaired on the 303(d) list and in need of a TMDL? *

(•) Yes ( ) No

4. List the pollutants that are causing the impairment:

Pollutant

Aluminum, total [as Al]

Delete Pollutant

Pollutant

Copper, total [as Cu]

Delete Pollutant

Pollutant

Alpha, total

Delete Pollutant

Pollutant

PCB IN WATER COLUMN

Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *	
METALS (OTHER THAN MERCURY)	Thallium, total [as Tl]	Delete Pollutant

Add Impairment Pollutant Associated with this Waterbody

3. Has a TMDL been completed for this receiving waterbody? *

○ Yes ◉ No

Outfalls

4. **List all of the stormwater outfalls from your facility. Each outfall must be identified by a unique 3-digit ID (e.g., 001, 002) or a 4-digit ID. Also provide the latitude and longitude in decimal degrees for each outfall.**

A. Outfall ID *		B. Latitude (Decimal Degrees) *		C. Longitude (Decimal Degrees) *
003	+	35.876369	-	106.326492

Lookup Receiving Waters Information

(This button will prepopulate the receiving water information associated with your outfall on your form. You may edit the information that is returned if you believe it is incorrect)

Delete Outfall

D. Substantially Identical to Any Outfalls Listed Above? *

◉ Yes ○ No

E. Substantially identical to outfall ID *

002

If for any reason the Lookup Receiving Water Information button does not prepopulate your form with receiving waters information, you must manually enter the information on your form.

5. Multiple Receiving Waters were returned for your outfall. Please select the receiving water that is associated with your outfall from this list: *

LOS ALAMOS CANYON (DP CANYON TO UPPER LANL BND)

Outfall Section

1. Provide the name of the first water of the U.S that receives stormwater directly from the outfall and/or from the MS4 that the outfall discharges to. (You may edit the name of the water of the U.S. that was returned if incorrect.) *

LOS ALAMOS CANYON (DP CANYON TO UPPER LANL BND)

2. Is the receiving water listed as impaired on the 303(d) list and in need of a TMDL? *

◉ Yes ○ No

4. List the pollutants that are causing the impairment:

Pollutant

Aluminum, total [as Al]

Delete Pollutant

Pollutant

Alpha, total

Delete Pollutant

Pollutant

PCB IN WATER COLUMN

Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *: MERCURY

Pollutant *: Mercury, total [as Hg]

Delete Pollutant

Add Impairment Pollutant Associated with this Waterbody

3. Has a TMDL been completed for this receiving waterbody? *

○ Yes ◉ No

Outfalls

4. **List all of the stormwater outfalls from your facility. Each outfall must be identified by a unique 3-digit ID (e.g., 001, 002) or a 4-digit ID. Also provide the latitude and longitude in decimal degrees for each outfall.**

A. Outfall ID *		B. Latitude (Decimal Degrees) *		C. Longitude (Decimal Degrees) *
005	+	35.873908	-	106.320709

Lookup Receiving Waters Information

(This button will prepopulate the receiving water information associated with your outfall on your form. You may edit the information that is returned if you believe it is incorrect)

Delete Outfall

D. Substantially Identical to Any Outfalls Listed Above? *

○ Yes ◉ No

If for any reason the Lookup Receiving Water Information button does not prepopulate your form with receiving waters information, you must manually enter the information on your form.

Outfall Section

1. Provide the name of the first water of the U.S that receives stormwater directly from the outfall and/or from the MS4 that the outfall discharges to. (You may edit the name of the water of the U.S. that was returned if incorrect.) *

SANDIA CANYON (SIGMA CANYON TO NPDES OUTFALL 001)

2. Is the receiving water listed as impaired on the 303(d) list and in need of a TMDL? *

◉ Yes ○ No

4. List the pollutants that are causing the impairment:

Pollutant: Aluminum, total [as Al]

Delete Pollutant

Pollutant: Copper, total [as Cu]

Delete Pollutant

Pollutant

Alpha, total

Delete Pollutant

Pollutant

PCB IN WATER COLUMN

Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *

METALS (OTHER THAN MERCURY)

Pollutant *

Thallium, total [as Tl]

Delete Pollutant

Add Impairment Pollutant Associated with this Waterbody

3. Has a TMDL been completed for this receiving waterbody? *

○ Yes ◉ No

Outfalls

4. **List all of the stormwater outfalls from your facility. Each outfall must be identified by a unique 3-digit ID (e.g., 001, 002) or a 4-digit ID. Also provide the latitude and longitude in decimal degrees for each outfall.**

A. Outfall ID *

006

+

B. Latitude (Decimal Degrees) *

35.874002

-

C. Longitude (Decimal Degrees) *

106.319825

Lookup Receiving Waters Information

(This button will prepopulate the receiving water information associated with your outfall on your form. You may edit the information that is returned if you believe it is incorrect)

Delete Outfall

D. Substantially Identical to Any Outfalls Listed Above? *

◉ Yes ○ No

E. Substantially identical to outfall ID *

005

If for any reason the Lookup Receiving Water Information button does not prepopulate your form with receiving waters information, you must manually enter the information on your form.

Outfall Section

1. Provide the name of the first water of the U.S that receives stormwater directly from the outfall and/or from the MS4 that the outfall discharges to. (You may edit the name of the water of the U.S. that was returned if incorrect.) *

SANDIA CANYON (SIGMA CANYON TO NPDES OUTFALL 001)

2. Is the receiving water listed as impaired on the 303(d) list and in need of a TMDL? *

◉ Yes ○ No

4. List the pollutants that are causing the impairment:

Pollutant

Aluminum, total [as Al]

Delete Pollutant

Pollutant

Copper, total [as Cu]

Delete Pollutant

Pollutant

Alpha, total

Delete Pollutant

Pollutant

PCB IN WATER COLUMN

Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *

METALS (OTHER THAN MERCURY)

Pollutant *

Thallium, total [as Tl]

Delete Pollutant

Add Impairment Pollutant Associated with this Waterbody

3. Has a TMDL been completed for this receiving waterbody? *

○ Yes ◉ No

Outfalls

4. **List all of the stormwater outfalls from your facility. Each outfall must be identified by a unique 3-digit ID (e.g., 001, 002) or a 4-digit ID. Also provide the latitude and longitude in decimal degrees for each outfall.**

A. Outfall ID *

009

+

B. Latitude (Decimal Degrees) *

35.874951

-

C. Longitude (Decimal Degrees) *

106.319263

Lookup Receiving Waters Information

(This button will prepopulate the receiving water information associated with your outfall on your form. You may edit the information that is returned if you believe it is incorrect)

Delete Outfall

D. Substantially Identical to Any Outfalls Listed Above? *

○ Yes ◉ No

If for any reason the Lookup Receiving Water Information button does not prepopulate your form with receiving waters information, you must manually enter the information on your form.

Outfall Section

1. Provide the name of the first water of the U.S that receives stormwater directly from the outfall and/or from the MS4 that the outfall discharges to.
(You may edit the name of the water of the U.S. that was returned if incorrect.) *

SANDIA CANYON (SIGMA CANYON TO NPDES OUTFALL 001)

2. Is the receiving water listed as impaired on the 303(d) list and in need of a TMDL? *

(•) Yes ( ) No

4. List the pollutants that are causing the impairment:

Pollutant

Aluminum, total [as Al]

Delete Pollutant

Pollutant

Copper, total [as Cu]

Delete Pollutant

Pollutant

Alpha, total

Delete Pollutant

Pollutant

PCB IN WATER COLUMN

Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *

METALS (OTHER THAN MERCURY)

Pollutant *

Thallium, total [as Tl]

Delete Pollutant

Add Impairment Pollutant Associated with this Waterbody

3. Has a TMDL been completed for this receiving waterbody? *

( ) Yes (•) No

Outfalls

4. **List all of the stormwater outfalls from your facility. Each outfall must be identified by a unique 3-digit ID (e.g., 001, 002) or a 4-digit ID. Also provide the latitude and longitude in decimal degrees for each outfall.**

A. Outfall ID *

007

B. Latitude (Decimal Degrees) *

+ | 35.874095

C. Longitude (Decimal Degrees) *

- | 106.319009

Lookup Receiving Waters Information

(This button will prepopulate the receiving water information associated with your outfall on your form. You may edit the information that is returned if you believe it is incorrect)

Delete Outfall

D. Substantially Identical to Any Outfalls Listed Above? *

(•) Yes ( ) No

E. Substantially identical to outfall ID *

009

If for any reason the Lookup Receiving Water Information button does not prepopulate your form with receiving waters information, you must manually enter the information on your form.

Outfall Section

1. Provide the name of the first water of the U.S that receives stormwater directly from the outfall and/or from the MS4 that the outfall discharges to. (You may edit the name of the water of the U.S. that was returned if incorrect.) *

SANDIA CANYON (SIGMA CANYON TO NPDES OUTFALL 001)

2. Is the receiving water listed as impaired on the 303(d) list and in need of a TMDL? *

(•) Yes ( ) No

4. List the pollutants that are causing the impairment:

Pollutant

Aluminum, total [as Al]

Delete Pollutant

Pollutant

Copper, total [as Cu]

Delete Pollutant

Pollutant

Alpha, total

Delete Pollutant

Pollutant

PCB IN WATER COLUMN

Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *

METALS (OTHER THAN MERCURY)

Pollutant *

Thallium, total [as Tl]

Delete Pollutant

Add Impairment Pollutant Associated with this Waterbody

3. Has a TMDL been completed for this receiving waterbody? *

○ Yes ◉ No

Outfalls

4. **List all of the stormwater outfalls from your facility. Each outfall must be identified by a unique 3-digit ID (e.g., 001, 002) or a 4-digit ID. Also provide the latitude and longitude in decimal degrees for each outfall.**

A. Outfall ID *		B. Latitude (Decimal Degrees) *		C. Longitude (Decimal Degrees) *
008	+	35.874306	-	106.318891

Lookup Receiving Waters Information

(This button will prepopulate the receiving water information associated with your outfall on your form. You may edit the information that is returned if you believe it is incorrect)

Delete Outfall

D. Substantially Identical to Any Outfalls Listed Above? *

◉ Yes ○ No

E. Substantially identical to outfall ID *

009

If for any reason the Lookup Receiving Water Information button does not prepopulate your form with receiving waters information, you must manually enter the information on your form.

Outfall Section

1. Provide the name of the first water of the U.S that receives stormwater directly from the outfall and/or from the MS4 that the outfall discharges to. (You may edit the name of the water of the U.S. that was returned if incorrect.) *

SANDIA CANYON (SIGMA CANYON TO NPDES OUTFALL 001)

2. Is the receiving water listed as impaired on the 303(d) list and in need of a TMDL? *

◉ Yes ○ No

4. List the pollutants that are causing the impairment:

Pollutant

Aluminum, total [as Al]

Delete Pollutant

Pollutant

Copper, total [as Cu]

Delete Pollutant

Pollutant

Alpha, total

Delete Pollutant

Pollutant

PCB IN WATER COLUMN

Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *

METALS (OTHER THAN MERCURY)

Pollutant *

Thallium, total [as Tl]

Delete Pollutant

Add Impairment Pollutant Associated with this Waterbody

3. Has a TMDL been completed for this receiving waterbody? *

○ Yes ◉ No

Outfalls

4. **List all of the stormwater outfalls from your facility. Each outfall must be identified by a unique 3-digit ID (e.g., 001, 002) or a 4-digit ID. Also provide the latitude and longitude in decimal degrees for each outfall.**

A. Outfall ID *

010

+

B. Latitude (Decimal Degrees) *

35.874014

-

C. Longitude (Decimal Degrees) *

106.318428

Lookup Receiving Waters Information

(This button will prepopulate the receiving water information associated with your outfall on your form. You may edit the information that is returned if you believe it is incorrect)

Delete Outfall

D. Substantially Identical to Any Outfalls Listed Above? *

◉ Yes ○ No

E. Substantially identical to outfall ID *

009

If for any reason the Lookup Receiving Water Information button does not prepopulate your form with receiving waters information, you must manually enter the information on your form.

Outfall Section

1. Provide the name of the first water of the U.S that receives stormwater directly from the outfall and/or from the MS4 that the outfall discharges to. (You may edit the name of the water of the U.S. that was returned if incorrect.) *

SANDIA CANYON (SIGMA CANYON TO NPDES OUTFALL 001)

2. Is the receiving water listed as impaired on the 303(d) list and in need of a TMDL? *

◉ Yes ○ No

4. List the pollutants that are causing the impairment:

Pollutant

Aluminum, total [as Al]

Delete Pollutant

Pollutant

Copper, total [as Cu]

Delete Pollutant

Pollutant

Alpha, total

Delete Pollutant

Pollutant

PCB IN WATER COLUMN

Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *

METALS (OTHER THAN MERCURY)

Pollutant *

Thallium, total [as Tl]

Delete Pollutant

Add Impairment Pollutant Associated with this Waterbody

3. Has a TMDL been completed for this receiving waterbody? *

○ Yes ◉ No

Outfalls

4. **List all of the stormwater outfalls from your facility. Each outfall must be identified by a unique 3-digit ID (e.g., 001, 002) or a 4-digit ID. Also provide the latitude and longitude in decimal degrees for each outfall.**

A. Outfall ID *

011

+

B. Latitude (Decimal Degrees) *

35.875560

-

C. Longitude (Decimal Degrees) *

106.320764

Lookup Receiving Waters Information

(This button will prepopulate the receiving water information associated with your outfall on your form. You may edit the information that is returned if you believe it is incorrect)

Delete Outfall

D. Substantially Identical to Any Outfalls Listed Above? *

◉ Yes ○ No

E. Substantially identical to outfall ID *

012

If for any reason the Lookup Receiving Water Information button does not prepopulate your form with receiving waters information, you must manually enter the information on your form.

Outfall Section

1. Provide the name of the first water of the U.S that receives stormwater directly from the outfall and/or from the MS4 that the outfall discharges to. (You may edit the name of the water of the U.S. that was returned if incorrect.) *

SANDIA CANYON (SIGMA CANYON TO NPDES OUTFALL 001)

2. Is the receiving water listed as impaired on the 303(d) list and in need of a TMDL? *

◉ Yes ○ No

4. List the pollutants that are causing the impairment:

Pollutant

Aluminum, total [as Al]

Delete Pollutant

Pollutant

Copper, total [as Cu]

Delete Pollutant

Pollutant

Alpha, total

Delete Pollutant

Pollutant

PCB IN WATER COLUMN

Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *

METALS (OTHER THAN MERCURY)

Pollutant *

Thallium, total [as Tl]

Delete Pollutant

Add Impairment Pollutant Associated with this Waterbody

3. Has a TMDL been completed for this receiving waterbody? *

○ Yes ◉ No

Outfalls

4. **List all of the stormwater outfalls from your facility. Each outfall must be identified by a unique 3-digit ID (e.g., 001, 002) or a 4-digit ID. Also provide the latitude and longitude in decimal degrees for each outfall.**

A. Outfall ID *

012

+

B. Latitude (Decimal Degrees) *

35.875506

-

C. Longitude (Decimal Degrees) *

106.320842

Lookup Receiving Waters Information

(This button will prepopulate the receiving water information associated with your outfall on your form. You may edit the information that is returned if you believe it is incorrect)

Delete Outfall

D. Substantially Identical to Any Outfalls Listed Above? *

○ Yes ◉ No

If for any reason the Lookup Receiving Water Information button does not prepopulate your form with receiving waters information, you must manually enter the information on your form.

Outfall Section

1. Provide the name of the first water of the U.S that receives stormwater directly from the outfall and/or from the MS4 that the outfall discharges to. (You may edit the name of the water of the U.S. that was returned if incorrect.) *

SANDIA CANYON (SIGMA CANYON TO NPDES OUTFALL 001)

2. Is the receiving water listed as impaired on the 303(d) list and in need of a TMDL? *

(•) Yes ( ) No

4. List the pollutants that are causing the impairment:

Pollutant

Aluminum, total [as Al]

Delete Pollutant

Pollutant

Copper, total [as Cu]

Delete Pollutant

Pollutant

Alpha, total

Delete Pollutant

Pollutant

PCB IN WATER COLUMN

Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group * | Pollutant *

METALS (OTHER THAN MERCURY) | Thallium, total [as Tl] | Delete Pollutant

Add Impairment Pollutant Associated with this Waterbody

3. Has a TMDL been completed for this receiving waterbody? *

( ) Yes (•) No

Outfalls

4. **List all of the stormwater outfalls from your facility. Each outfall must be identified by a unique 3-digit ID (e.g., 001, 002) or a 4-digit ID. Also provide the latitude and longitude in decimal degrees for each outfall.**

A. Outfall ID * | B. Latitude (Decimal Degrees) * | C. Longitude (Decimal Degrees) *

004 | + | 35.871465 | - | 106.323844

Lookup Receiving Waters Information

(This button will prepopulate the receiving water information associated with your outfall on your form. You may edit the information that is returned if you believe it is incorrect)

Delete Outfall

D. Substantially Identical to Any Outfalls Listed Above? *

○ Yes ◉ No

If for any reason the Lookup Receiving Water Information button does not prepopulate your form with receiving waters information, you must manually enter the information on your form.

Outfall Section

1. Provide the name of the first water of the U.S that receives stormwater directly from the outfall and/or from the MS4 that the outfall discharges to. (You may edit the name of the water of the U.S. that was returned if incorrect.) *

TWO MILE CANYON (PAJARITO TO HEADWATERS)

2. Is the receiving water listed as impaired on the 303(d) list and in need of a TMDL? *

◉ Yes ○ No

4. List the pollutants that are causing the impairment:

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group * | Pollutant *

METALS (OTHER THAN MERCURY) | Aluminum, total [as Al]

Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group * | Pollutant *

RADIATION | Alpha, total

Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group * | Pollutant *

POLYCHLORINATED BIPHENYLS (PCBS) | Polychlorinated biphenyls [PCBs]

Delete Pollutant

Add Impairment Pollutant Associated with this Waterbody

3. Has a TMDL been completed for this receiving waterbody? *

○ Yes ◉ No

Outfalls

4. **List all of the stormwater outfalls from your facility. Each outfall must be identified by a unique 3-digit ID (e.g., 001, 002) or a 4-digit ID. Also provide the latitude and longitude in decimal degrees for each outfall.**

A. Outfall ID * | B. Latitude (Decimal Degrees) * | C. Longitude (Decimal Degrees) *

018 | + | 35.872781 | - | 106.317616

Lookup Receiving Waters Information

(This button will prepopulate the receiving water information associated with your outfall on your form. You may edit the information that is returned if you believe it is incorrect)

Delete Outfall

D. Substantially Identical to Any Outfalls Listed Above? *

( ) Yes (•) No

If for any reason the Lookup Receiving Water Information button does not prepopulate your form with receiving waters information, you must manually enter the information on your form.

Outfall Section

1. Provide the name of the first water of the U.S that receives stormwater directly from the outfall and/or from the MS4 that the outfall discharges to.
(You may edit the name of the water of the U.S. that was returned if incorrect.) *

SANDIA CANYON (SIGMA CANYON TO NPDES OUTFALL 001)

2. Is the receiving water listed as impaired on the 303(d) list and in need of a TMDL? *

(•) Yes ( ) No

4. List the pollutants that are causing the impairment:

Pollutant

Aluminum, total [as Al]

Delete Pollutant

Pollutant

Copper, total [as Cu]

Delete Pollutant

Pollutant

Alpha, total

Delete Pollutant

Pollutant

PCB IN WATER COLUMN

Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *

METALS (OTHER THAN MERCURY)

Pollutant *

Thallium, total [as Tl]

Delete Pollutant

Add Impairment Pollutant Associated with this Waterbody

3. Has a TMDL been completed for this receiving waterbody? *

( ) Yes (•) No

Outfalls

4. **List all of the stormwater outfalls from your facility. Each outfall must be identified by a unique 3-digit ID (e.g., 001, 002) or a 4-digit ID. Also provide the latitude and longitude in decimal degrees for each outfall.**

A. Outfall ID *		B. Latitude (Decimal Degrees) *		C. Longitude (Decimal Degrees) *
014	+	35.870641	-	106.316865

Lookup Receiving Waters Information

(This button will prepopulate the receiving water information associated with your outfall on your form. You may edit the information that is returned if you believe it is incorrect)

Delete Outfall

D. Substantially Identical to Any Outfalls Listed Above? *

(•) Yes ( ) No

E. Substantially identical to outfall ID *

018

If for any reason the Lookup Receiving Water Information button does not prepopulate your form with receiving waters information, you must manually enter the information on your form.

Outfall Section

1. Provide the name of the first water of the U.S that receives stormwater directly from the outfall and/or from the MS4 that the outfall discharges to. (You may edit the name of the water of the U.S. that was returned if incorrect.) *

MORTANDAD CANYON (WITHIN LANL)

2. Is the receiving water listed as impaired on the 303(d) list and in need of a TMDL? *

(•) Yes ( ) No

4. List the pollutants that are causing the impairment:

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *	
METALS (OTHER THAN MERCURY)	Aluminum, total [as Al]	Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *	
METALS (OTHER THAN MERCURY)	Copper, total [as Cu]	Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *	
POLYCHLORINATED BIPHENYLS (PCBS)	Polychlorinated biphenyls [PCBs]	Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *	
RADIATION	Alpha, total	Delete Pollutant

Add Impairment Pollutant Associated with this Waterbody

3. Has a TMDL been completed for this receiving waterbody? *

( ) Yes (•) No

Outfalls

4. **List all of the stormwater outfalls from your facility. Each outfall must be identified by a unique 3-digit ID (e.g., 001, 002) or a 4-digit ID. Also provide the latitude and longitude in decimal degrees for each outfall.**

A. Outfall ID *		B. Latitude (Decimal Degrees) *		C. Longitude (Decimal Degrees) *
013	+	35.870783	-	106.317349

Lookup Receiving Waters Information

(This button will prepopulate the receiving water information associated with your outfall on your form. You may edit the information that is returned if you believe it is incorrect)

Delete Outfall

D. Substantially Identical to Any Outfalls Listed Above? *

(•) Yes ( ) No

E. Substantially identical to outfall ID *

018

If for any reason the Lookup Receiving Water Information button does not prepopulate your form with receiving waters information, you must manually enter the information on your form.

Outfall Section

1. Provide the name of the first water of the U.S that receives stormwater directly from the outfall and/or from the MS4 that the outfall discharges to. (You may edit the name of the water of the U.S. that was returned if incorrect.) *

MORTANDAD CANYON (WITHIN LANL)

2. Is the receiving water listed as impaired on the 303(d) list and in need of a TMDL? *

(•) Yes ( ) No

4. List the pollutants that are causing the impairment:

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *	
METALS (OTHER THAN MERCURY)	Aluminum, total [as Al]	Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *	
METALS (OTHER THAN MERCURY)	Copper, total [as Cu]	Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *	
RADIATION	Alpha, total	Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *	
POLYCHLORINATED BIPHENYLS (PCBS)	Polychlorinated biphenyls [PCBs]	Delete Pollutant

Add Impairment Pollutant Associated with this Waterbody

3. Has a TMDL been completed for this receiving waterbody? *

( ) Yes (•) No

Outfalls

4. **List all of the stormwater outfalls from your facility. Each outfall must be identified by a unique 3-digit ID (e.g., 001, 002) or a 4-digit ID. Also provide the latitude and longitude in decimal degrees for each outfall.**

A. Outfall ID *		B. Latitude (Decimal Degrees) *		C. Longitude (Decimal Degrees) *
015	+	35.871403	-	106.316276

Lookup Receiving Waters Information

(This button will prepopulate the receiving water information associated with your outfall on your form. You may edit the information that is returned if you believe it is incorrect)

Delete Outfall

D. Substantially Identical to Any Outfalls Listed Above? *
(•) Yes ( ) No

E. Substantially identical to outfall ID *
018

If for any reason the Lookup Receiving Water Information button does not prepopulate your form with receiving waters information, you must manually enter the information on your form.

Outfall Section

1. Provide the name of the first water of the U.S that receives stormwater directly from the outfall and/or from the MS4 that the outfall discharges to. (You may edit the name of the water of the U.S. that was returned if incorrect.) *

MORTANDAD CANYON (WITHIN LANL)

2. Is the receiving water listed as impaired on the 303(d) list and in need of a TMDL? *
(•) Yes ( ) No

4. List the pollutants that are causing the impairment:

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *	
METALS (OTHER THAN MERCURY)	Aluminum, total [as Al]	Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *	
METALS (OTHER THAN MERCURY)	Copper, total [as Cu]	Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *	
RADIATION	Alpha, total	Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *	
POLYCHLORINATED BIPHENYLS (PCBS)	Polychlorinated biphenyls [PCBs]	Delete Pollutant

Add Impairment Pollutant Associated with this Waterbody

3. Has a TMDL been completed for this receiving waterbody? *
( ) Yes (•) No

Outfalls

4. **List all of the stormwater outfalls from your facility. Each outfall must be identified by a unique 3-digit ID (e.g., 001, 002) or a 4-digit ID. Also provide the latitude and longitude in decimal degrees for each outfall.**

A. Outfall ID *		B. Latitude (Decimal Degrees) *		C. Longitude (Decimal Degrees) *
016	+	35.872553	-	106.316810

Lookup Receiving Waters Information

(This button will prepopulate the receiving water information associated with your outfall on your form. You may edit the information that is returned if you believe it is incorrect)

Delete Outfall

D. Substantially Identical to Any Outfalls Listed Above? *

(•) Yes ( ) No

E. Substantially identical to outfall ID *

018

If for any reason the Lookup Receiving Water Information button does not prepopulate your form with receiving waters information, you must manually enter the information on your form.

Outfall Section

1. Provide the name of the first water of the U.S that receives stormwater directly from the outfall and/or from the MS4 that the outfall discharges to. (You may edit the name of the water of the U.S. that was returned if incorrect.) *

SANDIA CANYON (SIGMA CANYON TO NPDES OUTFALL 001)

2. Is the receiving water listed as impaired on the 303(d) list and in need of a TMDL? *

(•) Yes ( ) No

4. List the pollutants that are causing the impairment:

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *	
METALS (OTHER THAN MERCURY)	Aluminum, total [as Al]	Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *	
METALS (OTHER THAN MERCURY)	Copper, total [as Cu]	Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *	
METALS (OTHER THAN MERCURY)	Thallium, total [as Tl]	Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *	
POLYCHLORINATED BIPHENYLS (PCBS)	Polychlorinated biphenyls [PCBs]	Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *	
RADIATION	Alpha, total	Delete Pollutant

Add Impairment Pollutant Associated with this Waterbody

3. Has a TMDL been completed for this receiving waterbody? *

○ Yes ◉ No

Outfalls

4. **List all of the stormwater outfalls from your facility. Each outfall must be identified by a unique 3-digit ID (e.g., 001, 002) or a 4-digit ID. Also provide the latitude and longitude in decimal degrees for each outfall.**

A. Outfall ID *		B. Latitude (Decimal Degrees) *		C. Longitude (Decimal Degrees) *
017	+	35.872752	-	106.317329

Lookup Receiving Waters Information

(This button will prepopulate the receiving water information associated with your outfall on your form. You may edit the information that is returned if you believe it is incorrect)

Delete Outfall

D. Substantially Identical to Any Outfalls Listed Above? *

◉ Yes ○ No

E. Substantially identical to outfall ID *

018

If for any reason the Lookup Receiving Water Information button does not prepopulate your form with receiving waters information, you must manually enter the information on your form.

Outfall Section

1. Provide the name of the first water of the U.S that receives stormwater directly from the outfall and/or from the MS4 that the outfall discharges to. (You may edit the name of the water of the U.S. that was returned if incorrect.) *

SANDIA CANYON (SIGMA CANYON TO NPDES OUTFALL 001)

2. Is the receiving water listed as impaired on the 303(d) list and in need of a TMDL? *

◉ Yes ○ No

4. List the pollutants that are causing the impairment:

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *	
METALS (OTHER THAN MERCURY)	Aluminum, total [as Al]	Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *	
METALS (OTHER THAN MERCURY)	Copper, total [as Cu]	Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *	
METALS (OTHER THAN MERCURY)	Thallium, total [as Tl]	Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *	
POLYCHLORINATED BIPHENYLS (PCBS)	Polychlorinated biphenyls [PCBs]	Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *: RADIATION

Pollutant *: Alpha, total

Delete Pollutant

Add Impairment Pollutant Associated with this Waterbody

3. Has a TMDL been completed for this receiving waterbody? *

( ) Yes (•) No

Outfalls

4. **List all of the stormwater outfalls from your facility. Each outfall must be identified by a unique 3-digit ID (e.g., 001, 002) or a 4-digit ID. Also provide the latitude and longitude in decimal degrees for each outfall.**

A. Outfall ID *: 019

+

B. Latitude (Decimal Degrees) *: 35.872668

-

C. Longitude (Decimal Degrees) *: 106.318428

Lookup Receiving Waters Information

(This button will prepopulate the receiving water information associated with your outfall on your form. You may edit the information that is returned if you believe it is incorrect)

Delete Outfall

D. Substantially Identical to Any Outfalls Listed Above? *

(•) Yes ( ) No

E. Substantially identical to outfall ID *: 018

If for any reason the Lookup Receiving Water Information button does not prepopulate your form with receiving waters information, you must manually enter the information on your form.

Outfall Section

1. Provide the name of the first water of the U.S that receives stormwater directly from the outfall and/or from the MS4 that the outfall discharges to. (You may edit the name of the water of the U.S. that was returned if incorrect.) *

SANDIA CANYON (SIGMA CANYON TO NPDES OUTFALL 001)

2. Is the receiving water listed as impaired on the 303(d) list and in need of a TMDL? *

(•) Yes ( ) No

4. List the pollutants that are causing the impairment:

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *: METALS (OTHER THAN MERCURY)

Pollutant *: Aluminum, total [as Al]

Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *: METALS (OTHER THAN MERCURY)

Pollutant *: Copper, total [as Cu]

Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *: POLYCHLORINATED BIPHENYLS (PCBS)

Pollutant *: Polychlorinated biphenyls [PCBs]

Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *: METALS (OTHER THAN MERCURY)

Pollutant *: Thallium, total [as Tl]

Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *: RADIATION

Pollutant *: Alpha, total

Delete Pollutant

Add Impairment Pollutant Associated with this Waterbody

3. Has a TMDL been completed for this receiving waterbody? *

( ) Yes (•) No

Outfalls

4. **List all of the stormwater outfalls from your facility. Each outfall must be identified by a unique 3-digit ID (e.g., 001, 002) or a 4-digit ID. Also provide the latitude and longitude in decimal degrees for each outfall.**

A. Outfall ID *		B. Latitude (Decimal Degrees) *		C. Longitude (Decimal Degrees) *
051	+	35.830145	-	106.242675

Lookup Receiving Waters Information

(This button will prepopulate the receiving water information associated with your outfall on your form. You may edit the information that is returned if you believe it is incorrect)

Delete Outfall

D. Substantially Identical to Any Outfalls Listed Above? *

( ) Yes (•) No

If for any reason the Lookup Receiving Water Information button does not prepopulate your form with receiving waters information, you must manually enter the information on your form.

Outfall Section

1. Provide the name of the first water of the U.S that receives stormwater directly from the outfall and/or from the MS4 that the outfall discharges to. (You may edit the name of the water of the U.S. that was returned if incorrect.) *

PAJARITO CANYON (IN LANL BELOW ARROYO DE LA DELFE)

2. Is the receiving water listed as impaired on the 303(d) list and in need of a TMDL? *

(•) Yes ( ) No

4. List the pollutants that are causing the impairment:

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *: METALS (OTHER THAN MERCURY)

Pollutant *: Aluminum, total [as Al]

Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *: METALS (OTHER THAN MERCURY)

Pollutant *: Copper, total [as Cu]

Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *: POLYCHLORINATED BIPHENYLS (PCBS)

Pollutant *: Polychlorinated biphenyls [PCBs]

Delete Pollutant

Add Impairment Pollutant Associated with this Waterbody

3. Has a TMDL been completed for this receiving waterbody? *

( ) Yes (•) No

Outfalls

4. **List all of the stormwater outfalls from your facility. Each outfall must be identified by a unique 3-digit ID (e.g., 001, 002) or a 4-digit ID. Also provide the latitude and longitude in decimal degrees for each outfall.**

A. Outfall ID *: 072

+

B. Latitude (Decimal Degrees) *: 35.832885

-

C. Longitude (Decimal Degrees) *: 106.239443

Lookup Receiving Waters Information

(This button will prepopulate the receiving water information associated with your outfall on your form. You may edit the information that is returned if you believe it is incorrect)

Delete Outfall

D. Substantially Identical to Any Outfalls Listed Above? *

( ) Yes (•) No

If for any reason the Lookup Receiving Water Information button does not prepopulate your form with receiving waters information, you must manually enter the information on your form.

Outfall Section

1. Provide the name of the first water of the U.S that receives stormwater directly from the outfall and/or from the MS4 that the outfall discharges to.
(You may edit the name of the water of the U.S. that was returned if incorrect.) *

CANADA DEL BUEY (WITHIN LANL)

2. Is the receiving water listed as impaired on the 303(d) list and in need of a TMDL? *

(•) Yes ( ) No

4. List the pollutants that are causing the impairment:

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *: METALS (OTHER THAN MERCURY)

Pollutant *: Aluminum, total [as Al]

Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *: POLYCHLORINATED BIPHENYLS (PCBS)

Pollutant *: Polychlorinated biphenyls [PCBs]

Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *: RADIATION

Pollutant *: Alpha, total

Delete Pollutant

Add Impairment Pollutant Associated with this Waterbody

3. Has a TMDL been completed for this receiving waterbody? *

○ Yes ◉ No

Outfalls

4. **List all of the stormwater outfalls from your facility. Each outfall must be identified by a unique 3-digit ID (e.g., 001, 002) or a 4-digit ID. Also provide the latitude and longitude in decimal degrees for each outfall.**

A. Outfall ID *		B. Latitude (Decimal Degrees) *		C. Longitude (Decimal Degrees) *
020	+	35.872251	-	106.316273

Lookup Receiving Waters Information

(This button will prepopulate the receiving water information associated with your outfall on your form. You may edit the information that is returned if you believe it is incorrect)

Delete Outfall

D. Substantially Identical to Any Outfalls Listed Above? *

○ Yes ◉ No

If for any reason the Lookup Receiving Water Information button does not prepopulate your form with receiving waters information, you must manually enter the information on your form.

Outfall Section

1. Provide the name of the first water of the U.S that receives stormwater directly from the outfall and/or from the MS4 that the outfall discharges to. (You may edit the name of the water of the U.S. that was returned if incorrect.) *

SANDIA CANYON (SIGMA CANYON TO NPDES OUTFALL 001)

2. Is the receiving water listed as impaired on the 303(d) list and in need of a TMDL? *

◉ Yes ○ No

4. List the pollutants that are causing the impairment:

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *	
METALS (OTHER THAN MERCURY)	Aluminum, total [as Al]	Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *	
METALS (OTHER THAN MERCURY)	Copper, total [as Cu]	Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *	
METALS (OTHER THAN MERCURY)	Thallium, total [as Tl]	Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *	
POLYCHLORINATED BIPHENYLS (PCBS)	Polychlorinated biphenyls [PCBs]	Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *: RADIATION

Pollutant *: Alpha, total

Delete Pollutant

Add Impairment Pollutant Associated with this Waterbody

3. Has a TMDL been completed for this receiving waterbody? *

( ) Yes (•) No

Add Another Outfall

Provide the following information about your outfall latitude longitude.

5. Latitude/Longitude Data Source *: GPS

6. Horizontal Reference Datum: NAD83

7. Does your facility discharge into a Municipal Separate Storm Sewer System (MS4)? *

( ) Yes (•) No

8. Do you discharge to any of the waters of the U.S. that are designated by the state or tribal authority under its antidegradation policy as a Tier 2 (or Tier 2.5) water (water quality exceeds levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water) (See Appendix L)? *

( ) Yes (•) No

D: Stormwater Pollution Prevention Plan (SWPPP) Information

SWPPP Contact Information

1. First Name *: Holly

2. Middle Initial:

3. Last Name *: Wheeler

4. Professional Title *: Environmental Professional

5. Phone (10-digits, No dashes) *: 5056671312

6. Extension:

7. E-Mail *: hbenson@lanl.gov

8. Your current SWPPP or certain information from your SWPPP must be made available through one of the following two options. Select one of the options and provide the required information. *

Note: You are not required to post any confidential business information (CBI) or restricted information (as defined in Appendix A) (such information may be redacted), but you must clearly identify those portions of the SWPPP that are being withheld from public access.

☒ Option 1: Maintain a Current Copy of your SWPPP on an Internet page (Universal Resource Locator or URL).

Provide the web address URL *: eprr.lanl.gov

☐ Option 2: Provide the following information from your SWPPP.

E: Endangered Species Protection

1. Using the instructions in Appendix E of the MSGP, under which endangered species criterion listed in Part 1.1.4.5 are you eligible for coverage under this permit? *

Criterion D – A separate ESA section 7 consultation has been completed

2. Provide a brief summary of the basis for the criterion selected in Appendix E (e.g., communication with U.S. Fish and Wildlife Service or National Marine Fisheries Service to determine no species in action area; implementation of controls approved by EPA and the Services). *

Direct consultation with the U.S. Fish and Wildlife Service and corresponding development and implementation of a facility-specific Habitat Management Plan.

You must attach copies of any letters or other communications with the U.S. Fish and Wildlife Service or National Marine Fisheries Service on the attachments screen after you click "Submit Now"

F: Historic Preservation

1. If your facility is not located in Indian country lands, is your facility located on a property of religious or cultural significance to an Indian tribe? *

(●) Yes ( ) No

1a. If yes, provide the name of the Indian tribe associated with the property *

San Ildefonso Pueblo

2. Using the instructions in Appendix F of the MSGP, under which historic properties preservation criterion listed in Part 1.1.4.7 are you eligible for coverage under this permit *

Criterion B - Subsurface stormwater controls will not affect historic properties

Certification Information

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. 40 CFR 122.22 (d)

Certifier E-Mail *

ADORRIES@LANL.GOV

Form Action *

Approve

2015 NPDES Multi-Sector General Permit For Stormwater Discharges Associated With Industrial Activity (MSGP) Forms

United States Environmental Protection Agency
1200 Pennsylvania Ave, NW Washington, DC 20460

Note: This is a "smart form"; as you fill out the form, additional questions willl appear that you will need to answer.

Permit Information

1. What action would you like to take? *

File a New Notice of Intent Form

Submission of this Notice of Intent (NOI) constitutes notice that the operator identified in the Facility Operator Information section of this form requests authorization to discharge pursuant to the NPDES Stormwater Multi-Sector General Permit (MSGP) permit number identified in the Permit Information section of this form. Submission of this NOI also constitutes notice that the operator identified in the Facility Operator Information section of this form meets the eligibility conditions of Part 1.1 of the MSGP for the facility identified in the Facility Information section of this form. To obtain authorization, you must submit a complete and accurate NOI form. Discharges are not authorized if your NOI is incomplete or inaccurate or if you were never eligible for permit coverage.

Operator Name (Organization Name) *

LOS ALAMOS NATIONAL LABORATORY

Operator Name as Noted by the NOI Preparer

Los Alamos National Security, LLC

2. Select the state/territory where your facility is located *

NM

3. Is your facility located on Indian Country lands? *

○ Yes ◉ No

4. Are you requesting coverage as a "federal operator" as defined in Appendix A? *

◉ Yes ○ No

5. Are you a new discharger or a new source as defined in Appendix A? * ○ Yes ◉ No

5a. Have stormwater discharges from your facility been covered previously under an NPDES permit? * ◉ Yes ○ No

5aa. Provide your most current NPDES ID (i.e., permit tracking number) if you had coverage under EPA's MSGP 2008 or the NPDES permit number if you had coverage under an EPA individual permit *

NMR05GB21

6. Do you directly discharge to any of the waters of the U.S. that are designated by the state or tribal authority under its antidegradation policy as a Tier 3 water (Outstanding Natural Resource Water) (See Appendix L)? Your project will be considered to discharge to a Tier 3 water if the first water of the US to which you discharge is identified by a state, tribe, or EPA as a Tier 3 water. For discharges that enter a storm sewer system prior to discharge, the first water of the US to which you discharge is the waterbody that receives the stormwater discharge from the storm sewer system. * ○ Yes ◉ No

7. Does your facility directly discharge to a Federal CERCLA site listed in Appendix P? For the purposes of this permit, a permittee discharges to a Federal CERCLA site if the discharge flows directly into the site through its own conveyance, or through a conveyance owned by others, such as a municipal separate storm sewer system. * ○ Yes ◉ No

8. Has the Stormwater Pollution Prevention Plan (SWPPP) been prepared in advance of filing this NOI, as required? * ◉ Yes ○ No

9. By indicating "Yes", I confirm that I understand that the MSGP only authorizes the allowable stormwater discharges in Part 1.1.2 and the allowable non-stormwater discharges in Part 1.1.3. Any discharges not expressly authorized under the MSGP are not covered by the MSGP and they cannot become authorized by disclosure to EPA and/or a state via this Notice of Intent to be covered by the permit or by any other means (e.g., in the Stormwater Pollution Prevention Plan or during an inspection). If any discharges requiring NPDES permit coverage other than the allowable stormwater and non-stormwater discharges listed in Parts 1.1.2 and 1.1.3 will be discharged, they must be covered under another NPDES permit. * ◉ Yes ○ No

10. Master Permit Number

NMR050000

A: Facility Operator Information

1. Operator Name (Organization Name) *

LOS ALAMOS NATIONAL LABORATORY

2. Street *

PO Box 1663

3. Supplemental Address

MS K490

4. City * | 5. State * | 6. Zip Code * | 7. Facility County or Similar Govt. Subdivision *

Los Alamos | NM | 87545 | Los Alamos

8. Phone (10-digits, No dashes) * | 9. Extension | 10. E-Mail *

5056671312 | | hbenson@lanl.gov

Operator point of contact information

11. First Name * | 12. Middle Initial | 13. Last Name * | 14. Professional Title *

Holly | | Wheeler | Environmental Professional

B: Facility Information

1. Facility Name *

Los Alamos National Laboratory

☒ Facility address same as facility operator address

2. Street/Location *

PO Box 1663

3. Supplemental Address

MS K490

4. City *

Los Alamos

5. State *

NM

6. Zip Code *

87545

7. Facility County or Similar Govt. Subdivision *

Los Alamos

Latitude/Longitude for the facility:

	8. Latitude (Decimal Degrees) *		9. Longitude (Decimal Degrees) *	10. Latitude/Longitude Data Source *	11. Horizontal Reference Datum
+	35.872777	-	106.321127	Other	WGS84

12. What is the ownership type of the facility *

Federal Facility (U.S. Government)

13. Estimated area of industrial activity at your facility exposed to stormwater (to the nearest quarter acre) *

126

Identify the applicable sector and subsector of your primary industrial activity (See Appendix D) that best represents the products produced or services rendered for which your facility is primarily engaged, as defined in the MSGP, and the 4-digit Standard Industrial Classification (SIC) code or 2-letter Activity Code:

15. Sector *

SECTOR AA: FABRICATED METAL PRODUCTS

16. Primary SIC Code *

3449: Miscellaneous Metal Work

17. Subsector

AA1: Fabricated Metal Products, Except Machinery and Transportation Equipment, and Coating, Engraving, and Allied Services.

18. Identify the applicable sectors(s) of any co-located industrial activity for which you are requesting permit coverage.

Sector	Subsector *	
SECTOR P: LAND TRANSPORTATION AND WAREHOUSING	P1: Motor Freight Transportation and Warehousing	Delete Sector
SECTOR K: HAZARDOUS WASTE TREATMENT, STORAGE, OR DISPOSAL FACILITIES	K1: Hazardous Waste Treatment, Storage, or Disposal Facilities, including those that are operati	Delete Sector
SECTOR A: TIMBER PRODUCTS	A4: Wood Products, Not Elsewhere Classified	Delete Sector
SECTOR D: ASPHALT PAVING AND ROOFING MATERIALS AND LUBRICANTS	D1: Asphalt Paving and Roofing Materials	Delete Sector
SECTOR O: STEAM ELECTRIC GENERATING FACILITIES	O1: Steam Electric Generating Facilities, including coal handling sites	Delete Sector
SECTOR F: PRIMARY METALS	F4: Nonferrous Foundries (Castings)	Delete Sector
SECTOR N: SCRAP RECYCLING FACILITIES	N2: Source-separated Recycling Facility	Delete Sector

Add Sector

22. Is your facility presently inactive and unstaffed? *

◯ Yes ◉ No

C: Discharge Information

1. Does your facility discharge into any saltwater receiving waters? *

◯ Yes ◉ No

2. What is the hardness of your receiving water(s) (see Appendix J) *

50-74.99 mg/L

3. Identify if the following Effluent Limitation Guideline(s) apply to any of your discharges

40 CFR Part/Subpart: Part 423	Eligible Discharges: Coal pile runoff at steam electric generating facilities	Affected MSGP Sector: O	New Source Date: 11/19/1982, 10/8/1974[1]	Does your facility have any discharges subject to this effluent limitation guideline? * ◯ Yes ◉ No
40 CFR Part/Subpart: Part 429, Subpart I	Eligible Discharges: Discharges resulting from spray down or intentional wetting of logs at wet deck storage areas	Affected MSGP Sector: A	New Source Date: 1/26/1981	Does your facility have any discharges subject to this effluent limitation guideline? * ◯ Yes ◉ No
40 CFR Part/Subpart: Part 443, Subpart A	Eligible Discharges: Runoff from asphalt emulsion facilities	Affected MSGP Sector: D	New Source Date: 7/28/1975	Does your facility have any discharges subject to this effluent limitation guideline? * ◉ Yes ◯ No

Outfalls

4. **List all of the stormwater outfalls from your facility. Each outfall must be identified by a unique 3-digit ID (e.g., 001, 002) or a 4-digit ID. Also provide the latitude and longitude in decimal degrees for each outfall.**

A. Outfall ID *		B. Latitude (Decimal Degrees) *		C. Longitude (Decimal Degrees) *
002	+	35.875801	-	106.327538

Lookup Receiving Waters Information

(This button will prepopulate the receiving water information associated with your outfall on your form. You may edit the information that is returned if you believe it is incorrect)

Delete Outfall

If for any reason the Lookup Receiving Water Information button does not prepopulate your form with receiving waters information, you must manually enter the information on your form.

Outfall Section

1. Provide the name of the first water of the U.S that receives stormwater directly from the outfall and/or from the MS4 that the outfall discharges to. (You may edit the name of the water of the U.S. that was returned if incorrect.) *

SANDIA CANYON (SIGMA CANYON TO NPDES OUTFALL 001)

2. Is the receiving water listed as impaired on the 303(d) list and in need of a TMDL? *

(•) Yes ( ) No

4. List the pollutants that are causing the impairment:

Pollutant

Aluminum, total [as Al]

Delete Pollutant

Pollutant

Copper, total [as Cu]

Delete Pollutant

Pollutant

Alpha, total

Delete Pollutant

Pollutant

PCB IN WATER COLUMN

Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *	
METALS (OTHER THAN MERCURY)	Thallium, total [as Tl]	Delete Pollutant

Add Impairment Pollutant Associated with this Waterbody

3. Has a TMDL been completed for this receiving waterbody? *

○ Yes ◉ No

Outfalls

4. **List all of the stormwater outfalls from your facility. Each outfall must be identified by a unique 3-digit ID (e.g., 001, 002) or a 4-digit ID. Also provide the latitude and longitude in decimal degrees for each outfall.**

A. Outfall ID *		B. Latitude (Decimal Degrees) *		C. Longitude (Decimal Degrees) *
003	+	35.876369	-	106.326492

Lookup Receiving Waters Information

(This button will prepopulate the receiving water information associated with your outfall on your form. You may edit the information that is returned if you believe it is incorrect)

Delete Outfall

D. Substantially Identical to Any Outfalls Listed Above? *

◉ Yes ○ No

E. Substantially identical to outfall ID *

002

If for any reason the Lookup Receiving Water Information button does not prepopulate your form with receiving waters information, you must manually enter the information on your form.

5. Multiple Receiving Waters were returned for your outfall. Please select the receiving water that is associated with your outfall from this list: *

LOS ALAMOS CANYON (DP CANYON TO UPPER LANL BND)

Outfall Section

1. Provide the name of the first water of the U.S that receives stormwater directly from the outfall and/or from the MS4 that the outfall discharges to. (You may edit the name of the water of the U.S. that was returned if incorrect.) *

LOS ALAMOS CANYON (DP CANYON TO UPPER LANL BND)

2. Is the receiving water listed as impaired on the 303(d) list and in need of a TMDL? *

◉ Yes ○ No

4. List the pollutants that are causing the impairment:

Pollutant

Aluminum, total [as Al]

Delete Pollutant

Pollutant

Alpha, total

Delete Pollutant

Pollutant

PCB IN WATER COLUMN

Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *: MERCURY

Pollutant *: Mercury, total [as Hg]

Delete Pollutant

Add Impairment Pollutant Associated with this Waterbody

3. Has a TMDL been completed for this receiving waterbody? *

○ Yes ◉ No

Outfalls

4. **List all of the stormwater outfalls from your facility. Each outfall must be identified by a unique 3-digit ID (e.g., 001, 002) or a 4-digit ID. Also provide the latitude and longitude in decimal degrees for each outfall.**

A. Outfall ID *		B. Latitude (Decimal Degrees) *		C. Longitude (Decimal Degrees) *
005	+	35.873908	-	106.320709

Lookup Receiving Waters Information

(This button will prepopulate the receiving water information associated with your outfall on your form. You may edit the information that is returned if you believe it is incorrect)

Delete Outfall

D. Substantially Identical to Any Outfalls Listed Above? *

○ Yes ◉ No

If for any reason the Lookup Receiving Water Information button does not prepopulate your form with receiving waters information, you must manually enter the information on your form.

Outfall Section

1. Provide the name of the first water of the U.S that receives stormwater directly from the outfall and/or from the MS4 that the outfall discharges to. (You may edit the name of the water of the U.S. that was returned if incorrect.) *

SANDIA CANYON (SIGMA CANYON TO NPDES OUTFALL 001)

2. Is the receiving water listed as impaired on the 303(d) list and in need of a TMDL? *

◉ Yes ○ No

4. List the pollutants that are causing the impairment:

Pollutant: Aluminum, total [as Al]

Delete Pollutant

Pollutant: Copper, total [as Cu]

Delete Pollutant

Pollutant

Alpha, total

Delete Pollutant

Pollutant

PCB IN WATER COLUMN

Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *

METALS (OTHER THAN MERCURY)

Pollutant *

Thallium, total [as Tl]

Delete Pollutant

Add Impairment Pollutant Associated with this Waterbody

3. Has a TMDL been completed for this receiving waterbody? *

○ Yes ◉ No

Outfalls

4. **List all of the stormwater outfalls from your facility. Each outfall must be identified by a unique 3-digit ID (e.g., 001, 002) or a 4-digit ID. Also provide the latitude and longitude in decimal degrees for each outfall.**

A. Outfall ID *

006

+

B. Latitude (Decimal Degrees) *

35.874002

-

C. Longitude (Decimal Degrees) *

106.319825

Lookup Receiving Waters Information

(This button will prepopulate the receiving water information associated with your outfall on your form. You may edit the information that is returned if you believe it is incorrect)

Delete Outfall

D. Substantially Identical to Any Outfalls Listed Above? *

◉ Yes ○ No

E. Substantially identical to outfall ID *

005

If for any reason the Lookup Receiving Water Information button does not prepopulate your form with receiving waters information, you must manually enter the information on your form.

Outfall Section

1. Provide the name of the first water of the U.S that receives stormwater directly from the outfall and/or from the MS4 that the outfall discharges to. (You may edit the name of the water of the U.S. that was returned if incorrect.) *

SANDIA CANYON (SIGMA CANYON TO NPDES OUTFALL 001)

2. Is the receiving water listed as impaired on the 303(d) list and in need of a TMDL? *

◉ Yes ○ No

4. List the pollutants that are causing the impairment:

Pollutant

Aluminum, total [as Al]

Delete Pollutant

Pollutant

Copper, total [as Cu]

Delete Pollutant

Pollutant

Alpha, total

Delete Pollutant

Pollutant

PCB IN WATER COLUMN

Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *

METALS (OTHER THAN MERCURY)

Pollutant *

Thallium, total [as Tl]

Delete Pollutant

Add Impairment Pollutant Associated with this Waterbody

3. Has a TMDL been completed for this receiving waterbody? *

○ Yes ◉ No

Outfalls

4. **List all of the stormwater outfalls from your facility. Each outfall must be identified by a unique 3-digit ID (e.g., 001, 002) or a 4-digit ID. Also provide the latitude and longitude in decimal degrees for each outfall.**

A. Outfall ID *

009

+

B. Latitude (Decimal Degrees) *

35.874951

-

C. Longitude (Decimal Degrees) *

106.319263

Lookup Receiving Waters Information

(This button will prepopulate the receiving water information associated with your outfall on your form. You may edit the information that is returned if you believe it is incorrect)

Delete Outfall

D. Substantially Identical to Any Outfalls Listed Above? *

○ Yes ◉ No

If for any reason the Lookup Receiving Water Information button does not prepopulate your form with receiving waters information, you must manually enter the information on your form.

Outfall Section

1. Provide the name of the first water of the U.S that receives stormwater directly from the outfall and/or from the MS4 that the outfall discharges to.
(You may edit the name of the water of the U.S. that was returned if incorrect.) *

SANDIA CANYON (SIGMA CANYON TO NPDES OUTFALL 001)

2. Is the receiving water listed as impaired on the 303(d) list and in need of a TMDL? *

(•) Yes ( ) No

4. List the pollutants that are causing the impairment:

Pollutant

Aluminum, total [as Al]

Delete Pollutant

Pollutant

Copper, total [as Cu]

Delete Pollutant

Pollutant

Alpha, total

Delete Pollutant

Pollutant

PCB IN WATER COLUMN

Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *

METALS (OTHER THAN MERCURY)

Pollutant *

Thallium, total [as Tl]

Delete Pollutant

Add Impairment Pollutant Associated with this Waterbody

3. Has a TMDL been completed for this receiving waterbody? *

( ) Yes (•) No

Outfalls

4. **List all of the stormwater outfalls from your facility. Each outfall must be identified by a unique 3-digit ID (e.g., 001, 002) or a 4-digit ID. Also provide the latitude and longitude in decimal degrees for each outfall.**

A. Outfall ID *

007

B. Latitude (Decimal Degrees) *

+ | 35.874095

C. Longitude (Decimal Degrees) *

- | 106.319009

Lookup Receiving Waters Information

(This button will prepopulate the receiving water information associated with your outfall on your form. You may edit the information that is returned if you believe it is incorrect)

Delete Outfall

D. Substantially Identical to Any Outfalls Listed Above? *

(•) Yes ( ) No

E. Substantially identical to outfall ID *

009

If for any reason the Lookup Receiving Water Information button does not prepopulate your form with receiving waters information, you must manually enter the information on your form.

Outfall Section

1. Provide the name of the first water of the U.S that receives stormwater directly from the outfall and/or from the MS4 that the outfall discharges to. (You may edit the name of the water of the U.S. that was returned if incorrect.) *

SANDIA CANYON (SIGMA CANYON TO NPDES OUTFALL 001)

2. Is the receiving water listed as impaired on the 303(d) list and in need of a TMDL? *

(•) Yes ( ) No

4. List the pollutants that are causing the impairment:

Pollutant

Aluminum, total [as Al]

Delete Pollutant

Pollutant

Copper, total [as Cu]

Delete Pollutant

Pollutant

Alpha, total

Delete Pollutant

Pollutant

PCB IN WATER COLUMN

Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *

METALS (OTHER THAN MERCURY)

Pollutant *

Thallium, total [as Tl]

Delete Pollutant

Add Impairment Pollutant Associated with this Waterbody

3. Has a TMDL been completed for this receiving waterbody? *

○ Yes ◉ No

Outfalls

4. **List all of the stormwater outfalls from your facility. Each outfall must be identified by a unique 3-digit ID (e.g., 001, 002) or a 4-digit ID. Also provide the latitude and longitude in decimal degrees for each outfall.**

A. Outfall ID *		B. Latitude (Decimal Degrees) *		C. Longitude (Decimal Degrees) *
008	+	35.874306	-	106.318891

Lookup Receiving Waters Information

(This button will prepopulate the receiving water information associated with your outfall on your form. You may edit the information that is returned if you believe it is incorrect)

Delete Outfall

D. Substantially Identical to Any Outfalls Listed Above? *

◉ Yes ○ No

E. Substantially identical to outfall ID *

009

If for any reason the Lookup Receiving Water Information button does not prepopulate your form with receiving waters information, you must manually enter the information on your form.

Outfall Section

1. Provide the name of the first water of the U.S that receives stormwater directly from the outfall and/or from the MS4 that the outfall discharges to. (You may edit the name of the water of the U.S. that was returned if incorrect.) *

SANDIA CANYON (SIGMA CANYON TO NPDES OUTFALL 001)

2. Is the receiving water listed as impaired on the 303(d) list and in need of a TMDL? *

◉ Yes ○ No

4. List the pollutants that are causing the impairment:

Pollutant

Aluminum, total [as Al]

Delete Pollutant

Pollutant

Copper, total [as Cu]

Delete Pollutant

Pollutant

Alpha, total

Delete Pollutant

Pollutant

PCB IN WATER COLUMN

Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *

METALS (OTHER THAN MERCURY)

Pollutant *

Thallium, total [as Tl]

Delete Pollutant

Add Impairment Pollutant Associated with this Waterbody

3. Has a TMDL been completed for this receiving waterbody? *

○ Yes ◉ No

Outfalls

4. **List all of the stormwater outfalls from your facility. Each outfall must be identified by a unique 3-digit ID (e.g., 001, 002) or a 4-digit ID. Also provide the latitude and longitude in decimal degrees for each outfall.**

A. Outfall ID *

010

+

B. Latitude (Decimal Degrees) *

35.874014

-

C. Longitude (Decimal Degrees) *

106.318428

Lookup Receiving Waters Information

(This button will prepopulate the receiving water information associated with your outfall on your form. You may edit the information that is returned if you believe it is incorrect)

Delete Outfall

D. Substantially Identical to Any Outfalls Listed Above? *

◉ Yes ○ No

E. Substantially identical to outfall ID *

009

If for any reason the Lookup Receiving Water Information button does not prepopulate your form with receiving waters information, you must manually enter the information on your form.

Outfall Section

1. Provide the name of the first water of the U.S that receives stormwater directly from the outfall and/or from the MS4 that the outfall discharges to. (You may edit the name of the water of the U.S. that was returned if incorrect.) *

SANDIA CANYON (SIGMA CANYON TO NPDES OUTFALL 001)

2. Is the receiving water listed as impaired on the 303(d) list and in need of a TMDL? *

◉ Yes ○ No

4. List the pollutants that are causing the impairment:

Pollutant

Aluminum, total [as Al]

Delete Pollutant

Pollutant

Copper, total [as Cu]

Delete Pollutant

Pollutant

Alpha, total

Delete Pollutant

Pollutant

PCB IN WATER COLUMN

Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *

METALS (OTHER THAN MERCURY)

Pollutant *

Thallium, total [as Tl]

Delete Pollutant

Add Impairment Pollutant Associated with this Waterbody

3. Has a TMDL been completed for this receiving waterbody? *

○ Yes ◉ No

Outfalls

4. **List all of the stormwater outfalls from your facility. Each outfall must be identified by a unique 3-digit ID (e.g., 001, 002) or a 4-digit ID. Also provide the latitude and longitude in decimal degrees for each outfall.**

A. Outfall ID *

011

+

B. Latitude (Decimal Degrees) *

35.875560

-

C. Longitude (Decimal Degrees) *

106.320764

Lookup Receiving Waters Information

(This button will prepopulate the receiving water information associated with your outfall on your form. You may edit the information that is returned if you believe it is incorrect)

Delete Outfall

D. Substantially Identical to Any Outfalls Listed Above? *

◉ Yes ○ No

E. Substantially identical to outfall ID *

012

If for any reason the Lookup Receiving Water Information button does not prepopulate your form with receiving waters information, you must manually enter the information on your form.

Outfall Section

1. Provide the name of the first water of the U.S that receives stormwater directly from the outfall and/or from the MS4 that the outfall discharges to. (You may edit the name of the water of the U.S. that was returned if incorrect.) *

SANDIA CANYON (SIGMA CANYON TO NPDES OUTFALL 001)

2. Is the receiving water listed as impaired on the 303(d) list and in need of a TMDL? *

◉ Yes ○ No

4. List the pollutants that are causing the impairment:

Pollutant

Aluminum, total [as Al]

Delete Pollutant

Pollutant

Copper, total [as Cu]

Delete Pollutant

Pollutant

Alpha, total

Delete Pollutant

Pollutant

PCB IN WATER COLUMN

Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *

METALS (OTHER THAN MERCURY)

Pollutant *

Thallium, total [as Tl]

Delete Pollutant

Add Impairment Pollutant Associated with this Waterbody

3. Has a TMDL been completed for this receiving waterbody? *

○ Yes ◉ No

Outfalls

4. **List all of the stormwater outfalls from your facility. Each outfall must be identified by a unique 3-digit ID (e.g., 001, 002) or a 4-digit ID. Also provide the latitude and longitude in decimal degrees for each outfall.**

A. Outfall ID *

012

+

B. Latitude (Decimal Degrees) *

35.875506

-

C. Longitude (Decimal Degrees) *

106.320842

Lookup Receiving Waters Information

(This button will prepopulate the receiving water information associated with your outfall on your form. You may edit the information that is returned if you believe it is incorrect)

Delete Outfall

D. Substantially Identical to Any Outfalls Listed Above? *

○ Yes ◉ No

If for any reason the Lookup Receiving Water Information button does not prepopulate your form with receiving waters information, you must manually enter the information on your form.

Outfall Section

1. Provide the name of the first water of the U.S that receives stormwater directly from the outfall and/or from the MS4 that the outfall discharges to. (You may edit the name of the water of the U.S. that was returned if incorrect.) *

SANDIA CANYON (SIGMA CANYON TO NPDES OUTFALL 001)

2. Is the receiving water listed as impaired on the 303(d) list and in need of a TMDL? *

(•) Yes ( ) No

4. List the pollutants that are causing the impairment:

Pollutant

Aluminum, total [as Al]

Delete Pollutant

Pollutant

Copper, total [as Cu]

Delete Pollutant

Pollutant

Alpha, total

Delete Pollutant

Pollutant

PCB IN WATER COLUMN

Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group * | Pollutant *

METALS (OTHER THAN MERCURY) | Thallium, total [as Tl] | Delete Pollutant

Add Impairment Pollutant Associated with this Waterbody

3. Has a TMDL been completed for this receiving waterbody? *

( ) Yes (•) No

Outfalls

4. **List all of the stormwater outfalls from your facility. Each outfall must be identified by a unique 3-digit ID (e.g., 001, 002) or a 4-digit ID. Also provide the latitude and longitude in decimal degrees for each outfall.**

A. Outfall ID * | B. Latitude (Decimal Degrees) * | C. Longitude (Decimal Degrees) *

004 | + | 35.871465 | - | 106.323844

Lookup Receiving Waters Information

(This button will prepopulate the receiving water information associated with your outfall on your form. You may edit the information that is returned if you believe it is incorrect)

Delete Outfall

D. Substantially Identical to Any Outfalls Listed Above? *

○ Yes ◉ No

If for any reason the Lookup Receiving Water Information button does not prepopulate your form with receiving waters information, you must manually enter the information on your form.

Outfall Section

1. Provide the name of the first water of the U.S that receives stormwater directly from the outfall and/or from the MS4 that the outfall discharges to. (You may edit the name of the water of the U.S. that was returned if incorrect.) *

TWO MILE CANYON (PAJARITO TO HEADWATERS)

2. Is the receiving water listed as impaired on the 303(d) list and in need of a TMDL? *

◉ Yes ○ No

4. List the pollutants that are causing the impairment:

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group * | Pollutant *

METALS (OTHER THAN MERCURY) | Aluminum, total [as Al]

Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group * | Pollutant *

RADIATION | Alpha, total

Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group * | Pollutant *

POLYCHLORINATED BIPHENYLS (PCBS) | Polychlorinated biphenyls [PCBs]

Delete Pollutant

Add Impairment Pollutant Associated with this Waterbody

3. Has a TMDL been completed for this receiving waterbody? *

○ Yes ◉ No

Outfalls

4. **List all of the stormwater outfalls from your facility. Each outfall must be identified by a unique 3-digit ID (e.g., 001, 002) or a 4-digit ID. Also provide the latitude and longitude in decimal degrees for each outfall.**

A. Outfall ID * | B. Latitude (Decimal Degrees) * | C. Longitude (Decimal Degrees) *

018 | + | 35.872781 | - | 106.317616

Lookup Receiving Waters Information

(This button will prepopulate the receiving water information associated with your outfall on your form. You may edit the information that is returned if you believe it is incorrect)

Delete Outfall

D. Substantially Identical to Any Outfalls Listed Above? *

( ) Yes (•) No

If for any reason the Lookup Receiving Water Information button does not prepopulate your form with receiving waters information, you must manually enter the information on your form.

Outfall Section

1. Provide the name of the first water of the U.S that receives stormwater directly from the outfall and/or from the MS4 that the outfall discharges to.
(You may edit the name of the water of the U.S. that was returned if incorrect.) *

SANDIA CANYON (SIGMA CANYON TO NPDES OUTFALL 001)

2. Is the receiving water listed as impaired on the 303(d) list and in need of a TMDL? *

(•) Yes ( ) No

4. List the pollutants that are causing the impairment:

Pollutant

Aluminum, total [as Al]

Delete Pollutant

Pollutant

Copper, total [as Cu]

Delete Pollutant

Pollutant

Alpha, total

Delete Pollutant

Pollutant

PCB IN WATER COLUMN

Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *

METALS (OTHER THAN MERCURY)

Pollutant *

Thallium, total [as Tl]

Delete Pollutant

Add Impairment Pollutant Associated with this Waterbody

3. Has a TMDL been completed for this receiving waterbody? *

( ) Yes (•) No

Outfalls

4. **List all of the stormwater outfalls from your facility. Each outfall must be identified by a unique 3-digit ID (e.g., 001, 002) or a 4-digit ID. Also provide the latitude and longitude in decimal degrees for each outfall.**

A. Outfall ID *		B. Latitude (Decimal Degrees) *		C. Longitude (Decimal Degrees) *
014	+	35.870641	-	106.316865

Lookup Receiving Waters Information

(This button will prepopulate the receiving water information associated with your outfall on your form. You may edit the information that is returned if you believe it is incorrect)

Delete Outfall

D. Substantially Identical to Any Outfalls Listed Above? *

(•) Yes ( ) No

E. Substantially identical to outfall ID *

018

If for any reason the Lookup Receiving Water Information button does not prepopulate your form with receiving waters information, you must manually enter the information on your form.

Outfall Section

1. Provide the name of the first water of the U.S that receives stormwater directly from the outfall and/or from the MS4 that the outfall discharges to. (You may edit the name of the water of the U.S. that was returned if incorrect.) *

MORTANDAD CANYON (WITHIN LANL)

2. Is the receiving water listed as impaired on the 303(d) list and in need of a TMDL? *

(•) Yes ( ) No

4. List the pollutants that are causing the impairment:

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *	
METALS (OTHER THAN MERCURY)	Aluminum, total [as Al]	Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *	
METALS (OTHER THAN MERCURY)	Copper, total [as Cu]	Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *	
POLYCHLORINATED BIPHENYLS (PCBS)	Polychlorinated biphenyls [PCBs]	Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *	
RADIATION	Alpha, total	Delete Pollutant

Add Impairment Pollutant Associated with this Waterbody

3. Has a TMDL been completed for this receiving waterbody? *

( ) Yes (•) No

Outfalls

4. **List all of the stormwater outfalls from your facility. Each outfall must be identified by a unique 3-digit ID (e.g., 001, 002) or a 4-digit ID. Also provide the latitude and longitude in decimal degrees for each outfall.**

A. Outfall ID *		B. Latitude (Decimal Degrees) *		C. Longitude (Decimal Degrees) *
013	+	35.870783	-	106.317349

Lookup Receiving Waters Information

(This button will prepopulate the receiving water information associated with your outfall on your form. You may edit the information that is returned if you believe it is incorrect)

Delete Outfall

D. Substantially Identical to Any Outfalls Listed Above? *

(•) Yes ( ) No

E. Substantially identical to outfall ID *

018

If for any reason the Lookup Receiving Water Information button does not prepopulate your form with receiving waters information, you must manually enter the information on your form.

Outfall Section

1. Provide the name of the first water of the U.S that receives stormwater directly from the outfall and/or from the MS4 that the outfall discharges to. (You may edit the name of the water of the U.S. that was returned if incorrect.) *

MORTANDAD CANYON (WITHIN LANL)

2. Is the receiving water listed as impaired on the 303(d) list and in need of a TMDL? *

(•) Yes ( ) No

4. List the pollutants that are causing the impairment:

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *	
METALS (OTHER THAN MERCURY)	Aluminum, total [as Al]	Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *	
METALS (OTHER THAN MERCURY)	Copper, total [as Cu]	Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *	
RADIATION	Alpha, total	Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *	
POLYCHLORINATED BIPHENYLS (PCBS)	Polychlorinated biphenyls [PCBs]	Delete Pollutant

Add Impairment Pollutant Associated with this Waterbody

3. Has a TMDL been completed for this receiving waterbody? *

( ) Yes (•) No

Outfalls

4. **List all of the stormwater outfalls from your facility. Each outfall must be identified by a unique 3-digit ID (e.g., 001, 002) or a 4-digit ID. Also provide the latitude and longitude in decimal degrees for each outfall.**

A. Outfall ID *		B. Latitude (Decimal Degrees) *		C. Longitude (Decimal Degrees) *
015	+	35.871403	-	106.316276

Lookup Receiving Waters Information

(This button will prepopulate the receiving water information associated with your outfall on your form. You may edit the information that is returned if you believe it is incorrect)

Delete Outfall

D. Substantially Identical to Any Outfalls Listed Above? *
(•) Yes ( ) No

E. Substantially identical to outfall ID *
018

If for any reason the Lookup Receiving Water Information button does not prepopulate your form with receiving waters information, you must manually enter the information on your form.

Outfall Section

1. Provide the name of the first water of the U.S that receives stormwater directly from the outfall and/or from the MS4 that the outfall discharges to. (You may edit the name of the water of the U.S. that was returned if incorrect.) *

MORTANDAD CANYON (WITHIN LANL)

2. Is the receiving water listed as impaired on the 303(d) list and in need of a TMDL? *
(•) Yes ( ) No

4. List the pollutants that are causing the impairment:

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *	
METALS (OTHER THAN MERCURY)	Aluminum, total [as Al]	Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *	
METALS (OTHER THAN MERCURY)	Copper, total [as Cu]	Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *	
RADIATION	Alpha, total	Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *	
POLYCHLORINATED BIPHENYLS (PCBS)	Polychlorinated biphenyls [PCBs]	Delete Pollutant

Add Impairment Pollutant Associated with this Waterbody

3. Has a TMDL been completed for this receiving waterbody? *
( ) Yes (•) No

Outfalls

4. **List all of the stormwater outfalls from your facility. Each outfall must be identified by a unique 3-digit ID (e.g., 001, 002) or a 4-digit ID. Also provide the latitude and longitude in decimal degrees for each outfall.**

A. Outfall ID *		B. Latitude (Decimal Degrees) *		C. Longitude (Decimal Degrees) *
016	+	35.872553	-	106.316810

Lookup Receiving Waters Information

(This button will prepopulate the receiving water information associated with your outfall on your form. You may edit the information that is returned if you believe it is incorrect)

Delete Outfall

D. Substantially Identical to Any Outfalls Listed Above? *

(•) Yes ( ) No

E. Substantially identical to outfall ID *

018

If for any reason the Lookup Receiving Water Information button does not prepopulate your form with receiving waters information, you must manually enter the information on your form.

Outfall Section

1. Provide the name of the first water of the U.S that receives stormwater directly from the outfall and/or from the MS4 that the outfall discharges to. (You may edit the name of the water of the U.S. that was returned if incorrect.) *

SANDIA CANYON (SIGMA CANYON TO NPDES OUTFALL 001)

2. Is the receiving water listed as impaired on the 303(d) list and in need of a TMDL? *

(•) Yes ( ) No

4. List the pollutants that are causing the impairment:

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *	
METALS (OTHER THAN MERCURY)	Aluminum, total [as Al]	Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *	
METALS (OTHER THAN MERCURY)	Copper, total [as Cu]	Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *	
METALS (OTHER THAN MERCURY)	Thallium, total [as Tl]	Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *	
POLYCHLORINATED BIPHENYLS (PCBS)	Polychlorinated biphenyls [PCBs]	Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *	
RADIATION	Alpha, total	Delete Pollutant

Add Impairment Pollutant Associated with this Waterbody

3. Has a TMDL been completed for this receiving waterbody? *

○ Yes ◉ No

Outfalls

4. **List all of the stormwater outfalls from your facility. Each outfall must be identified by a unique 3-digit ID (e.g., 001, 002) or a 4-digit ID. Also provide the latitude and longitude in decimal degrees for each outfall.**

A. Outfall ID *		B. Latitude (Decimal Degrees) *		C. Longitude (Decimal Degrees) *
017	+	35.872752	-	106.317329

Lookup Receiving Waters Information

(This button will prepopulate the receiving water information associated with your outfall on your form. You may edit the information that is returned if you believe it is incorrect)

Delete Outfall

D. Substantially Identical to Any Outfalls Listed Above? *

◉ Yes ○ No

E. Substantially identical to outfall ID *

018

If for any reason the Lookup Receiving Water Information button does not prepopulate your form with receiving waters information, you must manually enter the information on your form.

Outfall Section

1. Provide the name of the first water of the U.S that receives stormwater directly from the outfall and/or from the MS4 that the outfall discharges to. (You may edit the name of the water of the U.S. that was returned if incorrect.) *

SANDIA CANYON (SIGMA CANYON TO NPDES OUTFALL 001)

2. Is the receiving water listed as impaired on the 303(d) list and in need of a TMDL? *

◉ Yes ○ No

4. List the pollutants that are causing the impairment:

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *	
METALS (OTHER THAN MERCURY)	Aluminum, total [as Al]	Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *	
METALS (OTHER THAN MERCURY)	Copper, total [as Cu]	Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *	
METALS (OTHER THAN MERCURY)	Thallium, total [as Tl]	Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *	
POLYCHLORINATED BIPHENYLS (PCBS)	Polychlorinated biphenyls [PCBs]	Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *: RADIATION

Pollutant *: Alpha, total

Delete Pollutant

Add Impairment Pollutant Associated with this Waterbody

3. Has a TMDL been completed for this receiving waterbody? *

( ) Yes (•) No

Outfalls

4. **List all of the stormwater outfalls from your facility. Each outfall must be identified by a unique 3-digit ID (e.g., 001, 002) or a 4-digit ID. Also provide the latitude and longitude in decimal degrees for each outfall.**

A. Outfall ID *: 019

+

B. Latitude (Decimal Degrees) *: 35.872668

-

C. Longitude (Decimal Degrees) *: 106.318428

Lookup Receiving Waters Information

(This button will prepopulate the receiving water information associated with your outfall on your form. You may edit the information that is returned if you believe it is incorrect)

Delete Outfall

D. Substantially Identical to Any Outfalls Listed Above? *

(•) Yes ( ) No

E. Substantially identical to outfall ID *: 018

If for any reason the Lookup Receiving Water Information button does not prepopulate your form with receiving waters information, you must manually enter the information on your form.

Outfall Section

1. Provide the name of the first water of the U.S that receives stormwater directly from the outfall and/or from the MS4 that the outfall discharges to. (You may edit the name of the water of the U.S. that was returned if incorrect.) *

SANDIA CANYON (SIGMA CANYON TO NPDES OUTFALL 001)

2. Is the receiving water listed as impaired on the 303(d) list and in need of a TMDL? *

(•) Yes ( ) No

4. List the pollutants that are causing the impairment:

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *: METALS (OTHER THAN MERCURY)

Pollutant *: Aluminum, total [as Al]

Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *: METALS (OTHER THAN MERCURY)

Pollutant *: Copper, total [as Cu]

Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *: POLYCHLORINATED BIPHENYLS (PCBS)

Pollutant *: Polychlorinated biphenyls [PCBs]

Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *: METALS (OTHER THAN MERCURY)

Pollutant *: Thallium, total [as Tl]

Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *: RADIATION

Pollutant *: Alpha, total

Delete Pollutant

Add Impairment Pollutant Associated with this Waterbody

3. Has a TMDL been completed for this receiving waterbody? *

( ) Yes (•) No

Outfalls

4. **List all of the stormwater outfalls from your facility. Each outfall must be identified by a unique 3-digit ID (e.g., 001, 002) or a 4-digit ID. Also provide the latitude and longitude in decimal degrees for each outfall.**

A. Outfall ID *		B. Latitude (Decimal Degrees) *		C. Longitude (Decimal Degrees) *
051	+	35.830145	-	106.242675

Lookup Receiving Waters Information

(This button will prepopulate the receiving water information associated with your outfall on your form. You may edit the information that is returned if you believe it is incorrect)

Delete Outfall

D. Substantially Identical to Any Outfalls Listed Above? *

( ) Yes (•) No

If for any reason the Lookup Receiving Water Information button does not prepopulate your form with receiving waters information, you must manually enter the information on your form.

Outfall Section

1. Provide the name of the first water of the U.S that receives stormwater directly from the outfall and/or from the MS4 that the outfall discharges to. (You may edit the name of the water of the U.S. that was returned if incorrect.) *

PAJARITO CANYON (IN LANL BELOW ARROYO DE LA DELFE)

2. Is the receiving water listed as impaired on the 303(d) list and in need of a TMDL? *

(•) Yes ( ) No

4. List the pollutants that are causing the impairment:

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *: METALS (OTHER THAN MERCURY)

Pollutant *: Aluminum, total [as Al]

Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *: METALS (OTHER THAN MERCURY)

Pollutant *: Copper, total [as Cu]

Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *: POLYCHLORINATED BIPHENYLS (PCBS)

Pollutant *: Polychlorinated biphenyls [PCBs]

Delete Pollutant

Add Impairment Pollutant Associated with this Waterbody

3. Has a TMDL been completed for this receiving waterbody? *

( ) Yes (•) No

Outfalls

4. **List all of the stormwater outfalls from your facility. Each outfall must be identified by a unique 3-digit ID (e.g., 001, 002) or a 4-digit ID. Also provide the latitude and longitude in decimal degrees for each outfall.**

A. Outfall ID *: 072

+

B. Latitude (Decimal Degrees) *: 35.832885

-

C. Longitude (Decimal Degrees) *: 106.239443

Lookup Receiving Waters Information

(This button will prepopulate the receiving water information associated with your outfall on your form. You may edit the information that is returned if you believe it is incorrect)

Delete Outfall

D. Substantially Identical to Any Outfalls Listed Above? *

( ) Yes (•) No

If for any reason the Lookup Receiving Water Information button does not prepopulate your form with receiving waters information, you must manually enter the information on your form.

Outfall Section

1. Provide the name of the first water of the U.S that receives stormwater directly from the outfall and/or from the MS4 that the outfall discharges to.
(You may edit the name of the water of the U.S. that was returned if incorrect.) *

CANADA DEL BUEY (WITHIN LANL)

2. Is the receiving water listed as impaired on the 303(d) list and in need of a TMDL? *

(•) Yes ( ) No

4. List the pollutants that are causing the impairment:

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *: METALS (OTHER THAN MERCURY)

Pollutant *: Aluminum, total [as Al]

Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *: POLYCHLORINATED BIPHENYLS (PCBS)

Pollutant *: Polychlorinated biphenyls [PCBs]

Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *: RADIATION

Pollutant *: Alpha, total

Delete Pollutant

Add Impairment Pollutant Associated with this Waterbody

3. Has a TMDL been completed for this receiving waterbody? *

○ Yes ◉ No

Outfalls

4. **List all of the stormwater outfalls from your facility. Each outfall must be identified by a unique 3-digit ID (e.g., 001, 002) or a 4-digit ID. Also provide the latitude and longitude in decimal degrees for each outfall.**

A. Outfall ID *		B. Latitude (Decimal Degrees) *		C. Longitude (Decimal Degrees) *
020	+	35.872251	-	106.316273

Lookup Receiving Waters Information

(This button will prepopulate the receiving water information associated with your outfall on your form. You may edit the information that is returned if you believe it is incorrect)

Delete Outfall

D. Substantially Identical to Any Outfalls Listed Above? *

○ Yes ◉ No

If for any reason the Lookup Receiving Water Information button does not prepopulate your form with receiving waters information, you must manually enter the information on your form.

Outfall Section

1. Provide the name of the first water of the U.S that receives stormwater directly from the outfall and/or from the MS4 that the outfall discharges to. (You may edit the name of the water of the U.S. that was returned if incorrect.) *

SANDIA CANYON (SIGMA CANYON TO NPDES OUTFALL 001)

2. Is the receiving water listed as impaired on the 303(d) list and in need of a TMDL? *

◉ Yes ○ No

4. List the pollutants that are causing the impairment:

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *	
METALS (OTHER THAN MERCURY)	Aluminum, total [as Al]	Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *	
METALS (OTHER THAN MERCURY)	Copper, total [as Cu]	Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *	
METALS (OTHER THAN MERCURY)	Thallium, total [as Tl]	Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *	Pollutant *	
POLYCHLORINATED BIPHENYLS (PCBS)	Polychlorinated biphenyls [PCBs]	Delete Pollutant

Please select the cause group and pollutant for which the waterbody is impaired:

Cause Group *: RADIATION

Pollutant *: Alpha, total

Delete Pollutant

Add Impairment Pollutant Associated with this Waterbody

3. Has a TMDL been completed for this receiving waterbody? *

( ) Yes (•) No

Add Another Outfall

Provide the following information about your outfall latitude longitude.

5. Latitude/Longitude Data Source *: GPS

6. Horizontal Reference Datum: NAD83

7. Does your facility discharge into a Municipal Separate Storm Sewer System (MS4)? *

( ) Yes (•) No

8. Do you discharge to any of the waters of the U.S. that are designated by the state or tribal authority under its antidegradation policy as a Tier 2 (or Tier 2.5) water (water quality exceeds levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water) (See Appendix L)? *

( ) Yes (•) No

D: Stormwater Pollution Prevention Plan (SWPPP) Information

SWPPP Contact Information

1. First Name *: Holly

2. Middle Initial:

3. Last Name *: Wheeler

4. Professional Title *: Environmental Professional

5. Phone (10-digits, No dashes) *: 5056671312

6. Extension:

7. E-Mail *: hbenson@lanl.gov

8. Your current SWPPP or certain information from your SWPPP must be made available through one of the following two options. Select one of the options and provide the required information. *

Note: You are not required to post any confidential business information (CBI) or restricted information (as defined in Appendix A) (such information may be redacted), but you must clearly identify those portions of the SWPPP that are being withheld from public access.

☒ Option 1: Maintain a Current Copy of your SWPPP on an Internet page (Universal Resource Locator or URL).

Provide the web address URL *: eprr.lanl.gov

☐ Option 2: Provide the following information from your SWPPP.

E: Endangered Species Protection

1. Using the instructions in Appendix E of the MSGP, under which endangered species criterion listed in Part 1.1.4.5 are you eligible for coverage under this permit? *

Criterion D – A separate ESA section 7 consultation has been completed

2. Provide a brief summary of the basis for the criterion selected in Appendix E (e.g., communication with U.S. Fish and Wildlife Service or National Marine Fisheries Service to determine no species in action area; implementation of controls approved by EPA and the Services). *

Direct consultation with the U.S. Fish and Wildlife Service and corresponding development and implementation of a facility-specific Habitat Management Plan.

You must attach copies of any letters or other communications with the U.S. Fish and Wildlife Service or National Marine Fisheries Service on the attachments screen after you click "Submit Now"

F: Historic Preservation

1. If your facility is not located in Indian country lands, is your facility located on a property of religious or cultural significance to an Indian tribe? *

(●) Yes ( ) No

1a. If yes, provide the name of the Indian tribe associated with the property *

San Ildefonso Pueblo

2. Using the instructions in Appendix F of the MSGP, under which historic properties preservation criterion listed in Part 1.1.4.7 are you eligible for coverage under this permit *

Criterion B - Subsurface stormwater controls will not affect historic properties

Certification Information

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. 40 CFR 122.22 (d)

Certifier E-Mail *

ADORRIES@LANL.GOV

Form Action *

Approve

From:	Lemke, Terrill W
To:	Wheeler, Holly Lynn; Grieggs, Tony
Subject:	FW: EPA Multi-Sector General Permit (MSGP) Authorization is Active – Los Alamos National Laboratory, NPDES ID: NMR053195, NeT Submission ID: MSGP-3095
Date:	Monday, October 05, 2015 8:22:15 AM
Attachments:	AcceptedNewNOIReceipt.pdf

Terrill Lemke, PE, CPESC, CISEC
Environmental Compliance Programs
Los Alamos National Laboratory
Los Alamos, NM
Office: 505-665-2397
Cell: 505-699-0725

From: NeT@epa.gov [mailto:NeT@epa.gov]
Sent: Saturday, October 03, 2015 5:48 PM
To: Dorries, Alison Marie
Cc: Lemke, Terrill W; lee.won@epa.gov; lescure.nasrin@epa.gov; emily@avanticorporation.com; farris.erika@epa.gov; Christiane@avanticorporation.com; bius.catherine@epa.gov
Subject: EPA Multi-Sector General Permit (MSGP) Authorization is Active – Los Alamos National Laboratory, NPDES ID: NMR053195, NeT Submission ID: MSGP-3095

2015-10-03

Your Notice of Intent (NOI) requesting coverage for Los Alamos National Laboratory, PO Box 1663 MS K490 Los Alamos NM 87545 under EPA's Multi-Sector General Permit (MSGP) has been accepted and authorization to discharge under the MSGP became effective at the conclusion of your 30-day waiting period, on 2015-10-03.

For tracking purposes, the following NPDES ID has been assigned to your NOI: NMR053195. Attached to this email, you will find a copy of your completed NOI form. To access your NOI in NeT, please visit: https://cdx.epa.gov/epa_home.asp.

As you know, the MSGP requires you to have developed a Stormwater Pollution Prevention Plan (SWPPP) prior to submitting your NOI. The MSGP also includes specific requirements for implementing control measures (e.g., minimize exposure, good housekeeping, maintenance, spill prevention and response), conducting self-inspections and visual assessments of your discharges, taking corrective actions, and conducting staff training. You must comply with any specific requirements applicable to your industrial sector(s) in Part 8 and any state/tribal-specific requirements in Part 9 (see http://water.epa.gov/polwaste/npdes/stormwater/EPA-Multi-Sector-General-Permit-MSGP.cfm). You are also required to submit an Annual Report in accordance with Part 7.5 of the MSGP that will contain the results from your past year's routine facility inspections, quarterly visual assessments, and corrective actions. Annual Reports must be submitted to EPA through NeT.

The MSGP includes five types of required analytical monitoring, one or more of which may apply to your discharge:

- Quarterly benchmark monitoring (see Part 6.2.1 and Part 8);
- Annual effluent limitations guidelines monitoring (see Part 6.2.2 and Part 8);
- State- or tribal-specific monitoring (see Part 6.2.3 and Part 9);
- Impaired waters monitoring (see Part 6.2.4); and
- Other monitoring as required by EPA (see Part 6.2.5).

Monitoring requirements in the MSGP (i.e., parameters required to be monitored and sample frequency) will be prepopulated on your electronic Discharge Monitoring Report (DMR) in EPA's NetDMR system, which is accessed at http://www.epa.gov/netdmr/. Where you have determined that no monitoring requirements apply to your discharge, there is no need to access the NetDMR system. In order to obtain access to this system, you must complete the electronic signature process. Please refer to the following guidance for information about submitting monitoring reports through NetDMR: http://water.epa.gov/polwaste/npdes/stormwater/Stormwater-eNOI-System-for-EPAs-MultiSector-General-Permit.cfm.

Please note that this email does not represent a determination by EPA regarding the validity of the information you provided in your NOI. Your eligibility for coverage under this permit is based on the validity of the certification you provided. Your electronic signature on the NOI form certifies that you have read, understood, and are implementing all of the applicable requirements. An important aspect of this certification requires that you have correctly determined whether you are eligible for coverage under this permit.

The 2014 MSGP and additional guidance are available at: http://water.epa.gov/polwaste/npdes/stormwater/EPA-Multi-Sector-General-Permit-MSGP.cfm. Please contact your EPA Regional permitting authority at lee.won@epa.gov; lescure.nasrin@epa.gov; emily@avanticorporation.com; farris.erika@epa.gov; Christiane@avanticorporation.com; bius.catherine@epa.gov for more information.

This is an automated response; please do not reply to this email.

Environmental Protection Division
Environmental Compliance Programs (ENV-CP)
PO Box 1663, K490
Los Alamos, New Mexico 87545
(505) 667-0666

Date: NOV 17 2015
Symbol: ENV-DO-15-0326
LA-UR: 15-28966
Locates Action No.: N/A

Ms. Nasim Jahan
Water Quality Protection Division (6WQ)
U.S. Environmental Protection Agency, Region 6
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

Dear Ms. Jahan:

Subject: **National Pollutant Discharge Elimination System (NPDES) Permit Tracking No. NMR053195, Multi-Sector General Permit (MSGP) 45 Day Extension Notification Pursuant to Part 4.3.2**

In accordance with Part 4.3.2 of the 2015 NPDES Multi-Sector General Permit, the purpose of this letter is to notify EPA Region 6 personnel that completion of corrective actions for three items at Los Alamos National Laboratory (MSGP Tracking No. NMR053195) will exceed 45 days. For each of these items, the rationale for an extension and a proposed completion date are included in the Table 1, below.

Table 1 – MSGP Corrective Action 45 Day Extensions

LANL Tracking #	Condition Requiring Corrective Action	Rationale for Extension	Proposed Completion Date
778	The channel on the south end of the lower yard at the TA-60 Heavy Equipment Yard needs to be cleaned out and re-established. There is one point in the channel by a Chinese Elm tree that the water is bypassing the channel.	This corrective action is being addressed through LANL's institutional computer-based Facility Service Request (FSR) system, which utilizes multiple inputs for prioritizing work. However, the FSR system is not currently designed to recognize or accept MSGP corrective action as an input for work prioritization. This affects work scheduling and execution. The inability	12/04/2015

		of the LANL FSR system to prioritize MSGP corrective actions is being recognized at this time (management system policy and procedures). This corrective action is being scheduled for completion.	
792	Water was discharging from a leak in the steam condensate line into a drainage swale east of TA-3-66.	This corrective action is being addressed through LANL's institutional computer-based FSR system. The LANL Utilities Organization responsible for the work is also currently addressing multiple steam leaks across the LANL site. The FSR system utilizes multiple inputs for prioritizing work, however, it is not currently designed to recognize or accept MSGP corrective action as an input for work prioritization. This affects work scheduling and execution. The responsiveness of the LANL work control system to prioritize MSGP corrective actions is being recognized at this time (management system policy and procedures). The Utilities Organization is preparing a work package and will schedule the work in the near future.	11/25/2015
845	At TA-60 Roads and Grounds east, there is a pile of soil, tuff, asphalt, and concrete mixed with metal bollards staged north of Eniwetok Road.	The work crew is still segregating the material to identify content acceptable for recycling and material requiring disposal. This process requires development and evaluation of an internal waste profile, which is currently in process.	11/24/2015

If you have any questions or need additional information, please contact Terrill Lemke at (505) 665-2397.

Sincerely,

Alison M. Dorries
Division Leader
Environmental Protection Division
Los Alamos National Security, LLC

AMD:TWL:HLW/lm

Cy: Bruce Yurdin, NMED/SWQB, Santa Fe, NM, (E-File)
Gene E. Turner, LASO-NS-LP, (E-File)
Jorden Arnswald, LASO-NS-PI, (E-File)
Kirsten Lanskey, LASO-SUP, (E-File)
Craig Leasure, PADOPS, (E-File)
Amy E. De Palma, PADOPS, (E-File)
Michael T. Brandt, ADESH, (E-File)
Raeanna Sharp-Geiger, ADESH, (E-File)
Alison M. Dorries, ENV-DO, (E-File)
Michael T. Saladen, ENV-CP, (E-File)
Terrill W. Lemke, ENV-CP, (E-File)
Holly L. Wheeler, ENV-CP, (E-File)
lasomailbox@nnsa.doe.gov, (E-File)
locatesteam@lanl.gov, (E-File)
env-correspondence@lanl.gov

Los Alamos
NATIONAL LABORATORY
EST. 1943

Environment Safety & Health
PO Box 1663, MS K491
Los Alamos, New Mexico 87545
(505) 667-4218/Fax (505) 665-3811

Date: MAR 2 2 2016
Symbol: ADESH-16-045
LA-UR: 16-21721
Locates Action No.: N/A

Stormwater Notice Processing Center
Mail Code 4203M, ATTN: 2015 MSGP Reports
U.S. EPA
1200 Pennsylvania Avenue, NW
Washington, DC 20460

To Whom It May Concern:

Subject: **Transmittal of the National Pollutant Discharge Elimination System (NPDES) Notice of Intent (NOI) For Stormwater Discharges Associated with Industrial Activity under the Multi-Sector General Permit (MSGP) Tracking No. NMR053195**

The purpose of this letter is to transmit a complete/correct NOI for stormwater discharges associated with industrial activity under the MSGP for Los Alamos National Laboratory (LANL) (Enclosure 1) on behalf of Los Alamos National Security LLC. LANS operates LANL for the Department of Energy. Per Section G of the attached NOI, three concurrence letters from the United States Department of Interior, Fish and Wildlife Service are provided in Enclosure 2. While submitting a NOI for coverage under the new 2015 MSGP, LANS experienced significant problems with EPA's Net NPDES eReporting tool, which resulted in the initial submission of a NOI with incomplete outfall attribute data and incorrect information. The details of these issues were provided in a letter sent to Mr. Bret Larsen of EPA Region 6 on October 29, 2015 (ENV-DO-15-0309) (Enclosure 3).

The initial NOI was submitted in the Net eReporting tool on 9/02/2015, which resulted in a follow-up e-mail on 9/03/2015 from NeT@epa.gov stating the NOI requesting coverage for Los Alamos National Laboratory under EPA's 2015 MSGP had been certified and submitted to EPA for review, and assigned NPDES ID NMR053195. Please note, this tracking number has been inserted in Section B of Enclosure 1 to prevent confusion or assignment of an additional tracking number. Authorization to discharge under the 2015 MSGP was sent to LANS on 10/03/2015.

Repeated attempts to update the NOI via the "Change NOI" form have resulted in the same system problems without successful submittal of all required information via NeT. As such, an e-mail request for waiver pursuant to Part 7.1 of the 2015 MSGP was sent to Ms. Nasim Jahan on 2/05/2016. On 2/09/2016 Ms. Jahan responded by indicating "LANL can submit their paper copy."

LANL has 14 industrial sites covering eight (8) sectors, with 74 outfalls (26 monitored outfalls and 48 associated substantially identical outfalls) discharging to five (5) assessment units on the Clean Water Act 303(d) list (impaired waters without an EPA-approved or established TMDL pursuant to Part 6.2.4.1 of the 2015 MSGP). In addition, due to extended frozen conditions in the winter and the semi-arid climate, LANS implements an alternate monitoring period of four (4) two-month monitoring quarters for benchmark values as identified below, in accordance with Part 6.1.6 of the 2015 MSGP. This does not coincide with the four (4) three month monitoring quarters for benchmark values currently in the NetDMR.

April 1 through May 31
June 1 through July 31
August 1 through September 30
October 1 through November 30

To facilitate complete and accurate information in the NeT reporting system, LANS has provided an additional table (Enclosure 4) containing sector-specific information per MSGP site within the 36 square mile facility and listed each site's associated outfalls. The premise for providing this information is to determine whether the NeT tool can prepopulate the electronic Discharge Monitoring Report (DMR) form based on this information without causing inaccuracies or rejected data (non-fillable forms due to unresolvable hard errors). In addition, LANS is concerned that incomplete or incorrect NOI information will perpetuate a recurring prohibitive "domino effect" on subsequent electronic DMR filing and "Change NOI" forms.

LANS respectfully requests consideration of waivers for electronic submittal of MSGP DMRs using the NetDMR system until it is determined whether the attached NOI can be submitted by EPA's Subcontractor into the NeT tool. Once this occurs, LANS can determine how information is populating the NetDMR system and whether it will accept applicable data without causing prohibitive hard errors.

Any additional direction or guidance you may have would be appreciated. Please contact Terrill Lemke of Environmental Protection and Compliance, Compliance Programs (EPC-CP) at (505) 665-2397 if you have any questions regarding this NOI.

Sincerely,

Michael T. Brandt, DrPH, CIH
Associate Director
Environment, Safety & Health
Los Alamos National Security, LLC
Los Alamos National Laboratory

MTB:TWL:HLW/lm

Enclosure: 1. Notice of Intent (NOI) For Stormwater Discharges Associated With Industrial Activity Under the NPDES Multi-Sector General Permit
2. Concurrence letters from United States Department of Interior, Fish and Wildlife Service

3. Multi-Sector General Permit (MSGP) Notice of Intent (NOI) Reporting Pursuant to Part B.12.H
4. Industrial Sites and Outfalls by Sector

Cy: Nasim Jahan, USEPA/Region 6, Dallas, TX, (E-File)
Bruce Yurdin, NMED/SWQB, Santa Fe, NM, (E-File)
Jordan Arnswald, NA-LA, (E-File)
Craig S. Leasure, PADOPS, (E-File)
William Mairson, PADOPS, (E-File)
Michael T. Brandt, ADESH, (E-File)
Raeanna Sharp-Geiger, ADESH, (E-File)
John P. McCann, EPC-DO, (E-File)
Terrill W. Lemke, EPC-CP, (E-File)
Holly L. Wheeler, EPC-CP, (E-File)
Timothy A. Dolan, LC-ESH, (E-File)
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ENCLOSURE 1

Notice of Intent (NOI) For Stormwater Discharges Associated With Industrial Activity Under the NPDES Multi-Sector General Permit

ADESH-16-045

LA-UR-16-21721

Date: MAR 2 2 2016

NPDES FORM 3510-6	EPA	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460 NOTICE OF INTENT (NOI) FOR STORMWATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY UNDER THE NPDES MULTI-SECTOR GENERAL PERMIT	Form Approved. OMB No. 2040-0004

Submission of this Notice of Intent (NOI) constitutes notice that the operator identified in Section C of this form requests authorization to discharge pursuant to the NPDES Stormwater Multi-Sector General Permit (MSGP) permit number identified in Section B of this form. Submission of this NOI also constitutes notice that the operator identified in Section C of this form meets the eligibility conditions of Part 1.1 of the MSGP for the facility identified in Section D of this form. To obtain authorization, you must submit a complete and accurate NOI form. Discharges are not authorized if your NOI is incomplete or inaccurate or if you were never eligible for permit coverage. Refer to the instructions at the end of this form to complete your NOI.

A. Approval to Use Paper NOI Form

1. Have you been granted a waiver from electronic reporting from the EPA Regional Office*? ■ YES ☐ NO

If yes, check which waiver you have been granted, the name of the EPA Regional Office staff person who granted the waiver, and the date of approval:

Waiver granted: ☐ The owner/operator's headquarters is physically located in a geographic area (i.e., ZIP code or census tract) that is identified as under-served for broadband Internet access in the most recent report from the Federal Communications Commission.

■ The owner/operator has issues regarding available computer access or computer capability.

Name of EPA staff person that granted the waiver: Nasim Jahan

Date approval obtained: 02/09/2016

* **Note: You are required to obtain approval from the applicable EPA Regional Office prior to using this paper NOI form. If you have not obtained a waiver, you must file this form electronically using the NPDES eReporting Tool (NeT) at** http://water.epa.gov/polwaste/npdes/stormwater/Stormwater-eNOI-System-for-EPAs-MultiSector-General-Permit.cfm

B. Permit Information

NPDES ID (EPA Use Only): NMR053195

1. Master Permit Number: NMR050000 (see Appendix C of the MSGP for the list of eligible master permit numbers)

2. Are you a new discharger or a new source as defined in Appendix A? ☐ YES ■ NO (If yes, skip to Part C of this form).

3. If you are not a new discharger or a new source, have stormwater discharges from your facility been covered previously under an NPDES permit?

■ YES ☐ NO

If yes, provide the NPDES ID if you had coverage under EPA's 2008 MSGP or the NPDES ID if you had coverage under an EPA individual permit: NMR05GB21

C. Facility Operator Information

1. Operator Information:

Operator Name: Los Alamos National Security LLC

Mailing Address:

Street: PO Box 1663

City: Los Alamos State: NM ZIP Code: 87545-

County or Similar Government Subdivision: Los Alamos

Phone: 505-665-2397 Ext.

E-mail: tlemke@lanl.gov

2. Operator Point of Contact Information:

First Name, Middle Initial, Last Name: Terrill W Lemke

Title: Environmental Manager

3. NOI Preparer Information (Complete if NOI was prepared by someone other than the certifier):

First Name, Middle Initial, Last Name: Holly L Wheeler

Organization: Los Alamos National Security LLC

Phone: 505-667-1312 Ext.

E-mail: hbenson@lanl.gov

D. Facility Information

1. Facility Name: Los Alamos National Laboratory

2. Facility Address:

Street/Location: PO Box 1663

City: Los Alamos State: NM ZIP Code: 87545 -

County or Similar Government Subdivision: Los Alamos

3. Latitude/Longitude for the facility:

Latitude: 35.872777° N (decimal degrees) Longitude: 106.321127° W (decimal degrees)

Latitude/Longitude Data Source: ☐ Map ☐ GPS ■ Other

If you used a USGS topographic map, what was the scale? _____

Horizontal Reference Datum: ☐ NAD 27 ☐ NAD 83 ■ WGS 84

4. Is your facility located on Indian Country lands? ☐ YES ■ NO

If yes, provide the name of the Indian tribe associated with the area of Indian country (including name of Indian reservation, if applicable):

_____

5. Are you requesting coverage under this NOI as a "federal operator" as defined in Appendix A? ■ YES ☐ NO

6. What is the ownership type of the facility? ■ Federal Facility (U.S. Government) ☐ Privately Owned Facility ☐ Municipality ☐ County Government ☐ Corporation ☐ State Government ☐ Tribal Government ☐ School District ☐ District ☐ Mixed Ownership (e.g. Public/Private) ☐ Municipal or Water District

7. Estimated area of industrial activity at your facility exposed to stormwater: 131.36 (to the nearest quarter acre)

8. Sector-Specific Information

Identify the 4-digit Standard Industrial Classification (SIC) code or 2-letter Activity Code that best represents the products produced or services rendered for which your facility is primarily engaged, as defined in the MSGP, and the applicable sector and subsector of your primary industrial activity (See Appendix D):

Primary SIC Code: 3449 OR **Primary Activity Code:**

Sector: AA **Subsector:** AA1

Identify the applicable sector(s) and subsector(s) of any co-located industrial activity for which you are requesting permit coverage:

Sector: P **Subsector:** P1 **Sector:** K **Subsector:** K1 **Sector:** A **Subsector:** A4 **Sector:** D **Subsector:** D1

Sector: O **Subsector:** O1 **Sector:** F **Subsector:** F4 **Sector:** N **Subsector:** N2 **Sector:** **Subsector:**

If you are a Sector S (Air Transportation) facility, do you anticipate using more than 100,000 gallons of pure glycol in glycol-based deicing fluids and/or 100 tons or more of urea on an average annual basis? ☐ YES ☐ NO

If you are a Sector G (Metal Mining) facility, do you have discharges from waste rock and overburden piles? ☐ YES ☐ NO

Check the type of ore you mine at your facility: ☐ Tungsten Ore ☐ Nickel Ore ☐ Aluminum Ore ☐ Mercury Ore ☐ Iron Ore ☐ Platinum Ore ☐ Titanium Ore ☐ Vanadium Ore ☐ Molybdenum ☐ Uranium, Radium, and/or Vanadium Ore

9. Is your facility presently inactive and unstaffed?* ☐ YES ■ NO

* Note that if your facility becomes inactive and unstaffed during the permit term, you must submit an NOI modification to reflect the change.

E. Discharge Information

1. By indicating "Yes" below, I confirm that I understand that the MSGP only authorizes the allowable stormwater discharges in Part 1.1.2 and the allowable non-stormwater discharges listed in Part 1.1.3. Any discharges not expressly authorized in this permit cannot become authorized or shielded from liability under CWA section 402(k) by disclosure to EPA, state, or local authorities after issuance of this permit via any means, including the Notice of Intent (NOI) to be covered by the permit, the Stormwater Pollution Prevention Plan (SWPPP), during an inspection, etc. If any discharges requiring NPDES permit coverage other than the allowable stormwater and non-stormwater discharges listed in Parts 1.1.2 and 1.1.3 will be discharged, they must be covered under another NPDES permit. ■ YES

2. Federal Effluent Limitation Guidelines

Are you requesting permit coverage for any stormwater discharges subject to effluent limitation guidelines? ■ YES ☐ NO

If yes, which effluent limitation guidelines apply to your stormwater discharges?

40 CFR Part/Subpart	Eligible Discharges	Affected MSGP Sector	New Source Date	Check if Applicable
Part 411, Subpart C	Runoff from material storage piles at cement manufacturing facilities	E	2/20/1974	☐
Part 418 Subpart A	Runoff from phosphate fertilizer manufacturing facilities that comes into contact with any raw materials, finished product, by-products or waste products (SIC 2874)	C	4/8/1974	☐
Part 423	Coal pile runoff at steam electric generating facilities	O	11/19/1982 10/8/1974[1]	☐
Part 429, Subpart I	Discharges resulting from spray down or intentional wetting of logs at wet deck storage areas	A	1/26/1981	☐
Part 436, Subpart B, C, or D	Mine dewatering discharges at crushed stone mines, construction sand and gravel mines, or industrial sand mines	J	N/A	☐
Part 443, Subpart A	Runoff from asphalt emulsion facilities	D	7/28/1975	☒
Part 445, Subparts A & B	Runoff from hazardous waste and non-hazardous waste landfills	K, L	2/2/2000	☐
Part 449	Runoff containing urea from airfield pavement deicing at existing and new primary airports with 1,000 or more annual non-propeller aircraft departures	S	6/15/2012	☐

[1]NSPS promulgated in 1974 were not removed via the 1982 regulation; therefore wastewaters generated by Part 423-applicable sources that were New Sources under the 1974 regulations are subject to the 1974 NSPS.

3. Receiving Waters Information: (Attach a separate list if necessary)

List all of the stormwater outfalls from your facility. Each outfall must be identified by a unique 3-digit ID (e.g., 001, 002). Also provide the latitude and longitude in degrees decimal for each outfall.		**For each outfall, provide the following receiving water information:**		
		Provide the name of the first water of the U.S. that receives stormwater directly from the outfall and/or from the MS4 that the outfall discharges to:	**If the receiving water is impaired (on the CWA 303(d) list), list the pollutants that are causing the impairment:**	**If a TMDL been completed for this receiving waterbody, providing the following information:**
Outfall ID	002	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	Aluminum, total Copper, dissolved Gross Alpha, adjusted Polychlorinated Biphenyls (PCBs) Thallium, dissolved	**TMDL Name and ID:** N/A **Pollutant(s) for which there is a TMDL:** N/A
Latitude	35.875797			
Longitude	-106.327580			
Outfall ID	004	Two Mile Canyon (Pajarito to headwaters)	Aluminum, total Gross Alpha, adjusted PCBs	**TMDL Name and ID:** N/A **Pollutant(s) for which there is a TMDL:** N/A
Latitude	35.871431			
Longitude	-106.323832			

If substantially identical to other outfall, list identical outfall ID: _____

Outfall ID	005	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	Aluminum, total Copper, dissolved Gross Alpha, adjusted PCBs Thallium, dissolved	TMDL Name and ID: N/A Pollutant(s) for which there is a TMDL: N/A
Latitude	35.873919			
Longitude	-106.320746			
If substantially identical to other outfall, list identical outfall ID: _____				
Outfall ID	006	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	Aluminum, total Copper, dissolved Gross Alpha, adjusted PCBs Thallium, dissolved	TMDL Name and ID: N/A Pollutant(s) for which there is a TMDL: N/A
Latitude	35.874011			
Longitude	-106.319858			
If substantially identical to other outfall, list identical outfall ID: 005				
Outfall ID	009	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	Aluminum, total Copper, dissolved Gross Alpha, adjusted PCBs Thallium, dissolved	TMDL Name and ID: N/A Pollutant(s) for which there is a TMDL: N/A
Latitude	35.874843			
Longitude	-106.319412			
If substantially identical to other outfall, list identical outfall ID: _____				
Outfall ID	007	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	Aluminum, total Copper, dissolved Gross Alpha, adjusted PCBs Thallium, dissolved	TMDL Name and ID: N/A Pollutant(s) for which there is a TMDL: N/A
Latitude	35.874014			
Longitude	-106.319203			
If substantially identical to other outfall, list identical outfall ID: 009				

Outfall ID	008	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	Aluminum, total Copper, dissolved Gross Alpha, adjusted PCBs Thallium, dissolved	TMDL Name and ID: N/A Pollutant(s) for which there is a TMDL: N/A
Latitude	35.874617			
Longitude	-106.318925			
If substantially identical to other outfall, list identical outfall ID: 009				
Outfall ID	010	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	Aluminum, total Copper, dissolved Gross Alpha, adjusted PCBs Thallium, dissolved	TMDL Name and ID: N/A Pollutant(s) for which there is a TMDL: N/A
Latitude	35.875402			
Longitude	-106.320301			
If substantially identical to other outfall, list identical outfall ID: 009				
Outfall ID	012	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	Aluminum, total Copper, dissolved Gross Alpha, adjusted PCBs Thallium, dissolved	TMDL Name and ID: N/A Pollutant(s) for which there is a TMDL: N/A
Latitude	35.875532			
Longitude	-106.320884			
If substantially identical to other outfall, list identical outfall ID:				
Outfall ID	011	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	Aluminum, total Copper, dissolved Gross Alpha, adjusted PCBs Thallium, dissolved	TMDL Name and ID: N/A Pollutant(s) for which there is a TMDL: N/A
Latitude	35.875563			
Longitude	-106.320744			
If substantially identical to other outfall, list identical outfall ID: 012				

Outfall ID	018	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	Aluminum, total Copper, dissolved Gross Alpha, adjusted PCBs Thallium, dissolved	TMDL Name and ID: N/A Pollutant(s) for which there is a TMDL: N/A
Latitude	35.872834			
Longitude	-106.317653			
If substantially identical to other outfall, list identical outfall ID: _____				
Outfall ID	013	Mortandad Canyon (Within LANL)	Aluminum, total Copper, dissolved Gross Alpha, adjusted PCBs	TMDL Name and ID: N/A Pollutant(s) for which there is a TMDL: N/A
Latitude	35.870797			
Longitude	-106.317867			
If substantially identical to other outfall, list identical outfall ID: 018				
Outfall ID	014	Mortandad Canyon (Within LANL)	Aluminum, total Copper, dissolved Gross Alpha, adjusted PCBs	TMDL Name and ID: N/A Pollutant(s) for which there is a TMDL: N/A
Latitude	35.870890			
Longitude	-106.317393			
If substantially identical to other outfall, list identical outfall ID: 018				
Outfall ID	015	Mortandad Canyon (Within LANL)	Aluminum, total Copper, dissolved Gross Alpha, adjusted PCBs	TMDL Name and ID: N/A Pollutant(s) for which there is a TMDL: N/A
Latitude	35.871389			
Longitude	-106.316397			
If substantially identical to other outfall, list identical outfall ID: 018				

Outfall ID	016	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	Aluminum, total Copper, dissolved Gross Alpha, adjusted PCBs Thallium, dissolved	TMDL Name and ID: N/A Pollutant(s) for which there is a TMDL: N/A
Latitude	35.872447			
Longitude	-106.316721			
If substantially identical to other outfall, list identical outfall ID: 018				
Outfall ID	017	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	Aluminum, total Copper, dissolved Gross Alpha, adjusted PCBs Thallium, dissolved	TMDL Name and ID: N/A Pollutant(s) for which there is a TMDL: N/A
Latitude	35.872599			
Longitude	-106.317066			
If substantially identical to other outfall, list identical outfall ID: 018				
Outfall ID	019	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	Aluminum, total Copper, dissolved Gross Alpha, adjusted PCBs Thallium, dissolved	TMDL Name and ID: N/A Pollutant(s) for which there is a TMDL: N/A
Latitude	35.872682			
Longitude	-106.318467			
If substantially identical to other outfall, list identical outfall ID: 018				
Outfall ID	020	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	Aluminum, total Copper, dissolved Gross Alpha, adjusted PCBs Thallium, dissolved	TMDL Name and ID: N/A Pollutant(s) for which there is a TMDL: N/A
Latitude	35.872240			
Longitude	-106.316340			
If substantially identical to other outfall, list identical outfall ID:				

Outfall ID	022	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	Aluminum, total Copper, dissolved Gross Alpha, adjusted PCBs Thallium, dissolved	TMDL Name and ID: N/A Pollutant(s) for which there is a TMDL: N/A
Latitude	35.872661			
Longitude	-106.313691			
If substantially identical to other outfall, list identical outfall ID: _____				
Outfall ID	021	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	Aluminum, total Copper, dissolved Gross Alpha, adjusted PCBs Thallium, dissolved	TMDL Name and ID: N/A Pollutant(s) for which there is a TMDL: N/A
Latitude	35.872514			
Longitude	-106.313562			
If substantially identical to other outfall, list identical outfall ID: 022				
Outfall ID	023	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	Aluminum, total Copper, dissolved Gross Alpha, adjusted PCBs Thallium, dissolved	TMDL Name and ID: N/A Pollutant(s) for which there is a TMDL: N/A
Latitude	35.873193			
Longitude	-106.313116			
If substantially identical to other outfall, list identical outfall ID: 022				
Outfall ID	024	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	Aluminum, total Copper, dissolved Gross Alpha, adjusted PCBs Thallium, dissolved	TMDL Name and ID: N/A Pollutant(s) for which there is a TMDL: N/A
Latitude	35.873046			
Longitude	-106.315069			
If substantially identical to other outfall, list identical outfall ID: 022				

Outfall ID	025	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	Aluminum, total Copper, dissolved Gross Alpha, adjusted PCBs Thallium, dissolved	TMDL Name and ID: N/A Pollutant(s) for which there is a TMDL: N/A
Latitude	35.872928			
Longitude	-106.315400			
If substantially identical to other outfall, list identical outfall ID: 022				
Outfall ID	026	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	Aluminum, total Copper, dissolved Gross Alpha, adjusted PCBs Thallium, dissolved	TMDL Name and ID: N/A Pollutant(s) for which there is a TMDL: N/A
Latitude	35.872114			
Longitude	-106.313105			
If substantially identical to other outfall, list identical outfall ID:				
Outfall ID	027	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	Aluminum, total Copper, dissolved Gross Alpha, adjusted PCBs Thallium, dissolved	TMDL Name and ID: N/A Pollutant(s) for which there is a TMDL: N/A
Latitude	35.872401			
Longitude	-106.313391			
If substantially identical to other outfall, list identical outfall ID: 026				
Outfall ID	028	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	Aluminum, total Copper, dissolved Gross Alpha, adjusted PCBs Thallium, dissolved	TMDL Name and ID: N/A Pollutant(s) for which there is a TMDL: N/A
Latitude	35.872505			
Longitude	-106.313542			
If substantially identical to other outfall, list identical outfall ID: 026				

Outfall ID	029	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	Aluminum, total Copper, dissolved Gross Alpha, adjusted PCBs Thallium, dissolved	TMDL Name and ID: N/A Pollutant(s) for which there is a TMDL: N/A
Latitude	35.873969			
Longitude	-106.313281			
If substantially identical to other outfall, list identical outfall ID: _____				
Outfall ID	031	Mortandad Canyon (within LANL)	Aluminum, total Copper, dissolved Gross Alpha, adjusted PCBs	TMDL Name and ID: N/A Pollutant(s) for which there is a TMDL: N/A
Latitude	35.869227			
Longitude	-106.305685			
If substantially identical to other outfall, list identical outfall ID: _____				
Outfall ID	030	Mortandad Canyon (within LANL)	Aluminum, total Copper, dissolved Gross Alpha, adjusted PCBs	TMDL Name and ID: N/A Pollutant(s) for which there is a TMDL: N/A
Latitude	35.869325			
Longitude	-106.306926			
If substantially identical to other outfall, list identical outfall ID: 031				
Outfall ID	032	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	Aluminum, total Copper, dissolved Gross Alpha, adjusted PCBs Thallium, dissolved	TMDL Name and ID: N/A Pollutant(s) for which there is a TMDL: N/A
Latitude	35.870741			
Longitude	-106.306812			
If substantially identical to other outfall, list identical outfall ID: _____				

Outfall ID	033	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	Aluminum, total Copper, dissolved Gross Alpha, adjusted PCBs Thallium, dissolved	TMDL Name and ID: N/A Pollutant(s) for which there is a TMDL: N/A
Latitude	35.870712			
Longitude	-106.306443			
If substantially identical to other outfall, list identical outfall ID: 032				
Outfall ID	034	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	Aluminum, total Copper, dissolved Gross Alpha, adjusted PCBs Thallium, dissolved	TMDL Name and ID: N/A Pollutant(s) for which there is a TMDL: N/A
Latitude	35.870603			
Longitude	-106.306055			
If substantially identical to other outfall, list identical outfall ID: 032				
Outfall ID	035	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	Aluminum, total Copper, dissolved Gross Alpha, adjusted PCBs Thallium, dissolved	TMDL Name and ID: N/A Pollutant(s) for which there is a TMDL: N/A
Latitude	35.870474			
Longitude	-106.305432			
If substantially identical to other outfall, list identical outfall ID: 032				
Outfall ID	036	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	Aluminum, total Copper, dissolved Gross Alpha, adjusted PCBs Thallium, dissolved	TMDL Name and ID: N/A Pollutant(s) for which there is a TMDL: N/A
Latitude	35.867825			
Longitude	-106.293388			
If substantially identical to other outfall, list identical outfall ID:				

Outfall ID	037	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	Aluminum, total Copper, dissolved Gross Alpha, adjusted PCBs Thallium, dissolved	TMDL Name and ID: N/A Pollutant(s) for which there is a TMDL: N/A
Latitude	35.867859			
Longitude	-106.292992			
If substantially identical to other outfall, list identical outfall ID: 036				
Outfall ID	039	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	Aluminum, total Copper, dissolved Gross Alpha, adjusted PCBs Thallium, dissolved	TMDL Name and ID: N/A Pollutant(s) for which there is a TMDL: N/A
Latitude	35.867826			
Longitude	-106.291726			
If substantially identical to other outfall, list identical outfall ID:				
Outfall ID	038	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	Aluminum, total Copper, dissolved Gross Alpha, adjusted PCBs Thallium, dissolved	TMDL Name and ID: N/A Pollutant(s) for which there is a TMDL: N/A
Latitude	35.867855			
Longitude	-106.292211			
If substantially identical to other outfall, list identical outfall ID: 039				
Outfall ID	040	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	Aluminum, total Copper, dissolved Gross Alpha, adjusted PCBs Thallium, dissolved	TMDL Name and ID: N/A Pollutant(s) for which there is a TMDL: N/A
Latitude	35.867839			
Longitude	-106.291955			
If substantially identical to other outfall, list identical outfall ID: 039				

Outfall ID	042	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	Aluminum, total Copper, dissolved Gross Alpha, adjusted PCBs Thallium, dissolved	TMDL Name and ID: N/A Pollutant(s) for which there is a TMDL: N/A
Latitude	35.867047			
Longitude	-106.289163			
If substantially identical to other outfall, list identical outfall ID: _____				
Outfall ID	041	Mortandad Canyon (within LANL)	Aluminum, total Copper, dissolved Gross Alpha, adjusted PCBs	TMDL Name and ID: N/A Pollutant(s) for which there is a TMDL: N/A
Latitude	35.866377			
Longitude	-106.291397			
If substantially identical to other outfall, list identical outfall ID: 042				
Outfall ID	043	Mortandad Canyon (within LANL)	Aluminum, total Copper, dissolved Gross Alpha, adjusted PCBs	TMDL Name and ID: N/A Pollutant(s) for which there is a TMDL: N/A
Latitude	35.866084			
Longitude	-106.290165			
If substantially identical to other outfall, list identical outfall ID: _____				
Outfall ID	047	Canada del Buey (within LANL)	Aluminum, total Gross Alpha, adjusted PCBs	TMDL Name and ID: N/A Pollutant(s) for which there is a TMDL: N/A
Latitude	35.844895			
Longitude	-106.264513			
If substantially identical to other outfall, list identical outfall ID: _____				

Outfall ID	044	Canada del Buey (within LANL)	Aluminum, total Gross Alpha, adjusted PCBs	TMDL Name and ID: N/A Pollutant(s) for which there is a TMDL: N/A
Latitude	35.845868			
Longitude	-106.265279			
If substantially identical to other outfall, list identical outfall ID: 047				
Outfall ID	045	Canada del Buey (within LANL)	Aluminum, total Gross Alpha, adjusted PCBs	TMDL Name and ID: N/A Pollutant(s) for which there is a TMDL: N/A
Latitude	35.845586			
Longitude	-106.265214			
If substantially identical to other outfall, list identical outfall ID: 047				
Outfall ID	046	Canada del Buey (within LANL)	Aluminum, total Gross Alpha, adjusted PCBs	TMDL Name and ID: N/A Pollutant(s) for which there is a TMDL: N/A
Latitude	35.845200			
Longitude	-106.264844			
If substantially identical to other outfall, list identical outfall ID: 047				
Outfall ID	048	Canada del Buey (within LANL)	Aluminum, total Gross Alpha, adjusted PCBs	TMDL Name and ID: N/A Pollutant(s) for which there is a TMDL: N/A
Latitude	35.844590			
Longitude	-106.265044			
If substantially identical to other outfall, list identical outfall ID: 047				

Outfall ID	049	Pajarito Canyon (within LANL below Arroyo de la Delfe)	Aluminum, total PCBs	TMDL Name and ID: N/A
Latitude	35.837228			Pollutant(s) for which there is a TMDL: N/A
Longitude	-106.254840			
If substantially identical to other outfall, list identical outfall ID: _____				
Outfall ID	050	Canada del Buey (within LANL)	Aluminum, total Gross Alpha, adjusted PCBs	TMDL Name and ID: N/A
Latitude	35.835746			Pollutant(s) for which there is a TMDL: N/A
Longitude	-106.250832			
If substantially identical to other outfall, list identical outfall ID: _____				
Outfall ID	051	Pajarito Canyon (within LANL below Arroyo de la Delfe)	Aluminum, total PCBs	TMDL Name and ID: N/A
Latitude	35.830143			Pollutant(s) for which there is a TMDL: N/A
Longitude	-106.242662			
If substantially identical to other outfall, list identical outfall ID: _____				
Outfall ID	052	Pajarito Canyon (within LANL below Arroyo de la Delfe)	Aluminum, total PCBs	TMDL Name and ID: N/A
Latitude	35.831852			Pollutant(s) for which there is a TMDL: N/A
Longitude	-106.242928			
If substantially identical to other outfall, list identical outfall ID: 051				

Outfall ID	053	Pajarito Canyon (within LANL below Arroyo de la Delfe)	Aluminum, total PCBs	TMDL Name and ID: N/A
Latitude	35.829232			Pollutant(s) for which there is a TMDL: N/A
Longitude	-106.236793			
If substantially identical to other outfall, list identical outfall ID: _____				
Outfall ID	065	Pajarito Canyon (within LANL below Arroyo de la Delfe)	Aluminum, total PCBs	TMDL Name and ID: N/A
Latitude	35.829028			Pollutant(s) for which there is a TMDL: N/A
Longitude	-106.236029			
If substantially identical to other outfall, list identical outfall ID: 053				
Outfall ID	066	Pajarito Canyon (within LANL below Arroyo de la Delfe)	Aluminum, total PCBs	TMDL Name and ID: N/A
Latitude	35.830185			Pollutant(s) for which there is a TMDL: N/A
Longitude	-106.236107			
If substantially identical to other outfall, list identical outfall ID: 053				
Outfall ID	069	Pajarito Canyon (within LANL below Arroyo de la Delfe)	Aluminum, total PCBs	TMDL Name and ID: N/A
Latitude	35.830285			Pollutant(s) for which there is a TMDL: N/A
Longitude	-106.234518			
If substantially identical to other outfall, list identical outfall ID: _____				

Outfall ID	054	Pajarito Canyon (within LANL below Arroyo de la Delfe)	Aluminum, total PCBs	TMDL Name and ID: N/A
Latitude	35.829036			Pollutant(s) for which there is a TMDL: N/A
Longitude	-106.235125			
If substantially identical to other outfall, list identical outfall ID: 069				
Outfall ID	055	Pajarito Canyon (within LANL below Arroyo de la Delfe)	Aluminum, total PCBs	TMDL Name and ID: N/A
Latitude	35.829173			Pollutant(s) for which there is a TMDL: N/A
Longitude	-106.235121			
If substantially identical to other outfall, list identical outfall ID: 069				
Outfall ID	056	Pajarito Canyon (within LANL below Arroyo de la Delfe)	Aluminum, total PCBs	TMDL Name and ID: N/A
Latitude	35.829310			Pollutant(s) for which there is a TMDL: N/A
Longitude	-106.236107			
If substantially identical to other outfall, list identical outfall ID: 069				
Outfall ID	057	Pajarito Canyon (within LANL below Arroyo de la Delfe)	Aluminum, total PCBs	TMDL Name and ID: N/A
Latitude	35.829440			Pollutant(s) for which there is a TMDL: N/A
Longitude	-106.235117			
If substantially identical to other outfall, list identical outfall ID: 069				

Outfall ID	058	Pajarito Canyon (within LANL below Arroyo de la Delfe)	Aluminum, total PCBs	TMDL Name and ID: N/A
Latitude	35.829573			Pollutant(s) for which there is a TMDL: N/A
Longitude	-106.235112			
If substantially identical to other outfall, list identical outfall ID: 069				
Outfall ID	059	Pajarito Canyon (within LANL below Arroyo de la Delfe)	Aluminum, total PCBs	TMDL Name and ID: N/A
Latitude	35.829711			Pollutant(s) for which there is a TMDL: N/A
Longitude	-106.235108			
If substantially identical to other outfall, list identical outfall ID: 069				
Outfall ID	060	Pajarito Canyon (within LANL below Arroyo de la Delfe)	Aluminum, total PCBs	TMDL Name and ID: N/A
Latitude	35.830340			Pollutant(s) for which there is a TMDL: N/A
Longitude	-106.234802			
If substantially identical to other outfall, list identical outfall ID: 069				
Outfall ID	061	Pajarito Canyon (within LANL below Arroyo de la Delfe)	Aluminum, total PCBs	TMDL Name and ID: N/A
Latitude	35.830343			Pollutant(s) for which there is a TMDL: N/A
Longitude	-106.234766			
If substantially identical to other outfall, list identical outfall ID: 069				

Outfall ID	062	Pajarito Canyon (within LANL below Arroyo de la Delfe)	Aluminum, total PCBs	TMDL Name and ID: N/A
Latitude	35.830344			Pollutant(s) for which there is a TMDL: N/A
Longitude	-106.234725			
If substantially identical to other outfall, list identical outfall ID: 069				
Outfall ID	063	Pajarito Canyon (within LANL below Arroyo de la Delfe)	Aluminum, total PCBs	TMDL Name and ID: N/A
Latitude	35.830342			Pollutant(s) for which there is a TMDL: N/A
Longitude	-106.234692			
If substantially identical to other outfall, list identical outfall ID: 069				
Outfall ID	064	Pajarito Canyon (within LANL below Arroyo de la Delfe)	Aluminum, total PCBs	TMDL Name and ID: N/A
Latitude	35.830340			Pollutant(s) for which there is a TMDL: N/A
Longitude	-106.234656			
If substantially identical to other outfall, list identical outfall ID: 069				
Outfall ID	067	Pajarito Canyon (within LANL below Arroyo de la Delfe)	Aluminum, total PCBs	TMDL Name and ID: N/A
Latitude	35.829856			Pollutant(s) for which there is a TMDL: N/A
Longitude	-106.235110			
If substantially identical to other outfall, list identical outfall ID: 069				

Outfall ID	068	Pajarito Canyon (within LANL below Arroyo de la Delfe)	Aluminum, total PCBs	TMDL Name and ID: N/A
Latitude	35.830051			Pollutant(s) for which there is a TMDL: N/A
Longitude	-106.235103			
If substantially identical to other outfall, list identical outfall ID: 069				
Outfall ID	072	Canada del Buey (within LANL)	Aluminum, total Gross Alpha, adjusted PCBs	TMDL Name and ID: N/A
Latitude	35.832885			Pollutant(s) for which there is a TMDL: N/A
Longitude	-106.239444			
If substantially identical to other outfall, list identical outfall ID:				
Outfall ID	070	Canada del Buey (within LANL)	Aluminum, total Gross Alpha, adjusted PCBs	TMDL Name and ID: N/A
Latitude	35.832404			Pollutant(s) for which there is a TMDL: N/A
Longitude	-106.240510			
If substantially identical to other outfall, list identical outfall ID: 072				
Outfall ID	071	Canada del Buey (within LANL)	Aluminum, total Gross Alpha, adjusted PCBs	TMDL Name and ID: N/A
Latitude	35.832701			Pollutant(s) for which there is a TMDL: N/A
Longitude	-106.240994			
If substantially identical to other outfall, list identical outfall ID: 072				

Outfall ID	073	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	Aluminum, total Copper, dissolved Gross Alpha, adjusted PCBs Thallium, dissolved	TMDL Name and ID: N/A Pollutant(s) for which there is a TMDL: N/A
Latitude	35.874819			
Longitude	-106.324283			
If substantially identical to other outfall, list identical outfall ID: _____				
Outfall ID	074	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	Aluminum, total Copper, dissolved Gross Alpha, adjusted PCBs Thallium, dissolved	TMDL Name and ID: N/A Pollutant(s) for which there is a TMDL: N/A
Latitude	35.875034			
Longitude	-106.327328			
If substantially identical to other outfall, list identical outfall ID: 073				
Outfall ID	075	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	Aluminum, total Copper, dissolved Gross Alpha, adjusted PCBs Thallium, dissolved	TMDL Name and ID: N/A Pollutant(s) for which there is a TMDL: N/A
Latitude	35.871154			
Longitude	-106.312940			
If substantially identical to other outfall, list identical outfall ID: _____				
Outfall ID				TMDL Name and ID:
Latitude				Pollutant(s) for which there is a TMDL:
Longitude				
If substantially identical to other outfall, list identical outfall ID: _____				

4. Provide the following information about your outfall latitude longitude:

Latitude/Longitude Data Source: ☐ Map ■ GPS ☐ Other

If you used a USGS topographic map, what was the scale? _____

Horizontal Reference Datum: ☐ NAD 27 ■ NAD 83 ☐ WGS 84

5. Does your facility discharge into a Muncipal Separate Storm Sewer System (MS4)? ☐ YES ■ NO

If yes, provide the name of the MS4 operator: N/A

6. Check if you discharge to any of the waters of the U.S. that are designated by the state or tribal authority under its antidegradation policy as a Tier 2 (or Tier 2.5) water (water quality exceeds levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water) or as a Tier 3 water (Outstanding National Resource Water)? (See Appendix L).

☐ Tier 2/2.5. Provide the name(s) of receiving water(s): _____

☐ Tier 3 (Outstanding National Resource Waters)*

* **Note: You are ineligible for coverage if you are a new discharger or new source to waters designated as Tier 3 (outstanding national resource waters) for antidegradation purposes under 40 CFR 131.13(a)(3).**

7. If you are subject to benchmark monitoring requirements for a hardness-dependent metal, what is the hardness of your receiving water(s) (see Appendix J)?
57 (mg/L)

8. If you are subject to benchmark monitoring requirements for a hardness-dependent metal, does your facility discharge into any saltwater receiving waters?
☐ YES ■ NO

9. Does your facility discharge to a federal CERCLA site listed in Appendix P? ☐ YES ■ NO

If yes, did you notify the EPA Regional Office in advance of filing your NOI, and did the EPA Regional Office determine that you are eligible for permit coverage pursuant to Part 1.1.4.10*? ☐ YES ☐ NO

* **Note: If you discharge to a federal CERCLA site listed in Appendix P, you are ineligible for coverage under this permit unless you notify the EPA Regional Office in advance and the EPA Regional Office determines you are eligible coverage under this permit. In determining your eligibility for coverage under this Part, the EPA Regional Office may evaluate whether you have included adequate controls and/or procedures to ensure that your discharges will not lead to recontamination of aquatic media at the CERCLA Site such that it will to cause or contribute to an exceedance of a water quality standard.**

F. Stormwater Pollution Prevention Plan (SWPPP) Information

1. Has the SWPPP been prepared in advance of filing this NOI, as required? ■ YES ☐ NO

2. SWPPP Contact Information:

First Name, Middle Initial, Last Name: Holly L Wheeler

Professional Title: Environmental Professional

Phone: 505-667-1312 Ext.

E-mail: hbenson@lanl.gov

3. SWPPP Availability:

Your current SWPPP or certain information from your SWPPP must be made available through one of the following two options. Select one of the options and provide the required information*:

* **Note: You are not required to post any confidential business information (CBI) or restricted information (as defined in Appendix A) (such information may be redacted), but you must clearly identify those portions of the SWPPP that are being withheld from public access.**

■ **Option 1**: Maintain a current copy of your SWPPP on an Internet page (Universal Resource Locator or URL).

Provide the web address URL: eprr.lanl.gov

☐ **Option 2**: Provide the following information from your SWPPP:

A. Describe your onsite industrial activities exposed to stormwater (e.g., material storage; equipment fueling, maintenance, and cleaning; cutting steel beams), and potential spill and leak areas:

B. List the pollutant(s) or pollutant constituent(s) associated with each industrial activity exposed to stormwater that could be discharged in stormwater and any authorized non-stormwater discharges listed in Part 1.1.3:

C. Describe the control measures you will employ to comply with the non-numeric technology-based effluent limits required in Part 2.1.2 and Part 8, and any other measures taken to comply with the requirements in Part 2.2 Water Quality-Based Effluent Limitations (see Part 5.2.4):

D. Provide a schedule for good housekeeping and maintenance (see Part 5.2.5.1) and a schedule for all inspections required in Part 4 (see Part 5.2.5.2):

G. Endangered Species Protection

1. Using the instructions in Appendix E of the MSGP, under which endangered species criterion listed in Part 1.1.4.5 are you eligible for coverage under this permit (only check 1 box)?*

☐ A ☐ B ☐ C ■ D ☐ E

* **Note: After you submit your NOI and before your NOI is authorized, EPA may notify you if any additional controls are necessary to ensure your discharges have no likely adverse affects on listed species and critical habitat.**

2. Provide a brief summary of the basis for the criterion selected in Appendix E (e.g., communication with U.S. Fish and Wildlife Service or National Marine Fisheries Service to determine no species in action area; implementation of controls approved by EPA and the Services):
Direct consultation with the U.S. Fish and Wildlife Service and corresponding development and implementation of a facility-specific Habitat Management Plan.

3. If you select criterion B, provide the NPDES ID from the other operator's NOI authorized under this permit: ☐☐☐☐☐☐☐☐

4. If you select criterion C, you must answer the following questions:

a. What federally-listed species or designated critical habitat are located in your "action area":

b. Using the Appendix E worksheet, check which of the following is applicable to your facility and answer any corresponding questions:

☐ I submitted my completed *Criterion C Eligibility Form* to EPA at least 30 days prior to submitting this NOI and agree to implement any additional measures that were determined by EPA to be necessary to ensure that my discharges and/or discharge-related activities will not have likely adverse affects on listed species and critical habitat.

Date your *Criterion C Eligibilty Form* was sent to EPA: ☐☐/☐☐/☐☐☐☐

Describe any EPA-approved measures you will implement to ensure no likely adverse affects on listed species and critical habitat:

☐ I submitted my completed *Criterion C Eligibility Form* to EPA at least 30 days prior to submitting this NOI and have not been notified of any additional measures necessary to ensure no likely adverse affects on listed species and critical habitat.

Date your *Criterion C Eligibility Form* was sent to EPA: ☐☐/☐☐/☐☐☐☐

5. If you select criterion D or E, you must attach copies of any letters or other communications with the U.S. Fish and Wildlife Service or National Marine Fisheries Service.

H. Historic Preservation

1. If your facility is not located on Indian country lands, is your facility located on a property of religious or cultural significance to an Indian tribe?

   ■ YES ☐ NO

   If yes, provide the name of the Indian tribe associated with the property: San Ildefonso Pueblo

2. Using the instructions in Appendix F of the MSGP, under which historic properties preservation criterion listed in Part 1.1.4.6 are you eligible for coverage under this permit (only check 1 box)?

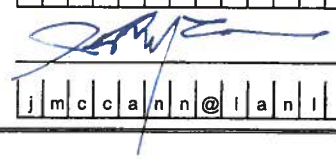
   ☐ A ■ B ☐ C ☐ D

I. Certification Information

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

First Name, Middle Initial, Last Name: John P McCann

Title: Division Leader

Signature: 

Date: 03/22/2016

E-mail: jmccann@ilanl.gov

Instructions for Completing EPA Form 3510-6

Notice of Intent (NOI) for Stormwater Discharges Associated with Industrial Activity Under the NPDES Multi-Sector General Permit

NPDES Form Date (06/15) This Form Replaces From 3510-6 (09/08) Form Approved OMB No. 2040-0004

Who Must File an NOI Form

Under section 402(p) of the Clean Water Act (CWA) and regulations at 40 CFR Part 122, stormwater discharges associated with industrial activity are prohibited to waters of the United States unless authorized under a National Pollutant Discharge Elimination System (NPDES) permit. You can obtain coverage under the MSGP by submitting a completed Notice of Intent (NOI) if you are an operator a facility:

- that is located in a jurisdiction where EPA is the permitting authority, listed in Appendix C of the MSGP,
- that discharges stormwater associated with industrial activities, identified in Appendix D of the MSGP,
- that meets the eligibility requirements in Part 1.1 of the permit,
- that has developed a stormwater pollution prevention plan (SWPPP) in accordance with Part 5 of the MSGP; and
- that installs and implements control measures in accordance with Part 2 and Part 8 to meet numeric and non-numeric effluent limits.

Completing the Form

Obtain and read a copy of the 2015 MSGP, viewable at http://water.epa.gov/polwaste/npdes/stormwater/EPA-Multi-Sector-General-Permit-MSGP.cfm. To complete this form, type or print, using uppercase letters, in the appropriate areas only. Please place each character between the marks. Abbreviate if necessary to stay within the number of characters allowed for each item. Use only one space for breaks between words, but not for punctuation marks unless they are needed to clarify your response. **Please submit original document with signature in ink - do not send a photocopied signature.**

Section A. Approval to Use Paper NOI Form

You must indicate whether you have been granted a waiver from electronic reporting from the EPA Regional Office. Note that you are not authorized to use this paper NOI form unless the EPA Regional Office has approved its use. Where you have obtained approval to use this form, indicate the waiver that you have been granted, the name of the EPA staff person who granted the waiver, and the date that approval was provided.

See http://water.epa.gov/polwaste/npdes/stormwater/Stormwater-Contacts.cfm for a list of EPA Regional Office contacts.

Section B. Permit Information

Provide the master permit number of the permit under which you are applying for coverage (see Appendix C of the general permit for the list of eligible master permit numbers).

You must indicate whether you are a new discharger or a new source (see Appendix A for the definitions). If you are not a new discharger or a new source, you must indicate whether stormwater discharges from your facility have been previously covered under another NPDES permit. If yes, you must provide the unique NPDES ID (i.e., permit tracking number) for the previous permit your facility was covered under.

Section C. Facility Operator Information

Provide the legal name of the person, firm, public organization, or any other entity that operates the facility described in this NOI. An operator of a facility is the legal entity that controls the operation of the facility. Refer to Appendix A of the permit for the definition of "operator". Provide the operator's mailing address, phone number, and e-mail. Correspondence for the NOI will be sent to this address. Also provide the name and title for the operator point of contact (note that the point of contact name may be the same as the operator name).

If the NOI was prepared by someone other than the certifier (for example, if the NOI was prepared by the facility SWPPP contact or a consultant for the certifier's signature), include the full name, organization, phone number, and email address of the NOI preparer.

Section D. Facility Information

Enter the official or legal name and complete address, including city, state, ZIP code, and county or similar government subdivision of the facility. If the facility lacks a street address, indicate the general location of the facility (e.g., Intersection of State Highways 61 and 34). Complete facility information must be provided for permit coverage to be granted.

Provide the latitude and longitude of your facility in decimal degrees format. The latitude and longitude of your facility can be determined in several different ways, including through the use of global positioning system (GPS) receivers, U.S. Geological Survey (U.S.G.S.) topographic or quadrangle maps. Refer to http://transition.fcc.gov/mb/audio/bickel/DDDMMSS-decimal.html/ for assistance in providing the proper latitude/longitude format. For consistency, EPA requests that measurements be taken from the approximate center of the facility. Specify which method you used to determine latitude and longitude. If a U.S.G.S. topographic map is used, specify the scale of the map used. Enter the horizontal reference datum for your latitude and longitude. The horizontal reference datum used on USGS topographic maps is shown on the bottom left corner of USGS topographic maps; it is also available for GPS receivers.

Indicate whether the facility is on Indian country lands, and if so, provide the name of the Indian tribe associated with the area of Indian country (including name of Indian reservation, if applicable).

Indicate whether you are seeking coverage under this permit as a "federal operator" as defined in Appendix A. Also check the ownership type for the facility (e.g., Federal Facility, Privately Owned Facility, Municipality, County Government, Corporation, State Government, Tribal Government, School District, District, Mixed Ownership [e.g., public/private], Municipal or Water District).

Enter the estimated area of industrial activity at your facility exposed to stormwaterto the nearest quarter acre.

List the four-digit Standard Industrial Classification (SIC) code or two character activity code that best describes the primary industrial activities performed by your facility under which you are required to obtain permit coverage. Your primary industrial activity includes any activities performed on-site which are (1) identified by the facility's primary SIC code and included in the descriptions of 40 CFR 122.26(b)(14)(ii), (iii), (vi), or (viii); or (2) included in the narrative descriptions of 40 CFR 122.26(b)(14)(i), (iv), (v), (vii), or (ix). See Appendix D of the MSGP for a complete list of SIC codes and activities codes covered under the MSGP. Also provide the applicable sector and subsector associated with the SIC code or activity code for your primary industrial activities. For a complete list of sector and subsector codes, see Appendix D of the MSGP.

If your facility has co-located industrial activities that are not identified as your primary industrial activity, identify the sector and subsector codes that describe these other industrial activities.

For Sector S facilities (Air Transportation), indicate whether you anticipate that the entire airport facility will use more than 100,000 gallons of pure glycol in glycol-based deicing fluids and/or 100 tons or more of urea on an average annual basis. If so, additional effluent limits and monitoring conditions apply to your discharge (see Part 8.S of the permit).

For Sector G facilities (Metal Mining), check the type of ore(s) mined at the facility.

Indicate whether your facility is currently inactive and unstaffed. Note that if your facility becomes inactive and unstaffed during the permit term, you must submit an NOI modification to reflect the change.

Section E. Discharge Information

You must confirm that you understand that the MSGP only authorizes the allowable stormwater discharges listed in Part 1.1.2 and the allowable non-stormwater discharges listed in Part 1.1.3. Any discharges not expressly authorized under the MSGP are not covered by the MSGP or the permit shield provision of the CWA Section 402(k) and they cannot become authorized or shielded by disclosure to EPA, state, or local authorities via the NOI to be covered by the permit or by any other means (e.g., in the SWPPP or during an inspection). If any discharges requiring NPDES permit coverage other than the allowable stormwater and non-stormwater discharges listed in Parts 1.1.2 and 1.1.3 will be discharged, they must either be eliminated or covered under another NPDES permit.

Depending on your industrial activities, your facility may be subject to federal effluent limitation guidelines which include additional effluent limits and monitoring requirements for your facility. Please review these requirements, described in Part 2.1.3 of the MSGP, and check any appropriate boxes on the NOI form.

You must identify all the outfalls from your facility that discharge stormwater. Each outfall must be assigned a unique 3-digit ID (e.g., 001, 002, 003). You must also provide the latitude and longitude for each outfall from your facility. Indicate whether any outfalls are substantially identical to an outfall already listed, and identify the outfall it is identical to. For each unique outfall you list, you must specify the name of the first water of the U.S. that receives stormwater directly from the outfall and/or from the MS4 that the outfall discharges to. You must specify whether any receiving waters that you discharge to are listed as "impaired" as defined in Appendix A, and the pollutants for which the water is impaired. You must also check identify any Total Maximum Daily Loads (TMDL) that have been completed for any of the waters of the U.S. that you discharge to. You must also provide information about the outfall latitude/longitude, including data source, the scale (if applicable), and the horizontal reference datum. See the instructions in Section D for more information about determining the latitude and longitude.

Identify whether your facility discharges into a Municipal Separate Storm Sewer System (MS4). If yes, provide the name of the MS4 operator. If you are uncertain of the MS4 operator, contact your local government for that information.

Indicate whether discharges from the facility will enter into a water of the U.S that is designated as a Tier 2, Tier 2.5, or Tier 3 water. A list of Tier 2, 2.5, and 3 waters is provided as Appendix L. If the answer is "yes", name all waters designated as Tier 2, Tier 2.5, or Tier 3 to which the facility will discharge. Note that you are ineligible for coverage if you are a new discharger or a new source to waters designated as Tier 3 (outstanding national resource waters) for antidegradation purposes under 40 CFR 131.13(a)(3).

If you are subject to any benchmark monitoring requirements for metals (see the requirements applicable to your Sector(s) in Part 8 of the permit), indicate the hardness for your receiving water(s). See Appendix J of the permit for information about determining waterbody hardness.

If you are subject to benchmark monitoring requirements for hardness-dependent metals you must also answer whether your facility discharges into any saltwater receiving waters.

Indicate whether your facility will discharge to a federal CERCLA site listed in Appendix P. Note that if your facility will discharge into a federal CERCLA site listed in Appendix P, you are not eligible for coverage under this permit unless you notify the EPA Regional Office in advance and the EPA Regional Office authorizes overage under this permit after you have included adequate controls and/or procedures designed to ensure that discharges will not lead to recontamination of aquatic media at the CERCLA site such that your discharge will cause or contribute to an exceedance of a water quality standard.

Section F. Stormwater Pollution Prevention Plan (SWPPP) Information

All facilities eligible for coverage under this permit are required to prepare a SWPPP in advance of filing the NOI, in accordance with Part 5. Indicate whether the SWPPP has been prepared in advance of filing the NOI.

Indicate the contact information (name, phone, and email) for the person who developed the SWPPP for this facility.

You identify how your SWPPP information will be made available, consistent with Part 5.4 and 7.3 of the permit. If you are making your SWPPP publicly available on a web site, check Option 1 and provide the appropriate Internet URL address. If you are not providing a URL, check Option 2 and provide the selected SWPPP information on this NOI form. You may copy and paste this information directly from your SWPPP.

Section G. Endangered Species Protection

Using the instructions in Appendix E, indicate the Part 1.1.4.5 criterion (i.e., A, B, C, D, or E) you are eligible under with regard to the protection of federally listed endangered and threatened species and designated critical habitat. A description of the basis for the criterion selected must also be provided.

If criterion B is selected, provide the NPDES ID (i.e., permit tracking number) for the other operator who has certified their eligibility under this permit. The NPDES ID was assigned when the operator received coverage under this permit.

If criterion C is selected, you must specify the federally-listed species or designated critical habitat that are located in the "action area" of the facility. You must also indicate under which scenario you determined you were eligible to submit your NOI under criterion C using Appendix E, and answer any corresponding questions.

If criterion D or E is selected, attach copies of any communications between you and the U.S. Fish and Wildlife Service and National Marine Fisheries Service to this NOI.

Section H. Historic Preservation

If the project is not located in Indian country lands, indicate whether the project is located on a property of religious or cultural significance to an Indian tribe, and if so, provide the name of the Indian tribe associated with the property. Use the instructions in Appendix F to complete the questions on the NOI form regarding historic preservation.

Instructions for Completing EPA Form 3510-6

Notice of Intent (NOI) for Stormwater Discharges Associated with Industrial Activity Under the NPDES Multi-Sector General Permit

NPDES Form Date (06/15) This Form Replaces From 3510-6 (09/08) Form Approved OMB No. 2040-0004

Section I. Certification

Certification statement and signature (see Section B.11 of Appendix B of the MSGP for more information). Enter certifier's printed name, title and email address. Sign and date the form. (CAUTION: An unsigned or undated NOI form will prevent the granting of permit coverage.) Federal statutes provide for severe penalties for submitting false information on this application form. Federal regulations require this application to be signed as follows:

For a corporation: by a responsible corporate officer, which means: (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

For a partnership or sole proprietorship: By a general partner or the proprietor, respectively; or

For a municipality, state, federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this Part, a principal executive officer of a federal agency includes (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrator of EPA). Include the name and title of the person signing the form and the date of signing.

An unsigned or undated NOI form will not be considered eligible for permit coverage.

Modifying Your NOI

If you have been granted a waiver from your Regional Office from electronic reporting, and if after submitting your NOI you need to correct or update any fields on this NOI form, you may do so by indicating changes on this same form.

Paperwork Reduction Act Notice

Public reporting burden for this NOI is estimated to average 3.7 hours, plus an additional 2 hours for certain respondents required to gather hardness data. This estimate includes time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments regarding the burden estimate, any other aspect of the collection of information, or suggestions for improving this form, including any suggestions which may increase or reduce this burden to: Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number on any correspondence. Do not send the completed form to this address.

Submitting Your Form

If you have been granted a waiver from your Regional Office to submit a paper NOI form, you must send your NOI by mail to one of the following addresses:

For Regular U.S. Mail Delivery:
Stormwater Notice Processing Center
Mail Code 4203M, ATTN: 2015 MSGP Reports
U.S. EPA
1200 Pennsylvania Avenue, NW
Washington, DC 20460

For Overnight/Express Mail Delivery:
Stormwater Notice Processing Center
William Jefferson Clinton East Building - Room 7420
ATTN: 2015 MSGP Reports
U.S. EPA
1201 Constitution Avenue, NW
Washington, DC 20004

Visit this website for instructions on how to submit electronically:
http://water.epa.gov/polwaste/npdes/stormwater/Stormwater-eNOI-System-for-EPAs-MultiSector-General-Permit.cfm

Associate Director for ESH
ADESH
P. O. Box 1663, MS K491
Los Alamos, New Mexico 87545
505-667-4218/Fax 505-665-3811

Date: AUG 14 2013
Symbol: ADESH-13-041
LAUR: 13-25954

Mr. Ron Curry, Regional Administrator
U.S. Environmental Protection Agency, Region 6
1445 Ross Avenue, Suite 1200
Mail Code: 6RA
Dallas, TX 75202-2733

Dear Mr. Curry:

SUBJECT: NOTIFICATION OF LOS ALAMOS NATIONAL SECURITY, LLC SIGNATORY OFFICIAL AND AUTHORIZED REPRESENTATIVES FOR NPDES STORMWATER GENERAL PERMITS AND LANL INDUSTRIAL POINT SOURCE OUTFALL PERMIT (NPDES PERMIT NO. NM0028355)

The purpose of this letter is to provide an update to the Environmental Protection Agency (EPA) Region 6 on the signatory authority for the operator of Los Alamos National Laboratory (LANL) NPDES permits. Los Alamos National Security, LLC (LANS) has been the Laboratory's management and operation contractor since June 1, 2006 and is also a co-permittee with the Department of Energy under the LANL Industrial Point Source Outfall Permit (NPDES Permit No. NM0028355).

The positions of Associate Director of Environmental, Safety, and Health (ADESH), Deputy Associate Director, and Division Leader of the Environmental Protection Division (ENV-DO) are hereby identified as LANS's primary signatory officials under 40 CFR 122.22(a) for certifying and signing permit applications and reports required under the LANL Industrial Point Source Outfall Permit (NPDES Permit No. NM0028355) and the NPDES Stormwater Construction and Multi-Sector General Permits.

The following positions are hereby designated as authorized representatives under 40 CFR 122.22(b) to sign reports, Storm Water Pollution Prevention Plans, and any other compliance documentation required by the permits:

Construction General Permit:

- Group Leader of the Laboratory's Environmental Compliance Programs Group.
- Cognizant Project Manager, Project or Field Engineer, or Subcontractor Technical Representative for the regulated construction activity.

- Responsible Facility Operations Director (FOD), Deputy FOD, or Operations Manager responsible for the overall operation of the regulated facility or construction activity.

Multi-Sector General Permit (No. NMR05GB21) & Industrial Point Source Outfall Permit (No. NM0028355):

- Group Leader of the Laboratory's Environmental Compliance Programs Group.
- Division Leader, Deputy Division Leader, or Group Leader of the LANL division responsible for the overall operation of the regulated facility or activity.
- Responsible FOD, Deputy FOD or Operations Manager responsible for the overall operation of the regulated facility or activity.
- Group Leader in the ESH Deployed Services Division assigned to the regulated facility.

This letter supersedes and replaces the signatory authority letter dated March 2, 2009 (See Enclosure 1) with respect to the LANL Industrial Point Source Outfall Permit, the Construction General Permit, and the Multi-Sector General Permit, and is submitted to notify the EPA of the current authorized representatives pursuant to 40 CFR 122.22(c).

Please contact Alison M. Dorries, Division Leader for the Environmental Protection Division, at (505) 665-6592, if you have questions.

Sincerely,

Michael T. Brandt, DrPH, CIH
Associate Director
Environment, Safety & Health

MTB:AMD:MTS/lm

Enclosure:
1. Delegation of "Authorized Representative" for the Clean Water Act (CWA) and NPDES Storm Water Permits and Industrial Outfall Permit by Los Alamos National Security, LLC (LANS) Memo

CY: Diana McDonald, USEPA, Region 6, Dallas, TX
Isaac Chen, USEPA, Region 6, Dallas, TX
Jan Walker, USEPA, Region 6, Dallas, TX
Brent E. Larsen, USEPA, Region 6, Dallas, TX
Bruce Yurdin, NMED/SWQB, Santa Fe, NM
Gene Tuner, NA-OO-LA, (E-File)
David Sosinski, LC-DO, (E-File)
Carl A. Beard, PADOPS, A102
Alison M. Dorries, ENV-DO, (E-File)

Cy (continued):

Anthony R. Grieggs, ENV-CP, (E-File)
Michael T. Saladen, ENV-CP, (E-File)
Terrill W. Lemke, ENV-CP, (E-File)
Deborah K. Woitte, LC-LESH, (E-File)
Brett S. Henrikson, LC-LESH, (E-File)
Alexander W. Purdue, LC-BL, (E-File)
LASOmailbox@nnsa.doe.gov, (E-File)
locatesteam@lanl.gov, (E-File)
ADESH Correspondence File, (E-File)
ENV-CP Correspondence, File, K490

ENCLOSURE 1

Delegation of "Authorized Representative" for the Clean Water Act (CWA) and NPDES Storm Water Permits and Industrial Outfall Permit by Los Alamos National Security, LLC (LANS) Memo

ADESH-13-041

LAUR-13-25954

Date: AUG 14 2013

Los Alamos
NATIONAL LABORATORY
EST. 1943

Associate Directorate for ESH&Q
P.O. Box 1663, Mail Stop K491
Los Alamos, New Mexico 87545
(505) 667-4218/Fax: (505) 665-3811

Date: March 2, 2009
Refer To: ESH&Q-09-009

Mr. Lawrence E. Starfield, Regional Administrator
U.S. Environmental Protection Agency, Region 6
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

Dear Mr. Starfield:

SUBJECT: DELEGATION OF "AUTHORIZED REPRESENTATIVE" FOR THE CLEAN WATER ACT (CWA) AND NPDES STORM WATER PERMITS AND INDUSTRIAL OUTFALL PERMIT BY LOS ALAMOS NATIONAL SECURITY, LLC (LANS)

The purpose of this letter is to inform the Environmental Protection Agency (EPA) Region 6 of a change in signatory authority for operator of Los Alamos National Laboratory (LANL). Los Alamos National Security, LLC (LANS) has been the Laboratory's management and operation contractor since June 1, 2006. This letter delegates authority as the LANS "authorized representative" for certifying and signing permits and documents required under the Clean Water Act and associated National Pollutant Discharge Elimination System (NPDES) storm water permits (Construction General Permit, Multi-Sector General Permit, LANL Individual Permit), and the NPDES Industrial Outfall Permit. This letter replaces the two LANS' delegation of "authorized representative" letters dated June 1, 2006 (ESH&Q: 06-001) and June 19, 2006 (ESH&Q: 06-002).

As the designated LANS signatory official for Clean Water Act and associated NPDES Permit Programs (please see Enclosure 1), I wish to further identify the position of Division Leader of the Laboratory's Environmental Protection Division (ENV-DO) as certifying official for NPDES standard permit requirements with the authority to certify, review, approve and/or sign as certifying official of all permit applications (e.g. Notice of Intent (NOIs) and Notice of Termination (NOTs)), permit modifications, registrations, certifications, reports and other information as required by EPA. The following is a detailed breakdown of this delegation of signatory authorities.

The following positions are hereby designated as authorized representatives to sign reports, plans, certifications, notices of changed conditions, discharge monitoring reports, and other information as required by the EPA:

NPDES Storm Water Construction General Permit

- Group Leader or Deputy Group Leader of the Laboratory's Water Quality & RCRA Group.
- Cognizant Project Manager, Project Leader, or Subcontractor Technical Representative for the regulated construction activity.
- Responsible Facility Operations Director (FOD), Deputy FOD, or Operations Manager responsible for the overall operation of the regulated facility or activity.

Multi-Sector General Permit & LANL Individual Permit

- Group Leader or Deputy Group Leader of the Laboratory's Water Quality & RCRA Group.
- Director, Deputy Director, or Group Leader of the Laboratory Division responsible for the overall operation of the regulated facility or activity.
- Responsible FOD, Deputy FOD or Operations Manager responsible for the overall operation of the regulated facility or activity.
- Program Director, Program Manager or Project Leader responsible for the overall operation of the regulated facility or activity.

NPDES Outfall Permit No. NM0028355

- Group Leader or Deputy Group Leader of the Laboratory's Water Quality & RCRA Group.
- Director or Deputy Director of the Laboratory Division responsible for the overall operation of the regulated facility or activity.

Please contact Tori George, Division Leader for Environmental Protection, at (505) 667-2211, if you have questions.

Sincerely,

J. Chris Cantwell
Associate Director
Environment, Safety, Health and Quality

Enclosures: a/s

Cy: M. Flores, U.S. EPA, Region 6, Dallas, TX, w/enc.
C. Hosch, U.S. EPA, Region 6, Dallas, TX, w/enc.
W. Lane, U.S. EPA, Region 6, Dallas, TX, w/enc.
I. Chen, U.S. EPA, Region 6, Dallas, TX, w/enc.
B. Larsen, U.S. EPA, Region 6, Dallas, TX, w/enc.
G. Saums, NMED/SWQB, Santa Fe, NM, w/enc.
R. Powell, NMED/SWQB, Santa Fe, NM, w/enc.
D. Winchell, NNSA-LASO, w/enc., MS A316
G. Rael, NNSA-LASO, w/enc., MS A906
G. Turner, NNSA-LASO, w/enc., MS A316
D. Sosinski, LC-DO, MS A183
D. Woitte, LC-LESH, MS A187
P. Wardwell, LC-LESH, w/enc., MS A187
T. George, ENV-DO, w/enc., MS J978
T. Grieggs, ENV-RCRA, w/enc., MS K490
M. Saladen, ENV-RCRA, w/enc., MS K490
T. Lemke, ENV-RCRA, w/enc., MS K490
ESH&Q File, w/enc., MS K491
ENV-DO, File, w/enc., MS J978
ENV-RCRA, File, (09-024), w/enc., MS K490
IRM-RMMSO, w/enc., MS A150

(ENCLOSURE 1)

Los Alamos
NATIONAL LABORATORY
EST. 1943

Office of the Director

March 4, 2009

J. Chris Cantwell
Associate Director
Environment, Safety, Health and Quality
Los Alamos National Security

Dear Mr. Cantwell: Chris

SUBJECT: **CONTRACT NUMBER: DE-AC52-06NA25396, DELEGATION OF AUTHORITY FOR PERMITS, AUTHORIZATIONS AND OTHER DOCUMENTS AS AN OPERATOR OR CO-OPERATOR UNDER ENVIRONMENTAL PERMITS FOR THE LOS ALAMOS NATIONAL LABORATORY**

I, Michael R. Anastasio, Director of Los Alamos National Laboratory and President of Los Alamos National Security, LLC (LANS), the "Company," hereby delegate authority to you, J. Chris Cantwell, Associate Director, Environmental, Safety and Health and Quality (ADESH&Q), to execute on behalf of the Company permits, authorizations, or other documents necessary for the Company to become an operator or co-operator under the environmental permits for the Los Alamos National Laboratory, which permits are currently in the name of the Los Alamos National Security.

This delegation shall remain in effect while you are in the position of Associate Director, ADESH&Q or until revoked by me.

Sincerely,

Michael R. Anastasio
Director

Cy: I. E. Richardson III, DIR, A100
M. Mallory, PADOPS, A102
M. Graham, ADEP, M991
T. George, ENV-DO, J978
D. Sosinski, LC-DO, A183
D. Woitte, LC-LESH, A187
R. Madison, LANS, T009
M. Rafferty, PCM-DO, M722
IRM-RMMSO, A150
DIR-09-085

PO Box 1663, MS A100, Los Alamos, NM 87545
505-667-5101 / FAX 505-665-2679
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ENCLOSURE 2

Concurrence Letters From the United States Department of Interior, Fish and Wildlife Service

ADESH-16-045

LA-UR-16-21721

Date: MAR 2 2 2016

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New Mexico Ecological Services Field Office
2105 Osuna NE
Albuquerque, New Mexico 87113
Phone: (505) 346-2525 Fax: (505) 346-2542

February 12, 1999

Cons. #2-22-98-I-336
Cons. #2-22-95-I-108

David A. Gurule, Acting Area Manager
Department of Energy
Albuquerque Operations Office
Los Alamos Area Office
Los Alamos, New Mexico 87545

Dear Mr. Gurule:

This responds to your letter dated August 6, 1998, requesting our review and concurrence with the Threatened and Endangered Species Habitat Management Plan (HMP) for Los Alamos National Laboratory (LANL). The HMP was prepared by the LANL Ecology Group for the Department of Energy (DOE) as part of the Dual-Axis Radiographic Hydrodynamics Test Facility (DAHRT) Mitigation Action Plan. The U.S. Fish and Wildlife Service (Service) has worked closely with LANL in the development of the HMP. As a result of discussions and meetings following the August 6, 1998, submittal, additional information/clarification was provided via letters, updated Biological Evaluations/HMPs, and e-mail messages, dated September 8, October 20, November 25, and December 9, 1998, and January 4, January 22, and January 29, 1999. The purpose of the HMP is to provide for the protection of threatened and endangered species and their habitats on LANL. The HMP consists of three components that must be used together to assure proper management of the threatened and endangered species: an Overview Document, Site Plans, and Monitoring Plans. It was determined that if all the restrictions and protective measures outlined in the HMP are strictly followed, the implementation of this HMP may affect, but is not likely to adversely affect the Mexican spotted owl (owl), peregrine falcon (falcon), bald eagle (eagle), and southwestern willow flycatcher (flycatcher). The Biological Evaluation (BE) also considered potential impacts on the black-footed ferret, arctic peregrine falcon, and whooping crane. It was determined that there would be no effect on these species because of a lack of habitat.

Property at LANL varies from remote isolation to heavily developed and/or industrialized. The Service agrees, as stated in the Overview document, that a number of activities at LANL have the potential to adversely impact threatened and endangered species. Many of the industrial processes used at LANL have involved hazardous and radioactive materials. These materials as well as remediation of potential release sites may disturb

or reduce population viability of threatened and endangered species. In addition, other potential sources of disturbance or habitat alterations are possible as a result of the residential and commercial development in the LANL area. While the HMP identifies potential sources of adverse effects, this consultation does not necessarily cover all of those impacts. The Service does not anticipate that DOE will be able to plan all of its operations at LANL in accordance with this plan. The direct effects of most actions can be minimized through implementation of the HMP; however, a more thorough assessment is necessary to adequately evaluate the indirect and cumulative impacts of all actions that are funded, authorized, and permitted by DOE, as well as potential impacts from interrelated and interdependent actions. It was agreed (by Service, DOE, and LANL personnel) that consultation concerning ongoing LANL operations would be handled separately from the HMP, under the consultation on the Site-Wide EIS.

The Site Plans identify the particular areas of LANL where operations might impact known occupied or potential habitat for the flycatcher, eagle, falcon, and owl. Suitable habitat for these species, along with protective buffer areas surrounding their habitat, have been designated as Areas of Environmental Interest (AEIs). For the flycatcher, one AEI was established based on an observation of a migrant male flycatcher in 1997. The AEI is located in the Pajarito wetland area and includes the best available riparian habitat. For eagles, one AEI has been identified for wintering habitat that exists along the Rio Grande on the eastern edge of LANL. It is based on the locations of known and potential roost sites. For the falcon, four AEIs have been identified. They consist of the habitat previously identified under the 1985 interagency agreement. These areas are centered on deep canyons on the eastern side of LANL or on adjacent lands. LANL has agreed to implement the recommended management guidelines, which utilize four management zones (A through D) to protect nesting peregrine falcons from disturbance. For the owl, six AEIs have been identified, but only one of these sites is known to be occupied. These AEIs are based on and located in canyons that have been defined as suitable nest/roost habitat.

The AEI management section of each Site Plan provides guidelines for LANL operations to reduce or eliminate threats to each species. The primary threats on LANL property are (1) impacts on habitat quality from LANL operations and (2) disturbance of nesting or roosting birds. The site plans provide information on their location and guidelines for their management. The AEI Site Plans consist of a species description, descriptions of the AEIs for the species, descriptions of current impacts in the AEIs, management plans that describe allowable activities within core and buffer areas under the guidelines of the sites plan and protective measures. Activities discussed in the site plans include day to day activities, such as access into an AEI, as well as long-term projects, such as levels of habitat alteration in the buffer area of an AEI. Restrictions will be implemented on activities that could cause disturbance (people, vehicles and machinery, aircraft, light production, and noise) within occupied AEIs. The location of a potential disturbance activity within the AEI, the occupancy status of the AEI, and the type of activity all affect whether or not an activity is allowable. Habitat alterations are always restricted in core areas, but a limited amount of future development is allowed in currently undeveloped DOE-controlled buffer areas under the guidelines of this site plan as long

as it does not alter habitat in the undeveloped AEI (including light and noise guidelines). The purpose of buffer areas is to protect core areas from undue disturbance or habitat alteration or habitat degradation. Each AEI is specific to the situation or circumstances of the site it covers. According to the HMP, development beyond the cap established for each AEI, or greater than 2 hectares in size, including the developed-area border, requires independent review for ESA compliance.

Varying amounts of development and/or ongoing activities exist in the cores and buffers of each AEI. These developments may include residential, commercial, and light industrial areas, as well as roads and utility corridors. Existing/ongoing activities may include periodic scientific surveys, power line maintenance, recreational use, residential development, ER Program activities, and possible use of a firing site. Potential disturbance may be associated with automobile and truck traffic, construction activities, a live-fire range, explosives testing, and aircraft traffic at the County airport. Ongoing activities in developed areas constitute a baseline condition for the AEIs and are not restricted. New activities including further development within already existing developed areas are not restricted unless they impact undeveloped portions of an AEI core. If a proposed action within a developed area does not meet site plan guidelines, it must be individually reviewed for ESA compliance.

Some activities such as utility corridor maintenance, fuels management, and a limited amount of development are allowed in each AEI (as described in the HMP). The potential impacts of these activities are considered to be insignificant or discountable because they will occur in habitat that has been previously disturbed or is of poor quality due to its size or proximity to already developed areas. It is our understanding (based on the January 22, 1999, e-mail response from Terry Foxx) that the fuels management activities within the owl AEIs will only consist of ongoing and proposed fire protection activities around existing facilities (e.g. thinning around buildings) or those activities that are already covered under the Dome Fire Emergency BA. The other fire management activities mentioned in the HMP will go through the ESH-ID process and further consultation with the Service when a fire management plan is completed in the future.

In general, activities that detrimentally alter habitat in an AEI or would cause unacceptable disturbance to the species inhabiting the AEI are not allowed under the guidelines of a Site Plan. The Site Plans are designed to minimize impacts to threatened and endangered species and their habitat. The protective measures and restrictions outlined in the Site Plans were developed using the best available data, in cooperation with Service biologists.

The U.S. Fish and Wildlife Service concurs with DOE's determination that implementation of LANL's HMP may affect, but is not likely to adversely affect the Mexican spotted owl, American peregrine falcon, bald eagle, and southwestern willow flycatcher based on the protective measures described in the BA and HMP. If all the restrictions and protective measures outlined in the HMP are strictly followed, potential impacts on owls, falcons, eagles, and flycatchers are expected to be insignificant or

discountable for the following reasons: 1) appropriate seasonal restrictions will be implemented to avoid disturbance to potentially breeding flycatchers, peregrines, and owls and wintering eagles; 2) no nest or roost habitat for any listed species will be altered; 3) the total amount of potential foraging habitat that could be impacted within each species home ranges is expected to be insignificant compared to the amount of available foraging habitat throughout the area; 4) monitoring plans have been developed as an integral part of the HMP; and 5) a mechanism for incorporating necessary technical and regulatory changes and updating the HMP has been included (page 32 of the Overview Document).

In future communications regarding this project, please refer to Consultation #2-22-98-I-336. If we can be of further assistance, please contact Carol Torrez of my staff at (505) 346-2525, ext. 115.

Sincerely,

Jennifer Fowler-Propst
Field Supervisor

cc:
Teralene Foxx, Project Manager, Ecology Group, Los Alamos National Laboratory, P.O. Box 1663, Mail Stop M887, Los Alamos, New Mexico 87545
Elizabeth Withers, U.S. Department of Energy, Los Alamos Area Office, 35th Street, Los Alamos, New Mexico
Field Supervisor, Ecological Services, U.S. Fish and Wildlife Service, Phoenix, Arizona

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New Mexico Ecological Services Field Office
2105 Osuna NE
Albuquerque, New Mexico 87113
Phone: (505) 346-2525 Fax: (505) 346-2542

December 9, 2013

Cons. #02ENNM00-2014-I-0014

Geoffrey L. Beausoleil, Acting Manager
National Nuclear Security Administration, Los Alamos Field Office
Department of Energy
Los Alamos, New Mexico 87544

Dear Mr. Beausoleil:

Thank you for your biological assessment entitled, "Biological Assessment of the Effects of Implementing the Jemez Mountains Salamander Site Plan on Federally Listed Threatened and Endangered Species at Los Alamos National Laboratory" (BA); the request for informal consultation and conferencing received on July 25, 2013 and supplemental information supplied in the "Jemez Mountains Salamander (*Plethodon neomexicanus*) Los Alamos National Laboratory (LANL) Site Plan" (Site Plan); and emails dated November 19 and December 3, 2013. The Department of Energy (DOE) requested concurrence with the determination of effects for the endangered Jemez Mountains salamander (*Plethodon* neomexicanus) (salamander) pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (ESA), as amended (16 U.S.C. § 1531 *et seq.*). Your proposed action consists of implementing the Site Plan, and includes of the incorporation of this Site Plan into LANL's Habitat Management Plan (HMP). The HMP was consulted upon in 1999 (Consultation #2-22-981-336) as the primary mechanism to ensure compliance with the ESA at LANL. The actions described in the Site Plan and analyzed in the BA, and supplemental emails are hereby incorporated by reference. You determined that implementing the Site Plan "may affect, is not likely to adversely affect" the salamander, and includes placing restrictions on certain types of work in areas identified as core habitat for the salamander on LANL property with the purpose of ensuring that effects to the salamander from those actions identified in the Site Plan are insignificant and discountable.

The Site Plan does not include any areas within designated salamander critical habitat, indicating that no critical habitat will be affected. The Site Plan has modeled and field validated the model to identify the areas on LANL property with the highest potential to be occupied by salamanders based on habitat features for the salamander. Each area identified by the modeling is termed "Area of Environmental Interest" (AEI) and consists of a "core area" and a "buffer area". The core area habitat is defined as suitable habitat where the salamander occurs or may occur at LANL. The core area habitat consists of sections of north-facing slope that contain the required

micro-habitat to support salamanders. The buffer area is 328 feet (100 meters) wide extending outward from the edge of the core area. Only the Los Alamos Canyon AEI is known to be occupied based on surveys. Surveys for the salamander are known to have a very low detection rate for occupied areas and DOE has assumed that all AEIs at LANL are occupied at all times by the salamander.

Within the Site Plan, DOE has assessed activities that could cause habitat alteration and includes any action that alters the soil structure, vegetative components necessary to the species, water quality, or hydrology in undeveloped areas of an AEI. If an activity were to take place outside of the AEI the activity will be assessed if it will have effects inside the AEI core. Within the core areas, only activities specified within the Site Plan and those that have no effect in the core areas (e.g. no habitat alterations or effects within the core areas) will be conducted without further consultation with the Service. Habitat alterations also include soil pits for soil samples deeper than 6 inches (15.2 centimeters) using either hand or mechanized augers. Within the Site Plan, DOE is proposing fuels management practices to reduce wildfire risk and maintenance of utility corridors within the AEIs. The likelihood that salamanders may be affected by the actions in the Site Plan is very low. To ensure that effects to the salamander are insignificant and discountable, the Site Plan incorporates the following conservation measures as restrictions to the identified work:

Fuels Management Practices to Reduce Wildfire Risk

a. Within undeveloped core areas, thinning trees to a level of 80% canopy cover or higher may occur; tree thinning below 80% canopy cover is not part of the action under this consultation.
b. Large logs on the ground will be left in place and not chipped.
c. Large trees that are felled will be left as large logs on the ground
d. When appropriate, smaller trees and understory shrubs that may be thinned will be dispersed and left on-site to aid in soil moisture retention.
e. In buffer areas, thinning of trees may occur to the current LANL-approved prescription level; clear-cutting will not occur.
f. Thinning activities will not occur during the rainy season when salamanders are surface active, between July 1 – October 31. Thinning activities may occur earlier in October if freezing temperatures are present.
g. In the unlikely event that a salamander is observed surface active during thinning activities, all activities shall cease, and the Service will be notified.

Utility Corridors

a. Cutting trees that threaten power lines may occur within 26 feet (8 meters) of either side of an existing utility line at LANL
b. New utility lines and utility lines requiring clearance of a right-of-way greater than 52 feet (16 meters) total in core habitat is not part of the action under this consultation.

Habitat alterations other than the fuels management practices and utility corridor maintenance described above will not occur in undeveloped core areas under the guidelines of the Site Plan or this consultation. The Service concurs with DOE's determination regarding the salamander for the following reasons:

Within the Site Plan, DOE has placed the above detailed restrictions to ensure that any effects to the salamander and its habitat remain insignificant and discountable. Canopy cover will remain at 80% or greater in undeveloped core areas and fire management actions will occur outside of the salamander surface activity period. Maintaining utility line corridors in areas with existing infrastructure (the utility lines) by removing individual hazard trees is not expected to have any measurable effect on salamanders or their potential habitat. Consequently, we concur that potential effects to the salamander from the proposed action will be insignificant and discountable.

This concludes section 7 consultation regarding the proposed action. If monitoring or other information results in modification or the inability to complete all aspects of the proposed action, consultation should be reinitiated. Please contact the Service if: 1) future surveys detect listed, proposed or candidate species in habitats where they have not been previously observed; 2) the proposed action changes or new information reveals effects of the proposal to listed species that have not been considered in this analysis; or 3) a new species is listed or critical habitat designated that may be affected by the action.

Thank you for your concern for endangered and threatened species and New Mexico's wildlife habitats. In future correspondence regarding this project, please refer to consultation #02ENNM00-2014-I-0014. If you have any questions, please contact Michelle Christman of my staff at (505) 761-4715.

Sincerely,

for Wally Murphy
Field Supervisor

cc:
Wildlife Biologist, Cuba Ranger District, Cuba, NM (Attn: Ramon Borrego)
Director, New Mexico Department of Game and Fish, Santa Fe, New Mexico

United States Department of the Interior

FISH AND WILDLIFE SERVICE

New Mexico Ecological Services Field Office
2105 Osuna Road NE
Albuquerque, New Mexico 87113
Telephone 505-346-2525 Fax 505-346-2542
www.fws.gov/southwest/es/newmexico/

August 6, 2015

Cons. # 02ENNM00-2015-I-0538

Kimberly Davis Lebak, Manager
Department of Energy
National Nuclear Security Administration
Los Alamos Field Office
Los Alamos, New Mexico 87544

Dear Ms. Lebak:

This responds to your July 9, 2015, cover letter and biological assessment (BA) requesting informal consultation for the addition of the Western distinct population segment of the yellow-billed cuckoo (*Coccyzus americanus occidentalis*) (cuckoo) and the New Mexico meadow jumping mouse (*Zapus hudsonius luteus*) (jumping mouse) to the Los Alamos National Laboratory Habitat Management Plan, Los Alamos, New Mexico. As documented in your BA, which is hereby incorporated by reference, we find that your proposed action will have insignificant and discountable effects to the cuckoo and the jumping mouse. Therefore, the Service concurs with your determination of "may affect, is not likely to adversely affect" for the cuckoo and the jumping mouse.

This concludes section 7 consultation regarding the proposed action. If monitoring or other information results in modification or the inability to complete all aspects of the proposed action, consultation should be reinitiated. Please contact the Service if: 1) future surveys detect listed, proposed or candidate species in habitats where they have not been previously observed; 2) the proposed action changes or new information reveals effects of the proposal to listed species that have not been considered in this analysis; or 3) a new species is listed or critical habitat designated that may be affected by the action.

Thank you for your concern for endangered species and New Mexico's wildlife habitats. If you have any questions, please contact Eric Hein of my staff at the letterhead address or at (505) 761-4735.

Sincerely,

ERIC HEIN

for Wally Murphy
Field Supervisor

cc:
Director, New Mexico Department of Game and Fish, Santa Fe, New Mexico

ENCLOSURE 3

Multi-Sector General Permit (MSGP) Notice of Intent (NOI) Reporting Pursuant to Part B.12.H

ADESH-16-045

LA-UR-16-21721

Date: MAR 2 2 2016

Los Alamos
NATIONAL LABORATORY
EST 1943

Environmental Protection Division
Environmental Compliance Programs (ENV-CP)
PO Box 1663, K490
Los Alamos, New Mexico 87545
(505) 667-0666

Date: OCT 2 9 2015
Symbol: ENV-DO-15-0309
LA-UR: 15-28383
Locates Action No.: N/A

Mr. Brent Larsen
Water Quality Protection Division (6WQ)
U.S. Environmental Protection Agency, Region 6
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

Dear Mr. Larsen:

Subject: **National Pollutant Discharge Elimination System (NPDES) Permit Tracking No. NMR053195, Multi-Sector General Permit (MSGP) Notice of Intent (NOI) Reporting Pursuant to Part B.12.H.**

In submitting a NOI for coverage under the new NPDES Multi-Sector General Permit, Los Alamos National Security (LANS) experienced significant problems with EPA's NeT NPDES eReporting Tool which resulted in certification of the NOI on September 3 and initial submission of a NOI with incomplete outfall attribute data and incorrect information. During this time LANS staff contacted EPA's NOI Processing Center for support and was given the recommendation to contact Region 6 personnel for further guidance. Per this direction, on September 1, 2015, Terrill Lemke left you a voicemail summarizing the issues and potential impacts of the difficulties experienced with the new electronic reporting system. For additional clarification, the following is a summary of the timeline of events associated with the NOI submission.

- Monday, August 31, 2015
    - Initiated NOI submission using the NeT NPDES eReporting Tool.

- As data was entered into each data field on the NOI form, the Tool was very slow in processing the data and allowing entry into the next field. This created a significant waiting time.
- Upon reaching the fields on the NOI form where outfall attribute data was entered the Tool began to randomly crash, repeatedly deleting all unsaved data.

- Tuesday, September 1, 2015
  - Tool continued to be very slow and randomly crash, repeatedly deleting all unsaved data.
  - For each outfall, when listing the constituents associated with impaired waters, the Tool's auto population feature initially displayed incorrect data which required additional editing and then eventually stopped functioning and caused the Tool to crash.
  - Much of the outfall attribute data had to be reentered multiple times before it was possible to successfully save it to the system.
  - After each save or Tool crash the eReporting Tool would close the NOI form. The time required for the Tool to repeatedly reopen the form made data entry very time consuming.
  - LANS staff contacted the EPA NOI Processing Center on the afternoon of Sept 1 for technical support:
    - NOI Processing Center staff stated that they had been "flooded" with calls over the past week on Tool problems.
    - LANS staff expressed their concern about the length of time being required to enter data and the potential inability to complete the NOI form by the Sept 2 deadline. No solution was available.
    - LANS staff explained the difficulty with entering outfall information for 73 outfalls and NOI Processing Center staff stated that they had received numerous calls on problems with entering outfall data and that some permittees couldn't even enter 20 outfalls.
    - NOI Processing Center staff recommended contacting Regional personnel to notify them of the situation and to seek additional guidance.
  - The eReporting Tool went down at approximately 3:30 pm MDT and remained down until after 9 pm MDT. This eliminated the opportunity to input data during normal business hours.

- Wednesday, September 2, 2015
  - Continued decrease in the performance of the eReporting Tool.
    - Increase in the time for the Tool to process information after entry of each item of data.
    - Increased frequency in the Tool crashing.
    - For each outfall, when listing the constituents associated with impaired waters, the form had to be saved after entry of each individual constituent. Entry of more than one constituent without saving would cause the Tool to crash.

- With the decreased performance of the eReporting Tool LANS staff contacted the EPA NOI Processing Center for direction and Processing Center staff stated the following:
  - They were aware of the problems with the Tool but could provide no solutions or technical direction.
  - They had been reporting daily to EPA on the problems and EPA was definitely aware of the issues.
  - When asked about taking the Tool down at 3:30 MDT on Sept. 1, staff stated that they thought the programmers may have taken the system down to assess the problems.
  - Stated again that they had received many calls about technical issues with the Tool.
  - The more data that was entered the slower the Tool would get.
  - When asked again about the possibility that LANS may not be able to get all information into the NOI, staff stated that LANS would be able to access the submitted NOI to modify/add data after the 30 day waiting period.
- eReporting Tool went down again at 3:30 pm MDT and did not come back up until after 10 pm MDT, again eliminating the opportunity to input data during normal business hours.
- The LANS NOI with all information except some remaining outfall attribute data was submitted by the Preparer at 10:50 pm MDT.
  - The LANS NOI certification signatory was prepared to certify the NOI at this time but didn't get notification that the NOI was ready for certification until 9:37 am MDT on Sept. 3, almost 11 hours later.
  - The NOI was certified on Sept 3, 2015.

Additionally, the NeT NPDES eReporting Tool did not provide dissolved Thallium as a constituent option, but only allowed the selection of total Thallium as an impaired water pollutant under a "Cause Group" when "Metals (other than Mercury)" was selected from the drop down menu. This resulted in LANS having to enter total Thallium as an impaired water pollutant in error for the following outfalls: 002, 005, 006, 007, 008, 009, 010, 011, 012, 016, 017, 018, 019, and 020. LANS appreciates any assistance you may have relative to the total Thallium vs. dissolved Thallium issue. During a subsequent quality assurance evaluation, LANS staff also determined that total Copper was erroneously entered as an impaired water pollutant for outfall 051 and needs to be deleted from the NOI.

LANS is committed to maintaining compliance with the MSGP requirements. Per Section B.12.H of the MSGP, the LANS NOI will be modified to include the remaining outfall attribute data that could not be included on the initial submission and to delete Copper as an impaired water pollutant for outfall 051. LANS coverage under the 2015 MSGP became effective on October 3, 2015, and with the NOI now accessible, actions to update the NOI have been initiated.

Any additional direction or guidance you may have would be appreciated. Please contact Terrill W. Lemke at (505) 665-2397 of the Environmental Compliance Programs (ENV-CP) if you have any questions.

Sincerely,

Anthony R. Grieggs
Group Leader
Environmental Compliance Programs (ENV-CP)
Los Alamos National Security, LLC

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ENCLOSURE 4

Industrial Sites and Outfalls by Sector

ADESH-16-045

LA-UR-16-21721

Date: MAR 2 2 2016

Industrial Sites and Outfalls by Sector

Sector	Industrial Site	Monitored Outfalls	Substantially Identical Outfalls
A	TA-3-38 Carpenter Shop	073	074
AA	TA-3-38 Metals Fab Shop	002	N/A
AA	TA-3-39 & 102 Metal Shop	004	N/A
AA, F	TA-3-66 Sigma Complex	018	013 014 015 016 017 019
AA, F	TA-3-66 Sigma Complex	020	N/A
D	TA-60 Asphalt Batch Plant	043	N/A
K	TA-54 Area G	051	052
K	TA-54 Area G	072	070 071
K	TA-54 Area G	053	065 066
K	TA-54 Area G	069	059 058 057 056 055 054 067 068 060 061 062 063 064
K	TA-54 Area L	050	N/A
K	TA-54 RANT	047	048 046 045 044
N	TA-60 MRF	029	N/A

Sector	Industrial Site	Monitored Outfalls	Substantially Identical Outfalls
O	TA-3-22 Power & Steam Plant	005	006
O	TA-3-22 Power & Steam Plant	009	007 008 010
O	TA-3-22 Power & Steam Plant	012	011
P	TA-54 MFW	049	N/A
P	TA-60 Roads and Grounds	031	030
P	TA-60 Roads and Grounds	039	038 040
P	TA-60 Roads and Grounds	036	037
P	TA-60 Roads and Grounds	032	033 034 035
P	TA-60 Roads and Grounds	042	041
P	TA-60-1 Heavy Equipment Yard	022	021 023 024 025
P	TA-60-2 Warehouse	026	027 028
P	TA-60-2 Warehouse	075	N/A

N/A = Not Applicable

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Appendix M – Reference Documents and Graphite Storage Area Documentation

(See next page)

EPC-CP-QP-047	Revision: 2	Los Alamos NATIONAL LABORATORY EST. 1943
Effective Date: 09/06/2017	Next Review Date: 09/06/2020	

Environment, Safety, and Health Directorate

Environmental Protection and Compliance Division – Compliance Programs

Quality Procedure

Inspecting Stormwater Runoff Samplers and Retrieving Samples for the MSGP

Document Owner/Subject Matter Expert:

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Derivative Classifier: ☐ **Unclassified or** ☒ **DUSA ENVPRO**

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Ellena I. Martinez	EPC-CP	Signature on File	8-22-17

Approval Signatures:

Subject Matter Expert:	Organization:	Signature:	Date:
Holly L. Wheeler	EPC-CP	Signature on File	9-5-17
Responsible Line Manager:	Organization:	Signature:	Date:
Terrill W. Lemke	EPC-CP Team Leader	Signature on File	9-5-17
Responsible Line Manager:	Organization:	Signature:	Date:
Anthony R. Grieggs	EPC-CP Group Leader	Signature on File	9-6-17

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REVISION HISTORY

Document Number and Revision *[Include revision number, beginning with Revision 0]*	**Effective Date** *[Document Control Coordinator inserts effective date]*	**Description of Changes** *[List specific changes made since the previous revision]*
ENV-RCRA-QP-047, Rev. 0	03/11	New Document.
ENV-RCRA-QP-047, Rev. 1	02/13	Annual Review and Revision
EPC-CP-QP-047, Rev. 2	09/06//2017	Review and revision. Updated document to new template and new group name. Clarified steps, modified inspection form EPC-CP-Form-1010, and added crosswalk to electronic form in MC Express. This document replaces ENV-RCRA-QP-047 R1.

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1.0 INTRODUCTION

Los Alamos National Security, LLC (LANS) through Environmental Protection and Compliance-Compliance Programs (EPC-CP) conducts stormwater monitoring activities required pursuant to the National Pollutant Discharge Elimination System (NPDES), Multi-Sector General Permit (MSGP) at Los Alamos National Laboratory (LANL). The MSGP requires LANL to monitor stormwater runoff from industrial sites relative to potential pollutants.

1.1 Purpose

This procedure describes the process for inspecting ISCO stormwater samplers and retrieving stormwater runoff samples from monitored outfall locations where LANS conducts stormwater monitoring activities pursuant to the NPDES, MSGP at LANL.

Inspections and sample retrieval conducted under this procedure should be documented using the Maintenance Connection Express™ (MC Express) web application on a tablet or notebook style computer. (In the event of electronic hardware or web application failure, personnel may use a printed hard copy to conduct inspection and sample retrieval.)

1.2 Scope

This procedure applies to the EPC-CP technical staff and subcontractor personnel (as applicable) conducting activities at automated stormwater sampling stations used for monitoring industrial stormwater discharge under the MSGP.

The MSGP Program Lead is the primary person with responsibility for the steps in this procedure. EPC-CP personnel will be appointed with responsibility for a subset of sampling stations.

1.3 Applicability

Stormwater runoff samples are collected at MSGP Program stations either with a refrigerated Avalanche® or ISCO 3700 automated sampler, single stage sampler or grab sample. ISCOs are designed to automatically collect water when the water surface is high enough to trigger a liquid level actuator and fill the sample bottles. Field personnel are required to inspect the sampling station while retrieving water samples during MSGP stormwater monitoring periods and at other intervals determined by the program or as directed by program personnel.

2.0 PRECAUTIONS AND LIMITATIONS

Hazards in the work described in this procedure are controlled thorough site specific Integrated Work Documents (IWDs). The hazard level of the activities in this procedure is **moderate**.

Personnel performing steps in this procedure that involve electrical equipment **MUST** be trained to LANL electrical safety standards as prescribed in the IWD before performing those steps.

Inspections may be discontinued during periods or conditions that make sites dangerous for worker safety or prevent personnel from safely accessing sites (e.g., weather-related events such as flash

floods, flooding, lightning, wildfires, hail, icy roads, deep snow, or LANL operations such as firing shots or burns).

Some terminology varies between the MC Express software and the Maintenance Connection desktop software.

- The "Reading" field in MC Express is the same field as "Reading Final" in Maintenance Connection desktop and "Meas." on a hard copy (printed) work order.
- The "Complete" option in MC Express is the same as a "Yes" answer; the "Failed" option in MC Express is the same as a "No" answer. Maintenance Connection desktop and hard copy (printed) work orders use "Yes" and "No" terminology.

3.0 PREREQUISITE ACTIONS

3.1 Planning and Coordination

1. Schedule work to be completed by the target date appearing on the work order(s) or as requested by the MSGP Program Lead if a form is not issued.
2. Inform (e.g., by e-mail) Facility contacts, as specified in the IWD, of the schedule for sampler inspection work and locations up to a week (preferred) before but no later than the day before (for minor changes) to be added to the appropriate plan of the day.

   Note: For some Facility Operations Divisions (FODs) like the Utilities and Institutional Facilities FOD, MSGP stormwater monitoring activities are on a standing plan of the day. However, this must be requested each year at the beginning of the monitoring season.
3. The IWD Part II (2101 Form) addresses specific requirements and training for FODs.
4. Obtain any necessary additional paperwork before conducting this work, including IWD's, and excavation permits (as necessary).
5. Gather the required equipment (see section below) for the work to be done.
6. Using the Safari web browser on a tablet or notebook style computer, navigate to http://express.maintenanceconnection.com and select English from the available dropdown menu.
7. Log into the MC Express application using your login credentials.
8. Confirm that the work order list displayed in the "My Open Work Orders" section matches your sites (see example in Attachment 1). If work orders are not displayed, click the "Refresh" bar at the bottom of the page. The page will refresh and any work orders issued since you logged in will be loaded to the application. If the work order lists still do not match, contact the MSGP Data Management Team for clarification.
9. Ensure that field personnel have access to accurate time measurement at the Site. When at the site, the clock time on the ISCO sampler must be set to Mountain Standard Time at all times, with no daylight saving time adjustment.

3.2 Tools and Equipment

Ensure the following equipment is available in the field vehicle:

- Safety glasses with side shields
- Sturdy hiking boots or steel toed shoes with soles that grip
- Nitrile gloves
- Cell phone (only government cell phones with batteries removed are allowed in secure areas)
- Copy of this procedure
- Copy of the Integrated Work Documents (IWDs)
- Copy of the MSGP Sampling and Analysis Plan
- Site Map(s) (as needed)
- Current electronic or paper inspection form EPC-CP-Form-1010, MSGP ISCO Sampler Inspection and Sample Retrieval
- Sample Collection Log/Field Chain of Custody (see EPC-CP-QP-048)
- Government issued iPad equipment with Safari web browser and Good™ app.
- Necessary access and station keys
- Charged spare battery(s)
- Battery voltage tester
- Clean spare tubing (pump, suction, discharge types, sampler specific)
- Certified clean replacement sample bottles (glass and poly)
- Spare/replacement sampler parts (liquid level actuator, distributor arm)
- Shovel
- Wooden stakes
- Plastic wire “zip” ties
- Coolers with ice or Blue Ice®
- Paper Towels
- Marker pen (permanent, waterproof)
- Ball point pen
- Zip lock bags
- Chain of custody seals

- 0.45 micron filter (where applicable)

4.0 INSPECTING STORMWATER SAMPLERS AND RETRIEVING SAMPLES

Throughout this procedure the field inspector should document comments and notations in the "Reading" field of the associated task line. Any additional comments not documented in a "Reading" field can be entered in in the "Comments" field of the same task line. If the inspector needs more space additional comments can be entered in the "Labor Report Update" field (see Section 4.3) when the work order is updated to "Complete" status.

4.1 Inspecting the Sampler

1. If conditions prevent a sampler inspection, document the conditions in the "Labor Report Update" field on the work order and notify the Program Lead or designee within 24 hours. Multiple attempts can be documented on the original inspection work order. If the target date cannot be met, the inspector must contact the MSGP Program Lead no less than 24 hours before target date for guidance.
2. In MC Express open the work order issued for the current location by clicking on the appropriate line. If needed, use the expand arrow located on the right side of the display to expand the work order detail information. The work order will open in the display to the work order Summary page.
3. Click on the "Tasks" bar to navigate to the work order Tasks page.
4. Remove the top cover from the sampler.

4.1.1 On Arrival

5. Item 1: Verify and document the sampler is ON and its condition upon arrival by clicking the expand arrow located on the right side of the task line and changing the "Complete" or "Failed" line to "Yes" (see example in Attachment 1). Explain any non-functional status (remember to use the "Reading" field unless more space is needed for comments). A hard copy inspection example is provided in Attachment 2 as a crosswalk to the electronic format.

   If a sampler has been inactivated (e.g., sample collection completed) prior to this inspection but continues to appear on the inspection form, change the "N/A" line to "Yes". Subsequent questions regarding this sampler may be left unanswered in this section.

CAUTION

Click the "Save" bar after all entries for a task line have been completed and before proceeding to the next question. Failure to "Save" results in lost data entries.

6. Item 2: Verify and document the ISCO programming displays the following by clicking the expand arrow located on the right side of the task line and changing the "Complete" or "Failed" line to "Yes".

ISCO 3700 sampler display should indicate "Sampler Inhibited"

OR

Avalanche sampler display should indicate "Program Disabled"

If the display does not indicate these messages, describe the messages (e.g., "Done X samples", "sampler off", etc.). If there is no indication of flow and the sampler triggered due to a non-flow event (e.g., animal, tumbleweed, etc.), describe this. Document any messages from the ISCO display.

7. Item 3: Verify and document the sampler is set to the correct Mountain Standard Time +/- no more than 1 minute by clicking the expand arrow located on the right side of the task line and changing the "Complete" or "Failed" line to "Yes". If the sampler is set incorrectly, reprogram for the correct Mountain Standard Time. Describe the work performed and correction applied (e.g., "ISCO clock was X minutes slow").
8. If the location has more than one sampler complete Steps 5 through 7 for each sampler.
9. Don nitrile gloves and safety glasses.
10. Remove the center section from the sampler.

4.1.2 Water Collection Information

11. Item 4: Document any evidence of storm water flow at the sampling location by clicking the expand arrow located on the right side of the task line and changing the "Complete" or "Failed" line to "Yes". Describe the evidence of flow (e.g. sediment or vegetation movement, erosion, standing water).
    - If the sampler did not trip but there is evidence of flow, document the date and time storm water discharge began from the precipitation report.
    - If the sampler tripped or collected storm water, document the date/time stamp from the sampler if available or from the precipitation report.
12. Item 5: Document if any storm water was collected (from either a sampler or by grab sample) by clicking the expand arrow located on the right side of the task line and changing the "Complete" or "Failed" line to "Yes". If any water was collected, complete the Bottle Information section (Item 20). Document if the water is taken by grab sample. Follow the steps in Section 4.2 of this procedure to retrieve samples.
13. Item 6: For Avalanche samplers only, verify and document the current refrigerator temperature of the sampler if water was collected by clicking the expand arrow located on the right side of the task line and changing the "Complete" or "Failed" line to "Yes". Record the temperature. If unable to review temperature, check "No" and describe the condition (e.g. dead battery, electrical short).

    If no water was collected the field inspector may change the "N/A" line to "Yes".

14. Item 7: For Avalanche samplers equipped with an ISCO pH and Temp Module, verify and document a pH measurement was taken on the collected water by clicking the expand arrow located on the right side of the task line and changing the "Complete" or "Failed" line to "Yes". Record the pH measurement taken at the time of Bottle 1 as "Average: Minimum:Maximum." If unable to review pH, check "No" and describe the condition (e.g. damaged meter).

    If no water was collected the field inspector may change the "N/A" line to "Yes".

4.1.3 Water Retrieval Information

15. Item 8: Verify and document whether a sample volume was retrieved (from either a sampler or by grab sample) and taken off site by clicking the expand arrow located on the right side of the task line and changing the "Complete" or "Failed" line to "Yes". If sample volume was retrieved, record the total volume **taken off site**.

16. Item 9: Verify and document whether a visual assessment of the water was performed by clicking the expand arrow located on the right side of the task line and changing the "Complete" or "Failed" line to "Yes". The MSGP program visual assessment form is not included in this procedure (see EPC-CP-QP-064). Ensure this form is submitted with the sampler inspection form. If the sample was filtered, conduct the visual assessment and document "Filtered sample."

4.1.4 On Departure

17. Item 10: Verify all cable and electrical connections are attached and firmly tightened (not loose) upon departure from the site by clicking the expand arrow located on the right side of the task line and changing the "Complete" or "Failed" line to "Yes".

    Connections may work loose over time due to temperature changes and if there are dis-similar metals at the connection points. The loose connections can introduce voltage spikes which inherently cause current spikes that may result in blown fuses.

    If the cables require replacement, connections require tightening, or other maintenance performed, describe the work performed (e.g., "tightened connectors on battery).

    If maintenance cannot be completed at the time of inspection, then describe the condition (e.g. cables chewed through by animal) and follow-up work needed (e.g., replace cables).

18. Item 11: Verify and document power supply function. Use a voltage meter to check the voltage of the battery(s) and record the voltage(s). Change the "Complete" or "Failed" line to "Yes" to indicate if battery voltage is acceptable upon departure from the station (≥11.7 for non-floating charged batteries at ISCO 3700 samplers and ≥11.0 for floating-charged batteries at Avalanche samplers).

    Check the voltage of the solar panel if access can be gained to the weather protected terminal covers on the back of the panel.

4.1.5 Equipment Specific Tasks

19. Item 12: Verify and document the sampler passes the diagnostic test by clicking the expand arrow located on the right side of the task line and changing the "Complete" or "Failed" line to "Yes". Directions for running the diagnostics test is provided in ENV-CP-QP-045.

    If a sampler has been inactivated (e.g., sample collection completed) prior to this inspection but continues to appear on the inspection form, change the "N/A" line to "Yes" on this task line. Subsequent questions regarding this sampler may be left unanswered in this section.

Warning

The internal pump tubing must be replaced if the pump tubing life has reached or exceeded the preset pump counts. The internal pump tubing life is set 500,000 pump counts for the 3700 and 1,000,000 for the Avalanche.

Only reset the pump counts after replacing the internal tubing.

    If maintenance is necessary and can be performed at the time of inspection, describe the work performed. If maintenance cannot be completed at the time of inspection, then describe the condition and follow up with a description of work needed.

    If a sampler has been inactivated (e.g., sample collection completed) prior to this inspection but continues to appear on the inspection form, change the "N/A" line to "Yes" on this task line. Subsequent questions regarding this sampler may be left unanswered in this section.

20. Item 13: Verify and document the sample tubing is free or clear of debris by clicking the expand arrow located on the right side of the task line and changing the "Complete" or "Failed" line to "Yes".

    Check the physical condition of the sampler including the actuator and intake line for correct location and height in the channel. The actuator, intake line and strainer (if used) should be placed on the cutting side of the channel to help minimize the possibility of sediment burying the intake line/strainer. Adjust as necessary to capture flow within the channel. The actuator, intake line and strainer must be clear of debris (sediment, pine needles, etc.).

    If maintenance (e.g., clearing the tube, reposition tubing intake) is necessary and can be performed at the time of inspection, perform the work and describe. If maintenance cannot be completed at the time of inspection (e.g., can't clear intake tubing and spare intake tubing not on hand to replace) then describe the condition and follow up with description of work needed.

21. Item 14: Verify and document the sample tubing has passed a suction test by clicking the expand arrow located on the right side of the task line and changing the "Complete" or "Failed" line to "Yes". Check the condition of sample tubing and vent tubing.

    If maintenance (e.g., replace internal pump tubing) is necessary and can be performed at the time of inspection, perform the work and describe. If maintenance (e.g., replace sampler

pump) cannot be completed at the time of inspection then describe the condition and follow up with description of work needed.

22. Item 15: Verify and document the sampler is ON prior to departing the site by clicking the expand arrow located on the right side of the task line and changing the "Complete" or "Failed" line to "Yes".

23. Item 16: Verify and document the liquid level actuator has been set to "Latch" prior to departing the site by clicking the expand arrow located on the right side of the task line and changing the "Complete" or "Failed" line to "Yes". If the sampler tripped and requires reset of the sampling program, reset the actuator by toggling the switch to "Reset" and then back to "Latch".

24. Item 17: Verify and document the ISCO programming displays the following by clicking the expand arrow located on the right side of the task line and changing the "Complete" or "Failed" line to "Yes".

    ISCO 3700 sampler display should indicate "Sampler Inhibited"

    OR

    Avalanche sampler display should indicate "Program Disabled"

    If an error occurs, reconfigure the sampler per EPC-CP-QP-045.

25. If the location has more than one sampler complete Steps 19 through 24 for each sampler.

4.1.6 Maintenance Information

26. Item 18: Verify and document any maintenance completed while on site that is not documented elsewhere on work order by changing the "Complete" or "Failed" line to "Yes". Describe the work performed.

    Maintenance items may include (but are not limited to) site clearing, installing new or additional equipment, removing equipment, animal/pest mitigation, problems with equipment location, etc.

    If a battery was replaced record the voltage of the new battery and the battery identification number. If the battery does not have an identification number, contact the MSGP Program Manager to have one assigned. Once assigned, the number must be painted or written in a permanent manner on the battery.

27. Item 19: Verify and document any maintenance needed that could not be completed while on site that is not documented elsewhere on work order by changing the "Complete" or "Failed" line to "Yes". Describe any work needed. Refer to EPC-CP-QP-045 for sampler operation and maintenance.

4.1.7 Bottle Information

28. Item 20: Document water collected by clicking the expand arrow located on the right side of each bottle's task line and change the "Complete" or "Failed" line to 'Yes'. Record the following information for each bottle by position number in the carousel.
    - Date (MM/DD/YY or MM-DD-YY) and time the ISCO collected water.
    - Volume of water in the bottle
    - Type of bottle (e.g. G for glass, P for poly)
    - Specific ISCO displayed message, if present

    If the sampler(s) did not trigger, change the "N/A" line to 'Yes' for Bottle #1 of each sampler and leave the other Bottle task lines unanswered.

    If a sampler has been inactivated (e.g., sample collection completed) prior to this inspection but continues to appear on the inspection form, change the "N/A" line to "Yes" on this task line. Subsequent questions regarding this sampler may be left unanswered in this section.
29. If the location has more than one sampler complete Step 28 for each sampler.
30. Replace and secure the sampler top cover and secure the sampler shelter (if sampler is in a shelter).

4.2 Retrieving Samples

1. Don nitrile gloves and safety glasses.
2. Add up the volume of water collected (see flow chart in Attachment 3) and check that the total volume of water in glass and poly matches the required volume for the specific location identified in the MSGP Sampling and Analysis Plan. The volume of water required to complete analytical may vary by monitored location.
    - If sample volume is sufficient to fulfill all analytical requirements, continue with Step 3.
    - If sample volume is sufficient to fulfill part of the analytical requirements, consult the prioritization order on the MSGP Sampling and Analysis Plan to determine which analytical to fulfill OR contact the MSGP Data Manager, continue with Step 3 but retrieve only the volume needed.
    - If the collected sample will NOT fulfill the minimum required volume for any analytical:
        - Record total volume retrieved as "0" in Item 8
        - Complete a Visual Assessment (see EPC-CP-QP-064)
        - Pour out all water on the ground
        - Skip to Step 10 below

CAUTION

ISCO Avalanche samplers are programmed to cool samples to 4°C. If water is collected and the refrigerator temperature reads higher than 6°C, **do not** retrieve samples that require ICE preservation. Refer to the MSGP Sampling and Analysis Plan for preservation requirements.

3. Remove filled and partially-filled bottles from the carousel.
4. For samples retrieved, immediately place lids onto the sample bottles and securely seal. Place custody seal tape on each bottle.
5. Write the date and time collected, Sampler Location number, and the corresponding carousel number on each retrieved sample bottle. Retrieve the sample collection date and time from the ISCO sampler.
6. Record total volume retrieved in Item 8.
7. Conduct a Visual Assessment (see EPC-CP-QP-064).
8. Place retrieved sample bottles in a cooler with blue ice (or equivalent).
9. Return any excess water or collected volume that exceeded the amount required to the ground at the location collected.
10. Install new certified clean sample bottles in the carousel to replace those bottles that collected stormwater. The number and type of bottles may vary. Ensure bottles match the configuration specified in the MSGP Sampling and Analysis Plan.
11. The 0.45 micron filter may also need to be replaced. Consult the most current revision of the Sampling and Analysis Plan for specifics. If the sampler is turned off for the quarter but new certified clean sample bottles and/or the filter have not been replaced, note this as follow-up maintenance required (see Item 19).
12. Replace and secure the center section of the sampler.
13. Return to steps in Section 4.1.

4.3 Completing the Inspection Form

1. When all task lines have been completed, make sure you have clicked the “Save” bar at the bottom of the page.
2. Click the “Back” arrow button in the upper left hand corner to exit the work order Tasks page and return to the Work Order Summary page.
3. Click the checkered flag in the upper right corner of the work order Summary page.

CAUTION

MC Express automatically changes the work order status to “Closed” and auto-populates the date and time fields.

4. Item 21: Click on the expand arrow located on the right side of the "New Status" field and select "Completed" from the available dropdown menu. Ensure the date and time auto-populated are the date and time the inspection was completed.

   If these fields need to be updated, click the "Date" field to modify it. Make necessary adjustments using the available timestamp application and click "Set" to apply changes.

6. Item 22: The inspector must type in his/her name in the "Labor Report Update" field.

   Any additional notes, observations, or site conditions not documented in a task line "Reading" or "Comments" field can also be documented in the "Labor Report Update" field.

7. Scroll down the page to the "Signature" bar and click the expand arrow on the left side of the bar to open the "Signature" field.

8. Item 23: Capture an electronic signature by drawing with a finger on the tablet screen. The Lead Inspector is certifying that the information submitted is "true, accurate, and complete" by electronically signing the work order.

   Note: If using MC Express on a desktop screen (not a tablet), the mouse must be used to sign electronically.

9. Click on the "Save" bar at the bottom of the page to close the "Signature" field.

10. Click on the "Back" button located in the upper left hand corner to return to the "My Open Work Orders" page.

11. Once you have completed an inspection, click on the Menu button again, and then click the "Logout" bar. Close the browser. All work will automatically uploaded from the MC Express application to the MC database.

    Always log out of MC Express when you have finished work OR if work is interupted.

4.4 REMOVING STORMWATER SAMPLES FROM THE FIELD

1. If samples were collected, deliver the samples and corresponding Sample Collection Log/Field Chain of Custody form to the EPC-CP Stormwater Program Laboratory at TA-59-1.

2. Sign the Sample Collection Log/Field Chain of Custody and place it with the sample(s) in the refrigerator. Ensure custody seal tape is intact on each sample bottle. Lock the refrigerator to prevent tampering. Refer to EPC-CP-QP-048, *Processing MSGP Stormwater Samples* for instruction on processing samples and submitting samples for shipping to an analytical laboratory.

5.0 TRAINING

The following personnel require training before implementing this procedure:

- EPC-CP technical staff and subcontract or other personnel who inspect automated stormwater samplers and retrieve stormwater samples for the MSGP.

For EPC-CP staff the training method for this procedure is "self-study" (reading). Other participating groups may require training documentation pursuant to local procedures.

Personnel performing this procedure will be familiar with the most current versions of the following procedures and operation manuals:

- EPC-CP MSGP Sampling and Analysis Plan for the current monitoring year
- Manual for Teledyne ISCO Sampler Model 3700
- Manual for Teledyne ISCO Avalanche® sampler
- Manual for Teledyne ISCO 701 pH/Temperature module (if equipped at station)

Personnel performing steps in this procedure that involve electrical equipment **MUST** be trained to LANL electrical safety standards as prescribed in the IWD before performing those steps.

6.0 RECORDS

Records generated by this document will be submitted to the EPC-CP Records Management designated point of contact or document manager in accordance with P1020-1, *Laboratory Records Management* and with ADESH-AP-006, *Records Management Plan*.

- Completed ISCO Sampler Inspection and Sample Retrieval form(s)

7.0 DEFINITIONS AND ACRONYMS

7.1 Definitions

See LANL *Definition of Terms*.

7.2 Acronyms

See LANL *Acronym Master List*.

EPC-CP	Environmental Protection and Compliance-Compliance Programs
IWD	Integrated Work Document
LANL	Los Alamos National Laboratory
LANS	Los Alamos National Security, LLC
MC Express	Maintenance Connection MC Express web application
MSGP	Multi-Sector General Permit
NPDES	National Pollutant Discharge Elimination System

8.0 REFERENCES

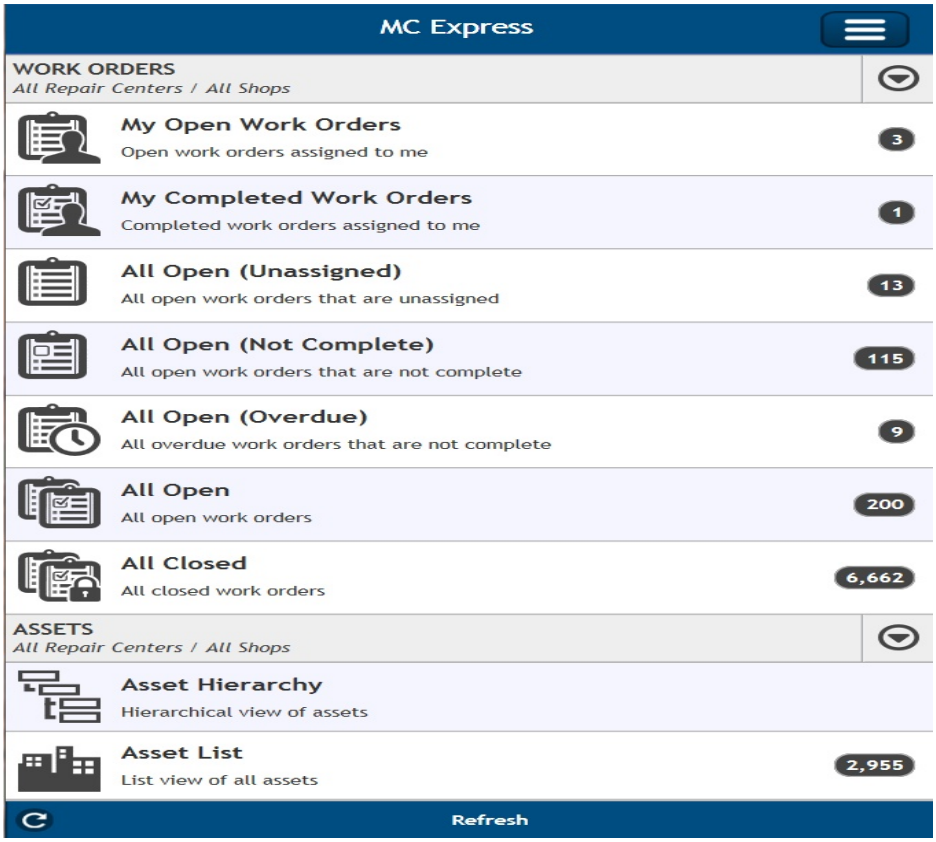
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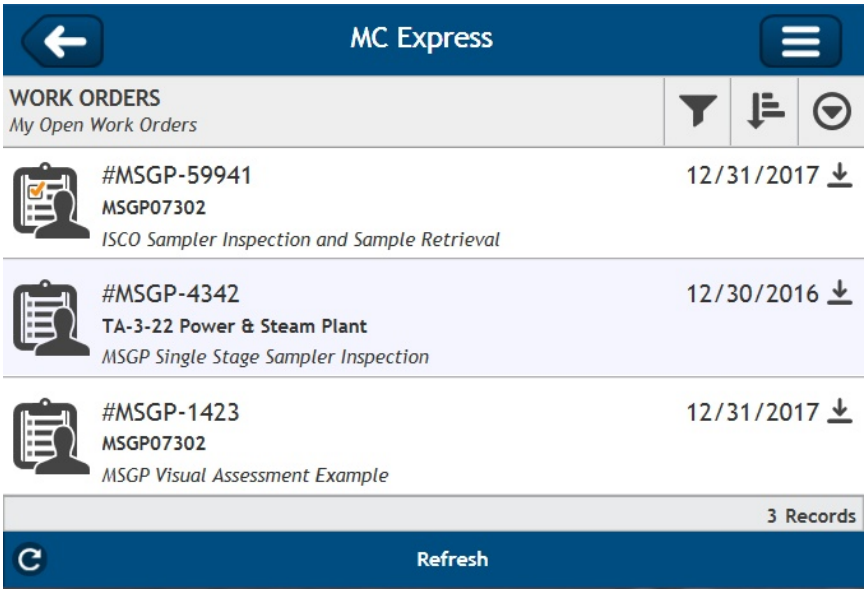
9.0 ATTACHMENTS

Attachment 1: Screenshot Examples of EPC-CP-Form-1010.02 in MC Express
Attachment 2: Crosswalk of EPC-CP-Form-1010.02 Hard Copy Format to Electronic Format Example
Attachment 3: Flow Chart for Sample Retrieval

Attachment 1: Screenshot Examples of EPC-CP-Form-1010.02 in MC Express

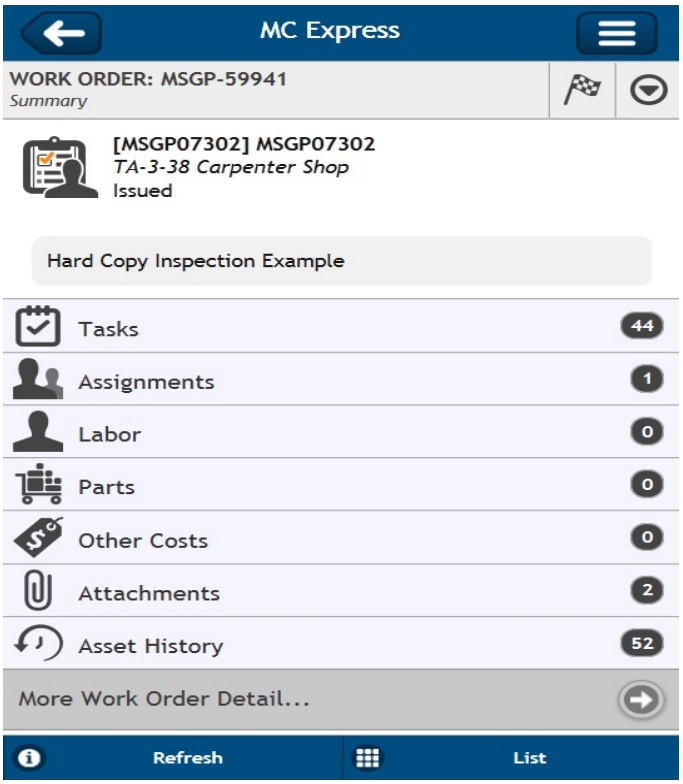
Page 1 of 7

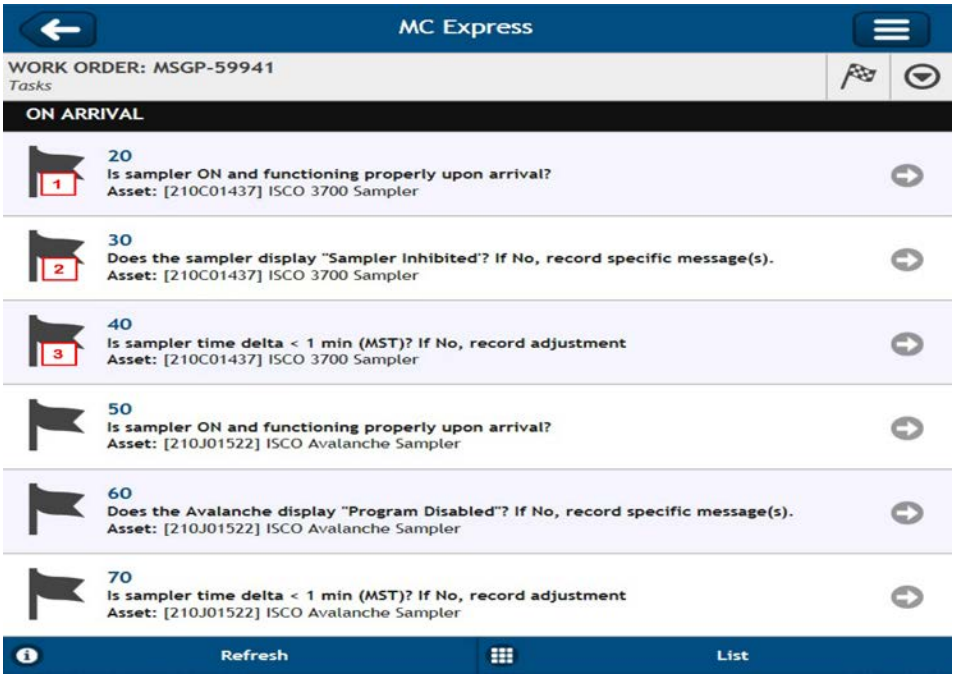




Attachment 1: Screenshot Examples of EPC-CP-Form-1010.02 in MC Express (cont.)

Page 2 of 7

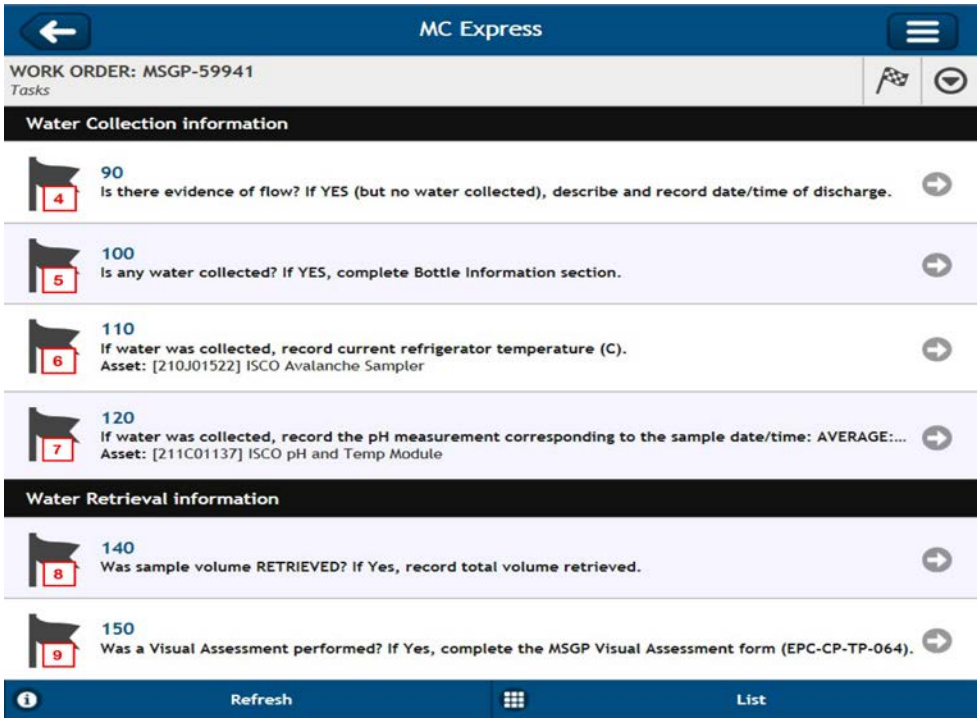




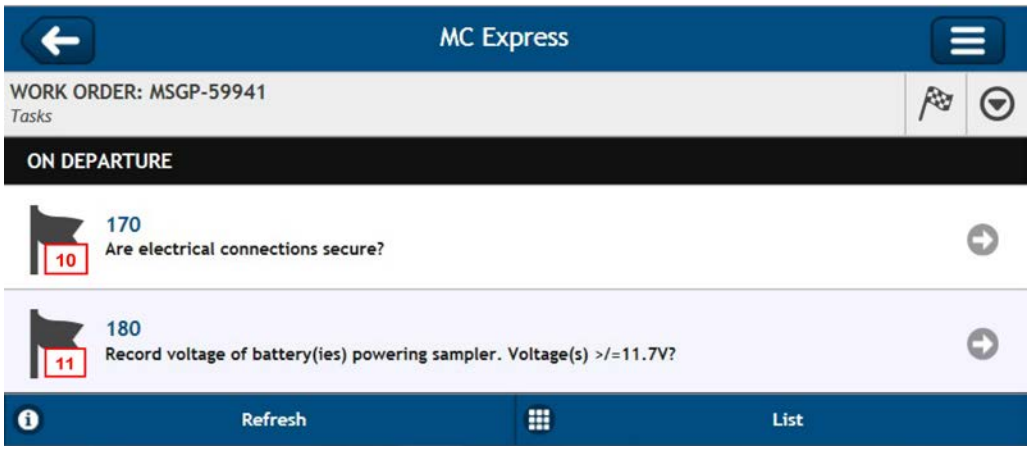
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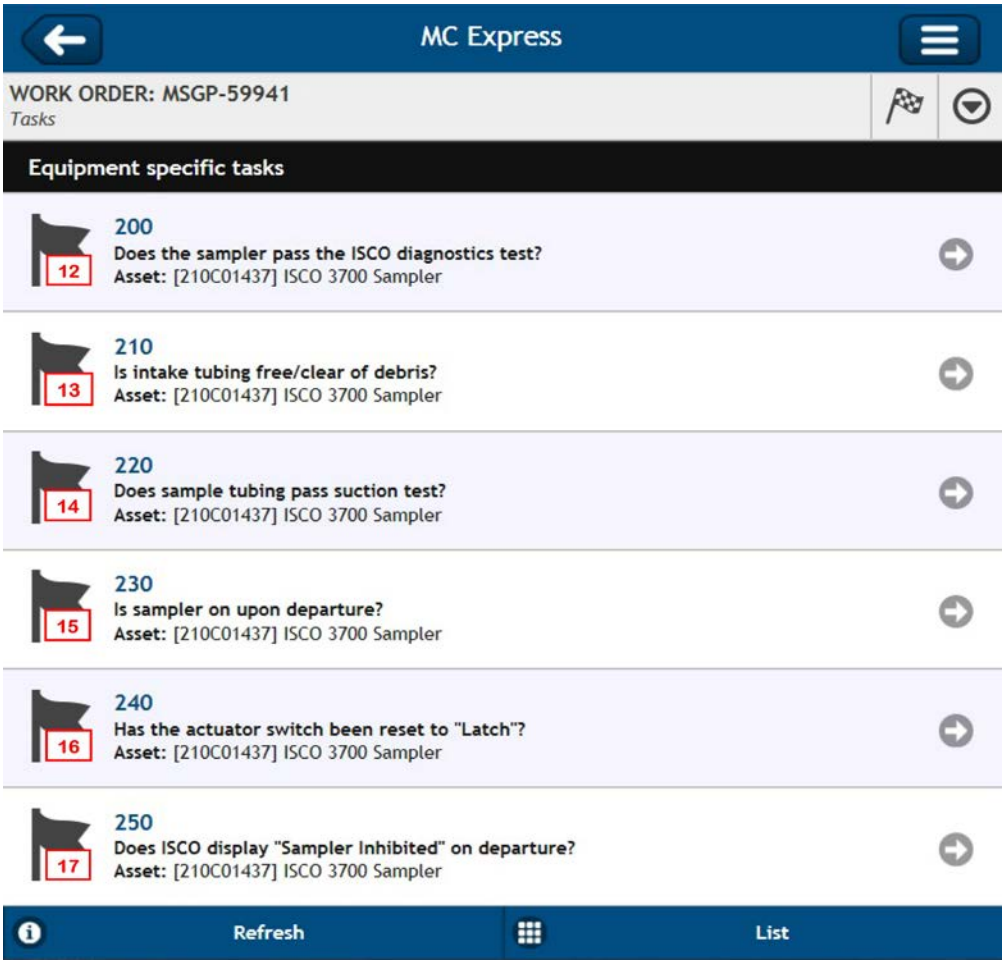
Page 3 of 7



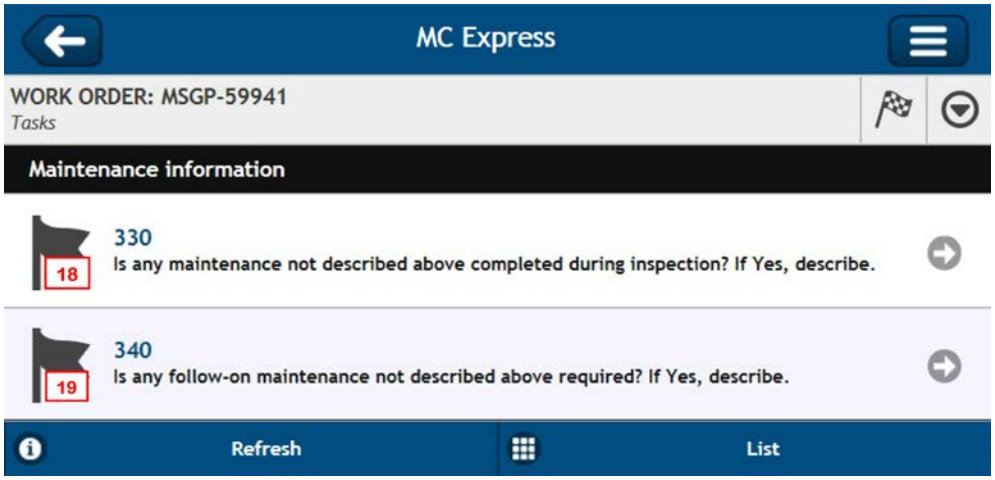


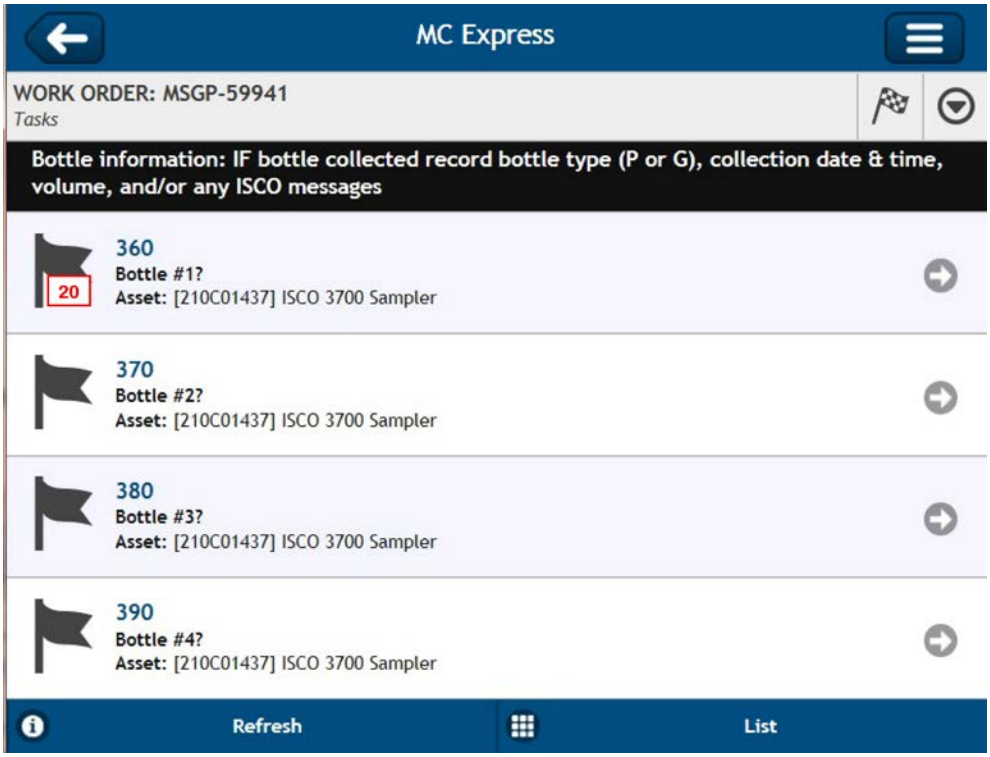
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Attachment 1: Screenshot Examples of EPC-CP-Form-1010.02 in MC Express (cont.)

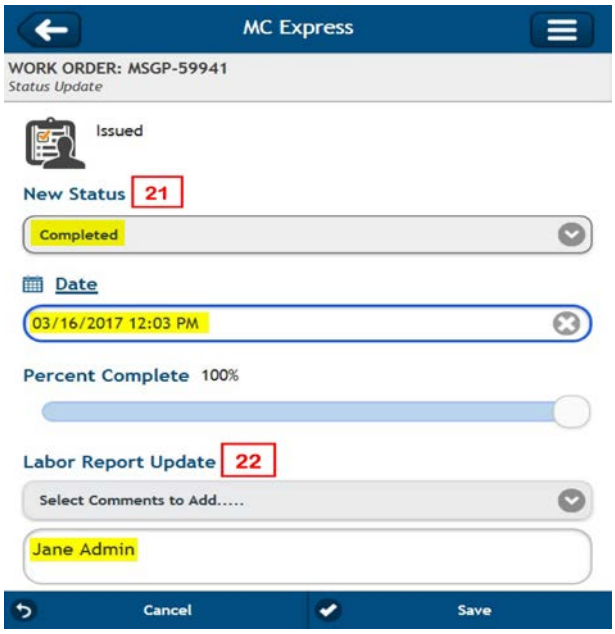




Attachment 1: Screenshot Examples of EPC-CP-Form-1010.02 in MC Express (cont.)

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Attachment 1: Screenshot Examples of EPC-CP-Form-1010.02 in MC Express (cont.)



Attachment 2: Crosswalk of EPC-CP-Form-1010.02 Hard Copy Format to Electronic Format

Los Alamos National Lab - ADESH

Work Order MSGP-59941

MSGP Monitoring Stations
Printed 8/10/2017 - 11:25 AM (Duplicate Copy)

Maintenance Details

Requested By: Admin, Jane on 8/10/2017 11:23:00 AM
Procedure: MSGP ISCO Sampler Inspection and Sample Retrieval (EPC-CP-Form-1010.2 2)
Last PM: 7/20/2017
Project: ISCO Inspections wk 8/7/17 (P-MSGP-5212)

Target: 12/31/2017
Priority/Type: / Inspection
Department: Utilities and Infrastructure

MSGP Program
RG121.9
TA-3-38 Carpenter Shop
Monitored Outfall (073)
MSGP07302

Contact: Admin, Jane
Phone: 123-4567

Reason: Hard Copy ISCO Sampler Inspection and Sample Retrieval

Tasks

	#	Description	Meas.	No	N/A	Yes
		ON ARRIVAL				
1	20	**ISCO 3700 Sampler [210C01437]** Is sampler ON and functioning properly upon arrival?		☐	☐	☐
2	30	**ISCO 3700 Sampler [210C01437]** Does the sampler display "Sampler Inhibited"? If No, record specific message(s).		☐	☐	☐
3	40	**ISCO 3700 Sampler [210C01437]** Is sampler time delta < 1 min (MST)? If No, record adjustment		☐	☐	☐
	50	**ISCO Avalanche Sampler [210J01522]** Is sampler ON and functioning properly upon arrival?		☐	☐	☐
	60	**ISCO Avalanche Sampler [210J01522]** Does the Avalanche display "Program Disabled"? If No, record specific message(s).		☐	☐	☐
	70	**ISCO Avalanche Sampler [210J01522]** Is sampler time delta < 1 min (MST)? If No, record adjustment		☐	☐	☐
		Water Collection information				
4	90	Is there evidence of flow? If YES (but no water collected), describe and record date/time of discharge.		☐	☐	☐
5	100	Is any water collected? If YES, complete Bottle Information section.		☐	☐	☐
6	110	**ISCO Avalanche Sampler [210J01522]** If water was collected, record current refrigerator temperature (C).		☐	☐	☐
7	120	**ISCO pH and Temp Module [211C01137]** If water was collected, record the pH measurement corresponding to the sample date/time: AVERAGE: MINIMUM: MAXIMUM:		☐	☐	☐
		Water Retrieval information				
8	140	Was sample volume RETRIEVED? If Yes, record total volume retrieved.		☐	☐	☐
9	150	Was a Visual Assessment performed? If Yes, complete the MSGP Visual Assessment form (EPC-CP-TP-064).		☐	☐	☐
		ON DEPARTURE				
10	170	Are electrical connections secure?		☐	☐	☐
11	180	Record voltage of battery(ies) powering sampler. Voltage(s) >/=11.7V?		☐	☐	☐
		Equipment specific tasks				
12	200	**ISCO 3700 Sampler [210C01437]** Does the sampler pass the ISCO diagnostics test?		☐	☐	☐
13	210	**ISCO 3700 Sampler [210C01437]** Is intake tubing free/clear of debris?		☐	☐	☐
14	220	**ISCO 3700 Sampler [210C01437]** Does sample tubing pass suction test?		☐	☐	☐
15	230	**ISCO 3700 Sampler [210C01437]** Is sampler on upon departure?		☐	☐	☐
16	240	**ISCO 3700 Sampler [210C01437]** Has the actuator switch been reset to "Latch"?		☐	☐	☐
17	250	**ISCO 3700 Sampler [210C01437]** Does ISCO display "Sampler Inhibited" on departure?		☐	☐	☐

Attachment 2: Crosswalk of EPC-CP-Form-1010.02 Hard Copy Format to Electronic Format (cont.)

Page 2 of 2

260	**ISCO Avalanche Sampler [210J01522]** Does the sampler pass the ISCO diagnostics test?		☐	☐	☐
270	**ISCO Avalanche Sampler [210J01522]** Is intake tubing free/clear of debris?		☐	☐	☐
280	**ISCO Avalanche Sampler [210J01522]** Does sample tubing pass suction test?		☐	☐	☐
290	**ISCO Avalanche Sampler [210J01522]** Is sampler on upon departure?		☐	☐	☐
300	**ISCO Avalanche Sampler [210J01522]** Has the actuator switch been reset to "Latch"?		☐	☐	☐
310	**ISCO Avalanche Sampler [210J01522]** Does Avalanche display "Program Disabled" on departure?		☐	☐	☐
	Maintenance information				
18 330	Is any maintenance not described above completed during inspection? If Yes, describe.		☐	☐	☐
19 340	Is any follow-on maintenance not described above required? If Yes, describe.		☐	☐	☐
	Bottle information: IF bottle collected record bottle type (P or G), collection date & time, volume, and/or any ISCO messages				
20 360	**ISCO 3700 Sampler [210C01437]** Bottle #1?		☐	☐	☐
370	**ISCO 3700 Sampler [210C01437]** Bottle #2?		☐	☐	☐
380	**ISCO 3700 Sampler [210C01437]** Bottle #3?		☐	☐	☐
390	**ISCO 3700 Sampler [210C01437]** Bottle #4?		☐	☐	☐
400	**ISCO 3700 Sampler [210C01437]** Bottle #5?		☐	☐	☐
410	**ISCO 3700 Sampler [210C01437]** Bottle #6?		☐	☐	☐
420	**ISCO 3700 Sampler [210C01437]** Bottle #7?		☐	☐	☐
430	**ISCO 3700 Sampler [210C01437]** Bottle #8?		☐	☐	☐
440	**ISCO 3700 Sampler [210C01437]** Bottle #9?		☐	☐	☐
450	**ISCO 3700 Sampler [210C01437]** Bottle #10?		☐	☐	☐
460	**ISCO 3700 Sampler [210C01437]** Bottle #11?		☐	☐	☐
470	**ISCO 3700 Sampler [210C01437]** Bottle #12?		☐	☐	☐
480	**ISCO Avalanche Sampler [210J01522]** Bottle #1?		☐	☐	☐
490	**ISCO Avalanche Sampler [210J01522]** Bottle #2?		☐	☐	☐
500	**ISCO Avalanche Sampler [210J01522]** Bottle #3?		☐	☐	☐
510	**ISCO Avalanche Sampler [210J01522]** Bottle #4?		☐	☐	☐

Labor Report

Completed: 5/30/2017 4:44:00 PM

Report: Jane Admin

Jane Admin — Signature / Name | 5/30/2017 — Date | Signature / Name | Date

I confirm the information as recorded is true, accurate and complete.

WO ID:_____ Page ___of___

21 Date:_____ Time:_____

22 Name/Z#:_____

Name/Z#:_____

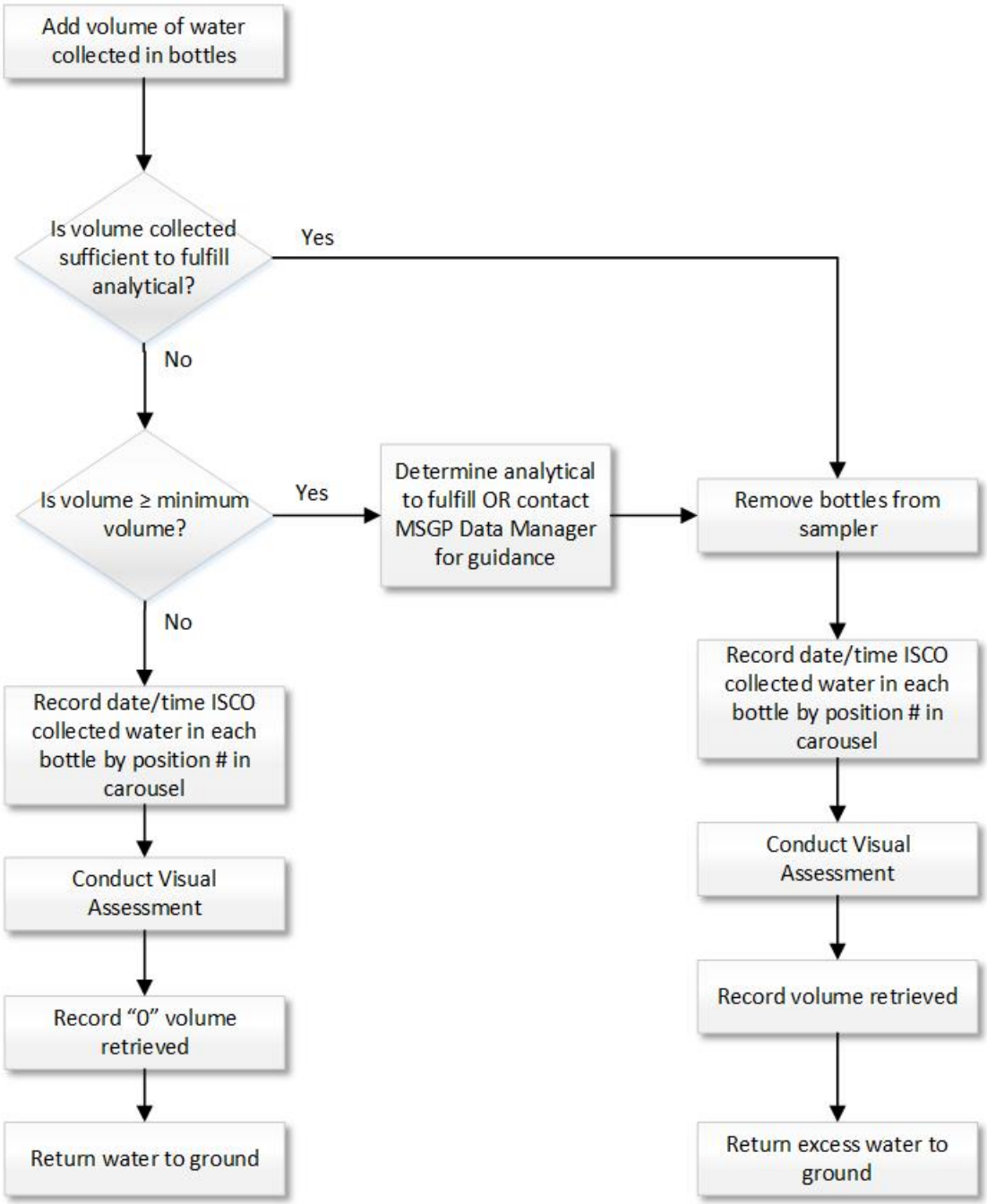
23 Lead Signature:_____

"I confirm the information as recorded is true, accurate and complete."

EPC-CP-Form-1010.02 08/2017

Attachment 3: Flow Chart for Sample Retrieval

Page 1 of 1



EPC-CP-QP-048	Revision: 3	
Effective Date: 10/05/2017	Next Review Date: 10/05/2020	

Environment, Safety, and Health Directorate

Environmental Protection and Compliance–Compliance Programs

Quality Procedure

Processing MSGP Stormwater Samples

Document Owner/Subject Matter Expert:

Name:	Organization:	Signature:	Date:
Holly L. Wheeler	EPC-CP	Signature on File	10-4-17

Derivative Classifier: ☐ **Unclassified or** ☒ **DUSA ENVPRO**

Name:	Organization:	Signature:	Date:
Ellena Martinez	EPC-CP	Signature on File	10-3-17

Approval Signatures:

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EPC-CP-QP-048 R3	10/05/2017	Updated Sample Collection Log instructions, added step describing evidence of flow, and added section for addressing excess stormwater material.

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1.0 INTRODUCTION

Los Alamos National Security, LLC (LANS) through Environmental Protection and Compliance-Compliance Programs (EPC-CP) conducts stormwater monitoring activities required pursuant to the National Pollutant Discharge Elimination System (NPDES), Multi-Sector General Permit (MSGP) at Los Alamos National Laboratory (LANL). The MSGP requires LANL to monitor stormwater runoff from industrial sites relative to potential pollutants.

1.1 Purpose

This procedure describes the process for filtering, preserving and preparing stormwater samples for shipment to an analytical laboratory from monitored outfall locations.

1.2 Scope

This procedure applies to the EPC-CP technical staff and subcontractor personnel (as applicable) who conduct processing and chemical preservation of stormwater samples either in the TA-59-1 Stormwater Laboratory or in the field.

The MSGP Program Lead is the primary person responsible for developing and updating this procedure. EPC-CP personnel will be appointed with responsibility for a subset of sampling stations.

1.3 Applicability

Stormwater samples are collected in the field either with a refrigerated Avalanche® or ISCO 3700 automated sampler, single stage sampler or grab sample. When in-line filtration is not possible, sample filtration along with chemical preservation will be conducted immediately following sample retrieval in the field or in the EPC-CP Stormwater Laboratory (TA-59-01).

Sample collection, submission, and analysis is conducted using EPA and New Mexico Water Quality Control Commission guidelines. Monitoring samples are collected and analyzed according to test procedures approved under Title 40 of the Code of Federal Regulations (40 CFR) Part 136 unless other test procedures have been specified in the MSGP permit. Quantitation limits associated with these test procedures are sufficiently sensitive to meet MSGP permit limits.

2.0 PRECAUTIONS AND LIMITATIONS

Hazards in the work described in this procedure are controlled through site specific Integrated Work Documents (IWDs). The hazard level for the activities in this procedure is **moderate**.

Use only sample containers that are documented to meet or exceed “US EPA Specification and Guidance for Contaminant-Free Sample Container” (Publication 9240.05A, EPA/540/R-93/051, December 1992). Never clean or re-use sample containers. Keep containers in a clean, dry place until a sample is ready for processing and transfer to the appropriate container(s).

3.0 PREREQUISITE ACTIONS

3.1 Planning and Coordination

Promptly schedule and complete all stormwater processing to meet the analytical holding time requirements identified in the MSGP Sampling and Analysis Plan or as requested by the MSGP Program Lead.

The MSGP Data Manager will generate Sample Collection Log/Field Chain of Custody (SCL) form(s) at the beginning of the MSGP monitoring season and/or the beginning of each MSGP monitoring quarter. The MSGP Data Manager will generate Chain of Custody/Analysis Request(s) from the Environmental Information Management (EIM) database as stormwater is collected. If the MSGP Data Manager is not available, forms may be obtained from the Sample Management Office (SMO).

3.2 Tools and Equipment

Ensure the following equipment is available:

- Safety glasses with side shields
- Nitrile gloves
- Lab coat
- Eyewash in Stormwater Lab (or portable eyewash in the field)
- Sample Collection Log/Field Chain of Custody Form
- Chain of Custody/Analysis Request
- Copy of the MSGP Sampling and Analysis Plan
- Sample containers (glass and poly bottles)
- Sample container lids
- Acid and base preservatives
- Clean silicon (e.g. Tygon) tubing
- Portable peristaltic pump (e.g. Geopump or equivalent)
- 0.45 micron and/or 0.10 micron cartridge filters (where applicable)
- Paper Towels
- Coolers with ice, Blue Ice®, or equivalent
- Ball point pen
- Permanent marker
- Chain-of-custody seals/tape
- Copy of this procedure
- Copy of the Integrated Work Documents (IWDs)
- Cell phone (only government cell phones with batteries removed are allowed in secure areas)

4.0 PROCESSING SAMPLES

In this procedure, sample collection bottles are the bottles in which the sample was collected in the field. Sample containers are containers into which the original sample may be transferred (as necessary) during processing and shipped to the analytical laboratory.

4.1 Preparation for Processing Samples

1. Don nitrile gloves, safety glasses with side shields, and lab coat. Long pants are required and no open toed shoes are allowed. Prior to processing samples, confirm eyewash is operational.
2. On the work bench arrange sample collection bottles in order from one MSGP sampling location according to the ISCO carousel number marked on the bottle.

CAUTION

Process only one sample set (i.e., samples listed on one Sample Collection Log/Field Chain of Custody form) at a time to ensure stormwater from different locations is not co-mingled.

3. Cross check the Location ID (e.g. MSGP00201) on the sample bottles with the requested analysis for that location on the SCL form (see example in Attachment 1).
4. Write the following information on the SCL:
    - Sampler Inspection and Sample Retrieval form (QP-047) identification number (e.g. Work Order: MSGP-xxxx)
    - Date and time the sample was collected in the field (e.g., date/time automated sampler filled sample bottles or a grab sample was taken)
    - pH measurement taken at the time the sample was collected in the field (as necessary)
    - Indicate if evidence of flow was recorded by writing “Y” for Yes or “N” for No
    - Indicate if a visual assessment was performed by writing “Y” for Yes or “N” for No
        – Visual Assessment form (QP-064) identification number (e.g., Visual WO#: MSGP-xxxx) if applicable
        – Date and time the visual assessment was performed if applicable
    - Printed name of person collecting the sample
    - Date and time the sample was RETRIEVED
5. Ensure the sample container type and chemical preservation type is correct for the analysis requested on the SCL (e.g., 500 ML POLY, HNO3). Note any deviation from the planned sample container volume or type on the SCL.
6. Indicate if each sample on the SCL was collected by writing Y for Yes or N for No under “Collected Y/N”.

7. Determine which samples require filtration and chemical preservation as requested on the SCL. Refer to Sections 4.2 and 4.3 as needed. Requirements are also identified in the most current revision of the MSGP Sampling and Analysis Plan.
8. Mark on each container lid the 3-digit outfall ID, required analysis, filtration requirement, and preservative requirement."
9. Document any other deviations from "As Planned" conditions in the "As Collected" column on the SCL (e.g., change the Field Matrix code from rain (WT) to snowmelt (WM)).

4.2 Filtering Samples

Filter samples if specified on the SCL or if an in-line filter was not used during sample collection.

1. Don nitrile gloves and safety glasses with side shields. Long pants are required and no open toed shoes are allowed. Prior to filtering samples, confirm eyewash is operational.
2. Ensure the sample container volume and container type (e.g., 1 L GLASS) is correct for the analysis requested on the SCL. Note any deviation from the planned sample container volume or type on the SCL.
3. Select the appropriate sized cartridge filter (e.g., 0.10µm or 0.45µm).
4. Attach an appropriate amount of silicone tubing to both ends of the cartridge filter. Place the filter upstream of the peristaltic pump to prevent over-pressurization. If the sample contains a significant amount of sediment, a pre-filter of the same size or larger micron capacity may be used.
5. For split samples(filtered and unfiltered), turn the sample collection bottle upside down multiple times to ensure all sediment is loose from the bottom of the bottle and move the intake tube up and down through the sample during filtration. A sample collected solely for filtration can be filtered without being homogenized by shaking.
6. Replace the filter if flow diminishes, the pump begins to make a grinding sound, or the tubing is forced off the filter by back pressure.
7. Add a check mark next to the filtered requirement previously marked on the lid to indicate that filtration has been completed.
8. Clean and dry the exterior of sample container and check sample container for leakage and breakage.
9. If no further processing is required (e.g., chemical preservation), apply a chain-of-custody seal/tape around the bottle and lid and sign and date the seal/tape.
10. Remove filter and tubing when filtration of one sample set (location) has been completed. A new filter must be used with each new sample ID.

4.3 Preserving Unfiltered and Filtered Samples

Preservation entails the addition of acid or base to a sample. Acids used include hydrochloric acid (HCl), nitric acid (HNO_3), and sulfuric acid (H_2SO_4). Bases used in preservation include sodium hydroxide (NaOH).

CAUTION

The preservatives are strong acids and bases that can cause severe burns. Extreme care should be taken when using these acids and bases. **Review the appropriate Material Safety Data Sheet or Safety Data Sheet for specific guidelines prior to preserving samples.**

1. Don nitrile gloves, safety glasses with side shields, and a lab coat. Long pants are required and no open toed shoes are allowed. Prior to chemically preserving samples, confirm eyewash is operational.
2. Ensure the sample container volume, type, and preservation type is correct for the analysis requested on the SCL or Sampling and Analysis Plan (e.g., 500 ML POLY, HNO_3). Note any deviation from the planned sample container volume or type on the SCL.
3. Select the pre-measured preservative size that matches the sample container size.

   Note: If you only have one size pre-measured preservative that does not match the sample container size you may need to use more than one. For example, if you have a 1 liter sample container and 500 ml pre-measured preservative vial, you would need to add two preservative vials to the sample container.

   Never "split" a larger volume pre-measured vial to preserve a smaller volume container (e.g., do not pipette from a 1 liter pre-measured preservative vial to preserve a 500 mL sample) as error in measurement precision may lead to a risk of violating Department of Transportation shipping requirements.
4. Add the preservative (acid or base) to the sample and securely affix the lid to the container.
5. Agitate the preserved sample by turning the container upside down two to three times.
6. Add a check mark next to the preservation type previously marked on the lid to indicate that preservation has been completed.
7. Clean and dry the exterior of sample container and check sample container for leakage and breakage.
8. Apply a chain-of-custody seal/tape around the bottle and lid and sign and date the seal/tape.

4.4 Handling Excess Stormwater

All efforts will be made to minimize the amount of stormwater sample brought into the TA-59-1 Stormwater Lab. Field personnel will attempt to retrieve only the volumes needed to fulfill the requested analyses from the current MSGP Sampling and Analysis Plan.

If any excess stormwater sample exists after processing has been completed:

- Ensure the container is labeled with the site of origin, date and time sample was collected, and "Return to Site".
- Place the container in the designated storage location in the MSGP Stormwater Lab,
- Return the sample to the site of origin as soon as possible and discharge at the sampler location.

If the excess stormwater has been altered (e.g. tap water or preservative added) contact the Waste Management Coordinator for TA-59-1 for further instruction.

4.5 Submit Samples for Shipping to Offsite Analytical Laboratory

1. Deliver completed SCL(s) to the MSGP Data Manager.
2. The MSGP Data Manager will process the sample information in the EIM system, capturing any documented deviations from planned conditions (as noted on the SCLs), and generate Chain of Custody/Analysis Request (COC) form(s) and sample container labels to reflect the "as collected" samples (see examples in Attachments 2 and 3).
3. In the "Received By" section of the SCL, enter the COC number (e.g., 2017-XXXX).
4. Don nitrile gloves and safety glasses.
5. Ensure the sample containers are securely sealed and wiped dry.
6. Cross check that the Sample ID on the SCL matches the Field Sample ID on the COC.
7. Carefully compare the information from the SCL and lid of each container to apply the correct labels to the sample containers.
8. Place the sample(s) in the cooler with sufficient Blue Ice® (or equivalent) to maintain the required preservation temperature (≤4° C). Cushioning material (e.g., bubble wrap) may be used to separate containers to avoid breakage during transport.
9. Place the SCL(s) and COC(s) in a zip lock type bag, seal, and place in the cooler with samples.
10. Transport samples to the Sample Management Office (SMO) using a government vehicle or approved subcontractor vehicle only. Samples may be delivered during SMO business hours, but must be delivered by 2pm for same day shipping. Coordinate with the SMO for delivery during other times or for delivery of samples that have limited holding times.

    Note: If submitting samples to the SMO will be delayed, place sample containers with SCL(s) in the Stormwater Laboratory refrigerator and ensure the refrigerator is locked.
11. On the COC, the person submitting the sample(s) will print and sign their name, date, and record the time under "Relinquished By." The SMO personnel accepts the sample(s) by printing and signing their name, dating, and recording the time under "Received By."
12. Retain a copy of the signed Chain of Custody/Analysis Request.

13. On the SCL, the person submitting the sample(s) will enter the data and time under "Relinquished By" that matches the data and time "Relinquished by" on the COC and write the COC/Lab Request# (e.g., 2017-xxxx) under “Received by.”
14. Ensure the SMO makes a copy of the SCL(s) to accompany the COC and samples. Retain the original SCL(s) for the MSGP program.
15. Deliver the copy of the signed COC and original SCL(s) to the MSGP Data Manager.

5.0 TRAINING

The training method for this procedure is “self-study” (reading). The following personnel require training before implementing this procedure:

- EPC-CP technical staff and subcontract or other personnel who process stormwater samples for the MSGP.

Personnel performing this procedure will be familiar with the most current versions of the following procedures and operation manuals:

- EPC-CP MSGP Sampling and Analysis Plan for the current monitoring year
- EPC-CP-QP-047 Inspecting Stormwater Runoff Samplers and Retrieving Samples for the MSGP

6.0 RECORDS

Records generated by this document will be submitted to the ADESH Records Management designated point of contact or document manager in accordance with P1020-1, *Laboratory Records Management* and with ADESH-AP-006, *Records Management Plan*. Below is a list of records generated as a result of implementing this procedure.

- Sample Collection Log/Field Chain of Custody Form
- Copy of the Chain of Custody/Analysis Request
- Copy of log book entry(s) (if a log book is used)
- Other pertinent field or lab notes

7.0 DEFINITIONS AND ACRONYMS

7.1 Definitions

See LANL *Definition of Terms*.

7.2 Acronyms

See LANL *Acronym Master List*.

40 CFR	Title 40 of the Code of Federal Regulations
COC	Chain of Custody/Analysis Request
EIM	Environmental Information Management
EPC-CP	Environmental Protection and Compliance – Compliance Programs
IWD	Integrated Work Document
LANL	Los Alamos National Laboratory
LANS	Los Alamos National Security, LLC
MSGP	Multi-Sector General Permit
NPDES	National Pollutant Discharge Elimination System
SCL	Sample Collection Log/Field Chain of Custody
SMO	Sample Management Office

8.0 REFERENCES

None

9.0 ATTACHMENTS

Attachment 1: Sample Collection Log/Field Chain of Custody Example
Attachment 2: Sample Container Labels Example
Attachment 3: Chain of Custody/Analysis Request Example

ATTACHMENT 1: SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY EXAMPLE

Los Alamos National Laboratory

MSGP Quarter 3

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 11198 **EVENT NAME:** MSGP 2017

SAMPLE ID: MSGP-17-131989 **WORK ORDER:** MSGP-59823

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
Date Collected (MM/DD/YYY):		4/01/17	FIELD MATRIX:	WT	
TIME COLLECTED (HH:MM):		16:03	MEDIA:		
PRS ID:		1	SAMPLE TECH CODE:	APS	
LOCATION ID:	MSGP05301		FIELD PREP:	UF	
LOCATION TYPE:			FIELD QC TYPE:	REG	
TOP DEPTH:			SAMPLE USAGE:	COMP	
BOTTOM DEPTH:			EXCAVATED:		YES / NO / (NA)

PRIORITY	ORDER	CONTAINER	#	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
	MSGP-CN(TOTAL)	500 ML POLY	1	NAOH	Y	
	MSGP-COD+NH3	500 ML POLY	1	H2SO4 ICE	Y	
	MSGP-Mg+Se+Hg	500 ML POLY	1	HNO3 ICE	Y	

SAMPLE COMMENTS:

LOCATION COMMENTS:

FIELD PARAMETERS: Visual WO# MSGP-58866

pH 6.7 Flow (Evidence) Y Visual Inspection Y SU Visual performed Date/Time 4/3/17 14:36

COLLECTED BY (PRINT): Jane Doe Retrieved 4/3/17 14:36

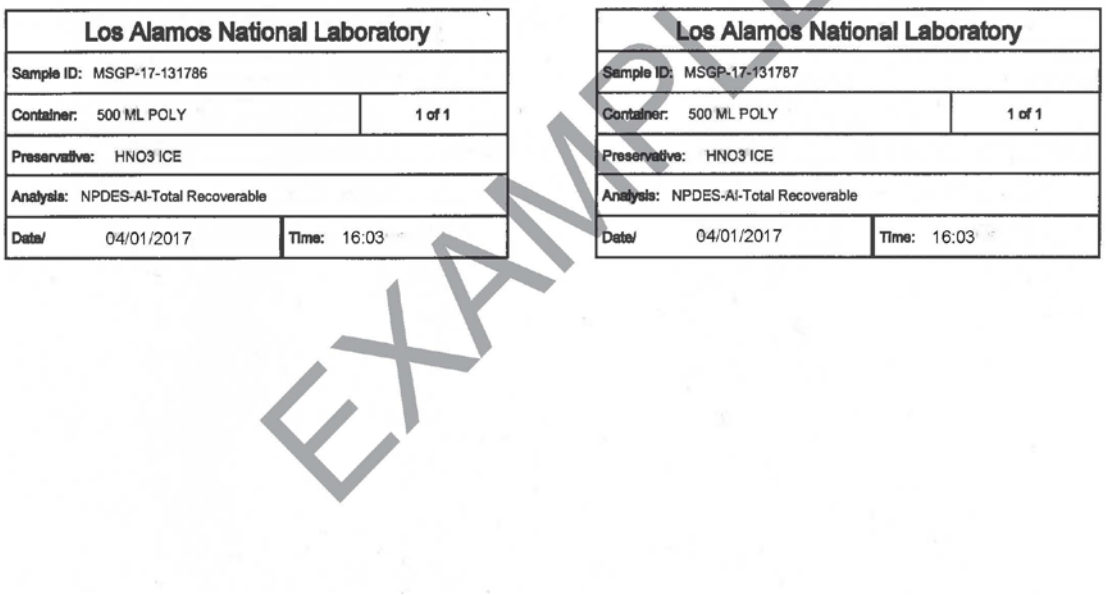
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time
		See COC 2017-1326	4/12/17 15:10
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

Report Date: 07/21/2017

EXAMPLE

ATTACHMENT 2: SAMPLE CONTAINER LABELS EXAMPLE

Page 1 of 1



Los Alamos National Laboratory	
Sample ID: MSGP-17-131786	
Container: 500 ML POLY	1 of 1
Preservative: HNO3 ICE	
Analysis: NPDES-Al-Total Recoverable	
Date/ 04/01/2017	Time: 16:03

Los Alamos National Laboratory	
Sample ID: MSGP-17-131787	
Container: 500 ML POLY	1 of 1
Preservative: HNO3 ICE	
Analysis: NPDES-Al-Total Recoverable	
Date/ 04/01/2017	Time: 16:03

EXAMPLE

ATTACHMENT 3: CHAIN OF CUSTODY/ANALYSIS REQUEST EXAMPLE

Page 1 of 1

LANL SMO

Los Alamos NM

Chain of Custody/Analysis Request

COC/Lab Request #: 2017-1326

Page 1 of 1

Client Contact:

Lab Agreement #:

Site Name: Los Alamos National Laboratory

Project Number:

Analysis Turnaround Time:

- 24 Hour - ☐ Other - ☐
- 7 Days - ☐
- 14 Days - ☐
- 21 Days - ☐
- 28 Days - ☒

Rad Screening Info:

Lab Reporting Limit Type: Method Detection Limit

Field Sample ID	Sample Date	Sample Time	Sample Matrix	MSGP-Zn
MSGP-17-131904	Apr 1 2017	16:03	W	1
MSGP-17-132187	Apr 1 2017	16:03	W	1

EXAMPLE

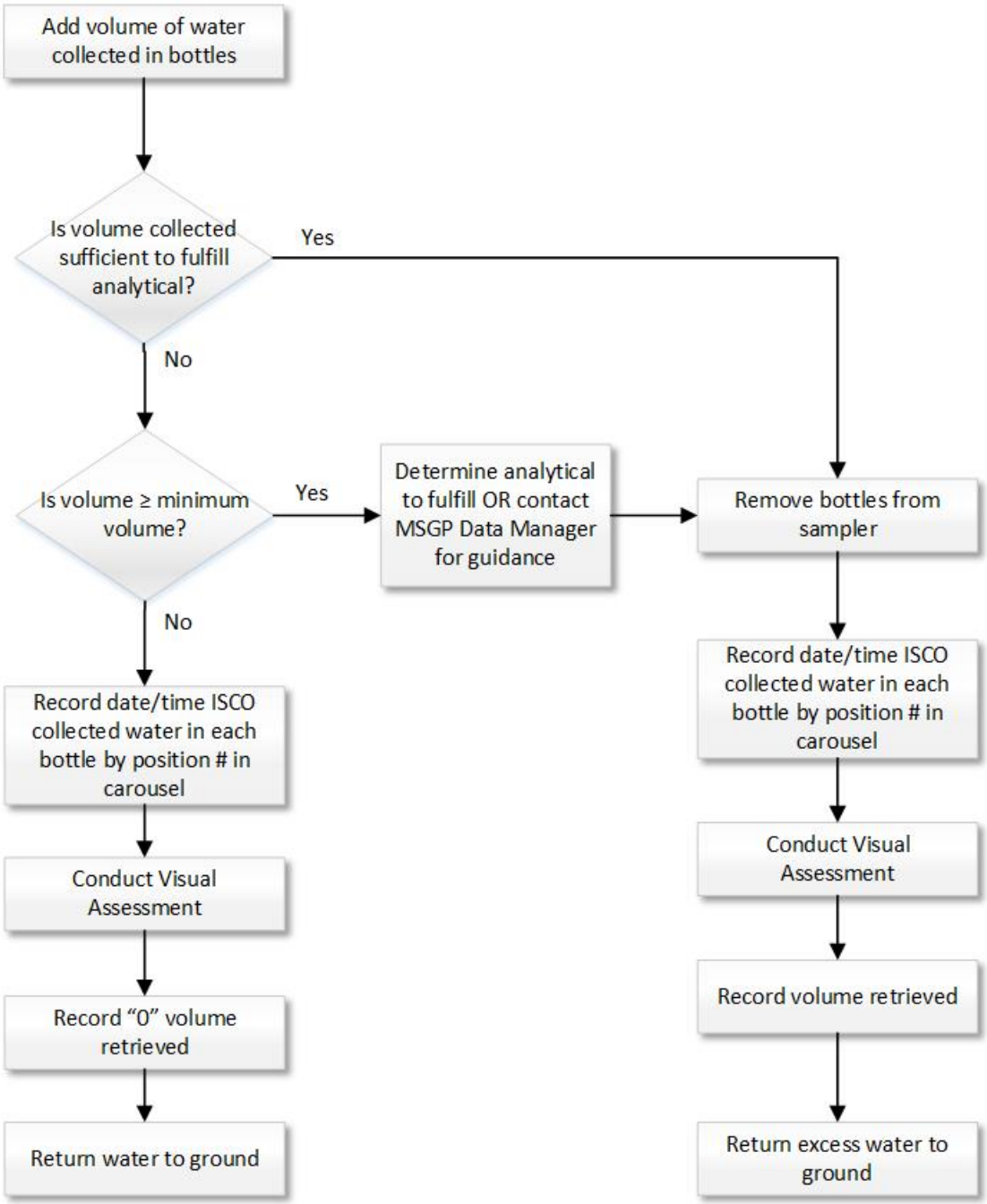
Special Instructions:

4/12/17

Relinquished by:	Print Name:	Date/Time:	Received by:	Print Name:	Date/Time:
Jane Doe	Jane Doe	4/12/17 15:10	[signature]	B Green	3:10

Attachment 3: Flow Chart for Sample Retrieval

Page 1 of 1



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Environment, Safety, and Health Directorate

Environmental Protection and Compliance-Compliance Programs

Quality Procedure

MSGP Stormwater Visual Assessments

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1.0 INTRODUCTION

Los Alamos National Security, LLC (LANS) through Environmental Protection and Compliance-Compliance Programs (EPC-CP) conducts stormwater monitoring activities required pursuant to the National Pollutant Discharge Elimination System (NPDES), Multi-Sector General Permit (MSGP) at Los Alamos National Laboratory (LANL). The MSGP requires LANL to monitor stormwater runoff from industrial sites relative to potential pollutants.

1.1 Purpose

This procedure describes the process for conducting visual assessments of stormwater from outfall locations monitored under the MSGP for industrial facilities at LANL.

Assessments conducted under this procedure should be documented using the Maintenance Connection Express™ (MC Express) web application. (In the event of electronic hardware or web application failure, personnel may use a printed hard copy to conduct inspection and sample retrieval.)

1.2 Scope

Requirements set forth in this document apply to Los Alamos National Laboratory industrial facilities covered by the MSGP. These facilities include, a warehouse, several metal fabrication areas/shops, a heavy equipment yard, an asphalt batch plant, roads and grounds, a foundry, a power plant, a material recycling facility, a carpenter shop, and several hazardous waste treatment, storage or disposal (TSD) facilities. Inspection waivers may be granted by EPC-CP for adverse weather conditions and unstaffed or inactive sites.

At least once each MSGP monitoring quarter a stormwater sample must be collected from each discharge point covered by the MSGP and site specific SWPPP and visually inspected for water quality characteristics. Stormwater samples can be collected with an automated sampler, single stage sampler, or by taking a grab sample.

1.3 Applicability

This procedure applies to the EPC-CP technical staff and subcontractor personnel (as applicable) who conduct stormwater visual assessments during or after measurable storm events at MSGP outfalls.

Note: *A measurable storm event is identified as one what results in an actual discharge from your site that follows the preceding measurable storm event by at least 72 hours (3 days)*.

2.0 PRECAUTIONS AND LIMITATIONS

Hazards in the work described in this procedure are controlled through site specific Integrated Work Documents (IWDs). The hazard level for the activities described in this procedure is **low**, however the cumulative hazard rating for activities described in the IWD is **moderate**.

Assessments may be discontinued during periods or conditions that make sites dangerous for worker safety or prevent personnel from safely accessing sites (e.g., weather-related events such as flash floods, flooding, lightning, wildfires, hail, icy roads, deep snow, or LANL operations such as firing shots or burns).

Click the "Save" bar after all entries for a task line have been completed and before proceeding to the next question. Failure to "Save" results in lost data entries.

Some terminology varies between the MC Express software and the Maintenance Connection desktop software.

- The "Reading" field in MC Express is the same field as "Reading Final" in Maintenance Connection desktop and "Meas." on a hard copy (printed) work order.
- The "Complete" option in MC Express is the same as a "Yes" answer; the "Failed" option in MC Express is the same as a "No" answer. Maintenance Connection desktop and hard copy (printed) work orders use "Yes" and "No" terminology.

Throughout this procedure the field inspector should document comments and notations in the "Reading" field of the associated task line. Any additional comments not documented in a "Reading" field can be entered in the "Comments" field of the same task line. If the inspector needs more space, additional comments can be entered in the "Labor Report Update" field (see Section 4.3) when the work order is updated to "Complete" status.

3.0 PREREQUISITE ACTIONS

3.1 Planning and Coordination

1. Schedule work to be completed by the target date appearing on the work order(s) or as requested by the MSGP Program Lead if a form is not issued.
2. Inform (e.g., by e-mail) Facility contacts, as specified in the IWD, of the schedule for inspection work and locations up to a week (preferred) before but no later than the day before (for minor changes) to be added to the appropriate plan of the day.

   Note: For some Facility Operations Divisions (FODs) like the Utilities and Institutional Facilities FOD, MSGP stormwater monitoring activities are on a standing plan of the day. However, this must be requested each year at the beginning of the monitoring season.
3. The IWD Part II (2101 Form) addresses specific requirements and training for FODs.
4. Obtain any necessary additional paperwork before conducting this work, including IWD's, and excavation permits (as necessary).
5. Gather the required equipment (see section below) for the work to be done.
6. Using the Safari web browser on a tablet or notebook style computer, navigate to http://express.maintenanceconnection.com and select English from the available dropdown menu.

7. Log into the MC Express application using your login credentials. Contact the MSGP Data Management Team if MC Express generates any message stating the field inspector does not have access.
8. Confirm that the work order list displayed in the "My Open Work Orders" section matches your sites. If work orders are not displayed, click the "Refresh" bar at the bottom of the page. The page will refresh and any work orders issued since you logged in will be loaded to the application. If the work order lists still do not match, contact the MSGP Data Management Team for clarification.
9. Ensure that field personnel have access to accurate time measurement at the Site. When at the site, the clock time on the ISCO sampler must be set to Mountain Standard Time at all times, with no daylight saving time adjustment.

3.2 Tools and Equipment

Ensure the following equipment is available in the field vehicle:

- Safety glasses with side shields
- Nitrile gloves
- Sturdy hiking boots or steel toed shoes with soles that grip
- Cell phone (only government cell phones with batteries removed are allowed in secure areas)
- Copy of this procedure
- Copy of the Integrated Work Documents (IWDs)
- Copy of the MSGP Sampling and Analysis Plan
- Site Map(s) (as needed)
- Current electronic or paper inspection form EPC-CP-Form-1021, MSGP Stormwater Visual Assessments
- Necessary access and station keys
- Clean replacement sample bottles (clear glass or clear poly)
- Paper Towels

4.0 VISUAL ASSESSMENT OF STORMWATER

1. Take the sample bottle with water out of automated sampler or single stage jar off the ground, or fill a clear sample bottle with a grab sample and wipe off exterior.

   Note: If a grab sample is collected it shall be collected during daylight hours in a wide mouth clear glass bottle or plastic container within 30 minutes of discharge from a storm event.

2. In MC Express, open the work order issued for the current location by clicking on the appropriate line. If needed, use the expand arrow located on the right side of the display to expand the work order detail information. The work order will open in the display to the work order Summary page.

3. Click on the "Tasks" bar to navigate to the work order Tasks page. See MC Express screen shot example in Attachment 1 and a hard copy example in Attachment 2.

4.1 Documenting Sample Information

4. Item 1: Verify the monitoring period by clicking the expand arrow located on the right side of the task line and changing the "Complete" or "Failed" line to "Yes". Describe the monitoring period (e.g., Apr-May, Jun-Jul, Aug-Sep, Oct-Nov).

   Note: If the discharge collected is from a rain event from the previous monitoring period but the visual assessment is made in the following monitoring period, document monitoring period on the inspection to correspond to the period in which the rain event took place.

CAUTION

Click the "Save" bar after all entries for a task line have been completed and before proceeding to the next question. Failure to "Save" results in lost data entries.

Note: Any additional comments not documented in a "Reading" field can be entered in in the "Comments" field of the same task line. If the inspector needs more space additional comments can be entered in the "Labor Report Update" field.

5. Item 2: Verify the visual assessment is performed on an unfiltered sample and document by clicking the expand arrow located on the right side of the task line and changing the "Complete" or "Failed" line to "Yes". If the sample was filtered, conduct the visual assessment and document "Filtered sample".

6. Item 3: Verify the date and time stormwater discharge began and document by clicking the expand arrow located on the right side of the task line and changing the "Complete" or "Failed" line to "Yes".

   Enter the date and time in the following date formats: MM/DD/YY, or MM-DD-YY. Time must be entered in 24-hr format.

   Note: If the discharge date/time is not available (e.g. precipitation report) when the visual is performed in the field, leave this Task Line incomplete and complete when the information is available.

7. Item 4: Verify the date and time the sample was collected and document by clicking the expand arrow located on the right side of the task line and changing the "Complete" or "Failed" line to "Yes".

   Enter the date and time in the following date formats: MM/DD/YY, or MM-DD-YY. Time must be entered in 24-hr format.

Note: If the collection date/time is not available (e.g. precipitation report) when the visual is performed in the field, leave this Task Line incomplete and complete when the information is available.

8. Item 5: Verify the date and time stormwater was visually assessed and document by clicking on the right side of the task line and changing the "Complete" or "Failed" line to "Yes".

   Enter the date and time in the following date formats: MM/DD/YY, or MM-DD-YY. Time must be entered in 24-hr format.

9. Item 6: Verify the nature of the discharge and document by clicking the expand arrow located on the right side of the task line and changing the "Complete" or "Failed" line to "Yes". Describe the discharge (e.g., rainfall or snowmelt) and the TOTAL amount of precipitation from the event.

   Note: If the total amount of precipitation is not available (e.g., precipitation report) when the visual is performed in the field, leave this Task Line incomplete and complete when the information is available.

10. Item 7: Verify the sample was collected in the first 30 minutes of discharge and document by clicking the expand arrow located on the right side of the task line and changing the "Complete" or "Failed" line to "Yes". If it is not possible to collect the sample within the first 30 minutes of discharge, the sample must be collected as soon as practicable after the first 30 minutes. The field inspector will document the reason a sample could not be collected within the first 30 minutes.

4.2 Assessing Parameters

While conducting the visual examinations, personnel should constantly be attempting to relate any pollutant that is observed in the sample to a pollutant source on the site.

Note if there are any potential sources of pollutants on site. If yes, contact an MSGP representative of EPC-CP and document the following:

- Potential sources;
- Indicate if there are any BMPs on site and evaluate and note effectiveness; and
- If no BMPs, determine if installation could correct future pollutant migration.

11. Item 8: Verify the color of the discharge in the sample container and document by clicking the expand arrow located on the right side of the task line and changing the "Complete" or "Failed" line to "Yes". Describe the color.

12. Item 9: Verify any odors detected from sample and document by clicking the expand arrow located on the right side of the task line and changing the "Complete" or "Failed" line to "Yes". Describe the odor (e.g., musty, sewage, sulfur, sour, solvents, petroleum/gas, etc.).

13. Item 10: Verify the clarity of the discharge and document by clicking the expand arrow located on the right side of the task line and changing the "Complete" or "Failed" line to "Yes". Describe the clarity (e.g., slightly cloudy, cloudy, opaque).

    Clarity can be described as the depth in which you can look into or through water. For example an individual can see through a clear glass of clean water in daylight. Generally the clarity of the water is a good visual indicator of the purity of water. If the water is poor in clarity there is most likely suspended solids throughout the water.

14. Item 11: Verify any floating solids and document by clicking the expand arrow located on the right side of the task line and changing the "Complete" or "Failed" line to "Yes". Careful examination should determine whether the solids are raw materials (e.g., product used to fabricate something, or ingredients used in a formulation) or waste materials (e.g., shavings, woodchips and sawdust, trash). Describe any floating solids observed.

15. Item 12: Verify any settled solids in the sample and document by clicking the expand arrow located on the right side of the task line and changing the "Complete" or "Failed" line to "Yes". Describe any settled solids observed (e.g., fine, course).

    Settled solids may be an indicator of unstable ground cover combined with a high intensity stormwater runoff event.

16. Item 13: Verify any suspended solids in the sample and document by clicking the expand arrow located on the right side of the task line and changing the "Complete" or "Failed" line to "Yes". Describe any settled solids observed (e.g., fine, course).

    Most often suspended solids include fine sediment. This may be an indication of an unstable channel that may have eroding banks. Some water appears to be colored because of relatively coarse particulate material in suspension such as sediment.

17. Item 14: Verify the sample is free of foam and document by clicking the expand arrow located on the right side of the task line and changing the "Complete" or "Failed" line to "Yes". Gently shake the sample container. Describe any bubbles in or on the surface of the water and the color of the foam.

CAUTION

Contact the EPC-CP Project Leader for MSGP **immediately if it is determined that the foam is caused by a pollutant**. Follow-up action is required within 24 hours.

18. Item 15: Verify the sample is devoid of any oil sheen and document by clicking the expand arrow located on the right side of the task line and changing the "Complete" or "Failed" line to "Yes". If an oil sheen is present, describe the thickness and consistency (e.g., flecks, globs).

CAUTION

Contact the EPC-CP Project Leader for MSGP **immediately**. Then determine the nature of the discharge (rain, snow, hail), the source of the sheen and if existing BMPs are effective in mitigation of potential pollutants or if a new BMP needs to be installed. Follow-up action is required within 24 hours.

19. Item 16: Verify the discharge is free of any other indicators of stormwater pollution not described in any other task line above and document by clicking the expand arrow located on the right side of the task line and changing the "Complete" or "Failed" line to "Yes". Describe any observations.
20. When all task lines have been completed, click the "Back" arrow button in the upper left hand corner to exit the work order Tasks page and return to the work order Summary page.

4.3 Completing the Assessment Form

1. Ensure the inspection form has been filled out completely including information not available during the field inspection (e.g., date/time of discharge, date/time of sample collection, total precipitation amount).
3. Click the checkered flag in the upper right corner of the work order Summary page. MC Express auto-populates the date and time fields.

CAUTION

MC Express automatically changes the work order status to "Closed."

4. Item 17: Click on the expand arrow located on the right side of the "New Status" field and select "Completed" from the available dropdown menu.

   Ensure the "Date" field has the date and time the **form was completed**. The completion date and time may be different from the date and time the visual assessment was performed if precipitation information was added to the form after the on-site field inspection.

   If these fields need to be updated, click the "Date" field to modify it. Make necessary adjustments using the available timestamp application and click "Set" to apply changes.

6. Item 18: The inspector must type in his/her name in the "Labor Report Update" field.

   Any additional notes, observations, or site conditions not documented in a task line "Reading" or "Comments" field can also be documented in the "Labor Report Update" field.

7. Scroll down the page to the "Signature" bar and click the expand arrow on the left side of the bar to open the "Signature" field.

8. Item 19: Capture an electronic signature by drawing with a finger on the tablet screen. The Lead Inspector is certifying that the information submitted is "true, accurate, and complete" by electronically signing the work order.

   Note: If using MC Express on a desktop screen (not a tablet), the mouse must be used to sign electronically.

9. Click on the "Save" bar at the bottom of the page to close the "Signature" field.
10. Click on the "Back" button located in the upper left hand corner to return to the "My Open Work Orders" page.
11. Once you have completed an inspection, click on the Menu button again, and then click the "Logout" bar. Close the browser. All work will automatically upload from the MC Express application to the MC database.

Always log out of MC Express when you have finished work OR if work is interupted.

4.4 Completing the Certification Statement

1. Using the Safari web browser on a desktop computer, navigate to http://www.maintenanceconnection.com. Log into the MainConn desktop application using your login credentials.
2. Click "Open" in the tool bar at the top of the page to open the MainConn module selections. Click on the "Work Orders" module (see Attachment 3).
3. Click on the "Search" tab at the top left of the page and enter the work order number in the "Search Value" field. Click the arrow to the right of the "Search Value" field to open the work order in the right split screen.
4. Click on the "Report" tab at the top of the page and click the "Work Order Statement" sub-tab.
5. Click the Tools drop down menu in the top right corner of the page and select "Print" from the options. The print dialog box will open. Select the print options as appropriate for your local printer.
6. Item 20: Obtain a printed name and title, signature, and date on the certification statement. The visual assessment form must be certified with a signature from a duly authorized representative of the facility as defined in Appendix B of the MSGP Permit, Section B.11.A (e.g., FOD, Operations Manager, DSESH Group Leader, EPC Group Leader). The duly authorized representative of the facility is certifying the information submitted is "true, accurate, and complete" by signing the form.

   EPC-CP will send out completed visual assessment forms at the end of each quarter that will contain a certification statement in the cover memorandum. The duly authorized signatory may sign and date this certification statement rather than the certification line associated with each attached form. However, the memorandum and associated completed forms must remain together.

7. Place the completed and signed visual assessment into the facility SWPPP.

5.0 EVIDENCE OF STORMWATER POLLUTION

If stormwater contamination is identified through visual assessment personnel should attempt to identify the pollutant source. Personnel should evaluate whether or not BMPs have already been implemented and evaluate whether or not these are working correctly or need maintenance. A design change could also be incorporated into the stormwater pollution prevention plan to eliminate or minimize the contaminant source from occurring in the future. Personnel should evaluate whether or not additional BMPs should be implemented in the pollution prevention plan to address the observed contaminant.

A clean up of the site should be conducted if the pollutant source is known and well defined. The FOD, ESH Manager, and MSGP representative of EPC-CP should also be contacted and made aware of the situation.

Corrective actions **MUST** be taken if BMPs are not performing effectively. Refer to EPC-CP-QP-022, *MSGP Stormwater Routine Facility Inspections and Corrective Actions*.

6.0 TRAINING

The following personnel require training before implementing this procedure:

- EPC-CP technical staff and subcontract or other personnel who retrieve stormwater samples and conduct visual assessments at automated or single stage stormwater samplers for the MSGP.

For EPC-CP staff the training method for this procedure is “self-study” (reading). Other participating groups may require training documentation pursuant to local procedures.

Personnel performing this procedure will be familiar with the most current versions of the following procedures and operation manuals:

- EPC-CP MSGP Sampling and Analysis Plan for the current monitoring year

7.0 RECORDS

Records generated by this document and signed by the EPC-CP certifier will be submitted to the EPC-CP Records Management designated point of contact or document manager in accordance with P1020-1, *Laboratory Records Management* and with ADESH-AP-006, *Records Management Plan*.

- EPC-CP-Form-1021, *MSGP Quarterly Visual Assessment*

All other MSGP Quarterly Visual Assessment forms generated are forwarded to the duly authorized representative of each facility for submittal to that facility’s Records Management designated point of contact or document manager.

8.0 DEFINITIONS AND ACRONYMS

See LANL *Definition of Terms*.

8.1 Definitions

Adverse weather conditions – Weather that prohibits collection of samples such as local flooding, high winds, hurricanes, tornadoes, electrical storms, etc. Could also include drought, extended frozen conditions, etc.

Best Management Practices (BMPs) – Schedules of activities, practices, prohibitions of practices, structures, vegetation, maintenance procedures, and other management practices to prevent or reduce pollution. BMPs can also include treatment requirements, operating procedures, and practices to control facility site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Clarity – Clearness or cleanness of appearance. This includes the visual observation of suspended sediment.

Color – Unpolluted water will be clear and colorless. Color should not be confused with clarity.

Floating solids – Particulate material floating on the surface of the water. Examples include: raw or waste materials and common trash.

Foam – An accumulation of fine frothy bubbles formed in or on the surface of water. A mass of bubbles of air in a matrix of liquid film.

Odor – The property or quality of waters that affects or stimulates the sense of smell. Examples of odors that may be present are burnt oil, petroleum hydrocarbon, sewage, diesel, sulfuric, or detergent odors.

Oil sheen – The presence of rainbow-like colors glistening on the surface of a liquid. The color of oil sheen will vary dependent on thickness and consistency.

Settled solids – Settled particulate material i.e., heavier than water. Examples include sand, gravel, metal turnings, and glass.

Suspended solids – Particulate materials that are floating between the bottom of the sample and the surface of the water.

Unstaffed and Inactive Sites – A facility maintaining certification with the SWPPP that it is inactive and unstaffed and visual examinations are not required.

8.2 Acronyms

See LANL *Acronym Master List*.

EPC-CP	Environmental Protection and Compliance – Compliance Programs
IWD	Integrated Work Document
LANL	Los Alamos National Laboratory
LANS	Los Alamos National Security, LLC
MC Express	Maintenance Connection MC Express web application
MSGP	Multi-Sector General Permit

NPDES	National Pollutant Discharge Elimination System

9.0 REFERENCES

P1020-1, Laboratory Records Management

ADESH-AP-006, Records Management Plan

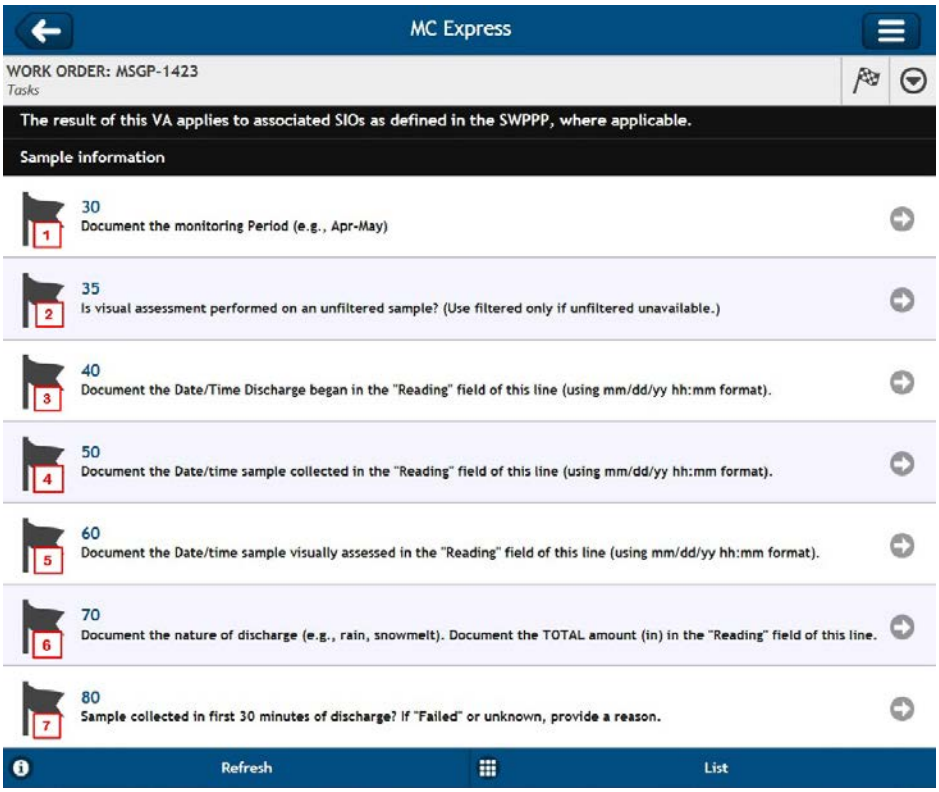
EPC-CP-QP-022, MSGP Stormwater Routine Facility Inspections and Corrective Actions

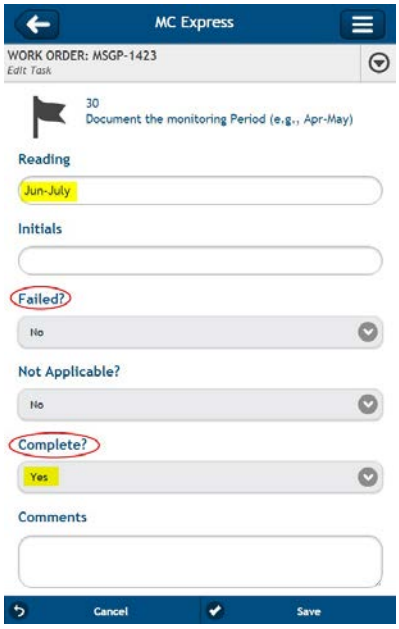
10.0 ATTACHMENTS

Attachment 1: *Screenshot Examples of EPC-CP-Form-1021 in MC Express*
Attachment 2: *Crosswalk of EPC-CP-Form-1021 Hard Copy Format to Electronic Format*
Attachment 3: *Screenshot Examples of Printing from Maintenance Connection*

Attachment 1: Screenshot Examples of EPC-CP-Form-1021 in MC Express

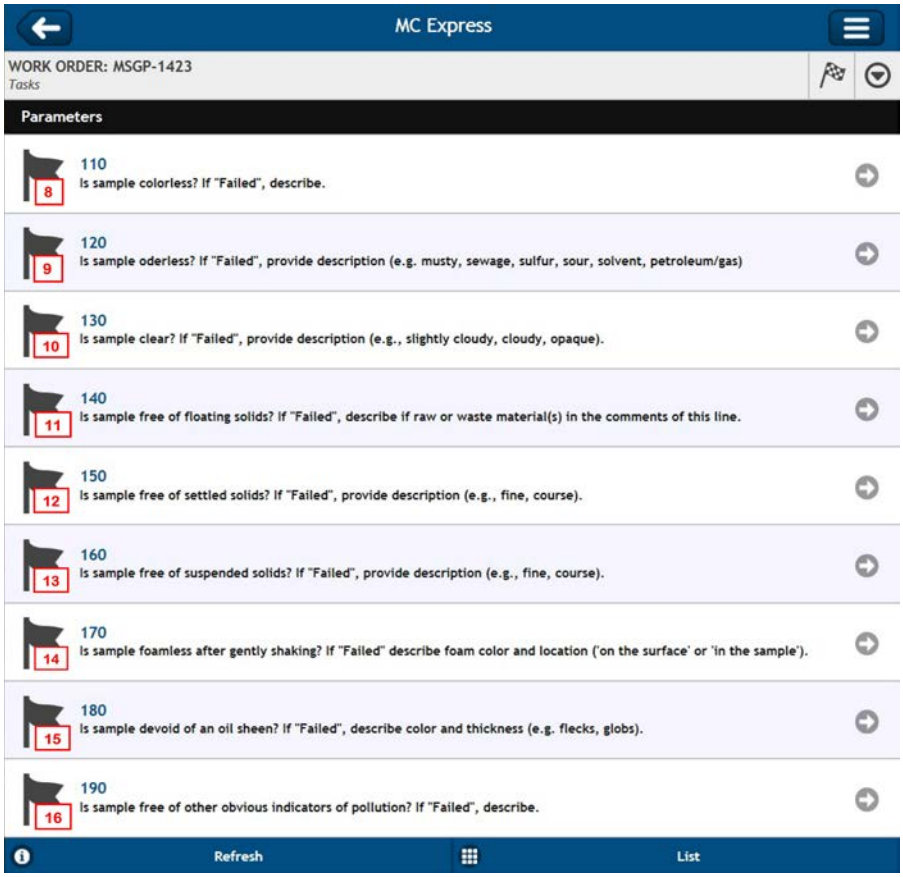
Page 1 of 3

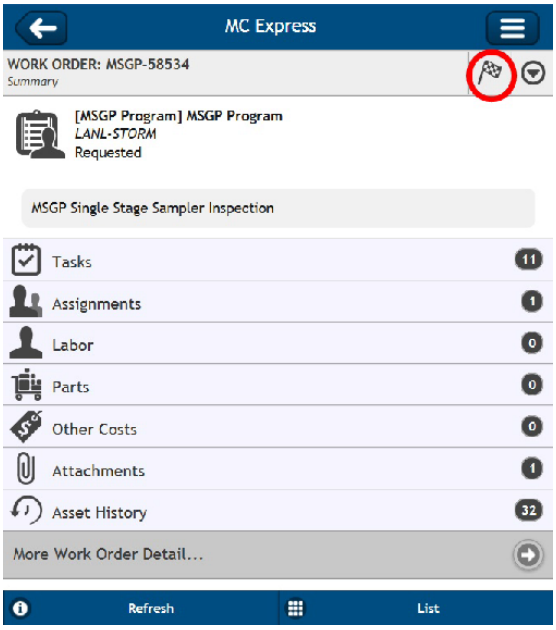




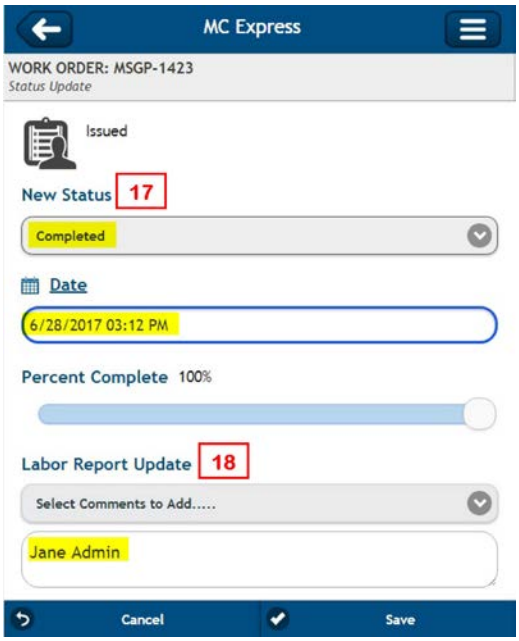
Attachment 1: Screenshot Examples of EPC-CP-Form-1021 in MC Express (cont.)

Page 2 of 3





Attachment 1: Screenshot Examples of EPC-CP-Form-1021 in MC Express (cont.)





Attachment 2: Crosswalk of EPC-CP-Form-1021 Hard Copy Format to Electronic Format

Los Alamos National Lab - ADESH

Work Order MSGP-1423

MSGP Monitoring Stations
Printed 7/12/2017 - 10:57 AM (Duplicate Copy)

Maintenance Details

Requested By: Admin, Jane on 7/11/2017 1:25:00 PM
Procedure: MSGP Quarterly Visual Assessment (EPC Sig) (EPC-CP-Form-1021.023)
Last PM: N/A
Reason: Hard Copy MSGP Visual Assessment Example

Target: 12/31/2017
Priority/Type: / Inspection
Department: Utilities and Infrastructure

MSGP Program
RG121.9
TA-3-38 Carpenter Shop
Monitored Outfall (073)
MSGP07302

Contact: Admin, Jane
Phone: 123-4567

Tasks

	#	Description	Meas.	No	N/A	Yes
		The result of this VA applies to associated SIOs as defined in the SWPPP, where applicable.				
		Sample information				
1	30	Document the monitoring Period (e.g., Apr-May)		☐	☐	☐
2	35	Is visual assessment performed on an unfiltered sample? (Use filtered only if unfiltered unavailable.)		☐	☐	☐
3	40	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).		☐	☐	☐
4	50	Document the Date/time sample collected in the "Reading" field of this line (using mm/dd/yy hh:mm format).		☐	☐	☐
5	60	Document the Date/time sample visually assessed in the "Reading" field of this line (using mm/dd/yy hh:mm format).		☐	☐	☐
6	70	Document the nature of discharge (e.g., rain, snowmelt). Document the TOTAL amount (in) in the "Reading" field of this line.		☐	☐	☐
7	80	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide a reason.		☐	☐	☐
		Parameters				
8	110	Is sample colorless? If "Failed", describe.		☐	☐	☐
9	120	Is sample oderless? If "Failed", provide description (e.g. musty, sewage, sulfur, sour, solvent, petroleum/gas)		☐	☐	☐
10	130	Is sample clear? If "Failed", provide description (e.g., slightly cloudy, cloudy, opaque).		☐	☐	☐
11	140	Is sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.		☐	☐	☐
12	150	Is sample free of settled solids? If "Failed", provide description (e.g., fine, course).		☐	☐	☐
13	160	Is sample free of suspended solids? If "Failed", provide description (e.g., fine, course).		☐	☐	☐
14	170	Is sample foamless after gently shaking? If "Failed" describe foam color and location (e.g.,'on the surface' or 'in the sample').		☐	☐	☐
15	180	Is sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks, globs).		☐	☐	☐
16	190	Is sample free of other obvious indicators of pollution? If "Failed", describe.		☐	☐	☐

Labor Report

17 **Completed:** 6/28/2017 3:23:00 PM

18 **Report:** Jane Admin

19 Jane Admin — Signature / Name; 6/28/2017 — Date; Signature / Name; Date

I confirm the information as recorded is true, accurate and complete.

EPC-CP-Form-1021.1 07/2017

Attachment 2: Crosswalk of EPC-CP-Form-1021 Hard Copy Format to Electronic Format (cont.)

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

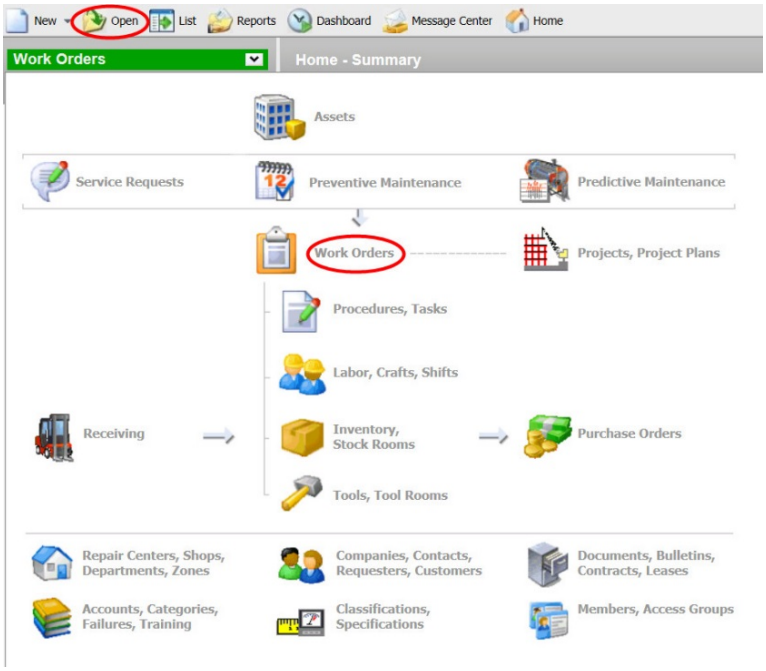
(Signatory must meet definition in Section B.11.A, eg. FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

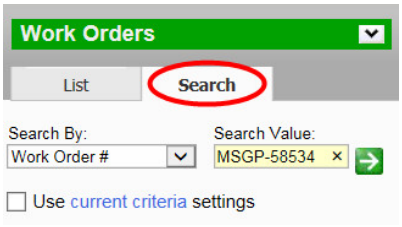
20 Print name and title:_____

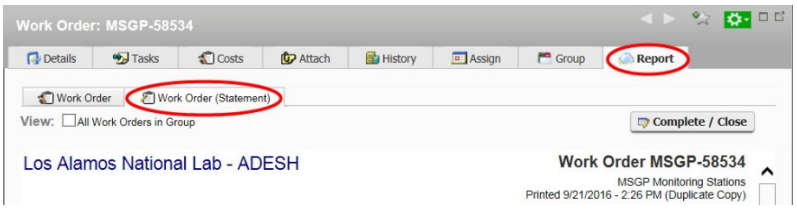
Signature:_____Date:_____

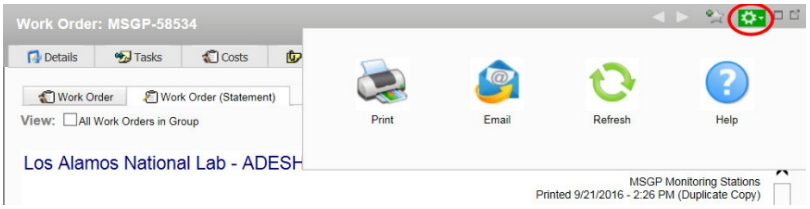
EPC-CP-Form-1021.1 07/2017

Attachment 3: Screenshot Examples of Printing from Maintenance Connection









ENV-CP-QP-007	Revision: 10	Los Alamos NATIONAL LABORATORY EST. 1943
Effective Date: 09/30/15	Next Review Date: 09/30/18	

Environment, Safety, Health Directorate

Environmental Protection – Compliance Programs

Quality Procedure

Spill Investigations

Reviewers:

Name:	Organization:	Signature:	Date:
Brian M. Iacona	EPC-CP	Signature on File	08/13/15
Name:	Organization:	Signature:	Date:
Jacob W. Meadows	EPC-CP	Signature on File	08/28/15

Derivative Classifier: ☒ **Unclassified** ☐ **DUSA** **ENVPRO**

Name:	Organization:	Signature:	Date:
Gian A. Bacigalupa	EPC-CP	Signature on File	08/31/15

Approval Signatures:

Subject Matter Expert:	Organization:	Signature:	Date:
Jacob W. Meadows	EPC-CP, Program Lead	Signature on File	08/31/15
Responsible Line Manager:	Organization:	Signature:	Date:
Michael T. Saladen	EPC-CP, Team Leader	Signature on File	08/31/15
Responsible Line Manager:	Organization:	Signature:	Date:
Anthony R. Grieggs	EPC-CP, Group Leader	Signature on File	09/30/15

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History of Revisions

Document Number *[Include revision number, beginning with Revision 0]*	**Effective Date** *[Document Control Coordinator inserts effective date]*	**Description of Changes** *[List specific changes made since the previous revision]*
0	12/98	New Document.
1	06/00	Annual review, added Cerro Grande fire hazards
2	07/01	Annual review
3	06/03	Annual review
4	04/04	Annual review, changes to HCPs
5	02/07	Annual review, changes to reflect organizational restructure
6	07/08	Annual review
7	09/10	Biennial Review and revision
8	04/11	Removed prerequisites, added note re: on-call spill reporting.
9	07/13	Biennial review and revision, implemented new procedure format.
10	09/30/15	Biennial review and revision, implemented new procedure format. Controlled the updated LANL ENV-CP Unplanned Release Report.

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1.0 PURPOSE

This Environmental Protection Division – Compliance Programs Group (EPC-CP) procedure describes processes and implements requirements for spill investigations.

2.0 SCOPE

This procedure applies to all EPC-CP staff and personnel conducting spill investigations.

2.1 HAZARD REVIEW

The work described in this procedure is field work and has a **LOW hazard** rating as documented by submittal of a completed *ENV Low Hazard Verification form*.

3.0 RESPONSIBILITIES

The following personnel require training before implementing this procedure:

- ECP-CP staff and contract personnel who perform spill response and investigation.

Annual re-training to this procedure is required. Specific training requirements will be updated as needed.

The training method for this procedure is required reading and on-the-job training (OJT). The OJT is to be conducted by a Team Leader or person designated as Subject Matter Expert (SME) by the EPC-CP Group Leader. This training will be documented in accordance with ENV-DO-QP-115, *Personnel Training*.

Actions specified within this procedure, unless proceeded with “should” or “may,” are to be considered mandatory (i.e., “shall”, “will”, “must”).

3.1 PREREQUISITES

None

4.0 WORK PROCESSES

Responsibility is to assure the immediate mitigation and timely notification of appropriate regulatory organizations in the event of a spill or unplanned discharge that has or may affect the environment. Work requires frequent and unscheduled site visits to any area of the Laboratory during a spill or unplanned release as support staff for the on-scene Security and Emergency Operations (SEO) Incident Commander.

Specific activities associated with Spill Response and Investigation:

- Respond to the spill or unplanned release site;
- Report to the On-Scene SEO Incident Commander and Site Safety Officer;
- Receive site safety requirements;
- Provide decision support;
- Investigate the nature and extent of the spill or unplanned release;

- Evaluate the potential environmental impact to water quality;
- Report the occurrence to the regulatory agencies, if necessary; and
- Provide support to mitigation plan and implementation.

4.1 FIELD ACTIVITY

If the spill or unplanned discharge is determined to be a non-emergency event by SEO response, such as a release of potable water, perform the following steps:

Step	Action
1	Perform a site visit in coordination with the Facility Operations Director designee.
2	Assess potential environmental damage.
3	Provide mitigation measures and requirements.
4	Document the event.
5	Notify regulatory agencies and DOE, if necessary.
6	Facilitate collection of samples, if necessary.

For emergency response, perform the following steps:

Step	Action
1	Report to on-scene commander and await instructions.
2	Perform a site visit in coordination with SEO.
3	Adhere to access requirements as developed by the SEO Site Safety Officer and Incident Commander.
4	Identify and document the source and cause of the release.
5	Provide notification and written report if necessary.
6	Facilitate collection of samples if necessary and safe to do so.

If sample collection is required, contact the following sampling personnel:

- EPC-CP
  - NPDES outfall
  - Sanitary treatment solids
- WM-SVS
  - Wastes and chemical spills (liquid, solid, hazardous)
- ADEP Environmental Remediation Division
  - Surface water
  - Storm water runoff
  - Groundwater
  - Sediments

If WM-SVS will collect the required sample, complete a Request For Analysis (RFA), http://int.lanl.gov/environment/waste/sampling.shtml, to schedule sampling. Specify the analytical suite and turn-around time needed for the sample in the RFA.

4.2 COMMUNICATION

Take a cellular phone that will transmit from the location to be visited. Also take a contact pager to receive messages.

If cellular service is unavailable, use a portable radio set to the appropriate radio frequency.

If in a secure area where cell phone use is prohibited, use the radio. Be sure to have radio checked and authorized for use within secure areas or within the boundaries of the WFO FOD or WX Division. Government-owned cellular phones, with batteries removed, may be brought into the secure area but used only if approval is given by the SEO Incident Commander or FOD or designee. Rules of use for Smartphones and other mobile devices (BlackBerry, iPhones, iPads) can be found on the Computing Communications webpage for mobile devices, http://int.lanl.gov/computing/communications/mobile/index.shtml.

Radio or cellular contact must be established with a designated contact prior to leaving EPC-CP and upon arrival/departure at the site in accordance with ENV-DO-QP-100, *General Field Safety*.

The Incident Commander can make special communication exceptions.

All photography at LANL must adhere to P217, *Controlled Articles*.

Wastes generated from activities described in the procedure will be properly characterized, managed, and disposed in accordance with P409, *LANL Waste Management*, P930-1, *LANL Waste Acceptance Criteria*, and P403, *Environmental Risk Identification and Management*.

4.3 FACILITY MANAGEMENT WORK CONTROL REQUIREMENTS FOR FIELD ACTIVITIES

Most field activities performed by the EPC-CP spill response personnel are impacted by facility management work control requirements. Requirements vary between the respective Facility Operations Divisions (FODs) and therefore necessitate EPC-CP response personnel to acquire FOD approval for site access in advance of starting work activities. The exception to this is in response to emergency situations as support to SEO staff.

Should work be required to stop/pause, reference P101-18, *Procedure for Pause/Stop Work*, for guidance.

4.4 FACILITY MANAGEMENT-SPECIFIC ACCESS REQUIREMENTS

4.4.1 HIGH EXPLOSIVES AREAS

TA-16 and TA-11 high explosives areas have specific access requirements. Access inside the security gate requires annual site-specific training. Curricula #5243 must be assigned and all the training courses completed before arriving at TA-16. For access, (normal or after hours) contact the WFO FOD to ensure entry requirements are met and the activity is authorized for the Plan of the Day.

For access to WFO perimeter gates during normal working hours or after hours, contact TA-15 Access Control at 667-6742 and request permission to enter. A perimeter gate key must be picked up at the TA-15 Access Control office. Note that all outdoor firing will be suspended during entry.

For perimeter gates, prior notification for after-hours entry is also required by SOC. Perform the following steps:

Step	Action
1	Call SOC Los Alamos at 667-4437.
2	Identify yourself to the on duty officer or attendant.
3	Provide the following information: Group, color and make of vehicle (s), which perimeter gate you are entering, and approximate time of arrival and finally, length of stay.

Failure to notify security personnel in advance could result in a security violation against the visiting Team Member.

Provide notification to SOC Los Alamos at 667-4437 when leaving area.

For access to WX areas required during normal or after working hours, perform the following steps:

- Ensure the required security clearance (Q clearance) is held, and
- Contact the FOD or designee for entry requirements.

4.4.2 CHEMISTRY METALLURGY RESEARCH FACILITY ACCESS

For access to the Chemistry Metallurgy Research Facility, perform the following:

- Must have the required L or Q clearance to pass the security gate.
- If access into any of the buildings is necessary, contact CMR Operations Management or the FOD for an escort**.**
- If responding to an emergency with SEO, EPC-CP staff will be considered part of the SEO response team, met at the access gate, and escorted to the spill site.

4.4.3 TA-3-66 SIGMA FACILITY ACCESS

For access to the Sigma facility (TA-3-66), perform the following:

- For non-emergency responses, obtain prior site-specific training and authorization or contact the FOD for personnel escort and contact the FOD Deployed Environmental Professional.
- For emergency response with SEO, EPC-CP staff will be considered part of the SEO response team, met at the access gate, and escorted to the spill site. Contact the FOD to ensure they are aware of the incident.

4.5 REGULATORY SPILL REPORTING

If a spill is determined to be a threat to the environment or human health, regulatory and DOE notification may be necessary. Contacts and telephone numbers can be found on Attachment 1, EPC-CP Release Notification Phone List.

If a spill impacts a Solid Waste Management Unit (SWMU) or Area of Concern (AOC), contact EPC-CP and Environmental Remediation (ER) for possible additional notification requirements.

If ENV Division or designated SME personnel determine after a site inspection or verbal notification that a spill is non-reportable to DOE or applicable regulatory agencies, a LANL EPC-CP Unplanned Release Report must be completed (Attachment 2) and submitted to the EPC-CP SME for required documentation.

For ENV Division designated on-call personnel, follow guidance for spill reporting as described in ENV-DO-QP-101, *Environmental Reporting Requirements for Releases or Events*.

NOTE: On-call representatives are required to follow up in writing (email is sufficient) with the spills program lead regarding all releases during their on-call schedule. If no spills are reported in off-work hours, please confirm in writing with the spills program lead at the end of your on-call schedule.

For additional information concerning spill and unplanned discharge determination and notification requirements, contact the EPC-CP Water Quality Permitting and Compliance Team Leader.

5.0 DOCUMENT CONTROL/RECORDS MANAGEMENT

The following records generated as a result of this procedure are to be submitted in accordance with ADESH-AP-006 Records Management Plan.

- Field notebook documentation of the release including:
  - Time and date of the release
  - Time and date of EPC-CP notification
  - Location of the release
  - Source of the release(equipment, etc,)
  - Type of material released
  - Quantity of material released
  - If an impact to a watercourse or Potential Release Site occurred
  - Time release was stopped
  - Any immediate mitigating actions implemented to contain or control the release
- Any written report and verbal notification list generated should the release be deemed reportable.
- LANL EPC-CP Unplanned Release Report (Attachment 2) for non-reportable releases.

6.0 DEFINITIONS

AOC: Area of Concern

ER: Environmental Remediation

Field Work: Performance of Laboratory related activities in areas that are removed or isolated from an established populated base of operation (that is, where emergency support and medical assistance is not readily available.)

FOD: Facility Operations Division

NPDES: National Pollutant Discharge Elimination System

OJT : On the job training

PRS: Potential Release Site

SEO: Security and Emergency Operations

SOC Los Alamos: Security contractor for Los Alamos National Laboratory

SWMU: Solid Waste Management Unit

7.0 REFERENCES

None

8.0 ATTACHMENTS

Attachment 1- EPC-CP Release Notification Phone List

Attachment 2- LANL EPC-CP Unplanned Release Report

ATTACHMENT 1- EPC-CP RELEASE NOTIFICATION PHONE LIST

Los Alamos National Laboratory

EPC-CP

Release notification phone list

August 2015

Los Alamos National Laboratory

(1)	Security and Emergency Operations Emergency Management (SEO-EM)	667-6211
(2)	ENV-ES Group Office	665-8855
(3)	EPC-CP Group Office	667-0666
(4)	EPC-CP Spills Pager	664-7722
(5)	ENV-DO	667-2211
(6)	L.A. Fire Department	667-7080
(7)	LANL Central Alarm Station (SOC-LA)	667-4055

New Mexico Environment Department

See Web address below

(1)	NMED Emergency Hotline (24 hours a day)	827-9329
(2)	NMED Non-Emergency Hotline (During business hours)	476-6000
	NMED Non-Emergency Hotline (Voicemail; 24 hours a day)	1(866) 428-6535
(3)	NMED Surface Water Quality Bureau	827-0187
	Erin Trujillo	827-0418
(4)	NMED Ground Water Quality Bureau	827-2900
	Greg Huey	827-6891
	Steven Huddleson	827-2936
	Gerald Knutson	827-2996
(5)	NMED Hazardous Waste Bureau	476-6000
	Ruth Horowitz	476-6025

U.S Environmental Protection Agency

(1)	US EPA Region 6 Spill Reporting (During business hours)	1(800) 887-6063
	Emergencies- Contact the NRC	1(800) 424-8802
(2)	Gladys Gooden-Jackson	1(214) 655-7494

U.S. Department of Energy

(1)	Gene Turner	667-5794

State Emergency Response Commission (SERC) Notification

New Mexico State Police	(505) 827-9300 (During business hours)
(Immediate Notification)	(505) 827-3476 (24 hours a day)
New Mexico Department of Homeland Security and Emergency Management (Follow-up Notification)	(505) 476-9600

National Response Center

U.S. Coast Guard National Response Center	1-800-424-8802

See NRC web address below for report form

New Mexico State Police

New Mexico State Police — (505)827-9300 (During business hours)
(505) 827-3476 (24 hours a day)

Local Emergency Planning Committee (LEPC) LAPD

Philmont Taylor — (505) 663-3511

On Call Environmental Contact for Releases
Group Representatives for Notifications to External Agencies

Name	Group	Work Phone	Pager	Cellular Phone	Email address
Jake Meadows	EPC-CP	606-0185	664-1333	231-0460	jmeadows@lanl.gov
Mike Saladen	EPC-CP	665-6085		699-1284	saladen@lanl.gov
Mark Haagenstad	EPC-CP	665-2014		699-1733	mph@lanl.gov
Tim Zimmerly	EPC-CP	664-0105	664-1237	699-7621	tzimmer@lanl.gov
Terrill Lemke	EPC-CP	665-2397		699-0725	tlemke@lanl.gov

Web addresses:
NMED home page http://www.nmenv.state.nm.us
National Response Center home page http://www.nrc.uscg.mil/Default.aspx
Reportable Quantities web page http://homer.ornl.gov/rq/

ATTACHMENT 2- LANL EPC-CP UNPLANNED RELEASE REPORT

Los Alamos National Laboratory
Environmental Compliance Programs (ENV-CP)
Unplanned Release Report

Form Completed By:	**Telephone:**	**Group:**

Spill Details — Spill Owner (Specify): ☐LANS, LLC ☐Subcontractor:

Date of Spill/Date Spill Discovered:

Location:

Material Spilled:
- ☐ Hydraulic Fluid
- ☐ Potable Water
- ☐ Diesel
- ☐ Anti-freeze/coolant
- ☐ Steam Condensate
- ☐ Lubricants/oils
- ☐ Refrigerant Oil
- ☐ Gasoline
- ☐ Other: _____

Volume Spilled: **Waste Volume Generated:**

Source of Spill:
Vehicle ID: _____
Equipment ID: _____
- ☐ Hydraulic Line
- ☐ Potable Water Line
- ☐ Fire Suppression System
- ☐ Fuel Tank
- ☐ Radiator
- ☐ Condensate Line
- ☐ Other: _____

Describe the spill response in chronological order. Include response personnel, steps taken to contain the spill, and steps/spill control equipment used to clean it up. Please indicate if corrective actions have been completed and describe actions taken to prevent spill recurrence:

Date Corrective Actions Completed: _____

Did the spill enter or impact any of the following? (Check as many as apply)
- ☐ RCRA Treatment Storage Disposal Facility
- ☐ RCRA Satellite Accumulation Area
- ☐ RCRA <90 Day Storage Area
- ☐ Floor Drain, if so please indicate affected facility _____
- ☐ Watercourse/drainage area, if so please indicate _____
- ☐ Solid Waste Management Unit/Area of Concern, if so please indicate _____
- ☐ None

Did the spill occur inside or outside a building? ☐ Inside ☐ Outside

Did the spill occur on: (Check as many as apply)
- ☐ Concrete
- ☐ Carpeted Floor
- ☐ Tile
- ☐ Wooden floor/deck
- ☐ Asphalt
- ☐ Graveled/Rocky Area
- ☐ Soil/Vegetated Area
- ☐ Other: _____

Samples Collected:
- ☐ None
- ☐ Water
- ☐ Soil
- ☐ Air
- ☐ Other: _____

If samples were collected, indicate analytical suite:

Certification

I certify that I am knowledgeable about the information on this form. The information, to my knowledge, is true, accurate, and complete.

Name of Certifying Official: **Organization:** **Date:**

Certification:

Completed by ENV-CP Personnel
Date Received: **Severity Index:** **Causal Analysis:**
☐ Non-Reportable
☐ Reportable

ENV-CP-Form 1009.0 06/2015

Return Completed Form to ENV-CP (jmeadows@lanl.gov)

EPC-DO-QP-101	Revision: **3**	Los Alamos NATIONAL LABORATORY EST.1943
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Environment, Safety, and Health Directorate

Environmental Protection and Compliance Division – Compliance Programs

Quality Procedure

Environmental Reporting Requirements for Releases or Events

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Derivative Classifier: ☒ **Unclassified or** ☐ **DUSA ENVPRO**

Name:	Organization:	Signature:	Date:
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Responsible Line Manager:	Organization:	Signature:	Date:
Anthony Grieggs	EPC-CP, Group Leader	Signature on File	8-3-17
Responsible Line Manager	Organization	Signature:	Date:
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ENV-DO-QP-101 R2	6/12	Biennial Review/Revision, new template implemented.
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1.0 INTRODUCTION

This Environmental Protection and Compliance Division (EPC-DO) procedure describes how to determine whether an unplanned release, spill, fire, or other event needs to be reported under environmental regulations and how to fulfill all immediate reporting requirements (within the first 24 hours). Emergency and abnormal event notification requirements for reporting to Laboratory and DOE management are specified in PD1200, *Emergency Management*, and *P322-4, Performance Improvement from Abnormal Events*. Environmental reporting requirements regarding releases or other events are included in this procedure.

1.1 Purpose

This procedure describes the actions that must be performed within the first 24 hours of the release. This procedure does **not** cover the response procedures for "continuous releases" under Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and Emergency Planning and Community Right-to-Know Act (EPCRA) (see definitions) nor the follow-up notifications and reports.

1.2 Applicability

This procedure applies to EPC-DO on-call representatives and subject matter experts (SMEs) who must respond to any release, spill, or event at the Laboratory that may require immediate notification to local, state or federal regulatory agencies. For notifications to Pueblo Environmental Departments refer to ENV-DO-QP-111, *Reporting Environmental Releases to Pueblo Governments*.

2.0 PRECAUTIONS AND LIMITATIONS

The work described in this procedure includes field work that does not require an Integrated Work Document (IWD) and is rated as having a **LOW hazard** level.

3.0 RESPONSIBILITIES

The following personnel require training before implementing this procedure:

- EPC managers, designated on-call representatives, and SMEs who may be asked to fulfill immediate reporting requirements during release-related exercises or during actual releases

Annual retraining to this procedure is required. This procedure will be reviewed biennially by all affected personnel and updated as necessary.

Training to this procedure will be by "self-study" (reading) and is documented in accordance with the trainee's organization's procedure for training.

Actions specified within this procedure, unless preceded with "should" or "may", are to be considered mandatory (i.e., "shall", "will", "must").

4.0 WORK PROCESSES

Events covered by this procedure include detonation or burns of unstable material, leaking or compromised gas cylinders, puncturing of bulging containers, fires, explosions, chemical or radiological spills, wastewater spills, potable water discharges, and other unplanned releases at the Laboratory.

On a semi-annual basis, EPC-DO will prepare a list of individuals designated as on-call representatives and will designate the week each will be on-call. This list will be distributed to on-call representatives and Laboratory managers including Principal Associate Directorate for Operations (PADOPS), Associate Directorate for Environment, Safety, and Health (ADESH), Associate Directorate for Environmental Management (ADEM), Emergency Operations (SEO-DO), EPC-DO, Environmental Protection and Compliance Division Compliance Programs Group (EPC-CP), and Environmental Protection and Compliance Division Environmental Stewardship Group (EPC-ES). The on-call representative can be reached by pager at 505-664-7722.

4.1 Responsibility of On-Call Representative

The EPC on-call representative is the party primarily responsible for:

- determining if the incident will require immediate notification to external agencies in accordance with LANL, state, and federal regulatory reporting requirements
- notifying EPC Division management of immediate reporting requirements
- if needed, coordinating with other on-call SMEs and the Emergency Operations Center (EOC) to ensure the required notifications for environmental reporting and abnormal events are being addressed for the Laboratory

The EPC on-call representative is not responsible for the following and EOC will make these determinations:

- determining if the Resource Conservation Recovery Act (RCRA) Contingency Plan must be implemented
- if a shock-sensitive material or leaking or compromised gas cylinder constitutes an emergency

However, in order to ensure that the appropriate expertise is available for the affected media, the EPC on-call representative may immediately confer with an SME of the EPC group that has programmatic responsibility. If an SME from the responsible group is able to respond to the event, the remaining steps in this procedure may be passed to that person.

A list of contact numbers for on-call representatives and SMEs for EPC-CP and EPC-ES groups is available in the EPC-CP group office. The EPC-DO and SEO-DO may also be contacted to determine the on-call representative for each group.

4.2 Follow-Up Reporting

This procedure describes the initial external notifications (within the first 24 hours) to regulatory agencies. After completion of the steps in this procedure, the EPC group specifically responsible for compliance with the relevant regulations will complete the required notifications and reports, as applicable under the appropriate regulations, according to established procedures.

4.3 Summary of Policy Reporting

The EPC on-call representative and spill response SMEs have the authority and responsibility for deciding when to report an event and for making notifications to regulatory agencies within the applicable regulatory deadlines.

LANL management and Department of Energy Los Alamos Field Office (DOE LAFO) must be informed as soon as possible that a report was or will be made, but their approval is not required prior to the report being made to the regulatory agency. LANL management, with input from EPC SMEs, will determine if an ORPS (Occurrence Reporting Processing System) report or other type of Lessons Learned will be necessary.

NOTE: SEO-DO maintains a current list of on-call LANL managers.

4.4 Using this Procedure

This procedure has seven separate paths (and corresponding sections) to follow for determining if a release or event is reportable. Follow each of these paths to determine if one or more are applicable:

- Resource Conservation and Recovery Act (RCRA)
- Toxic Substances Control Act (TSCA)
- Clean Water Act (CWA),New Mexico Water Quality Act (NMWQA), and New Mexico Water Quality Control Commission (NMWQCC) Regulations
- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and Emergency Planning and Community Right-to-Know Act (EPCRA)
- Clean Air Act
- Endangered Species Act
- Bald and Golden Eagle Protection Act
- Migratory Bird Treaty Act
- New Mexico Wildlife Conservation Act
- National Environmental Policy Act
- National Historic Preservation Act
- Native American Graves Protection and Repatriation Act

- Archaeological Resources Protection Act

Each release needs to be evaluated for all potential reporting requirements. For example, a Reportable Quantity (RQ), defined under CERCLA or EPCRA may not be met, **but the release may be reportable** under RCRA, New Mexico Water Quality Control Commission (NMWQCC), and/or Clean Water Act (CWA) requirements.

NOTE: The 24-hour deadline (immediate in some cases) applies regardless of whether it occurs during business hours, after business hours or on non-business days.

4.5 Determining if a Release is Reportable under RCRA

Follow the flow chart in Attachment 1 to determine if an event is reportable under RCRA regulations.

Under the RCRA permit requirements, the SEO-DO manager determines if the "RCRA Contingency Plan" provisions should be implemented. The EPC on-call representative or an EPC-CP SME performs notifications that may be required.

The SEO-DO Manager will normally attempt to contact the EPC-CP SME for guidance in making this decision. If the EPC-CP SME is successfully contacted, the completion of the remainder of this procedure may be passed on to this individual.

The EPC on-call representative makes the determination that one or more of these conditions occurred through consultation with EPC-CP and appropriate SMEs. 24-hour notification can be made by the EPC on-call representative or by an EPC SME.

The Emergency Operations Center (EOC) manager makes the determination that unstable chemicals, leaking or compromised gas cylinders represent an emergency situation and, typically with EPC-CP, how best to respond. 24-hour notification can be made by the on-call representative or EPC-CP SME.

If a release/event is reportable under RCRA rules, determine if the release/event is reportable under other rules and proceed to the Section 4.10 *Reporting a Release or Event.*

4.6 Determining if a Release is Reportable under TSCA

In practice, only spills of Polychlorinated Biphenyls (PCBs) or PCB-suspect untested mineral oil to the environment (generally outdoors or with the potential to reach the outdoors) are reportable. Spills that are contained indoors are generally not reported.

A discharge of PCBs is reportable to the Environmental Protection Agency (EPA) under TSCA if 1 pound of PCBs by weight is released [40 Code of Federal Regulations (CFR) 761.125(a)(1)]. Notify the EPA regional office and proceed with the immediate clean up requirements noted in 40 CFR 761.125(a)(1) in the shortest possible time after discovery, but in no case later than 24 hours after discovery. Additionally, reporting requirements are triggered if over 270 gallons of untested mineral oil suspected of containing PCBs has been spilled.

Follow the steps in *Determining if a Release is Reportable under CERCLA, EPCRA, or Other Regulations* to determine if the RQ for PCBs has also been exceeded.

There are six items containing PCBs that are out of service at the Chemistry and Metallurgy Research (CMR) Building. All other known PCB equipment at the Laboratory has been taken out of service and disposed of in accordance with TSCA regulations.

If a release is reportable under TSCA, continue through the next sections to determine if the release/event is reportable under other rules and proceed to *Reporting a Release or Event* and determine if additional reporting is necessary.

If the spill is ...	**Then...**
equal to or over 1 pound by weight of PCBs (TSCA) or greater than 270 gallons of untested mineral oil suspected of containing PCBs	Report to the National Response Center (1-800-242-8802) immediately (within 15 minutes of discovery). Additionally, contact EPA Region 6 (Office of Prevention, Pesticides and Toxic Substances Branch) through EPA's 24-hour spill response number 866-372-7745 as soon as possible after discovery but no later than 24 hours after discovery.

4.7 Determining if a Release is Reportable under the NM Water Quality Act or the CWA

20.6.2.1203 New Mexico Administrative Code (NMAC) Reporting

The NM Water Quality Act (NMWQA) does not use Reportable Quantities (as described in the next section). Instead the NM Water Quality Control Commission (NMWQCC) regulations state: *"With respect to any discharge from any facility of oil or other water contaminant, in such quantity as may with reasonable probability injure or be detrimental to human health, animal or plant life, or property, or unreasonably interfere with the public welfare or the use of property, notifications (to the New Mexico Environment Department (NMED)) and corrective actions are required."*

The above rule requires the use of professional judgment to determine if reporting is required. No quantifiable metric is available to assist in making this determination. The EPC on-call representative or SME has the authority and responsibility to make this determination.

Additionally, unplanned releases of potable water or steam condensate require reporting pursuant to 20.6.2.1203 NMAC if the release is greater than 5,000 gallons, reaches a watercourse, or if the release adversely impacts a Solid Waste Management Unit (SWMU) or Area of Concern (AOC) as directed in the LANL Liquid Discharge Reporting Guidance (Decision Tree), dated March 10, 2009. Contact ADEM to confirm the location and potential impacts to SWMUs or AOCs from any releases that may occur.

Groundwater Discharge Permit Reporting

The Laboratory has four current Groundwater Discharge Permits (DPs) that include notification and reporting requirements in the event of an unpermitted discharge. Spills of **any volume** associated with any of the Groundwater DPs require reporting to NMED pursuant to 20.6.2.1203 NMAC.

1. **DP-857: Sanitary Waste Water System (SWWS) Plant, Sanitary Effluent Reclamation Facility (SERF), and Sigma Mesa Evaporation Basins. Permit Condition No. 44.**

   The unauthorized release of untreated and treated sanitary wastewater, reuse wastewater, blended wastewater, and reject wastewater would be subject to reporting under Condition No. 44.

2. **DP-1589: Septic Tank/Disposal Systems. Permit Condition No. 23.**

   The unauthorized release of untreated wastewater, septage, treated wastewater surfacing from failing disposal systems (leach fields), and treated wastewater surfacing from overflowing septic tanks would be subject to reporting under Condition No. 23.

3. **DP-1793: Land Application of Treated Groundwater. Permit Condition No. 17.**

   The unauthorized release of untreated or treated groundwater that does not constitute land application, as defined in EPC-CP-QP-010: Land Application of Groundwater, would be subject to reporting under Condition No. 17.

4. **DP-1835: Injection of Treated Groundwater to Class V Underground Injection Control (UIC) Wells. Permit Condition No. 22.**

   The unauthorized release of treated or untreated groundwater that does not constitute injection into a Class V UIC well, as defined in Discharge Permit DP-1835, would be subject to reporting under Condition No. 22.

Clean Water Act Reporting

Oil discharges (film/sheen/discoloration) to water in stream channels must also be reported to the National Response Center (NRC) immediately (within 15 minutes of discovery) pursuant to 40 CFR §110.6.

National Pollutant Discharge Elimination System (NPDES) Outfall Reporting

The EPC-DO on-call SME must provide notification to the NPDES Outfall Permit Program Lead and/or the EPC-CP Water Quality Team Leader in the event of a leak or unplanned release from an NPDES permitted outfall upon discovery in order to meet applicable reporting requirements.

4.7.1 Reporting Requirement for Petroleum Storage Tanks

As defined in 20.5.7 NMAC, the NMED requires verbal reporting within 24 hours of a petroleum product release from regulated tanks to the NMED Petroleum Storage Tank Bureau (PSTB) when there is:

- any suspected or confirmed release of regulated substances
- evidence of release of regulated substances
- unusual operational conditions (that would cause concern about a release)
- monitoring results that show loss from the system

Regulated tanks include those with a capacity between 1,320 gallons and 55,000 gallons. Regulated substances for Aboveground Storage Tanks includes, but is not limited to petroleum and petroleum-based substances comprised of a complex blend of hydrocarbons derived from crude oil through processes of separation, conversion, upgrading and finishing, such as motor fuels (including ethanol-based motor fuels), jet fuels, distillate fuel oils, residual fuel oils, lubricants, petroleum solvents, and used oils.

Notice of any suspected or confirmed release from a storage tank system needs to be completed within 24 hours. Contact the EPC-CP Aboveground Storage Tank (AST) Program Lead and/or the EPC-CP Water Quality Team Leader prior to completing any external notifications. The PSTB can be reached at 476-4397 during business hours and 827-9329 (NMED Emergency Spill Hotline) during non-business hours. A written report describing the spill, release or suspected release and any investigation or follow-up action needs to be submitted to the PSTB within 14 days of the incident.

4.7.2 Additional Reporting Requirements under the NPDES Pesticide General Permit

Adverse incidents require reporting to the EPA under the NPDES Pesticide General Permit (PGP). An adverse incident is defined as an unusual or unexpected incident resulting from pesticide applications that an Operator has observed upon inspection or of which the Operator otherwise becomes aware, in which:

1. There is evidence that a person or non-target organism has likely been exposed to a pesticide residue, and
2. The person or non-target organism suffered a toxic or adverse effect.

The phrase toxic or adverse effect includes effects that occur within Waters of the United States on non-target plants, fish, or wildlife that are unusual or unexpected (e.g., effects are to organisms not otherwise described on the pesticide product label or otherwise not expected to be present) as a result of exposure to a pesticide residue, and may include:

- Distressed or dead juvenile and small fishes
- Washed up or floating fish
- Fish swimming abnormally or erratically
- Fish lying lethargically at water surface or in shallow water
- Fish that are listless or nonresponsive to disturbance
- Stunting, wilting, or desiccation of non-target submerged or emergent aquatic plants
- Other dead or visibly distressed non-target aquatic organisms (amphibians, turtles, invertebrates, etc.)

The phrase toxic or adverse effects also includes any adverse effects to humans (e.g. skin rashes) or domesticated animals that occur either from direct contact with or as a secondary effect from a discharge (e.g., sickness from consumption of plants or animals containing pesticides) to Waters of the United States that are temporally and spatially related to exposure to a pesticide residue (e.g. vomiting, lethargy).

If an Operator observes or otherwise becomes aware of an adverse incident due to pesticide application, the Operator must notify the EPA Incident Reporting contact within 24 hours of the Operator becoming aware of the adverse incident. EPA Incident Reporting Contacts are listed at https://www.epa.gov/npdes/pesticide-permitting.

If an Operator becomes aware of an adverse incident affecting a federally listed threatened or endangered species or its federally designated critical habitat, which may have resulted from a discharge from the Operator's pesticide application, the Operator must immediately (within 15 minutes of discovery) notify the U. S Fish and Wildlife Service. This notification must be made by phone to the contact listed on the EPA's website (https://www.epa.gov/npdes/pesticide-permitting).

4.8 Determining if a Release is Reportable under CERCLA or EPCRA

Under CERCLA or EPCRA, an RQ is the threshold which requires regulatory notification of a release. An RQ is based on the quantity of chemical released within any 24-hour period. CERCLA RQs of hazardous substances are listed in 40 CFR § 302.4. If an RQ is met or exceeded, an immediate (within 15 minutes of discovery) notification must be made to the NRC (1-800-424-8802) pursuant to 40 CFR §302.6. If a release of an airborne radioactive material exceeds an RQ, the EPA Region 6 Health Physicist (Office-(214) 665-8541; Mobile-(214) 755-1530; Home-(972) 937-1900) must also be verbally notified after the NRC notifications have been completed.

A release is reportable under EPCRA if a release of a hazardous or extremely hazardous substance listed in 40 CFR Part 355 Appendices A and B occurs. The chemicals that have not been assigned RQs by the EPA have been given statutory RQs of one pound by Congress. If an RQ established under EPCRA is met or exceeded, an immediate (within 15 minutes of discovery) notification must be made to the Local Emergency Planning Committee (LEPC) community emergency coordinator and to the State Emergency Response Commission (SERC) (see Attachment 2).

The lists of CERCLA hazardous substances and EPCRA extremely hazardous substances are two separate lists that include a number of common substances. However, not all extremely hazardous substances are listed hazardous substances. In some instances, a release of an extremely hazardous substance may be reportable under EPCRA but not reportable under CERCLA.

Releases that occur within a closed space with no emissions to the ambient environment are exempt from EPCRA and CERCLA reporting requirements.

NOTE: Response procedures for "Continuous Releases" are not covered in this procedure.

4.8.1 Regulatory Classification of the Released Material

The on-call EPC SME will determine the regulatory classification of the substance released with respect to the hazard classifications:

- Extremely Hazardous Substance (EHS) and/or Hazardous Substance (HS)

Often during the course of an emergency, complete information will not be available regarding type and amount of material released. In this case, best professional judgment must be used to establish the level of confidence associated with the estimates. If the uncertainty is high enough that future

estimates may require reporting, it is best to be conservative and report the release following the reporting requirements detailed in Section 4.10 *Reporting a Release or Event*.

After determining the RQ of a released material, the EPC on-call representative or SME will perform the following steps to determine if an RQ has been released.

<table>
<tr><th>Step</th><th>Action</th></tr>
<tr><td>1</td><td>Obtain an estimate of the quantity and type of material released (e.g. 4 pounds of chlorine gas or 150 curies of tritium).</td></tr>
<tr><td>2</td><td>Compare this quantity against the RQs provided in 40 CFR Table 302.4 and 40 CFR §355, Appendices A and B.</td></tr>
<tr><td>3</td><td>If this is an airborne release of radioactive materials, immediate (within 15 minutes of discovery) reporting to the NRC and the EPA Region 6, Regional Health Physicist is required if the RQ has been exceeded. Note that for radioactive materials, the RQ is provided in activity units (curies or becquerels). Also note that some materials have an RQ value for both chemical exposure (Table 302.4) and for radiological exposure (Appendix B to §302.4). In these cases, the RQ applying to the smallest quantity of material will apply.

For all radioactive material releases, a radiological dose assessment must also be performed within 24 hours of the release. This dose assessment should be made by an environmental health physicist in EPC-CP or EPC-ES. The on-call individual should contact an EPC health physicist for this evaluation.

Immediate evaluation – RQ comparison (of a radioactive material release)

If the release… — Then…
Is equal to or greater than the RQ — Proceed to section 4.10 Reporting a Release or Event.
Is less than the RQ — No immediate reporting is required; contact EPC environmental health physicist to complete follow-up dose assessment.</td></tr>
<tr><td>4</td><td>If this is a release of non-rad material, it is reportable if the RQ is exceeded.

If the amount released is.., — Then…
Equal to or greater than the RQ — Proceed to Section 4.10 Reporting a Release or Event.
Less than the RQ — Proceed to Step 5</td></tr>
<tr><td>5</td><td>Continue to re-evaluate the release as new data becomes available. Perform Steps 1 through 4 as necessary.</td></tr>
</table>

4.9 Determining Release Impacts to Biological or Cultural Resources

There are laws and regulations related to protection of biological and cultural resources which are applicable to the Laboratory. These laws and regulations include:

- National Environmental Policy Act
- Endangered Species Act
- Bald and Golden Eagle Protection Act
- Migratory Bird Treaty Act
- New Mexico Wildlife Conservation Act
- New Mexico Endangered Species Act
- National Historic Preservation Act
- Native American Graves Protection and Repatriation Act
- Archaeological Resources Protection Act

Reporting of impacts to biological or cultural resources under the preceding federal laws is not specifically defined. However, the EPC on-call SME should utilize the Decision Support Application (DSA) to determine if the release impacted a Biological or Cultural Site. The DSA layer 'Federally Listed Species Habitat' contains Endangered Species habitat boundaries. The DSA 'Cultural Resources-Buffered Sites' layer contains the boundaries of the Cultural Sites (Please note- information contained in these layers is Official Use Only). Notify the respective Biological or Cultural SME within one business day if the release impacted either of these areas. The Biological or Cultural SMEs will handle any additional reporting requirements.

Additionally, if there is a release of contaminants to a wetland or destruction of a wetland, OR if the event could result in the "take" of a threatened or endangered species (i.e., a wildfire), the EPC on-call representative or SME will notify the Biological SME within one business day of the event. The Biological SME will complete any additional reporting requirements.

4.10 Reporting a Release or Event

If a release or event is reportable (as determined by one or more of the previous sections), the Laboratory is required to meet certain reporting requirements. The emergency notification requirements must be followed upon determination that a release or event is reportable.

For informational purposes, a Summary of Emergency Release or Event Reporting Requirements is provided in Attachment 2. This document summarizes the primary statutes and the associated reporting requirements.

Maintain a notebook to record pertinent information about the release and to document the actions taken (see Section 5.0 *Records*).

Any release to the environment that has been determined to be reportable by the EPC on-call representative or SME shall be reported through the LANL management chain in accordance with PD1200, *Emergency Management* and *P322-4, Performance Improvement from Abnormal Events*.

Los Alamos National Security (LANS) management and DOE shall be notified if a release notification to state or federal regulatory agencies is required. Management approval is not required prior to completing environmental notifications to the regulatory agencies in order to assure that the deadline for reporting is not exceeded.

Perform the following steps immediately after establishing that reporting is required:

Step	Action
1	Compile release information including : • The source, cause, type and quantity of the release • Time and duration of the release • Extent of any protective and corrective actions taken • Name, address, and telephone number of the person to contact for further information • Whether the substance is an HS or EHS • Associated health risks and medical attention necessary for exposed individuals • If available, information concerning the release of any hazardous and/or mixed waste which may endanger public or private drinking water supplies • Assessment of actual or potential hazards to human health or the environment outside the facility • If available, estimated quantity and disposition of recovered material that resulted from the incident • Precautions to take due to the release/event, including, in the case of fire, those associated with special hazards due to hazardous and/or mixed waste • Any other information which may help emergency personnel responding to the incident • Environmental media impacted from the release
2	Notify LANL management, DOE, and the respective Facilities Operations Division (FOD). Note: Management approval is not required prior to completing environmental notifications to the regulatory agencies in order to assure that the deadline for reporting is not exceeded.
3	Provide notification to the regulatory agency as required by the applicable regulation(s) detailed in Sections 4.5 - 4.9. Reference Attachment 2 for a summary of the applicable reporting requirements.
4	Notify programmatic SMEs that may be impacted or required to complete follow up reporting.

4.10.1 Steps to Notify LANL Management and DOE

The EPC on-call representative will complete the following steps to provide notification to LANL Management and DOE.

Step	Action
1	Determine that a release to the environment is reportable to state or federal entities as

	required under applicable regulations. **NOTE:** Occurrence Reporting and Procession System (ORPS) reporting is a FOD and Responsible Associate Director (RAD) responsibility and commonly they will seek advisement from EPC SMEs.
2	Provide notification to the EPC-CP Water Quality Team Leader, the EPC-CP Group Leader, the EPC-DO Division Leader, and DOE LAFO program contact of the release and the required external notifications.
3	Complete environmental reporting to state and federal agencies in accordance with all applicable regulations.
4	Notify the appropriate program SME that may be impacted or be required to complete following up release reporting.

After all the above notifications have been made, or when requested, the EPC on-call representative or SME will hand off responsibility for additional actions and follow-up to the affected environmental group. (The group that will be responsible will depend on the type and location of the release and the governing regulations or statutes.)

In order to communicate events at LANL which may impact the public and or the environment, EPC staff may provide a courtesy notification to New Mexico Environment Department of events that may not require formal regulatory notification. Examples of such events in the past have been small wild land fires.

5.0 RECORDS

The following records are generated as a result of this procedure and are maintained in accordance with ADESH-AP-006 Records Management Plan and P1020-1, *Laboratory Records Management*:

- Field documentation of the release, including:
    - Time and date of the release
    - Time, date, and description of notifications
    - Location and source of the release
    - Type of material released
    - Quantity of material released
    - Impacted media
    - Time release was stopped
    - Any immediate mitigation actions taken to contain or control the release
    - Documentation of any verbal notifications
    - Samples taken
- Copies of any written notifications generated

- Documentation of any analytical results, and quality assurance of results
- Contingency and / or emergency plan documentation
- Documentation of any RCRA permit non-compliance that threatens human health and environment
- Documentation of treatment of any RCRA unstable chemicals, leaking or compromised gas cylinders

6.0 DEFINITIONS AND ACRONYMS

6.1 Definitions

ADESH – Associate Directorate for Environment, Safety, and Health

ADEM – Associate Directorate for Environmental Management

AOC – Area of Concern

AST – Aboveground Storage Tank

CAA – Clean Air Act

CERCLA – Comprehensive Environmental Response, Compensation, and Liability Act

CMR – Chemistry and Metallurgy Research

CFR – Code of Federal Regulations

Continuous Release – A release is continuous if it "occurs without interruption or abatement or if it is routine, anticipated, intermittent, and incidental to normal operations or treatment processes." The release must also be "stable in quantity and rate," which means that it must be predictable and regular in the amount and rate of emission. The response procedures for continuous releases are not covered by this document. See guidance in Reporting Continuous Releases of Hazardous and Extremely Hazardous Substances under CERCLA and EPCRA.

CWA – Clean Water Act

DOE LAFO – Department of Energy Los Alamos Field Office

DSA – Decision Support Application

Environment – Includes "water, air, land, and the interrelationship which exists among and between water, air, land, and all living things." (40 CFR 355.20)

EOC – Emergency Operations Center

EPA – Environmental Protection Agency

EPC-DO – Environmental Protection and Compliance Division

EPCRA – Emergency Planning and Community Right-to-Know Act

EPC-CP – Environmental Protection and Compliance Division Compliance Programs Group

EPC-ES – Environmental Protection and Compliance Division Environmental Stewardship Group

Extremely Hazardous Substance (EHS) – EPCRA establishes emergency reporting requirements for extremely hazardous substances in 40 CFR 355, Appendix A. All of these substances are also CWA and CERCLA "hazardous" substances.

FOD – Facility Operations Director

GWDP-Ground Water Discharge Permit

Hazardous Substance (HS) – These substances are summarized in 40 CFR Part 302. As used in this context, refers to: (1) any elements, compounds, mixtures, solutions, or substances specially designated by EPA under Section 311 of the Clean Water Act (CWA) (40 CFR 116.4); (2) any toxic pollutants listed under Section 307(a) of the CWA; (3) any hazardous substances regulated under Section 311 (b)(2)(A) of the CWA; (4) any listed or characteristic RCRA hazardous waste (40 CFR 261), (5) any hazardous air pollutants listed under Section 112 of the Clean Air Act (CAA); or (6) any imminently hazardous chemical substances or mixtures regulated under Section 7 of the Toxic Substances Control Act (TSCA).

IWD – Integrated Work Document

LANL – Los Alamos National Laboratory

LANS – Los Alamos National Security

LEPC – Local Emergency Planning Committee

NMAC – New Mexico Administrative Code

NMED – New Mexico Environment Department

NMWQA – New Mexico Water Quality Act

NMWQCC – New Mexico Water Quality Control Commission

NPDES – National Pollutant Discharge Elimination System

NRC – National Response Center

ORPS – Occurrence Reporting and Processing System

OSC – On-Scene Commander

PADOPS – Principal Associate Directorate Operations

PCBs – Polychlorinated Biphenyls

PGP – Pesticide General Permit

PST – Petroleum Storage Tank

PSTB – Petroleum Storage Tank Bureau

RAD – Responsible Associate Director

RCRA – Resource Conservation and Recovery Act

Release – Any unpermitted spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing of contaminants into the environment, excluding: (1) emissions from the engine exhaust of any vehicle, (2) certain releases of source, byproduct, or special nuclear material from a nuclear incident, or (3) normal application of fertilizer.

RQ – Reportable Quantity

SARA – Superfund Amendments and Reauthorization Act

SDS – Safety Data Sheet

SERC – State Emergency Response Commission

SERF – Sanitary Effluent Reclamation Facility

SEO-DO –Security and Emergency Operations Division

SME – Subject Matter Expert

SWMU – Solid Waste Management Unit

SWWS - Sanitary Waste Water System

TSCA – Toxic Substances Control Act

UIC – Underground Injection Control

7.0 REFERENCES

The following documents are referenced in this procedure:

- 40 CFR 302, Designation, Reportable Quantities, and Notification
- 40 CFR 261, 264 Subpart D 270.30
- DOE guidance document PCB Spill Response and Notification Requirements
- (EH-231-059/1294), available on the EPC-CP web page
- DOE – Office of Environmental Guidance, CERCLA Information Brief, EH-231-001-0490 (April 1990)
- EPA Web Site: http://www.epa.gov/
- EPCRA Information Web Site: http://www.chemicalspill.org/EPCRA-facilities/spill.html
- Federal Register, Volume 67, No. 47, Notices FRL-7172-4, Guidance on the CERCLA Section 101(10)H, Federally Permitted Release Definition for Certain Air Emissions
- PD1200, Emergency Management
- P322-3, Performance Improvement from Abnormal Events
- LANL RCRA Permit No. NM0890010515-1
- LANL NPDES Permit No. NM0028355

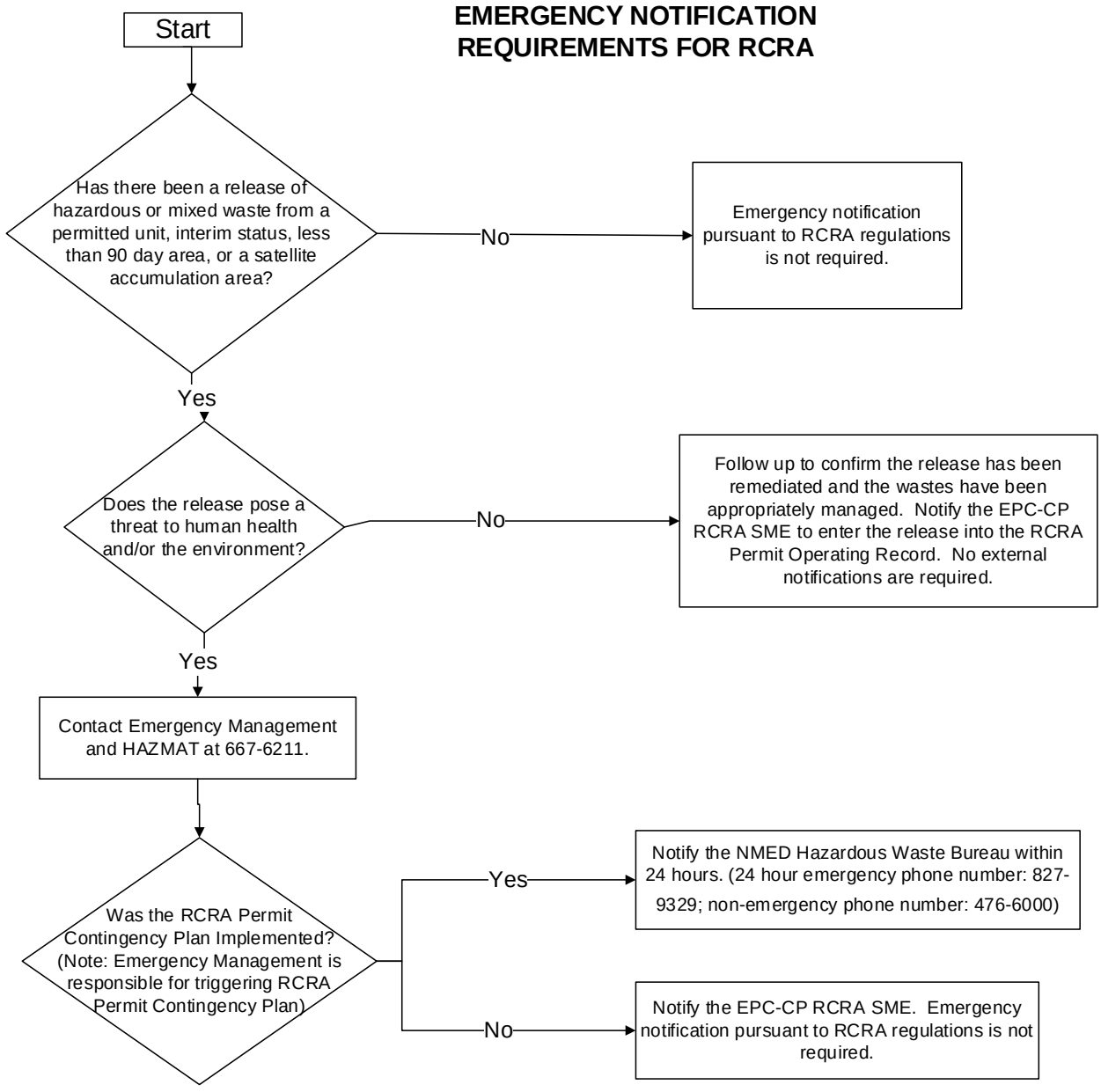
- National Response Center (NRC) Web Site: http://www.nrc.uscg.mil/
- NMWQCC Regulations, 20.6.2 NMAC, dated December 1, 2001
- P407, Water Quality
- P1020-1, Laboratory Records Management
- ADESH-AP-006, Records Management Plan

8.0 ATTACHMENTS OR APPENDICES

Attachment 1: Emergency Notification Requirements for RCRA

Attachment 2: Summary of Emergency Release or Event Reporting Requirements

Attachment 1: Emergency Notification Requirements for RCRA



Attachment 2: Summary of Emergency Release or Event Reporting Requirements

NOTE: This is only a guide and does not cover all federal, state, or permit reporting requirements. Refer to the Code of Federal Regulations and the RCRA Permit for more details regarding these regulations.

STATUTE	REGULATIONS	INCIDENT	Immediate Reporting Requirements	Follow Up Reporting Requirements
Clean Water Act	40 CFR §110.6	Oil discharge (film/sheen/discoloration) to water surface or shoreline, or violation of water quality standards.	Immediately (within 15 minutes of discovery) notify the National Response Center.	Follow-up not required.
Clean Water Act	Part III of NPDES Permit No. NM0028355	Leak or unplanned release from an NPDES permitted outfall.	Notify the NPDES Outfall Permit Program Lead and EPC-CP Water Quality Team Leader upon discovery. The program lead or the EPC-CP Water Quality Team Leader will complete initial reporting requirements as required.	Required follow up reporting will be completed by the NPDES Outfall Permit Program Lead and EPC-CP Water Quality Team Leader.
Clean Water Act (CWA)-NPDES Pesticide General Permit	40 CFR §122.28	Adverse incident which includes evidence that a person or non-target organism has been exposed to a pesticide residue or the person or non-target organism suffered a toxic or adverse effect.	Notify the EPA Region 6 Pesticide Permitting contact (214)665-7500 within 24 hours.	Submit a 30 Day Adverse Incident Written Report to the EPA Regional Office.
New Mexico Water Quality Control Commission Regulations (NMWQCC Regulations)	20.6.2.1203 NMAC	Discharge from any facility of oil or other water contaminant, in such quantity as may with reasonable probability injure or be detrimental to human health, animal or plant life, or property, or unreasonably interfere with the public welfare or use of the property.	Notify the New Mexico Environment Department 505-827-9329 within 24 hours.	Submit 7 and 15 Day written follow up Corrective Action Reports (Copy EPA Region 6 on the 7 and 15 Day Reports).

STATUTE	REGULATIONS	INCIDENT	Immediate Reporting Requirements	Follow Up Reporting Requirements
New Mexico Water Quality Control Commission Regulations (NMWQCC Regulations)	20.6.2.3104 NMAC	Unplanned release of any volume from an activity or facility covered under an active Groundwater DP: DP-857: SWWS Plant, SERF, and Sigma Mesa Evaporation Basins DP-1589: Septic Tank/Disposal Systems DP-1793: Land Application of Treated Groundwater DP-1835: Injection of Treated Groundwater to Class V UIC Wells	Notify the New Mexico Environment Department 505-827-9329 within 24 hours.	Submit 7 and 15 Day written follow up Corrective Action Reports (Copy EPA Region 6 on the 7 and 15 Day Reports)
New Mexico Environmental Improvement Board Regulation	20.5.7 NMAC	A release of a petroleum product from regulated aboveground storage tank.	Contact the EPC-CP AST Program Lead and/or the EPC-CP Water Quality Team Leader prior to completing any external notifications. If required, the Petroleum Storage Tank Bureau (476-4397) or NMED Emergency Spill Hotline (827-9329) must be contacted within 24 hours.	A written report describing the spill, release or suspected release and any investigation or follow-up action needs to be submitted to the PSTB within 14 days of the incident.
Comprehensive Environmental, Response, Compensation, and Liability Act (CERCLA)	40 CFR §302.6(a)	Hazardous substance (listed in 40 CFR Table 302.4) release (Equal to or greater than an RQ).	Immediately (within 15 minutes of discovery) notify the National Response Center 1-800-424-8802.	Follow-up not required.
Emergency Planning and Community Right- to-Know Act (EPCRA)	40 CFR§ 355.40	Release of an extremely hazardous substance (listed in 40 CFR Part 355 Appendices A and B) or CERCLA hazardous substance (listed in 40 CFR Table 302.4) equal to or greater than RQ.	Immediately (within 15 minutes of discovery) notify the LEPC (505-662-8283) the SERC (505-476-9635). Immediately notify the 911 operator for a release that occurs during transportation or from storage incident to transportation.	A written follow-up emergency notice must be submitted to the LEPC and SERC as soon as practicable after the release.

STATUTE	REGULATIONS	INCIDENT	Immediate Reporting Requirements	Follow Up Reporting Requirements
Resource Conservation and Recovery Act (RCRA)	40 CFR 262.34, 263.30, 264.51, 264.56 & .196, 265.51, .56 & .196, 270.14, & .30, 273.17, .37 & .54, 279.43 & .53, 280.50, .52, .53, .60, &.61	Release of hazardous or mixed waste from a permitted unit, interim status, less than 90 day area or a satellite accumulation area which the RCRA Permit Contingency Plan was triggered.	Notify NMED Hazardous Waste Bureau within 24 hours (24 hour emergency phone number: 827-9329; Non-emergency phone number: 476-6000) See Attachment 1 for additional details.	Submit written report to NMED HWB within 5 days.
Clean Air Act/ Radionuclide NESHAP	40 CFR 61, Subpart H	Airborne release of radioactive material in excess of an RQ.	Notify the EPA Region 6 Health Physicist (Office-(214) 665-8541; Mobile-(214) 755-1530; Home – (972) 937-1900) immediately after providing notification to the NRC.	Follow-up not required.
Toxic Substance Control Act (TSCA)	40 CFR 761.120, 761.125	Over 1 pound by weight of PCBs (TSCA) or greater than 270 gallons of untested mineral oil suspected of containing PCBs.	Contact the National Response Center (1-800-242-8802) and the EPA Region 6 Office of Prevention, Pesticides, and Toxic Substances Branch (1-866-372-7745) as soon as possible after discovery, but no later than 24 hours after discovery.	Within 24 hours. Follow-up: as required by agency.

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Environment, Safety, Health Directorate

Environmental Protection – Water Quality and RCRA Quality Procedure

MSGP Storm Water Corrective Actions

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History of Revisions

Document Number *[Include revision number, beginning with Revision 0]*	**Effective Date** *[Document Control Coordinator inserts effective date]*	**Description of Changes** *[List specific changes made since the previous revision]*
0	08/10	New Document.
1	11/10	Incorporated ENV-RCRA-QP-062 *MSGP Routine Inspections* into this document.
2	01/13	Biennial revision, new template implemented.

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1.0 PURPOSE

This procedure is written to provide requirements for identifying, documenting and entering corrective actions into the ENV-RCRA MSGP Corrective Action Report Findings database.

2.0 SCOPE

Requirements set forth in this document apply to Los Alamos National Laboratory industrial facilities covered by the National Pollutant Discharge Elimination System (NPDES) Storm Water Multi-Sector General Permit (MSGP). This "general permit" requires identification, documentation, tracking and reporting of corrective actions in accordance with sections 2.2.1, 3, 4.1.2, 4.2.2, 4.3.2, 5.0, 5.2, 5.4, 6.2.1, 6.2.1.2, 7.2 and Appendices B and I.

2.1 HAZARD REVIEW

The work described in this procedure is office work only and has a **LOW hazard** rating as documented by submittal of a completed *ENV Low Hazard Verification form* to the Quality Assurance Specialist.

3.0 RESPONSIBILITIES

The following personnel require training before implementing this procedure:

- Group and Team Leader
- ENV-RCRA MSGP Storm Water compliance personnel
- Deployed Environmental Professionals (DEPs)
- Other LANL or subcontract personnel identified as being required to conduct storm water assessments as part of their job duties.

In addition to training to this procedure, the following training is also required prior to performing this procedure:

- ENV-RCRA QAPP-MSGP *Quality Assurance Project Plan for the Storm Water Multi-Sector General Permit for Industrial Activities*

The training method for this procedure is "self-study" (required read). For ENV-RCRA staff, this is documented in accordance with ENV-DO-QP-115, *Personnel Training*. Other participating groups may require training documentation pursuant to local procedures.

Actions specified within this procedure, unless preceded with "should" or "may", are to be considered mandatory (i.e., "shall", "will", "must").

3.1 ROLES AND RESPONSIBILITIES

3.1.1 ENV-RCRA MSGP STORM WATER TEAM

ENV-RCRA MSGP Storm Water Team members will be fully knowledgeable of the specific regulatory requirements identified in the 2008 MSGP and are responsible for ensuring compliance with these requirements and entering corrective actions. Team members will evaluate corrective actions that the DEPs enter into the ENV-RCRA MSGP Corrective Action Report Findings database and modify them as needed for quality assurance. This team will also periodically review open corrective actions and follow up with the DEPs, ES&H Managers, or Upper Management, as deemed necessary, to ensure close out of the corrective action. The team members will notify upper management of instances of non-compliance with the permit. A team member may also be responsible for responding to the regulatory authority (EPA) regarding identified storm water issues and/or negotiate settlement of any identified issues.

3.1.2 DEPLOYED ENVIRONMENTAL PROFESSIONALS

DEPs will be fully knowledgeable of the site specific Storm Water Pollution Prevention Plan (SWPPP) and corrective action requirements identified in the MSGP for the facilities they are deployed to. In addition, they shall be appropriately trained to meet the job qualifications identified in the *Quality Assurance for Storm Water Multi-Sector General Permit for Industrial Activities Program* (ENV-RCRA-QAPP-MSGP) and shall be familiar with the regulatory requirements identified in the 2008 MSGP. Further, they shall be familiar with facility operations so that potential pollution discharge sources can be determined and corrective actions can be identified.

The DEPs are responsible for identifying and entering corrective actions observed at their industrial facilities into the ENV-RCRA MSGP Corrective Action Report Findings database. They are also responsible for updating corrective actions in a timely manner that cannot be implemented immediately. They will work with the ES&H Manager and ENV-RCRA storm water personnel to ensure identified corrective actions are implemented by overseeing repairs and/or improvements or instituting additional controls. If it is determined that corrective actions are necessary following an assessment, any modification to the control measures must be made before the next storm event if possible, or as soon as practicable following that storm event.

NOTE: These time intervals are not grace periods, but are schedules considered reasonable for documenting your finding(s) and for making repairs and improvements. They are included in the MSGP Permit to ensure that the conditions prompting the need for these repairs and improvements are not allowed to persist indefinitely (see Section 3.3 of the 2008 MSGP). In no instance will the corrective action remain open indefinitely.

3.1.3 ENV-RCRA STORM WATER TEAM LEADER

The ENV-RCRA Storm Water Team Leader is responsible for compliance oversight relative to the 2008 MSGP. The Team Leader will ensure costs needed to implement the regulatory requirements identified in the 2008 MSGP are identified and environmental risks are assessed. Upper management will be notified of these costs or environmental risks, as deemed necessary. In the event there is a dispute regarding the regulatory requirements contained in the MSGP, the Team Leader will make the final determination of the required action. The Team Leader will notify upper management of instances of non-compliance with the permit.

3.1.4 ENV-RCRA GROUP LEADER

The ENV-RCRA Group Leader or designee is responsible for ensuring there is adequate funding to implement the regulatory requirements identified in the 2008 MSGP. The Group Leader also acts as the duly authorized signatory that certifies the reports. The Group Leader will notify upper management of instances of non-compliance with the permit or other identified environmental risk.

3.1.5 ES&H MANAGER

The ES&H manager shall identify funding for their industrial facilities to ensure compliance with the 2008 MSGP. The ES&H Manager is also responsible for ensuring that industrial facilities are complying with the 2008 MSGP permit and notifying upper management of instances of non-compliance with the permit or other identified environmental risk.

3.1.6 FACILITIES OPERATIONS DIRECTOR

The Facilities Operations Director (FOD) provides organizational leadership to ensure that all facility and programmatic activities under their authority are performed in compliance with the 2008 MSGP. The FOD is also responsible for establishing an environmental compliance envelope. It is the FOD's responsibility to maintain trained and qualified Environmental Professionals and Waste Management Coordinators on staff.

3.1.7 COMPUTER PROGRAMMER

Maintains and updates the ENV-RCRA MSGP Corrective Action Report Findings database as requested by MSGP storm water personnel.

3.2 PREREQUISITES

In addition to training to this procedure, the following training is also required prior to performing this procedure:

- *ENV-RCRA QAPP-MSGP, Quality Assurance Project Plan for the Storm water Multi-Sector General Permit for Industrial Activities Program*

4.0 DOCUMENT CONTROL/RECORDS MANAGEMENT

The following records generated as a result of this procedure are to be submitted to the designated RM-POC in accordance with ENV-DO-QP-110, *Records Management* and filed in project files.

- MSGP Comprehensive Site Inspection Annual Report
- Completed Routine Inspection Forms
- Electronic records within the ENV-RCRA MSGP Corrective Action Report Findings database.
- Copies of automated e-mail notifications

5.0 WORK PROCESSES

5.1 IDENTIFYING CORRECTIVE ACTIONS

If any of the following conditions occur, the DEP or ENV-RCRA storm water team member must review and revise the selection, design, installation, and implementation of control measures to ensure that the condition is eliminated and will not be repeated in the future:

- An unauthorized release or discharge (e.g., spill, leak, or discharge of non-storm water not authorized by the 2008 MSGP);
- You become aware, or EPA determines, that your control measures are not stringent enough for the discharge to meet applicable water quality standards;
- An inspection or evaluation of the facility by an EPA official and/or local or State entity, determines that modification to the control measures are necessary to meet the non-numeric effluent limits in the 2008 MSGP;
- You find in the routine facility inspection, quarterly visual assessment, or comprehensive site inspection that the control measures are not being properly operated and maintained;
- Construction or a change in design, operation, or maintenance at the facility significantly changes the nature of pollutants discharged in storm water from the facility, or significantly increases the quantity of pollutants discharged; or
- The average of four quarterly sampling results exceeds an applicable benchmark. If less than four benchmark samples have been taken, but the results are such that an exceedence of the four quarter average is mathematically certain, (i.e., if the sum of quarterly sample results to date is more than four times the benchmark level) this is considered a benchmark exceedence, triggering this review;
- If effluent limitation guidelines are exceeded at the Asphalt Batch Plant (Sector D); or
- If impaired water quality standards are exceeded.

5.2 ROUTINE INSPECTIONS

Routine inspections shall be conducted by the DEP (or a qualified member if the DEP is not trained and qualified) at all areas of the facility where industrial materials or activities are exposed to storm water, and of all storm water control measures used to comply with the effluent limits contained in the 2008 MSGP. Routine inspections shall be conducted at least quarterly; however, some facilities conduct monthly inspections (as specified in the facility specific SWPPP). Routine inspections shall be conducted during periods when the facility is in operation. A certified copy of completed Routine Inspection Forms shall be maintained in the facility's SWPPP.

At least once each calendar year, the routine facility inspections must be conducted during a period when a storm water discharge (either rain or snow) is occurring. The DEP(s) or storm water personnel from ENV-RCRA are responsible for identifying and entering corrective actions observed during the routine inspections into the ENV-RCRA MSGP Corrective Action Report Findings database. The database is set up to allow access for all identified DEPs associated with a particular FOD if the FOD has more than one DEP. Contact a member of the ENV-RCRA storm water team if you do not have access to this database and the FOD has assigned you responsibility for MSGP corrective actions.

NOTE: If the industrial facility is inactive and unstaffed and there are no industrial materials or activities exposed to storm water, routine inspections may not be required. A determination of whether a facility is inactive or unstaffed shall be made in coordination with storm water personnel from ENV-RCRA as there are specific documentation and certification requirements that have to be met prior to discontinuing routine inspections.

5.3 COMPREHENSIVE INSPECTIONS

Qualified ENV-RCRA storm water personnel will conduct one comprehensive inspection of all industrial facilities and those that meet the "no exposure" criteria subject to the 2008 MSGP before September 29th of each year. At least one member of the facility's storm water pollution prevention team shall participate in this inspection. This is usually the DEP.

This inspection must cover all areas of the industrial facility affected by the requirements in the 2008 MSGP including the areas identified in the SWPPP as potential pollutant sources where industrial material or activities are exposed to storm water, areas where control measures are used to comply with the effluent limits, and areas where spills and leaks have occurred in the past 3 years. The inspector must include review of the monitoring data (analytical results from benchmark and impaired waters and visual assessments) collected that calendar year as part of the comprehensive inspection. Inspectors must examine the following at a minimum:

- Industrial materials, residue, or trash that may have or could come into contact with storm water;
- Leaks or spills from industrial equipment, drums, tanks, and other containers;

- Offsite tracking of industrial or waste materials, or sediment where vehicles enter or exit the site;
- Tracking or blowing of raw, final, or waste materials from areas of no exposure to exposed areas; and
- Control measures needing replacement, maintenance, or repair.
- Storm water controls measures required by the 2008 MSGP must be observed to ensure that they are functioning correctly.

NOTE: The annual report inspection may also be used as one of the routine inspections, as long as all components of both types of inspections are included.

ENV-RCRA will then enter all identified corrective actions into the ENV-RCRA MSGP Corrective Action Report Findings database. It is the responsibility of the DEP to update the database to reflect updates to these corrective actions.

Information compiled during the comprehensive inspection is used to complete the Annual Report. This report shall be submitted to EPA (postmarked) within 45 days of the last facility inspection completed in September of each year. For example, if the last facility was inspected (as part of the comprehensive site inspection) on September 22, the report shall be postmarked before or on November 6th. A complete certified copy of the Annual Report shall be maintained in the facility's SWPPP.

5.4 SPILLS

All leaks or spills shall be cleaned up immediately and entered into the ENV-RCRA MSGP Corrective Action Report Findings database. This can be done by either the DEP or an ENV-RCRA MSGP storm water team member. If the spill is immediately cleaned up, and controls are put in place to prevent further leakage, the corrective action can be closed.

5.5 ALLOWABLE NON-STORM WATER DISCHARGES

The following are allowable non-storm water discharges authorized by the 2008 MSGP:

- Discharges from fire-fighting activities;
- Fire hydrant flushing;
- Potable water, including water line flushings;
- Uncontaminated condensate from air conditioners, coolers, and other compressors and from the outside storage of refrigerated gases or liquids;
- Irrigation drainage;
- Landscape watering provided all pesticides, herbicides, and fertilizer have been applied in accordance with the approved labeling;
- Pavement wash waters where no detergents are used and no spills or leaks of toxic or hazardous material have occurred (unless all spilled material has been removed);

- Routine external building washdown that does not use detergents; and
- Uncontaminated ground water or spring water.

Any person authorized to conduct work at LANL can identify a potential storm water issue. If this occurs, they should contact the DEP or an ENV-RCRA MSGP storm water team member who will determine if a corrective action is needed.

5.6 ENTERING CORRECTIVE ACTIONS

To enter a corrective action into the ENV-RCRA MSGP Corrective Action Report Findings database, perform the following steps:

NOTE: Be clear and concise, use correct grammar and punctuation, and correct any spelling errors. This information will be used to populate a report that will be submitted to the EPA. Therefore, it is critical that all information entered into the ENV-RCRA MSGP Corrective Action Report Findings database is correct and meets these criteria.

Step	Action
1	From this web page: http://int.lanl.gov/environment/water/guidance/swmgp.shtml, under the heading "Compliance Tools". Click on the link "MSGP Corrective Action Report Findings Database" Click on "Enter New Corrective Action."
2	Under the "Corrective Action Header" tab, enter the following: • Facility Name by clicking on the "List" tab and selecting a facility. • Date Problem was Identified (mm/dd/yyyy) • Date of Notification to ENV-RCRA (mm/dd/yyyy) • FOD Responsible for CA (Name & Org) by clicking in the box. FOD designations (for example "STO") and the associated name will come up. Just select the appropriate FOD. **NOTE:** Contact the MSGP Project Leader at 667-1312 or hbensen@lanl.gov if the FOD name or organization is incorrect, so this can be corrected. • Describe Specific Evaluation Location (for example "Northeast corner of Building TA-3-66") • Inspector Z-Number by clicking in the box, which will populate it with your Z number. In most instances, the DEP should be identified as the inspector. Note: If you are entering the CA and are not the DEP, you will have to enter the DEP's Z number or they will not have the ability to update the corrective action. Once all of the above information is entered correctly, click "Save" and go

	to Step 3. All boxes identified with a red asterisk are "required fields" and shall be filled out. Note: The system will automatically assign a Corrective Action Report ID number.
3	Click "Go To Corrective Action Details" in the middle of the screen. Under the "Corrective Action Details" tab, enter the following: • Identify the condition triggering the need for this review by clicking on the "List" tab and selecting an option or selecting "Other" and entering a description of the condition. • Briefly describe the nature of the problem identified during the inspection (e.g., erosion, damage to a BMP, trash, spill, etc.) and the specific evaluation location. **NOTE:** Spills or other emergency situations may identify the need for a corrective action that was not identified during an inspection. • How the problem was identified by clicking on the "List" tab and selecting an option or selecting "Other" and entering a description of the problem. • Description of the corrective action taken, or to be taken, to eliminate or further investigate the problem (e.g., describe modifications or repairs to control measures, analyses to be conducted, etc.) or if no modifications are needed, the basis for that determination. • Did/will the corrective action require modification of your SWPPP. Type in "Y" for yes and "N" for no. • Date Corrective action was initiated (mm/dd/yyyy) • Date corrective action was completed **OR** expected completion date (mm/dd/yyyy) **NOTE:** If the corrective action has not been completed, enter an expected completion date. Do not put a date in both locations. If the corrective action has not been completed, provide the status of the corrective action and describe any remaining steps (including timeframes associated with each step) necessary to complete the corrective action. **NOTE:** This should only be filled out if the corrective action has not been completed. If the corrective action has been completed, enter "N/A." Make sure to hit the "save" tab in the bottom right hand corner so the corrective action information is retained. If you want to enter more corrective actions, go back to the "Corrective Action Header" tab and press the "Enter New Corrective Action" button in the lower left hand corner of the screen (see step #2). Hitting the "Exit" button will cause you to exit from the system.

	All boxes identified with a red asterisk are "required fields" and shall be filled out. If a date is not included or identified as an expected completion date, ENV-RCRA storm water compliance personnel will enter a completion date of 30 days after the corrective action was identified.

5.7 UPDATING CORRECTIVE ACTIONS

To update a corrective action in the ENV-RCRA MSGP Corrective Action Report Findings database, perform the following steps:

Step	Action
1	From this web page: http://int.lanl.gov/environment/water/guidance/swmgp.shtml, under the heading "Compliance Tools". Click on the link "MSGP Corrective Action Report Findings Database" to access the database and tab down to the corrective action number you want to edit. Click on "Edit."
2	Navigate to the blank that you will be changing and input the updated information. It is anticipated that most changes will occur relative to updating the status of corrective actions. Save all changes to the information. Remember, you should only have a date under "Date corrective action completed **OR** the "expected to be completion," but not both.

5.8 VALIDATING CORRECTIVE ACTIONS

ENV-RCRA storm water personnel will periodically validate the information contained in the ENV-RCRA MSGP Corrective Action Report Findings database. To validate a corrective action in the ENV-RCRA MSGP Corrective Action Report Findings database, perform the following steps:

Step	Action
1	From this web page: http://int.lanl.gov/environment/water/guidance/swmgp.shtml, under the heading "Compliance Tools". Click on the link "MSGP Corrective Action Report Findings Database" to access the database.

2	Check all entered fields for a corrective action to ensure that all information is clear, correct, and concise. If not, correct the information by navigating to the information that needs to be changed and making the change. Save all changes to the information. All information shall be validated before running the final annual report.
3	For ENV-RCRA storm water personnel only, under "status" select "void" if the corrective action is a repeat of a previous corrective action or if it is determined not to be a corrective action. This will delete the corrective action from the annual report.

5.9 INSTITUTIONAL PERFORMANCE FEEDBACK AND IMPROVEMENT TRACKING SYSTEM (PFITS)

PFITS is the institutional performance and tracking system for identified issues. A corrective action that meets any of the following criteria will be entered into the PFITS system, as deemed necessary.

- Corrective action was not completed by the expected completion date entered into the database.
- No action was taken to remedy an identified issue with a control measure within 14 days of discovery or before the next storm event or as soon as practicable following that storm event (Section 3.3 of the 2008 MSGP).
- Repeat corrective actions or trends identified by ENV-RCRA MSGP storm water personnel.
- Conditions requiring immediate action, where failure to take action would result in pollutants being released to water of the state or an immediate non-compliance with the 2008 MSGP.
- Violations identified by the regulatory authority.
- Other issues as deemed necessary by MSGP storm water personnel.

Once every month, ENV-RCRA storm water personnel will evaluate a summary of open corrective actions in the ENV-RCRA MSGP Corrective Action Report Findings database and using the above criteria will determine which corrective actions, if any, should be transferred into PFITS. When the monthly notification of outstanding corrective actions is sent out, evaluate whether any of the outstanding corrective actions meet the above conditions. Send those that do to the Environmental Protection Division's Improvement Management Coordinator (IMC) so that she can enter the information into PFITS. The summary report will contain the following information, at a minimum:

- Date the corrective action was identified;
- Person that identified the corrective action;

- A description of the nature of the problem identified and what needs to be done to address the corrective action.
- Whether the corrective action was identified internal to LANL or External to LANL.

5.10 NOTIFICATIONS FOR NEW AND OVERDUE CORRECTIVE ACTIONS

When a new corrective action is entered into the ENV-RCRA MSGP Corrective Action Report Findings database, the FOD, ESH&Q Manager, Operations Manager, inspector (usually the DEP) and ENV-RCRA MSGP storm water personnel are notified automatically by e-mail (unless the corrective action is closed the same day it is entered). This will assist the FOD, ESH& Q Managers, Operations Managers and the DEPs with keeping track of new corrective actions.

An automatic e-mail is sent the first of each month notifying the FOD, ESH&Q Manager, Operations Manager and DEPs of all overdue corrective actions for their industrial facilities. The Environmental Protection Division Leader and ENV-RCRA Group Leader receive a web link that contains a bar graph showing corrective actions 30 to 60 days overdue, 60 to 90 days overdue, 90 days to 1 year overdue, and those greater than a year overdue. In addition, they receive a link with summary information on each corrective action overdue sorted by FOD.

6.0 REFERENCES

- Federal Register: *Final National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges from Industrial Activities.* Federal Register: September 29, 2008, Volume 73, Number 189.
- P300, *Integrated Work Management*
- P315, *Conduct of Operations Manual*
- PD103, *Worker Safety and Health Policy*
- SD100, *Integrated Safety Management System Description Document with Embedded 10 CFR 851 Worker Safety and Health Program*
- P101-18, *Procedure for Pause/Stop Work*
- PD410, *Los Alamos National Laboratory Environmental ALARA Program*
- P121, *Radiation Protection*
- ENV-DO QP-106, *Document Control*
- ENV-DO-QP-115, *Personnel Training*
- ENV-DO-QP-104, *Work Safety Review*

In addition to these documents, please read any site specific requirements before proceeding with work.

7.0 DEFINITIONS

Best Management Practice (BMP): Schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of "waters of the United States." BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. (*40 CFR Part 122.2)*

Control Measure: Any BMP or other method (including effluent limitations) used to prevent or reduce the discharge of pollutants to waters of the United States.

CA: Corrective Action

DEP: Deployed Environmental Professional

EPA: Environmental Protection Agency

FOD: Facility Operations Director

MSGP: Multi-Sector General Permit

SWPPP: Storm Water Pollution Prevention Plan

8.0 ATTACHMENTS

Attachment 1- Annual Reporting Form

Attachment 2- NPDES Multi-Sector General Permit Routine Inspection Form

Click here for "Required Read" credit.

ATTACHMENT 1- ANNUAL REPORTING FORM

NPDES Permit Tracking No.:

EPA

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

Annual Reporting Form

A. GENERAL INFORMATION

1. Facility Name:

2. NPDES Permit Tracking No.:

3. Facility Physical Address:

a. Street:

b. City: c. State: d. Zip Code: -

4. Lead Inspectors Name: Title:

Additional Inspectors Name(s):

5. Contact Person: Title:

Phone: - - Ext. E-mail:

6. Inspection Date: / /

B. GENERAL INSPECTION FINDINGS

1. As part of this comprehensive site inspection, did you inspect all potential pollutant sources, including areas where industrial activity may be exposed to stormwater?
☐ YES ☐ NO

If NO, describe why not:

NOTE: *Complete Section C of this form for each industrial activity area inspected and included in your SWPPP or as newly identified in B.2 or B.3 below where pollutants may be exposed to stormwater.*

2. Did this inspection identify any stormwater or non-stormwater outfalls not previously identified in your SWPPP? ☐ YES ☐ NO

If YES, for each location, describe the sources of those stormwater and non-stormwater discharges and any associated control measures in place:

NPDES Permit Tracking No.:

3. Did this inspection identify any sources of stormwater or non-stormwater discharges not previously identified in your SWPPP? ☐ YES ☐ NO

If YES, describe these sources of stormwater or non-stormwater pollutants expected to be present in these discharges, and any control measures in place:

4. Did you review stormwater monitoring data as part of this inspection to identify potential pollutant hot spots? ☐ YES ☐ NO ☐ NA, no monitoring performed

If YES, summarize the findings of that review and describe any additional inspection activities resulting from this review:

5. Describe any evidence of pollutants entering the drainage system or discharging to surface waters, and the condition of and around outfalls, including flow dissipation measures to prevent scouring:

6. Have you taken or do you plan to take any corrective actions, as specified in Part 3 of the permit, since your last annual report submission (or since you received authorization to discharge under this permit if this is your first annual report), including any corrective actions identified as a result of this annual comprehensive site inspection?
☐ YES ☐ NO

If YES, how many conditions requiring review for correction action as specified in Parts 3.1 and 3.2 were addressed by these corrective actions? ☐☐

NOTE: *Complete the attached Corrective Action Form (Section D) for each condition identified, including any conditions identified as a result of this comprehensive stormwater inspection.*

NPDES Permit Tracking No.:

C. INDUSTRIAL ACTIVITY AREA SPECIFIC FINDINGS

Complete one block for each industrial activity area where pollutants may be exposed to stormwater. Copy this page for additional industrial activity areas.

In reviewing each area, you should consider:

- Industrial materials, residue, or trash that may have or could come into contact with stormwater;
- Leaks or spills from industrial equipment, drums, tanks, and other containers;
- Offsite tracking of industrial or waste materials from areas of no exposure to exposed areas; and
- Tracking or blowing of raw, final, or waste materials from areas of no exposure to exposed areas.

INDUSTRIAL ACTIVITY AREA _____:

1. Brief Description:

2. Are any control measures in need of maintenance or repair? ☐ YES ☐ NO

3. Have any control measures failed and require replacement? ☐ YES ☐ NO

4. Are any additional/revised control measures necessary in this area? ☐ YES ☐ NO

If YES to any of these three questions, provide a description of the problem: (Any necessary corrective actions should be described on the attached Corrective Action Form)

INDUSTRIAL ACTIVITY AREA _____:

1. Brief Description:

2. Are any control measures in need of maintenance or repair? ☐ YES ☐ NO

3. Have any control measures failed and require replacement? ☐ YES ☐ NO

4. Are any additional/revised c necessary in this area? ☐ YES ☐ NO

If YES to any of these three questions, provide a description of the problem: (Any necessary corrective actions should be described on the attached Corrective Action Form)

INDUSTRIAL ACTIVITY AREA _____:

Brief Description:

2. Are any control measures in need of maintenance or repair? ☐ YES ☐ NO

3. Have any control measures failed and require replacement? ☐ YES ☐ NO

4. Are any additional/revised BMPs necessary in this area? ☐ YES ☐ NO

If YES to any of these three questions, provide a description of the problem: (Any necessary corrective actions should be described on the attached Corrective Action Form)

NPDES Permit Tracking No.:

NOTE: *Copy this page and attach additional pages as necessary*

INDUSTRIAL ACTIVITY AREA _____:

1. Brief Description:

2. Are any control measures in need of maintenance or repair? ☐ YES ☐ NO
3. Have any control measures failed and require replacement? ☐ YES ☐ NO
4. Are any additional/revised BMPs necessary in this area? ☐ YES ☐ NO

If YES to any of these three questions, provide a description of the problem: (Any necessary corrective actions should be described on the attached Corrective Action Form)

INDUSTRIAL ACTIVITY AREA _____:

1. Brief Description:

2. Are any control measures in need of maintenance or repair? ☐ YES ☐ NO
3. Have any control measures failed and require replacement? ☐ YES ☐ NO
4. Are any additional/revised BMPs necessary in this area? ☐ YES ☐ NO

If YES to any of these three questions, provide a description of the problem: (Any necessary corrective actions should be described on the attached Corrective Action Form)

INDUSTRIAL ACTIVITY AREA _____:

1. Brief Description:

2. Are any control measures in need of maintenance or repair? ☐ YES ☐ NO
3. Have any control measures failed and require replacement? ☐ YES ☐ NO
4. Are any additional/revised BMPs necessary in this area? ☐ YES ☐ NO

If YES to any of these three questions, provide a description of the problem: (Any necessary corrective actions should be described on the attached Corrective Action Form)

NPDES Permit Tracking No.:

D. CORRECTIVE ACTIONS

Complete this page for each specific condition requiring a corrective action or a review determining that no corrective action is needed. Copy this page for additional corrective actions or reviews.

Include both corrective actions that have been initiated or completed since the last annual report, and future corrective actions needed to address problems identified in this comprehensive stormwater inspection. Include an update on any outstanding corrective actions that had not been completed at the time of your previous annual report.

1. Corrective Action # ☐☐ of ☐☐ for this reporting period.

2. Is this corrective action:
   - ☐ An update on a corrective action from a previous annual report; or
   - ☐ A new corrective action?

3. Identify the condition(s) triggering the need for this review:
   - ☐ Unauthorized release or discharge
   - ☐ Numeric effluent limitation exceedance
   - ☐ Control measures inadequate to meet applicable water quality standards
   - ☐ Control measures inadequate to meet non-numeric effluent limitations
   - ☐ Control measures not properly operated or maintained
   - ☐ Change in facility operations necessitated change in control measures
   - ☐ Average benchmark value exceedance
   - ☐ Other (describe): _____

4. Briefly describe the nature of the problem identified:

5. Date problem identified: ☐☐/☐☐/☐☐☐☐

6. How problem was identified:
   - ☐ Comprehensive site inspection
   - ☐ Quarterly visual assessment
   - ☐ Routine facility inspection
   - ☐ Benchmark monitoring
   - ☐ Notification by EPA or State or local authorities
   - ☐ Other (describe): _____

7. Description of corrective action(s) taken or to be taken to eliminate or further investigate the problem (e.g., describe modifications or repairs to control measures, analyses to be conducted, etc.) or if no modifications are needed, basis for that determination:

8. Did/will this corrective action require modification of your SWPPP? ☐ YES ☐ NO

9. Date corrective action initiated: ☐☐/☐☐/☐☐☐☐

10. Date correction action completed: ☐☐/☐☐/☐☐☐☐ or expected to be completed: ☐☐/☐☐/☐☐☐☐

11. If corrective action not yet completed, provide the status of corrective action at the time of the comprehensive site inspection and describe any remaining steps (including timeframes associated with each step) necessary to complete corrective action:

NPDES Permit Tracking No.:

E. ANNUAL REPORT CERTIFICATION

1. Compliance Certification

Do you certify that your annual inspection has met the requirements of Part 4.2 of the permit, and that, based upon the results of this inspection, to the best of your knowledge, you are in compliance with the permit? ☐ YES ☐ NO

If NO, summarize why you are not in compliance with the permit:

2. Annual Report Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Authorized Representative Printed Name: Title:

Signature: Date Signed:

Maintenance Details

Requested: 12/6/2016 3:51:09 PM
Procedure: MSGP Stormwater Industrial Routine Facility Inspection (EPC-CP-Form-1020.1)
Last PM: N/A
Project: Routine Facility Inspections Dec 2016 (P-MSGP-RI-5158)

Target: 12/30/2016
Priority/Type: Normal / Inspection
Department: Science and Technology Operations

MSGP Program
RG121.9
TA-3-66 Sigma Complex

Contact:
Phone:

Reason: MSGP Stormwater Industrial Routine Facility Inspection

Precipitation Type:
Odor:
Clarity:
Settled Solids:
Suspended Solids:
Special Instructions: NMR053195

Tasks

#	Description	Rating	Meas.	Initials	Failed	N/A	Complete
	Weather Information						
20	Describe the weather at time of inspection in the Weather lookup table. If "Other" is chosen, provide description in task comments of this line. Document the temperature (F°) in the "Reading" field of this line.				☐	☐	☐
	Within the Facility Boundary						
40	Is the facility free of new discharges of pollutants that have occurred since the last inspection? If "Failed", describe:				☐	☐	☐
50	If "Failed" has a CAR been previously initiated for this new discharge? (Range: 0 - 0)				☐	☐	☐
60	Is the facility free of discharge of pollutants at the time of inspection? If "Failed" describe: (Range: 0 - 0)				☐	☐	☐
70	Is the facility free of evidence of, or the potential for, pollutants entering the drainage system. If "Failed" describe: (Range: 0 - 0)				☐	☐	☐
	Outfall Inspection (needed maintenance and repairs, failed control measures that need replacement, or a description of corrective actions in relevant task comment)						
90	**Monitored Outfall [018]** Free of Evidence of Erosion? (Range: 0 - 0)				☐	☐	☐
100	**Monitored Outfall [018]** Flow Dissipation Devices Operating Effectively? (Range: 0 - 0)				☐	☐	☐
110	**Monitored Outfall [018]** Free of Evidence of Pollutants in Discharges and/or Receiving Water? (Range: 0 - 0)				☐	☐	☐
120	**Monitored Outfall [020]** Free of Evidence of Erosion? (Range: 0 - 0)				☐	☐	☐
130	**Monitored Outfall [020]** Flow Dissipation Devices Operating Effectively? (Range: 0 - 0)				☐	☐	☐
140	**Monitored Outfall [020]** Free of Evidence of Pollutants in Discharges and/or Receiving Water? (Range: 0 - 0)				☐	☐	☐

150	**Substantially Identical Outfall [013]** Free of Evidence of Erosion? (Range: 0 - 0)				☐	☐	☐
160	**Substantially Identical Outfall [013]** Flow Dissipation Devices Operating Effectively? (Range: 0 - 0)				☐	☐	☐
170	**Substantially Identical Outfall [013]** Free of Evidence of Pollutants in Discharges and/or Receiving Water? (Range: 0 - 0)				☐	☐	☐
180	**Substantially Identical Outfall [014]** Free of Evidence of Erosion? (Range: 0 - 0)				☐	☐	☐
190	**Substantially Identical Outfall [014]** Flow Dissipation Devices Operating Effectively? (Range: 0 - 0)				☐	☐	☐
200	**Substantially Identical Outfall [014]** Free of Evidence of Pollutants in Discharges and/or Receiving Water? (Range: 0 - 0)				☐	☐	☐
210	**Substantially Identical Outfall [015]** Free of Evidence of Erosion? (Range: 0 - 0)				☐	☐	☐
220	**Substantially Identical Outfall [015]** Flow Dissipation Devices Operating Effectively? (Range: 0 - 0)				☐	☐	☐
230	**Substantially Identical Outfall [015]** Free of Evidence of Pollutants in Discharges and/or Receiving Water? (Range: 0 - 0)				☐	☐	☐
240	**Substantially Identical Outfall [016]** Free of Evidence of Erosion? (Range: 0 - 0)				☐	☐	☐
250	**Substantially Identical Outfall [016]** Flow Dissipation Devices Operating Effectively? (Range: 0 - 0)				☐	☐	☐
260	**Substantially Identical Outfall [016]** Free of Evidence of Pollutants in Discharges and/or Receiving Water? (Range: 0 - 0)				☐	☐	☐
270	**Substantially Identical Outfall [017]** Free of Evidence of Erosion? (Range: 0 - 0)				☐	☐	☐
280	**Substantially Identical Outfall [017]** Flow Dissipation Devices Operating Effectively? (Range: 0 - 0)				☐	☐	☐
290	**Substantially Identical Outfall [017]** Free of Evidence of Pollutants in Discharges and/or Receiving Water? (Range: 0 - 0)				☐	☐	☐
300	**Substantially Identical Outfall [019]** Free of Evidence of Erosion? (Range: 0 - 0)				☐	☐	☐
310	**Substantially Identical Outfall [019]** Flow Dissipation Devices Operating Effectively? (Range: 0 - 0)				☐	☐	☐
320	**Substantially Identical Outfall [019]** Free of Evidence of Pollutants in Discharges and/or Receiving Water? (Range: 0 - 0)				☐	☐	☐

Control Measures (identify needed maintenance and repairs, failed control measures that need replacment, or a description of corrective actions in relevant task comments).

340	**Gravel Bags [0300303100008]** Control Measure is operating effectively? (Range: 0 - 0)				☐	☐	☐
350	**Gravel Bags [0300303100008]** If "Failed", is control measure in need of maintenance, Repair, or Replacement?				☐	☐	☐
360	**Gravel Bags [0300303100009]** Control Measure is operating effectively? (Range: 0 - 0)				☐	☐	☐
370	**Gravel Bags [0300303100009]** If "Failed", is control measure in need of maintenance, Repair, or Replacement?				☐	☐	☐
380	**Rip Rap [0300304060005]** Control Measure is operating effectively? (Range: 0 - 0)				☐	☐	☐

390	**Rip Rap [0300304060005]** If "Failed", is control measure in need of maintenance, Repair, or Replacement?				☐	☐	☐
400	**Rip Rap [0300304060006]** Control Measure is operating effectively? (Range: 0 - 0)				☐	☐	☐
410	**Rip Rap [0300304060006]** If "Failed", is control measure in need of maintenance, Repair, or Replacement?				☐	☐	☐
420	**Rip Rap [0300304060007]** Control Measure is operating effectively? (Range: 0 - 0)				☐	☐	☐
430	**Rip Rap [0300304060007]** If "Failed", is control measure in need of maintenance, Repair, or Replacement?				☐	☐	☐
440	**Detention Pond [0300311020001]** Control Measure is operating effectively? (Range: 0 - 0)				☐	☐	☐
450	**Detention Pond [0300311020001]** If "Failed", is control measure in need of maintenance, Repair, or Replacement?				☐	☐	☐
460	**Detention Pond [0300311020002]** Control Measure is operating effectively? (Range: 0 - 0)				☐	☐	☐
470	**Detention Pond [0300311020002]** If "Failed", is control measure in need of maintenance, Repair, or Replacement?				☐	☐	☐
480	**Detention Pond [0300311020010]** Control Measure is operating effectively? (Range: 0 - 0)				☐	☐	☐
490	**Detention Pond [0300311020010]** If "Failed", is control measure in need of maintenance, Repair, or Replacement?				☐	☐	☐
500	**Detention Pond [0300311020011]** Control Measure is operating effectively? (Range: 0 - 0)				☐	☐	☐
510	**Detention Pond [0300311020011]** If "Failed", is control measure in need of maintenance, Repair, or Replacement?				☐	☐	☐

Area/Activity exposed to stormwater (identify needed mainteance or a description of corrective actions in relevant task comment).

530	Material loading/unloading and storage areas inspected?				☐	☐	☐
540	Area/Activity controls adequate (appropriate, effective, and operating)? (Range: 0 - 0)				☐	☐	☐
550	Transfer areas for substances in bulk inspected?				☐	☐	☐
560	Area/Activity controls adequate (appropriate, effective, and operating)? (Range: 0 - 0)				☐	☐	☐
570	Produce/chemical storage areas (raw material) inspected?				☐	☐	☐
580	Area/Activity controls adequate (appropriate, effective, and operating)? (Range: 0 - 0)				☐	☐	☐
590	Liquid tank storage/secondary containment inspected?				☐	☐	☐
600	Area/Activity controls adequate (appropriate, effective, and operating)? (Range: 0 - 0)				☐	☐	☐
610	Industrial processing and finished product storage areas inspected?				☐	☐	☐
620	Area/Activity controls adequate (appropriate, effective, and operating)? (Range: 0 - 0)				☐	☐	☐
630	Equipment operation and maintenance areas inspected?				☐	☐	☐
640	Area/Activity controls adequate (appropriate, effective, and operating)? (Range: 0 - 0)				☐	☐	☐
650	Fueling areas inspected?				☐	☐	☐
660	Area/Activity controls adequate (appropriate, effective, and operating)? (Range: 0 - 0)				☐	☐	☐

670	Outdoor vehicle and equipment washing areas inspected?				☐	☐	☐
680	Area/Activity controls adequate (appropriate, effective, and operating)? (Range: 0 - 0)				☐	☐	☐
690	Machinery inspected?				☐	☐	☐
700	Area/Activity controls adequate (appropriate, effective, and operating)? (Range: 0 - 0)				☐	☐	☐
710	Waste handling and disposal areas inspected?				☐	☐	☐
720	Area/Activity controls adequate (appropriate, effective, and operating)? (Range: 0 - 0)				☐	☐	☐
730	Erodible areas/construction inspected?f				☐	☐	☐
740	Area/Activity controls adequate (appropriate, effective, and operating)? (Range: 0 - 0)				☐	☐	☐
750	Locations and sources of run-on to the site inspected?				☐	☐	☐
760	Area/Activity controls adequate (appropriate, effective, and operating)? (Range: 0 - 0)				☐	☐	☐
770	Non-stormwater/illicit connections inspected?				☐	☐	☐
780	Area/Activity controls adequate (appropriate, effective, and operating)? (Range: 0 - 0)				☐	☐	☐
790	Salt storage piles or pile containing salt inspected?				☐	☐	☐
800	Area/Activity controls adequate (appropriate, effective, and operating)? (Range: 0 - 0)				☐	☐	☐
810	Dust generation and vehicle tracking inspected?				☐	☐	☐
820	Area/Activity controls adequate (appropriate, effective, and operating)? (Range: 0 - 0)				☐	☐	☐
830	Housekeeping (Industrial materials/residues/trash in contact with stormwater) inspected?				☐	☐	☐
840	Area/Activity controls adequate (appropriate, effective, and operating)? (Range: 0 - 0)				☐	☐	☐
850	Leaks and spills inspected?				☐	☐	☐
860	Area/Activity controls adequate (appropriate, effective, and operating)? (Range: 0 - 0)				☐	☐	☐
870	**Sector F [03003-F]** Baghouse for degradation that could limit efficiency and lead to excessive emissions inspected?				☐	☐	☐
880	**Sector F [03003-F]** Area/Activity controls adequate (appropriate, effective, and operating)? (Range: 0 - 0)				☐	☐	☐
Non-Compliance							
900	Free of incidents of observed non-compliance not associated with any of the above? (Range: 0 - 0)				☐	☐	☐
Additional Control Measures							
920	Are permit requirements satisfied with existing control measure(s)? If "Failed" describe additional control measures needed. (Range: 0 - 0)				☐	☐	☐
					☐	☐	☐

Labor

Labor	Assigned	Work Date	Reg Hrs	OT Hrs	Other Hrs
Gallegos, Marc	12/30/2016 / 14				

Labor Report

Completed: _____ **Failure:** _____ **Meter 1:** _____ **Meter 2:** _____

Report:

Signature / Name	Date	Signature / Name	Date

WO ID:_____ Page____ of_____

Signature (lead inspector):_____Date and Time:_____

"I confirm the information as recorded is true, accurate and complete."

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

(Signatory must meet definition in Section B.11.A, eg., FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)

Print name and title:_____

Signature:_____Date:_____

ENV-QP-047.0

LANL Multi-Sector General Permit
ISCO Sampler Inspection and Sample Retrieval Form

Form 047-1 (3/2011)

Outfall: **3-MFS-1 : 03-0038W** Project ID: **P-MSGP-2046** Work Order ID: **MSGP-26090**

Complete if sample bottles contain water OR to to record ISCO message

Sample Volume Requirements		
Bottle Type: Poly or Glass bottles	**Minimum Volume (L):** 0.5	**Maximum Volume (L):** 1

Bottle #	Bottle Type	Date:	Time (MST):	Comments
1	❒P ❒G	/ /2012		
2	❒P ❒G	/ /2012		
3	❒P ❒G	/ /2012		
4	❒P ❒G	/ /2012		
5	❒P ❒G	/ /2012		
6	❒P ❒G	/ /2012		
7	❒P ❒G	/ /2012		
8	❒P ❒G	/ /2012		
9	❒P ❒G	/ /2012		
10	❒P ❒G	/ /2012		
11	❒P ❒G	/ /2012		
12	❒P ❒G	/ /2012		
13	❒P ❒G	/ /2012		
14	❒P ❒G	/ /2012		

Total Volume Retrieved (liters):	Poly	Glass

Relinquished by Signature	Date:	Time:	Received by Signature	Date:	Time:

Additional Notes:

LANL PERSONNEL USE ONLY (Initials and dates)		
Accepted	Tech QC	ENV-RCRA Review

Page 2 of 2 for MSGP-26090

No: P101-14
Revision: 7

Admin. Chg. 3
Issued: 10/16/17
Effective Date: 10/16/17

Chemical Management

1.0 PURPOSE

The purpose of this document is to:

- define the chemical management requirements for the Los Alamos National Laboratory (LANL or the Laboratory) Chemical Lifecycle Management Program,
- define processes to ensure protection of workers from health hazards associated with hazardous chemicals, and to keep exposures below Occupational Exposure Limits (OELs),
- provide direction to ensure that work with hazardous chemicals is conducted in a safe and responsible manner that protects workers, the public, and the environment, in accordance with Laboratory Integrated Work Management (IWM) and Environmental Management Systems,
- provide direction in the development and application of the hierarchy of controls (i.e., elimination, substitution, engineering, administrative, and Personal Protective Equipment [PPE]) that will protect workers and the environment, and
- promote consistency in hazardous-materials-related Integrated Work Documents (IWDs) and other procedures across the Laboratory.

2.0 AUTHORITY AND APPLICABILITY

2.1 Authority

This document is issued under the authority of the Laboratory Director to direct the management and operation of the Laboratory, as delegated to the Associate Director for Nuclear and High Hazard Operations (ADNHHO) as provided in the Prime Contract. This document derives from the Laboratory Governing Policies, particularly the section on Safety.

- Issuing Authority (IA): Associate Director for Nuclear and High Hazard Operations (ADNHHO)
- Responsible Manager (RM): Operations Support (OS) Division Leader
- Responsible Office (RO): Operations Support-Division Office (OS-DO)

2.2 Applicability

This document applies to all Laboratory workers. Subcontract workers are expected to follow the requirements set forth in their contractual agreements (i.e., Exhibit F) with the Laboratory.

This document applies to all work areas where chemicals including gases (compressed and cryogenic fluids) are procured, acquired, manufactured, machined, handled, received, distributed, transported, used, stored, or disposed. Activities that are subject to the requirements contained in this document are maintenance, construction, facility categorization, Research and Development (R&D), emergency planning, environmental restoration, and Decontamination and Decommissioning (D&D). This document applies to Laboratory facilities and equipment that involve current or past use of hazardous chemicals. Offsite work by LANL workers, where chemicals are used, should follow the specific guidelines and protocols of the host facility within

the context of the guidelines provided herein. Minimum requirements are adherence to the Federal Regulations cited in this document.

3.0 PROCEDURE DESCRIPTION

This document sets forth practices for managing industrial hygiene, safety, and environmental concerns associated with hazardous chemicals.

Note: Every Laboratory organization that procures, acquires, manufactures, machines, handles, receives, distributes, transports, uses, stores, or disposes of hazardous chemicals is required to follow the safety plan found in Attachment A*, LANL Hazard Communication and Chemical Hygiene Plan*. Requirements identified in Attachment A are specific to 29 Code of Federal Regulations (CFR) 1910.1200, *Labor, Occupational Safety and Health Standards, Hazard Communication* (e), 29 CFR 1910.1450, *Labor, Occupational Safety and Health Standards, Occupational Exposure to Hazardous Chemicals in Laboratories* (e), and 29 CFR 1926.59, *Labor, Safety and Health Regulations for Construction, Hazard Communication* (e) (identical to .1200). The processes found in Attachment A, and any associated IWDs and organization-specific procedures that address hazardous chemicals, must be communicated to the workers in the organization. The plan is applicable to all activities whether chemicals are used in industrial applications (Hazard Communication [HAZCOM]) or small-scale laboratory R&D (Chemical Hygiene Plan [CHP]). Where it is mutually beneficial, the plan is applicable to all activities. Where procedures are specific to HAZCOM or CHP, the delineation is made in the text of the plan.

Note: Engineered nanomaterials are addressed in P101-29, *Working with Nanotechnology Materials and Processes*. Biological materials are addressed in P101-15, *Biological Safety.* Explosives are addressed in P101-8, *Explosives Safety*. Radiological materials are addressed in P121, *Radiation Protection*. Chemical disposition is addressed in P409, *LANL Waste Management.*

3.1 Chemical Management and Chemical Safety Program Elements

Table 1. Chemical Management Program Elements

Chemical Management Program Element	Main Document Section	Attachment A Section
A list of the hazardous chemicals known to be present, i.e., an inventory	3.3	1.3
Hazard identification and analysis	Attachment A	All
Acquisition	3.2	NA
Chemical inventory management and tracking, including management of extremely hazardous chemicals, and Material Safety Data Sheets/Safety Data Sheets (MSDS/SDSs)	3.3	1.4 (MSDS/SDS only)
Chemical transportation	3.8	NA
Chemical storage	3.7	NA
Hazard control	3.6	1.6
Pollution prevention and waste minimization	3.4	NA
Chemical emergency management	3.9	NA
Chemical disposition	3.7	NA
Training	6.0	1.15

The LANL chemical management program addresses elements from both 29 CFR 1910.1200, *Labor, Occupational Safety and Health Standards, Hazard Communication,* and 29 CFR 1910.1450, *Labor, Occupational Safety and Health Standards, Occupational Exposure to Hazardous Chemicals in Laboratories.*

Table 2. Chemical Safety Program Elements

Chemical Safety Program Element	Main Document Section	Attachment A Section
A list of the hazardous chemicals known to be present, i.e., an inventory	3.3	1.3
Access to MSDS/SDSs for procured or acquired hazardous chemicals	3.3	1.4
Container labeling and other forms of warning	NA	1.5
Employee information and training	6.0	1.15
Methods used to inform employees of hazards of non-routine tasks or chemicals in unlabeled piping, precautionary measures for protection of employees during normal operating conditions and foreseeable emergencies, and the circumstances under which a particular laboratory operation, procedure or activity will require prior approval from the employer or the employer's designee before implementation	NA	1.6
Standard operating procedures relevant to safety and health considerations to be followed when laboratory work involves the use of hazardous chemicals	NA	1.6
Criteria that the employer will use to determine and implement control measures to reduce employee exposure to hazardous chemicals including engineering controls, the use of Personal Protective Equipment (PPE) and hygiene practices; particular attention will be given to the selection of control measures for chemicals that are known to be extremely hazardous	3.6	1.6
A requirement that fume hoods and other protective equipment are functioning properly and specific measures will be taken to ensure proper and adequate performance of such equipment	NA	1.8
Designation of personnel responsible for implementation of the Chemical Hygiene Plan (CHP) including the assignment of a Chemical Hygiene Officer (CHO), and, if appropriate, establishment of a Chemical Hygiene Committee	4.2	1.9
Provisions for additional employee protection for work with particularly hazardous substances, i.e., carcinogens, reproductive toxins, and substances that have a high degree of acute toxicity, including as appropriate: establishment of a designated area, use of containment devices such as fume hoods or glove boxes, procedures for safe removal of contaminated waste; and decontamination procedures	4.2	1.11
Compliance with 29 Code of Federal Regulations (CFR) 1910.119, *Labor, Occupational Safety and Health Standards, Process Safety Management of Highly Hazardous Chemicals (Occupational Safety and Health Administration [OSHA] PSM Rule),* Appendix A	4.7	NA
Hazardous chemical spill response	3.9	NA

3.2 Chemical Acquisition

Acquisition includes procurement, onsite synthesis, blending of chemicals, individuals or organizations bringing chemicals onsite, and other mechanisms. Chemicals are purchased by trained and authorized chemical workers.

Before a decision is made to purchase a chemical through LANL procurement, chemical owners will determine whether:

- The proposed quantity of the chemical is within the evaluated safety basis limits, fire protection limits, and fire hazard analysts limits for the facility. ***Note:*** The FOD is responsible for providing this information.
- There is a less hazardous or non-hazardous chemical available.
- There is a suitable surplus chemical available from another chemical owner.
- There is a current need for the chemical.
- There are unique hazards of the chemical that would require special assessment and controls.
- The quantity is limited to a specific project or maintenance need.
- There are stability or shelf life issues that need to be tracked.
- Storage facilities are suitable.
- There is an appropriate safe and environmentally acceptable means for the final disposition of environmentally sensitive chemicals, products, and byproducts.
- The required safety documentation MSDS/SDS is uploaded to the LANL MSDS/SDS electronic binder. Contact Occupational Safety and Health-Industrial Safety and Hygiene (OSH-ISH) for a listing of MSDS Online administrators who can add SDS/MSDSs to the LANL Electronic Binder.

All gas will be procured from the Gas Facility for those maintained as stock items, or as a LANL iProcurement Non Catalog request choosing Compressed Gas as the category. Gases cannot be purchased on a Pcard. All chemical/gases transported as a Hazard Class 2 material must be delivered to the Gas Facility at TA-3, Building 170. The SM-30 warehouse is not allowed to accept the delivery of gas.

Note: Non-gas chemical requests for purchase by purchase card must be submitted for approval via email to ChemDB@lanl.gov. Include the TA, building, and room where the chemical will be stored, the Z# and name of the chemical requestor, the chemical or product name, total amounts requested, the manufacturer and catalog number, and an SDS/MSDS for the chemical or product.

3.3 Chemical Inventory Management and Tracking

- LANL is required to maintain a list of the hazardous chemicals known to be present using an identity that is referenced on the appropriate MSDS/SDS. The listing of hazardous chemicals is maintained in the LANL institutional chemical inventory database application. This inventory is overseen by ADNHHO Operations Support (OS) Division. For LANL institutional chemical inventory database requirements, contact the help desk at 667-9242, or e-mail ChemDB@lanl.gov.
- Primary hazardous chemical containers are barcoded, entered, and tracked in the LANL institutional chemical inventory database in accordance with guidance documents found under the “Support and Resources” tab in the LANL institutional chemical inventory database application.

- The LANL institutional chemical inventory database will be updated when a primary hazardous chemical container is acquired; is transferred to a new owner and/or a new location; or is disposed.
- Physical inventories of primary hazards chemical containers will be performed annually to verify the accuracy of the LANL institutional chemical inventory database. Workers must have access to the MSDS/SDS for all procured hazardous chemicals. See 29 CFR 1910.1200, *Labor, Occupational Safety and Health Standards, Hazard Communication* (g) (6) (iii) and (8) and 29 CFR 1910.1450, *Labor, Occupational Safety and Health Standards, Occupational Exposure to Hazardous Chemicals in Laboratories* (f) (3) (v). MSDS/SDSs must be maintained as stated in Attachment A, *LANL Hazard Communication and Chemical Hygiene Plan,* Section 1.4.

3.4 Chemical Elimination, Substitution, Pollution Prevention, and Waste Minimization

Elimination of a hazardous chemical or substitution of a hazardous chemical with a less hazardous chemical is the preferred method to control hazards in accordance with the IWM process. Process change to a system for pollution prevention or waste minimization is another recognized control for chemical usage. Whenever possible, chemical workers will consider eliminating hazardous chemical usage or substituting less hazardous chemicals for highly hazardous chemicals, according to 29 CFR 1910.1450, *Labor, Occupational Safety and Health Standards, Occupational Exposure to Hazardous Chemicals in Laboratories*, and 10 CFR 1021, *Energy, National Environmental Policy Act Implementing Procedures*. In addition, upstream chemical minimization processes and waste reduction techniques to minimize the quantity of chemical used in an activity will be considered.

Note: The Environmental Protection-Environmental Stewardship Services Group (ENV-ES) may be contacted for assistance in chemical substitution, pollution prevention, and waste minimization. See the Laboratory Chemical Safety Webpage for assistance with surplus chemicals. Transportation of surplus chemicals must comply with requirements in Section 3.8.

Avoid introducing excess chemicals into radiologically controlled areas, to minimize the potential to create a mixed waste. The need for legacy chemicals should be evaluated on at least an annual basis.

3.5 Management of Extremely Hazardous Substances

An extremely hazardous substance present at the Laboratory in an amount greater than or equal to its threshold planning quantity triggers emergency planning requirements as required by 40 CFR 355, *Protection of Environment, Emergency Planning and Notification*. Contact Security and Emergency Operations-Emergency Management Group (SEO-EM) at 667-6211 for assistance in emergency planning and release reporting requirements.

3.6 Hazard Control

Identification, evaluation, and control of hazards associated with chemical use are managed through IWM (see P300, *Integrated Work Management*), and worker exposure assessments (see P101-32, *Worker Exposure Assessments*).

3.7 Hazardous Chemical Storage

Storage includes all physical phases and all types of containers including, but not limited to, tanks, piping, cylinders, and containers of solid, liquid, or gaseous chemicals. Storage includes all chemicals or chemical products, including used and unused chemicals, sealed, opened, or partially filled containers, working solutions, day-use containers, and chemical “residues” left

within tanks, piping, or other containers. Storage in this document excludes storage of solid waste or hazardous waste.

Chemical storage will be limited to the quantity necessary to perform the work, and within safety basis and fire protection limits. Liquid hazardous chemicals should be stored so that a spill will not exceed 20 L (5 gallons), as required by the National Fire Protection Association (NFPA 45, *Standard on Fire Protection for Laboratories Using Chemicals* and NFPA 400, *Hazardous Materials Code*. Flammable and combustible liquids will be limited to less than the maximum quantities allowed in Tables 10.1.1(a), 10.1.1(b) and 10.1.2 of NFPA 45. Both documents are available to Laboratory workers through the Research Library.

Storage of gas must follow the requirements of NFPA 55, *Compressed Gases and Cryogenic Fluids Code*, and the Compressed Gas Association and be grouped together by type (e.g., flammable, oxidizer, corrosive, toxic and highly toxic gases); segregated from potential hazards; and separated by 20 feet, or a half hour fire barrier in accordance with P101-34, *Pressure Safety*.

Containers of materials that might become hazardous (e.g., peroxidizable chemicals) during prolonged storage will be dated when first opened. At the end of six months after opening, the material will be evaluated or tested for continued safe use. Material that is found to be safe or that can be stabilized to be made safe will be permitted to be re-dated and retained for an additional 6-month period, or according to manufacturer's instructions, whichever is more stringent. All other material will be safely and compliantly discarded.

To protect the environment and the safety and health of all people, hazardous waste will be disposed of properly. See P409, *LANL Waste Management,* for requirements.

Note: See Tool #4, *Chemical Storage Schemes*, and Tool #8, *Minimum Requirements for Peroxidizables*, on the Chemical Safety Tools webpage for additional information about storage requirements for materials that might become hazardous.

Note: The NFPA standards 30, 45, and 55, and the International Building Code define Maximum Allowable Quantities (MAQs) of different categories of chemicals that may be within open and closed systems in facilities. These criteria apply to LANL facilities (via the Prime Contract). The Fire Protection-Division Office (FP-DO) can assist in defining MAQs for specific facilities where those limits are not clearly defined.

3.8 Hazardous Chemical Transportation

Transportation refers to vehicular movement of chemicals, including movement subject to Department of Transportation (DOT) regulations for public roads, site transportation on nonpublic roads, and movement of chemicals within and between buildings. Off-site and on-site hazardous chemical transportation will be done in accordance with P151-1, *LANL Packaging and Transportation Program Procedure*.

Transportation of gases (DOT Hazardous Class 2 Material) must be performed by the Gas Facility in accordance with 49 CFR 100–185, *Transportation, Pipeline and Hazardous Materials Safety Administration, Department of Transportation*.

3.8.1 Off-Site Shipping

Any chemical that meets the definition of a hazardous material, or is suspected to be hazardous material according to 49 CFR 171.8, *Transportation, General Information, Regulations, and Definitions, Definitions and Abbreviations*, and can be classified as a hazardous material in

accordance with 49 CFR 173, *Transportation, Shippers—General Requirements for Shipments and Packagings, Parts 115–141 and Parts 403–436*, will be packaged, marked, labeled, and shipped with prepared shipping papers in accordance with 49 CFR 100–185, *Transportation, Pipeline and Hazardous Materials Safety Administration, Department of Transportation*, and applicable Department of Energy (DOE) Orders by DOT trained personnel. Contact Operations Support-Packaging and Transportation (OS-PT) for assistance.

Any chemical being shipped by air that meets the definition of dangerous goods according to the International Civil Aviation Organization will be packaged, marked, labeled, and shipped, with an accompanying properly prepared dangerous goods declaration, in accordance with the International Civil Aviation Organization technical instructions. Contact OS-PT for assistance.

Wastes containing chemicals that are also New Mexico special wastes or hazardous wastes have additional shipping, placarding, manifesting, and training requirements. Contact your Waste Management Coordinator (WMC).

3.8.2 On-Site Transfers of Chemicals

The on-site transfer of hazardous chemicals will follow P151-1, *LANL Packaging and Transportation Program Procedure*. OS-PT has jurisdiction over the requirements for packaging, marking, and documenting on-site transfers.

On-site shipping of analytical-scale samples of hazardous chemicals (DOT small quantities) is permissible, as long as it meets Laboratory and DOT requirements for such samples. An example procedure that meets the Laboratory and DOT requirements for such on-site shipping, including training requirements, is SOP-C-DO-003, *On-Site Shipping of Analytical-Scale Samples of Hazardous or Radioactive Materials (DOT Small Quantities).*

All hazardous chemical transport will be done in a government vehicle. Hand carrying of hazardous chemical containers will be done using secondary containment and laboratory carts for heavy or multiple containers. Exception: Gas must be transferred by Gas Facility personnel in accordance with 49 CFR 100–185, *Transportation, Pipeline and Hazardous Materials Safety Administration, Department of Transportation*.

3.8.3 Hazardous Chemical Spills

Workers must be authorized, provided the necessary training, understand required spill response procedures before working with a hazardous chemical, and ensure that containment and cleanup of a spill is permitted by the IWD.

- Contact SEO-EM Group at 667-6211 then the FOD or the FOD's on-call designee for the building (or the Operations Center if a facility is so equipped), in the event of a large hazardous chemical spill (i.e., a spill that cannot be safely contained by an authorized chemical worker). The FOD or on-call designee must ensure involvement of deployed support as necessary. SEO-EM provides the Incident Commander to manage cleanup of all spills outside the scope of IWDs.
- When safe to do so, authorized chemical workers will determine the extent of the area affected, and demarcate it with barricade tape or use another reliable means to restrict entry into the area.
- Properly briefed, authorized chemical workers may cleanup smaller spills, following spill control, mitigation, cleanup, and reporting procedures listed in the IWD associated with the activity in progress at the time of the spill.

- Workers and their supervisors are required to go to Occupational Medicine for a work-related injury or illness, including exposure to hazardous chemical spills, unless transported directly to Los Alamos Medical Center (LAMC). Prior to return to work, workers must go to Occupational Medicine for follow up.
- Manage all debris and waste resulting from the cleanup of a spill as though it contains the hazardous chemical, according to WMC instruction.

Note: Incidental spill guidance is available on the Chemical Safety webpage under Resources, Systems & Tools.

3.9 Chemical Safety Tools

Chemical safety tools, found on the Chemical Safety webpage, contain safety and health considerations to be followed when using hazardous chemicals. These tools will be supplemented and updated as needed.

4.0 RESPONSIBILITIES

4.1 Associate Director for Nuclear and High Hazard Operations-Operations Support (OS) Division

- Overall accountability for the proper management of the Chemical Management Program.
- Chemical Management Program Manager provides overall coordination of LANL's Chemical Management Program.
- Oversees the LANL institutional chemical inventory database application.

4.2 Associate Director for Environment, Safety, Health (ADESH)

- Maintains a site-wide MSDS/SDS program (OSH-ISH).
- Maintains a site-wide hazard assessment and exposure monitoring database and Comprehensive Tracking System (CTS) (OSH-ISH).
- Consults with the Laboratory community on the development and implementation of chemical hygiene and safety policies and practices (OSH-ISH).
- Annually reviews and updates as necessary per the Hazard Communication and Chemical Hygiene Plan (OSH-ISH).
- Provides medical consultation and examinations for individuals who are exposed or potentially exposed to hazardous materials, including OSHA regulated carcinogens (OSH-OM).
- Provides consultation with respect to reproductive toxicants (OSH-OM, Deployed Services Environment, Safety, and Health [DSESH]).
- Provides assistance in researching less hazardous chemical substitutes (ENV-ES).
- Provides the LANL CHO (OSH-ISH)/Chemical Safety SME.

4.3 Security and Emergency Response Division

- Provides specialized expertise and equipment in response to hazardous materials emergencies at LANL and within the surrounding communities.

4.4 Division Leaders

- Ensure that Division activities involving chemicals are conducted within the safety envelope and the scope of work identified in Division and Facility documents.
- Ensure that adequate resources are provided to Responsible Line Managers (RLMs) to identify, evaluate, and control chemical hazards associated with existing and proposed work performed within their Divisions so that chemical management can be integrated into day-to-day operations.
- Ensure that a chemical safety plan is written for their Division, or provide written documentation that references Attachment A, *LANL Hazard Communication and Chemical Hygiene Plan,* as their Hazard Communication and Chemical Hygiene Plan. Ensure that the written program governs all hazardous chemical work in the group or facility (HAZCOM or CHP), and is referenced in IWDs and other relevant documents.
- Ensure that violations of codes and safety standards identified by reviews or inspections are corrected or that compensatory measures or action plans are developed.
- In CHP areas only, assign a Division Chemical Hygiene Officer (CHO) Group CHOs may be assigned as necessary. Ensure that CHOs have the experience and training as noted in Attachment A, *LANL Hazard Communication and Chemical Hygiene Plan,* Section 1.9.

4.5 Program Directors, Program Managers, and Project Leaders

- Negotiate with RLMs to provide adequate resources for the requirements in this document.

4.6 Responsible Line Managers (RLMs) in Coordination with the Person in Charge (PIC)

- Ensure that primary hazardous chemical containers in their organization are barcoded, and entered and tracked in the LANL institutional chemical inventory database.
- Ensure that workers keep the LANL institutional chemical inventory database current and accurate for their chemicals.
- Ensure that a physical chemical inventory of primary hazardous chemical containers is performed in their organization annually and reconciled in the LANL institutional chemical inventory database.
- Ensure that for any new activity (i.e., an activity that requires a new IWD) a hazard review is completed for hazards that can be encountered or generated during the course of the work. The evaluation must include the hazards associated with the properties and the reactivity of the materials used, any intermediate and end products that can be formed, hazards associated with the operation of the equipment at the operating conditions, and hazards associated with the proposed reactions.
- Ensure that all required training is completed by workers before the work is authorized.
- Integrate chemical life cycle management (purchase through disposition) into resource planning, funding, prioritizing, planning, scheduling, and implementation of work conducted under their supervision.
- Specify the written program governing all chemical work in the group (HAZCOM or CHP) and reference in IWDs and other safety documents.
- Ensure that IWDs are completed and approved for work with Occupational Safety and Health Administration (OSHA) carcinogens and LANL Category 1 (LANL Cat 1) chemicals in CHP areas. See the Chemical Safety webpage.
- Provide job-specific briefings and/or information on the chemical hazards and safety precautions related to each authorized chemical worker's assigned work, before beginning

work. ***Note:*** Never assume that a worker has knowledge of the chemical, its hazards, and the controls. Job-specific information must include:

- chemical inventory, relevant to the employee's assigned work, specific chemicals used, and the location of activities where hazardous chemicals are present;
- specific methods and observations, if applicable, that are used to detect the presence or release of a hazardous chemical;
- the location of the associated MSDS/SDS(s), and how to obtain an MSDS/SDS. For hazardous chemicals used, the following information from each MSDS/SDS must be discussed within a job-specific briefing, or as part of a pre-job briefing:
  - hazards identification;
  - fire protection/incompatibilities;
  - accidental release measures, handling and storage;
  - exposure controls/personal protection;
  - physical and chemical properties; and
  - chemical stability and reactivity information, particularly instability conditions and incompatible chemicals.
- the applicable details of the written Hazard Communication and Chemical Hygiene Plan (see Attachment A, *LANL Hazard Communication and Chemical Hygiene Plan*) and any facility-specific HAZCOM Plan or written CHP;
- secondary container labeling requirements (see Attachment A, Section 1.5.);
- specific building signs and postings for hazardous chemicals;
- Building Emergency Plans;
- locations of eyewashes and safety showers;
- spill response requirements, including mitigation, cleanup, and reporting requirements, and
- specific chemical storage requirements.

- Monitor through Management Observation and Verification (MOV) or other means that equipment and chemical containers are labeled with the name of the contents and that work areas are posted with signs or placards that depict the chemical hazards in the area.
- Monitor through MOV or other means that MSDS/SDSs are accessible to all workers who may have potential exposure to chemicals.
- When authorizing IWDs, ensure that elimination of hazardous chemicals, or substitution of a less hazardous material when practical, has been addressed by the preparer.
- When authorizing IWDs, ensure identification of operations where the following are used: LANL Cat 1 chemicals (CHP), known and suspect human carcinogens, reproductive toxicants, and highly acute toxicity/highly chronic toxicity chemicals (HAZCOM). Ensure that deployed personnel are notified to conduct worker exposure assessments, and that proper controls are established. See the Chemical Safety Webpage.
- Ensure that workers adhere to the requirements in this document.
- Authorize workers to perform chemical work and purchase chemicals.
- Investigate accidents and near misses involving chemicals, and ensure that corrective actions identified from chemical accident investigations and inspections are implemented.

- Ensure that all chemical hazards are removed when vacating space. When an area is being vacated, all chemicals will be moved, transferred to new ownership, or properly disposed. The work area will be cleaned and restored to its original condition or a condition acceptable to the next occupant before transfer of ownership.
- Ensure that resource planning, funding, prioritizing, scheduling, and implementation of chemical work conducted under their supervision addresses the necessary environmental, safety, and health evaluation and controls.
- Inform visitors about the Laboratory's chemical safety policies and procedures and ensure that they are aware of the existence and availability of chemical hazard information and resources.
- Notify DSESH deployed staff of new or modified work activities that require exposure assessments.
- Negotiate with Program Directors, Program Managers, and Project Leaders to provide adequate resources to meet the requirements in this document.
- Ensure that hazards of chemicals and chemical reactions are evaluated before laboratory activities or chemical reactions are begun. See Attachment A, Section 1.11.3.

4.7 Facility Operations Directors (FODs)

- Ensure that new work involving hazardous chemicals is reviewed by appropriate Subject Matter Experts (SMEs).
- Communicate Safety Basis levels to RLMs and maximum chemical quantities allowed to tenants.
- Maintain a proactive preventive maintenance program to ensure that laboratory engineering controls and emergency equipment (e.g., ventilation systems, detectors, shutoff devices, and emergency eyewash and safety showers) are in proper operating condition.
- Inform on-site construction/equipment subcontractors of the presence and identity of hazardous chemicals in their immediate work areas.
- Notify building occupants of testing, demolition, construction, and renovation activities and their related chemical hazards before initiation.
- Work with the Subcontract Technical Representative (STR) to ensure that subcontractors comply with Exhibit F and other subcontractor requirements.
- Working with Acquisition Services Management-Project Management and the STR, ensure that subcontractors provide an inventory and the MSDS/SDS for hazardous chemicals brought on-site to the Environment, Safety, Health (ESH) manager or designee, SEO Division personnel.
- Ensure that chemical incidents are reported and investigated and that corrective action is taken to prevent recurrence.
- Provide facility-specific information so tenants are aware of bounding chemical thresholds.
- Ensure that facilities maintain quantities (by weight) of highly hazardous chemicals below threshold quantities (see Process Safety Management (PSM) List [use Firefox]).

4.8 Deployed Services Environment, Safety, and Health (DSESH) Deployed Personnel

- Assist line managers in performing and documenting hazard assessments and risks for existing and planned operations, including laboratory moves and decommissioning.
- Provide guidance for establishing administrative, work practice, PPE, and engineering controls. Assist in determining labeling requirements for equipment, piping, containers, and facilities.
- Perform and document worker exposure assessments and exposure monitoring to determine employee exposures to hazardous materials and to evaluate the adequacy of controls in accordance with P101-32, *Worker Exposure Assessments.*

4.9 Authorized Chemical Owners

- Ensure that all their primary hazardous chemical containers are barcoded and entered into the LANL institutional chemical inventory database.
- Ensure that the LANL institutional chemical inventory database is updated when one of their primary hazardous chemical containers is transferred to a new owner and/or a new location; or is disposed.
- Complete the training requirements for an authorized chemical worker. Individuals with appointments of less than one year, visitors, undergraduate and high school students will not be chemical owners. The immediate supervisor for visitors, undergraduates and high school students will be the chemical owner.
- Post work areas with signs or placards that depict the current chemical hazards in the area. Labels, signs, and placards will be consistent with the group's written plan (HAZCOM or CHP).
- Label chemical containers with required information. See Attachment A, *LANL Hazard Communication and Chemical Hygiene Plan,* Section 1.5.
- Working with the WMC, establish whether the chemical or its end product will require disposal as a hazardous waste, New Mexico Special Waste, or has other disposal requirements.
- To the greatest extent possible, purchase chemicals on an as-needed basis and limit the purchase quantity to an amount that will be used in six months or less, to minimize inventory and chemicals in storage. If possible purchase reagents in polyethylene bottles or plastic-coated glass bottles to minimize breakage, corrosion, and rust. Ensure that the amount purchased does not exceed safety basis or flammable or combustible liquid storage limits.
- Be aware of chemical incompatibilities and store chemicals accordingly.

4.10 Authorized Chemical Workers

- Work safely by observing safety standards, guidelines, and procedures.
- Implement all controls required by work authorization documentation.
- Stop work that may pose an imminent danger to workers.
- Work with DSESH deployed personnel in workplace monitoring and sample collection.
- Report unsafe conditions, chemical incidents, or injuries to line managers immediately.
- Call 911 immediately if a chemical-related illness or injury occurs.
- Be familiar with and follow chemical and emergency procedures as directed in work authorization documentation.

- Label chemical containers with required information. See Attachment A, *LANL Hazard Communication and Chemical Hygiene Plan,* Section 1.5.
- Complete required training and ensure receipt and understanding of job-specific information on the chemical hazards and safety precautions related to assigned work, before beginning work. (See Section 6.0.)

5.0 IMPLEMENTATION

The requirements in this document are effective on the issue date.

6.0 TRAINING

Job-specific and site-specific information provided will be documented in the activity specific IWD. Training and briefings will use a graded approach so that each increasing level of risk associated with the safe use of chemicals is addressed. Job-specific information will include other topics such as MSDS/SDSs, labeling, emergency equipment, chemical spill control/mitigation/cleanup, process chemistry, process control, chemical storage, hazardous material regulations for chemical packaging, waste identification and disposal, pollution prevention, and waste minimization. Training and briefings will include methods that will be used to detect the presence or release of chemicals and measures workers can implement to protect themselves from chemical hazards.

RLMs will work with FOD personnel to ensure that workers are informed of the hazards when non-routine tasks are performed in the work area by maintenance or subcontract workers, and work with FOD personnel to inform subcontractors and visitors of the hazards in the building.

Required training for chemical workers, along with the regulatory reference is as follows:

- Course #25418, *Chemical Hazard Introduction,* or Course #25997, *Chemical Hazard Communication Introduction,* which includes how to detect hazards, how to interpret an MSDS/SDS, and labeling requirements, in accordance with 29 CFR 1910.1200, *Labor, Occupational Safety and Health Standards*, *Hazard Communication* (h) (2-3), and 29 CFR 1910.1450, *Labor, Occupational Safety and Health Standards*, *Occupational Exposure to Hazardous Chemicals in Laboratories* (f) (3-4).
- Facility-specific hazard information, in accordance with 29 CFR 1910.1450 (f).
- Awareness briefing on operation and building chemical inventory, how to obtain an MSDS/SDS, secondary container labeling requirements, building signs and postings, building emergency plans, written program documents, location of eyewashes and safety showers, spill response, and chemical storage requirements in accordance with 29 CFR 1910.1200 (h) (1-3) and 29 CFR 1910.1450 (f).
- Level 1 On-the-Job Training (Level 1 formality of training requires trainee to read, observe/walk through, and self-assess/sign the communication document) or pre-job briefing on specific chemical hazards, procedures, and PPE and review the hazard analysis documentation (for moderate and high-level hazard IWDs) authorized by his/her RLM/PIC for the job assignment every time a worker receives a new job assignment or a new hazard is introduced into the current assignment in accordance with 29 CFR 1926.21, *Labor, Safety and Health Regulations for Construction, Safety Training and Education* (b), 29 CFR 1910.1450 (f) (3), and 29 CFR 1910.1003, *Labor, Occupational Safety and Health Standards, 13 Carcinogens*.
- If a chemical worker will be generating waste, Course #23263 *Waste Generation Overview Live*, and Course #21464, *Waste Generation Overview Refresher*, every three years, in

accordance with 40 CFR 262, *Protection of Environment, Standards Applicable to Generators of Hazardous Waste*.

- If a chemical worker will be using gas, Course #769, *Pressure Safety Orientation,* and Course #9518, *Gas Cylinder Safety*.

7.0 EXCEPTION OR VARIANCE

To obtain an exception or variance to this document, see the following instructions:

- Managers may request an exception or variance from the IA through the RM;
- At the IA's request, the RM will provide a recommendation or supporting information; and
- The IA or designee will provide the requester with a written response and copy the RM.

The requesting organization must maintain the official copy of record of the approved correspondence granting the exception or variance.

8.0 DOCUMENTS AND RECORDS

8.1 Office of Record

The Policy Office is the Laboratory Office of Record for this Institutional Document and maintains the administrative record.

9.0 DEFINITIONS AND ACRONYMS

9.1 Definitions

See LANL *Definition of Terms*.

Accident—Any event, including, but not limited to, equipment failure, rupture of containers, or failure of engineering controls, that potentially creates a hazard through uncontrolled release of a hazardous chemical.

Authorized Chemical Worker—A worker (Los Alamos National Security, Limited Liability Company [LANS, LLC or LANS], contractor, subcontractor, student) whose RLM and PIC have determined that he/she has the training, skill, knowledge, and abilities to safely perform the chemical work to which he/she is assigned.

Carcinogen—Those chemicals that have been identified as substances that can lead to cancer by the agencies listed below and that have a concentration equal to or greater than 0.1% (1,000 parts per million).

- American Conference of Governmental Industrial Hygienists (ACGIH), either Category A1 (confirmed human carcinogen) or Category A2 (suspected human carcinogen).
- Compounds that the International Agency for Research on Cancer (IARC) has confirmed or identified as possible human carcinogens and those chemicals that the National Toxicology Program (NTP) has identified as known to be carcinogenic or chemicals that may reasonably be expected to be carcinogenic.

Chemical—Any element, compound, or mixture of elements and compounds. A substance that (1) possesses potentially hazardous properties (including, but not limited to, flammability, toxicity, corrosivity, reactivity, and instability); or (2) is included on any Federal, state, or local agency regulatory list; or (3) is associated with a MSDS/SDS. For the purposes of this document, this definition also applies to chemical products.

Chemical Hygiene Officer (CHO)—(CHP areas only). An employee, appointed by the Division Leader, who is qualified by training or experience to provide technical guidance in the development and implementation of the provisions of the LANL Hazard Communication and Chemical Hygiene Plan (see Attachment A, *LANL Hazard Communication and Chemical Hygiene Plan*).

Chemical Hygiene Plan (CHP)—A written program that consists of the Laboratory's CHP (see Attachment A, *LANL Hazard Communication and Chemical Hygiene Plan*) and activity-specific documentation, such as IWDs, which set forth guidance to protect workers from the dangers presented by hazardous chemicals used in a particular laboratory work area.

Chemical Inventory—A written or electronic record of chemicals.

Chemical Owner—An authorized chemical worker to whom a container that contains a chemical on the chemical inventory is assigned.

Chemical Release—Any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing of a chemical into the environment.

Chemical Worker—A worker who works with hazardous chemicals.

Corrosive—A chemical that causes visible destruction of, or irreversible alterations in, living tissue by chemical action at the site of contact. A substance or a mixture that by chemical action will materially damage, or even destroy, metals is termed "corrosive to metal." See 29 CFR 1910.1200, *Labor, Occupational Safety and Health Standards, Hazard Communication,* Appendix A.

Designated Area—An area that will be used for work with LANL Cat 1 chemicals and to which access is administratively restricted to authorized personnel.

Emergency Response—A response made by workers from outside the immediate release area or by other designated emergency responders (i.e., SEO-EM, the Los Alamos County Fire Department and the Hazardous Materials Response Group) to an occurrence that results, or is likely to result, in an uncontrolled release of a hazardous substance.

Environment, Safety, and Health (**ESH) Qualified Person**—An employee who has academic credentials or work experience in a relevant discipline, such as industrial hygiene or industrial safety, who has experience or training in conducting workplace exposure monitoring and in determining the hazards and consequences of exposure to chemicals.

Extremely Hazardous Substance—Any of 366 (+ or -) chemicals or hazardous substances identified by EPA on the basis of hazard or toxicity and listed under EPCRA. The list is periodically revised. See 40 CFR Part 355.

Explosive—A chemical that causes a sudden, almost instantaneous release of pressure, gas, and heat when subjected to sudden shock, pressure, or high temperature.

Flammable Liquid Storage Cabinet—A cabinet for the storage of flammable and combustible liquids constructed in accordance with Section 9.5 of NFPA 30, *Flammable and Combustible Liquids Code*.

Hazard Communication (HAZCOM) Plan—A written program developed and implemented by the Laboratory or subcontractor, which consists of requirements listed in Attachment A, *LANL Hazard Communication and Chemical Hygiene Plan*, and activity-specific documentation such as IWDs, or operating procedures that set forth requirements to protect workers from the dangers presented by hazardous chemicals used in a specific construction or production work area.

Hazardous Chemical—Any chemical that presents a physical hazard or a health hazard (health hazard defined below). If a hazardous chemical comprises 1% (0.1% for carcinogens) or greater of a compound or mixture, the compound or mixture will be treated as a hazardous chemical. See 29 CFR 1910.1200, *Labor, Occupational Safety and Health Standards, Hazard Communication* (g) (2) (i) (c) (*1*).

Hazardous Waste—A solid waste that is not excluded from regulation as a hazardous waste and is a listed hazardous waste or exhibits any of the hazardous characteristics: ignitibility, corrosivity, reactivity, or toxicity.

Health Hazard—A chemical that is classified as posing one of the following hazardous effects: acute toxicity (any route of exposure); skin corrosion or irritation; serious eye damage or eye irritation; respiratory or skin sensitization; germ cell mutagenicity; carcinogenicity; reproductive toxicity; specific target organ toxicity (single or repeated exposure); or aspiration hazard. The criteria for determining whether a chemical is classified as a health hazard are detailed in 29 CFR 1910.1200. Appendix A, *Health Hazard Criteria* having an NFPA rating of 2, 3, or 4 under fire conditions.

High Acute Toxicity—Substances that may be fatal or cause clinical damage to target organs as a result of a single exposure or exposures of short duration. High-acute-toxicity chemicals meet the following criteria: a Permissible Exposure Limit (PEL) or Threshold Limit Value (TLV) of less than 0.1 ppm Time-Weighted Average (TWA) or ceiling limit of less than 1.0 ppm.

High Chronic Toxicity—Refers to substances that produce adverse effects in humans who suffer repeated exposures to those substances over a relatively prolonged period.

Immediate Use—The hazardous chemical will be under the control of and used only by the person who transfers it from a labeled container and only within the work shift in which it is transferred.

Irritant—A chemical, which is not corrosive, but which causes a reversible inflammatory effect on living tissue by chemical action at the site of contact.

Laboratory Scale—Work with substances in which the containers used for reactions, transfers, and other handling of substances are designed to be easily and safety manipulated by one person.

Laboratory Produced Material—A chemical or chemical mixture that is manufactured or synthesized by an operating group at the Laboratory.

LANL Category 1 Chemical (LANL Cat 1)—A Laboratory designation identifying specific chemicals that are regulated at the Laboratory and that require the chemical worker to follow special provisions. LANL Cat 1 chemicals are known human carcinogens, chemicals of high acute or high chronic toxicity, and/or known human reproductive toxins. Lists are available at the

Chemical Safety Webpage. ***Note:*** The Globally Harmonized System (GHS) used in the update for 29 CFR 1910.1200 uses the term hazard category: the division of criteria within each hazard class. GHS hazard category 1 has specific criteria for each hazard class.

Legacy Chemical—A stable, non-time-sensitive stock chemical or chemical mixture being held for evaluation for future use. Note: Per EPA [40 CFR 261.2(a) (2) and 261.33], unused commercial chemical products do not become solid wastes (i.e., they remain commercial chemical products) until a determination is made that the material will be discarded. Commercial chemical products, even those whose shelf life has been exceeded, that ultimately will be used for their intended purpose or that will be reclaimed are not subject to the Resource Conservation and Recovery Act (RCRA). In 2006 [71 FR 29719; May 23, 2006], EPA noted the following for laboratory chemicals "when accumulated for long periods of time, for example, such unused reagents may be considered solid or hazardous wastes if it can be determined that they are no longer usable for their intended purpose."

Material Safety Data Sheet/Safety Data Sheet (MSDS/SDS)—Written, printed, or electronically transmitted information on the hazards and properties of a particular material, including instructions for its safe use.

Mutagen—A chemical that induces DNA damage and genetic alterations that range from changes in one or a few DNA base pairs to gross changes in chromosome structure.

Occupational Exposure Limit (OEL)—The upper limit on the acceptable concentration of a hazardous substance in workplace air for a particular material or class of materials. LANL OELs include OSHA PELs (8-hour time weighted average), and Ceiling Values; ACGIH Threshold Limits Values (Threshold Limit Value-Time-Weighted Average [TLV-TWA], Threshold Limit Value-Short-Term Exposure Limit [TLV-STEL], and Threshold Limit Value-Ceiling [TLV-C]), or other appropriate OELs.

Occupational Safety and Health Administration Permissible Exposure Limit—regulatory limits on the amount or concentration of a substance in the air. They may also contain a skin designation. OSHA PELs are based on an 8-hour TWA exposure.

Physical Hazard—A chemical that is classified as posing one of the following hazardous effects: explosive; flammable (gases, aerosols, liquids, or solids); oxidizer (liquid, solid or gas); self-reactive; pyrophoric (liquid or solid); self-heating; organic peroxide; corrosive to metal; gas under pressure; or in contact with water emits flammable gas. *See* 29 CFR 1910.1200, Appendix B, *Physical Hazard Criteria*.

Production—An operation in which large quantities of a limited list of hazardous chemicals are used on a routine basis for synthesis, product manufacture, product preparation, dip tank or painting, solvent cleaning, photographic development, mechanical shops, construction, or maintenance activities.

Regulated Area—An area where entry and exit is restricted and controlled.

Reproductive Toxicants (known human)—Substances that are known to have lethal effects on the fertilized egg, developing embryo, or fetus, or to cause teratogenesis (malformation) in the fetus.

Secondary Container—Any chemical container other than an original container that will be used to store decanted chemicals or mixed chemicals beyond a single workday.

Note: This definition should not be confused with secondary containment for chemical release prevention and control.

Sensitizer—A chemical that causes a substantial proportion of exposed people or animals to develop an allergic reaction in normal tissue after repeated exposure to the chemical.

Short-Term Exposure Limit (STEL)—A 15-minute time weighted average that should not be exceeded at any time during a work day.

Solid Waste—As defined by regulations promulgated under RCRA and the New Mexico Hazardous Waste Act, unless otherwise excluded, is any discarded material, either abandoned, recycled, or inherently waste-like, including liquids, solids, semisolids, and contained gases.

Spill—An unintentional release of a hazardous chemical, liquid, or solid that creates a hazard because of quantity, physical properties, or toxicity.

Subcontractor—A party entering into a contract with LANS, LLC.

Threshold Limit Value (TLV)—An ACGIH limit that is usually expressed as an 8-hour TWA, meaning a time-weighted airborne contaminant concentration for a normal 8-hour workday and a 40-hour work week, to which nearly all workers may be repeatedly exposed, day after day, over a working lifetime, without adverse effect.

Time Sensitive Chemicals—Those chemicals that, when stored for prolonged periods or under improper storage conditions, can develop hazards that were not present in the original formulation. There are four general categories of time-sensitive chemicals loosely based on those unsafe properties that can develop. They are (1) peroxide formers, (2) peroxide formers that can undergo hazardous polymerization, (3) materials that become shock or friction sensitive upon the evaporation of a stabilizer, and (4) materials that generate significant additional hazards by undergoing slow chemical reactions. It should be noted that time-sensitive chemicals can be pure reagents or they can be commercial mixtures formulated as cleaners, adhesives, and other products. ***Note:*** This definition does not include chemicals that have expiration dates for nonsafety reasons, e.g., inorganic standard solutions that expire 1 year from purchase.

Toxicant—A material that has the ability to injure biological tissue.

Toxicity—A relative property of a chemical agent that refers to a harmful effect on some biologic mechanism and the condition under which this effect occurs.

9.2 Acronyms

See LANL *Acronym Master List*.

ACGIH	American Conference of Governmental Industrial Hygienists
ADESH	Associate Director for Environment, Safety, Health
ADNHHO	Associate Director for Nuclear and High Hazard Operations
ANSI	American National Standards Institute
ASM	Acquisition Services Management
CFR	Code of Federal Regulations
CGA	Compressed Gas Association
CHO	Chemical Hygiene Officer
CHP	Chemical Hygiene Plan

CTS	Comprehensive Tracking System
D&D	Decontaminate and Decommission
DEAR	Department of Energy Acquisition Regulation
DOE	Department of Energy
DOT	Department of Transportation
DPR	Designated Procurement Representative
DSESH	Deployed Services Environment, Safety, and Health
ENV-ES	Environmental Protection-Environmental Stewardship
EO-EPP	Emergency Operations-Emergency Planning and Preparedness
ESH	Environment, Safety, Health
FOD	Facility Operations Director
FP-DO	Fire Protection-Division Office
GHS	Globally Harmonized System
HAZCOM	Hazard Communication
HDBK	Handbook
HEPA	High-Efficiency Particulate Air
IA	Issuing Authority
IARC	International Agency for Research on Cancer
ISEA	International Safety Equipment Association
IWD	Integrated Work Document
IWM	Integrated Work Management
LANL or the Laboratory	Los Alamos National Laboratory
LAMC	Los Alamos Medical Center
LANS, LLC or LANS	Los Alamos National Security, Limited Liability Company
MAQ	Maximum Allowable Quantity
MOV	Management Observation and Verification
MSDS/SDS	Material Safety Data Sheet
NFPA	National Fire Protection Association
NTP	National Toxicology Program
OEL	Occupational Exposure Limit
OM	Occupational Medicine
OS	Operations Support (Division)
OS-DO	Operations Support-Division Office
OSHA	Occupational Safety and Health Administration
OSH-ISH	Occupational Safety and Health-Industrial Safety and Hygiene
OSH-OM	Occupational Safety and Health-Occupational Medicine
OS-PT	Operations Support-Packaging and Transportation
OST	Operations Support Tool
PEL	Permissible Exposure Limit
PFITS	Performance Feedback and Improvement Tracking System
PIC	Person in Charge

PPE	Personal Protective Equipment
R&D	Research and Development
RCRA	Resource Conservation and Recovery Act
RLM	Responsible Line Manager
RM	Responsible Manager
RO	Responsible Office
SBP	Safety Basis Procedure
SME	Subject Matter Expert
STEL	Short-Term Exposure Limit
STR	Subcontract Technical Representative
TA	Technical Area
TLV	Threshold Limit Value
TLV-C	Threshold Limit Value-Ceiling
TLV-STEL	Threshold Limit Value-Short-Term Exposure Limit
TLV-TWA	Threshold Limit Value-Time-Weighted Average
TWA	Time-Weighted Average
USI	Unreviewed Safety Issue
USQ	Unreviewed Safety Question
WMC	Waste Management Coordinator

10.0 HISTORY

Revision History		
04/22/08	P101-14, Rev. 0	Renumbered document, ISD 101-14, *Chemical Management*.
04/15/09	P101-14, Rev. 1	Reformatted to meet the requirements as set forth in P311-1, *Creating, Revising, and Cancelling Institutional Documents*. Updated to address needs identified by the Chemical Management Improvement Project, driven by a Black Belt Project Execution Plan, and captured in Laboratory Issues Management Tracking System (LIMTS). The need to provide a more user friendly chemical inventory process, and tools to Designated Procurement Representatives (DPRs) and chemical workers is addressed. As part of the provision of a more user friendly chemical inventory process, drivers based on compliance requirements for chemical management were identified. Divisions responsible for these compliance requirements provided additional requirements for chemical inventory management and tracking, which are now reflected in a Chemlog functional requirements document. The set of requirements is provided in Section 3.3 of the document. There are no new requirements in this document, but the document has been simplified and updated, including combining the Hazard Communication (HAZCOM) plan and the Chemical Hygiene Plan (CHP) into one attachment.
08/11/10	P101-14, Rev. 2	Issued as a PROVISIONAL document until October 11, 2010. Added a requirement to ensure compliance with 29 Code of Federal Regulations (CFR) 1910.119, *Labor, Occupational*

Revision History		
		Safety and Health Standards, Process Safety Management of Highly Hazardous Chemicals (OSHA PSM Rule), Appendix A. by requiring Facility Operations Directors (FODs) to ensure that quantities are kept below threshold quantities. Updated responsibilities for chemical inventory to reflect ownership by Emergency Operations-Emergency Planning and Preparedness (EO-EPP). Clarified training requirements for "authorized chemical workers" and explained the training requirements for a worker who performs chemical spill/control/mitigation/cleanup. Added a requirement that work involving hazardous chemicals is reviewed using a new activity review process or equivalent process. Clarified the requirement for Chemical Hygiene Officers (CHOs), added the requirement that CHOs are assigned by the Division Leader, and added training and responsibilities for CHOs. Added specific requirements for job-specific briefings and/or information. Added the requirement for evaluation of chemicals and chemical reactions before start of laboratory activities.
10/11/10	P101-14, Rev. 2	Document became effective and is no longer PROVISIONAL.
11/30/10	P101-14, Rev. 3	Updated links to ensure correct names; removed irrelevant, incorrect, or duplicative links. Section 3.2: Elimination of a requirement for DPRs and clarification of chemical owner responsibility for procurement. Reducing requirement for justification of keeping chemical containers from six months to five years.
11/30/11	P101-14, Rev. 4	Updated items in Section 3.2 to consider before a chemical is purchased and provided link to list of chemicals with no disposal path. Changed Form 2134, *Medical Surveillance and Medical Certification Program Enrollment Form*, to Form 1793, *Job-Demands Evaluation*. Changed Chemical Management Webpage to Chemical Management Webpage. Updated Section 5.0 to reflect that this Quick Change does not require an Unreviewed Safety Question/Unreviewed Safety Issue (USQ/USI) review. Updated links, titles, and acronyms.
09/27/12	P101-14, Rev. 5	Section 5.0: Updated to reflect effective date of December 17, 2012 for applicable nuclear, high- and moderate-hazard facilities and accelerators. Removed the requirement for the approval by the Person in Charge (PIC) for the applicable Integrated Work Document (IWD).

Revision History		
		Updated links, titles, and acronyms.
01/08/15	P101-14, Rev. 6	This document cancels PD100, *Occupational Safety and Health*. Performed three-year review in accordance with PD311, *Requirements System and Hierarchy*. Changed the Issuing Authority (IA) from Associate Director for Environment, Safety, and Health (ADESH) to Associate Director for Nuclear and High Hazard Operations (ADNHHO); changed the Responsible Manager (RM) from Industrial Hygiene and Safety Division Leader to Operations Support (OS) Division Leader; and changed the Responsible Office (RO) from Industrial Hygiene and Safety Division to Operations Support-Division Office (OS-DO). Addressed revised Occupational Safety and Health Administration (OSHA) Hazard Communication Standard, now aligned with the Globally Harmonized System (GHS) of Classification and Labeling of Chemicals. Clarified requirements for Chemical Hygiene Officers. Reinserted requirements for chemical inventory. Added new requirements in 29 CFR 1910.1200, *Labor, Occupational Safety and Health Standards, Hazard Communication*. Added requirements for handling of sharps. Clarified and streamlined other chemical management requirements. Revised language in Section 5.0 to reflect Unreviewed Safety Question/Unreviewed Safety Issue (USQ/USI) process and implementation dates for affected facilities. Updated acronyms, links, and organization names. Made other edits and clarifications to resolve vague or inappropriate wording.
08/06/15	P101-14, Rev. 7	Performed three-year review in accordance with PD311, *Requirements System and Hierarchy*. Throughout document: Changed "Chemlog@lanl.gov" to "ChemDB@lanl.gov." Section 1.0: Changed the name from "Hazardous Materials Lifecycle Management Program" to "Chemical Lifecycle Management Program." Section 3.3: Changed how to barcode, enter, and track to the "Support and Resources" tab in the LANL institutional chemical inventory database application. Section 5.0: Updated this section to read, "The requirements in this document are effective on the issue date." Section 6.0: Updated broken link to UTrain course # 25418. Attachment A, Section 1.3: Removed sentence referencing Tools #9. Updated hyperlinks and references.

Revision History		
07/31/17	P101-14, Rev. 7 Admin. Chg. 1	Changed pointer in Table 2, row 7, from Main Document Section 3.7 to 3.6.
08/23/17	P101-14, Rev. 7 Admin. Chg. 2	Section 3.7: Changed "i.e." to "e.g." in paragraph 4. Changed title from P102, *Occupational Medicine*, to P102, *Occupational Health*.
10/16/17	P101-14, Rev. 7 Admin. Chg. 3	Section 6.0, first bullet following third paragraph: Replaced reference to "Course #21464 or equivalent" with "Course #25418, *Chemical Hazard Introduction,* or Course #25997, *Chemical Hazard Communication Introduction."*

11.0 REFERENCES

Prime Contract:

- Clause I-121, Department of Energy Acquisition Regulation (DEAR) 970.5203-1, *Management Controls* (Dec. 2000)
- Clause I-122, DEAR 970.5203-3, *Contractor's Organization* (Dec. 2000) (Deviation)
- Clause I-123, DEAR 970.5204-2, *Laws, Regulations, and DOE Directives* (Dec. 2000) (Deviation)
- DEAR 970.5223-1, *Integration of Environment, Safety and Health into Work Planning and Execution*
- DEAR 970.5204-2, *Laws, Regulations, and DOE Directives; Appendix B 4.2, Environment, Safety, and Health*
- 29 CFR 1910.1200, *Labor, Occupational Safety and Health Standards, Hazard Communication*
- DOE O 151.1C, *Comprehensive Emergency Management System*

11.1 Other References

- 29 CFR 1910.1450, *Labor, Occupational Safety and Health Standards, Occupational Exposure to Hazardous Chemicals in Laboratories*
- 29 CFR 1926.59, *Labor, Safety and Health Regulations for Construction, Hazard Communication*
- P101-29, *Working with Nanotechnology Materials and Processes*
- P101-15, *Biological Safety*
- P101-8, *Explosives Safety*
- P121, *Radiation Protection*
- 29 CFR 1910.119, *Labor, Occupational Safety and Health Standards, Process Safety Management of Highly Hazardous Chemicals (OSHA PSM Rule),* Appendix A
- MSDS/SDS electronic binder
- Designated Procurement Representative (DPR)
- LANL institutional chemical inventory
- 10 CFR 1021, *Energy, National Environmental Policy Act Implementing Procedures*
- 40 CFR 355, *Protection of Environment, Emergency Planning and Notification*

- NFPA 704, *Standard System for the Identification of the Hazards of Materials for Emergency Response*
- P300, *Integrated Work Management*
- P101-32, *Worker Exposure Assessments*
- NFPA 45, *Standard on Fire Protection for Laboratories Using Chemicals*
- Research Library
- P101-34, *Pressure Safety*
- NFPA 55, *Compressed Gases and Cryogenic Fluids Code*
- P409, *LANL Waste Management*
- P151-1, *LANL Packaging and Transportation Program Procedure*
- 49 CFR 100–185, *Transportation, Pipeline and Hazardous Materials Safety Administration, Department of Transportation*
- 49 CFR 171.8, *Transportation, General Information, Regulations, and Definitions, Definitions and Abbreviations*
- 49 CFR 173, *Transportation, Shippers—General Requirements for Shipments and Packagings, Parts 115–141 and Parts 403–436*
- SOP-C-DO-003, *On-Site Shipping of Analytical-Scale Samples of Hazardous or Radioactive Materials (DOT Small Quantities)*
- SBP 112-3, *Unreviewed Safety Question (USQ) Process*
- 29 CFR 1926.21, *Labor, Safety and Health Regulations for Construction, Safety Training and Education*
- 29 CFR 1910.1003, *Labor, Occupational Safety and Health Standards, 13 Carcinogens*
- 40 CFR 262, *Protection of Environment, Standards Applicable to Generators of Hazardous Waste*
- NFPA 30, *Flammable and Combustible Liquids Code*
- P311-1, *Creating, Revising, and Cancelling Institutional Documents*
- PD311, *Requirements System and Hierarchy*
- P101-21, *Chronic Beryllium Disease Prevention Program*
- Laboratory Industrial Hygiene and Safety Manual
- P101-16, *Local Exhaust Ventilation and HEPA Filtration Systems*
- American National Standards Institute/International Safety Equipment Association (ANSI/ISEA) z358.1-2009, *American National Standard for Emergency Eyewash and Shower Equipment*
- LANL Operations and Maintenance Manual, Criterion 407: Emergency Eyewash and Shower Equipment
- LANL Category 1 Chemicals list
- P101-19, *Safety Signs, Labels, and Tags*
- P101-6, *Personal Protective Equipment*
- PD1200, *Emergency Management*

- P102, *Occupational Health*
- 10 CFR 851, *Energy, Worker Safety and Health Program*
- *Montreal Protocol on Substances that Deplete the Ozone Layer*
- Public Law 101-549, *Clean Air Act Amendments of 1990*
- 29 CFR 1910 Subpart Z, *Labor, Occupational Safety and Health Standards, Toxic and Hazardous Substances*
- 29 CFR 1910.1020, *Labor, Occupational Safety and Health Standards, Access to Employee Exposure and Medical Records*
- 40 CFR 61, *Protection of Environment, National Emission Standards for Hazardous Air Pollutants*
- 40 CFR 63, *Protection of Environment, National Emission Standards for Hazardous Air Pollutants for Source Categories*
- 40 CFR 68, *Protection of Environment, Chemical Accident Prevention Provisions*
- 40 CFR 82, *Protection of Environment, Protection of Stratospheric Ozone*
- 40 CFR 261, *Protection of Environment, Identification and Listing of Hazardous Waste*
- 40 CFR 263, *Protection of Environment, Standards Applicable to Transporters of Hazardous Waste*
- 40 CFR 268, *Protection of Environment, Land Disposal Restrictions*
- 40 CFR 302, *Protection of Environment, Designation, Reportable Quantities, and Notification*
- 40 CFR 370, *Protection of Environment, Hazardous Chemical Reporting: Community Right-to-Know*
- 40 CFR 372, *Protection of Environment, Toxic Chemical Release Reporting: Community Right-to-Know*
- 40 CFR 700–799, *Protection of Environment, Toxic Substances Control Act*
- 49 CFR, *Transportation*
- NFPA 430, *Code for the Storage of Liquid and Solid Oxidizers*
- NFPA 432, *Code for the Storage of Organic Peroxide Formulations*
- NFPA 484, *Standard for Combustible Metals*
- *Compressed Gas Association (CGA) Publications*
- 49 CFR 171-180, *Transportation, Hazardous Materials Regulations*
- DOE-HDBK (Handbook)-1139/2-2006, *Chemical Management (Volume 2 of 3), Chemical Safety and Lifecycle Management*
- DOE-HDBK-1139/3-2003, *Chemical Management (Volume 3 of 3), Consolidated Chemical User Safety and Health Requirements*
- P313, *Roles, Responsibilities, Authorities, and Accountability*
- P301, *Research Sample Management for Quality R&D*

12.0 FORMS

There are no forms associated with this document.

13.0 ATTACHMENTS

Attachment A. *LANL* Hazard Communication and *Chemical Hygiene Plan*

14.0 CONTACTS

Chemical Management: ADNHHO Operations Support (OS) Division
Telephone: (505) 665-5550
Website: http://int.lanl.gov/org/padops/adnhho/operations-support/index.shtml

Chemical Safety: Occupational Safety and Health Division
Telephone: (505) 606-0295
Website: http://int.lanl.gov/org/padops/adesh/occupational-safety-and-health/index.shtml

No: P101-14 Chemical Management
Attachment A. LANL Hazard Communication and Chemical Hygiene Plan (Page 1 of 12)

1.0 INTRODUCTION

A Chemical Hygiene Plan (CHP) is required by 29 Code of Federal Regulations (CFR) 1910.1450, *Labor, Occupational Safety and Health Standards, Occupational Exposure to Hazardous Chemicals in Laboratories*, which applies to facilities where multiple chemicals are used in laboratory scale quantities or Research and Development (R&D). A written Hazard Communication (HAZCOM) Plan is required by 29 CFR 1910.1200, *Labor, Occupational Safety and Health Standards, Hazard Communication,* and 29 CFR 1926.59, *Labor, Safety and Health Regulations for Construction, Hazard Communication*, which apply to workers who use chemicals in shops, maintenance activities, construction or facility work, product manufacture, laboratory analysis, environmental restoration, or decommissioning activities. This attachment covers both standards. Areas where only one standard applies will be noted in the text.

Personnel exposure to chemical agents is to be minimized, and maintained within acceptable exposure limits. Exposures will be minimized by the use of hazard elimination, hazard substitution, engineering controls, administrative controls, and Personal Protective Equipment (PPE). Every employee, guest, visiting scientist, student, or subcontractor working on or off-site will be familiar with and comply with appropriate Los Alamos National Laboratory (LANL or the Laboratory) safety standards.

This plan includes:

- procedures to be followed when work involves the use of hazardous chemicals,
- criteria used to determine and implement control measures to reduce employee exposure to hazardous chemicals through the Integrated Work Management (IWM) and Worker Exposure Assessment processes,
- methods used to inform workers of non-routine tasks and hazards associated with chemicals in unlabeled pipes through the IWM process,
- requirements for:
  - fume hoods and other protective equipment,
  - employee information and training,
  - authorization and approval of activities through the IWM process,
  - additional employee protection for work with particularly hazardous substances in accordance with 29 CFR 1910.1450,
  - a hazardous chemical listing, and
  - subcontractor personnel in terms of HAZCOM.

1.1 Purpose

The purpose of this Hazard Communication and Chemical Hygiene Plan is to provide workers with the specific requirements for chemicals used during work, the hazards involved, the forms of warning, Material Safety Data Sheets/Safety Data Sheets (MSDS/SDSs), and the procedures and work practices to minimize their exposure to those chemicals.

1.2 Scope

HAZCOM applies to the use of chemicals in shops, maintenance activities, construction or facility work, product manufacture, the use of chemicals in a process in excess of 40 pounds or 5 gallons (see 40 CFR 355, *Protection of Environment, Emergency Planning and Notification*), environmental restoration, or decommissioning activities.

The CHP applies to work with small quantities of chemicals where the work can be safely manipulated by one person and multiple chemical procedures or multiple chemicals are used.

1.3 Chemical Inventory Requirements

A list of the hazardous chemicals known to be present at the Laboratory is maintained in the LANL institutional chemical inventory database. Primary hazardous chemical containers must be barcoded, and entered and tracked in the database.

Note: Most primary hazardous chemical containers ordered through standard purchasing agreements will be delivered to the user with a barcode and will already be listed in the LANL institutional chemical inventory database.

The chemical owner is responsible for ensuring the entry was accurately made in the chemical inventory database (e.g., owner, name of chemical, location). Some hazardous chemical containers (e.g., P-card purchases) may be delivered without a barcode and absent from the chemical inventory database. Chemical owners are responsible for barcoding these containers and entering them into the chemical inventory database. When a primary hazardous chemical container is transferred to a new owner and/or a new location; or is disposed, the chemical owner is responsible for updating the database.

Responsible Line Managers (RLMs) are accountable for accurate chemical inventories and are responsible for ensuring that physical inventories of their primary hazardous chemical containers are performed annually to verify the database inventory.

Note: Accuracy of the Laboratory's chemical inventory is very important. For example, in accordance with 40 CFR 370, *Protection of Environment, Hazardous Chemical Reporting: Community Right-to-Know*, "The owner or operator or the officially designated representative of the owner or operator must certify that all information included in the Tier II submission is true, accurate, and complete…under penalty of law... " The accuracy of the Laboratory's Tier II submittal (annual hazardous chemical report) is dependent on the accuracy of the Laboratory's chemical inventory.

For assistance with the LANL institutional chemical inventory database, contact the help desk at 667-9242, or e-mail ChemDB@lanl.gov.

1.4 Material Safety Data Sheets/Safety Data Sheets (MSDS/SDSs)

Access to MSDS/SDSs is provided through a link on the Chemical Safety Webpage.

- For chemicals acquired prior to December 1, 2015: MSDSs are available for all hazardous chemicals and hazardous chemical mixtures in the LANL institutional chemical inventory database (see the Chemical Safety Webpage) through the LANL MSDS/SDS database, or if specific manufacturer MSDS/SDSs are not available, refer to the Laboratory Chemical Safety Webpage for commercial MSDS/SDS databases.
- For chemicals acquired after December 1, 2015, or for chemicals for which an SDS has been created: SDSs, are available for all hazardous chemicals and hazardous chemical mixtures in the LANL institutional chemical inventory database (see the Chemical Safety Webpage) through the LANL MSDS/SDS database, or if specific manufacturer SDSs are not available, refer to the Laboratory Chemical Safety Webpage for commercial MSDS/SDS databases.

Manufacturer's MSDS/SDSs are provided to Industrial Safety and Hygiene (ISH) as part of the I-procurement process. If a chemical owner has acquired the chemical through another process, the manufacturer's MSDS/SDS will be provided to ISH.

Note: This does not apply to samples being submitted for analysis.

New chemicals developed at the Laboratory for internal use will be evaluated by the chemical owner to determine if they are hazardous (CHP only). If it is determined the chemicals are hazardous, the information will be included in the Integrated Work Document (IWD), thus allowing for the chemical workers to receive information on how to control the hazard. If the chemical produced is a byproduct whose composition is not known, the chemical will be assumed to be hazardous and handled accordingly. If an employee produces a new chemical, and plans to ship it off-site for use or distribution, an MSDS/SDS is required to be created and shipped with the chemical. For chemicals created at the Laboratory, ISH will be contacted for assistance in creating an MSDS/SDS.

1.5 Labels

Labels on containers, including, but not limited to, tanks, totes, piping and drums must be maintained. This means that labels must be maintained on chemicals in a manner which continues to be legible and the pertinent information (such as the hazards and directions for use) does not get defaced (i.e., fade, get washed off) or removed in any way.

Note: All hazardous chemicals shipped after June 1, 2015, must be labeled with specified elements including pictograms, signal words and hazard and precautionary statements. However, manufacturers, importers, and distributors may start using the new labeling system in the revised HCS before the June 1, 2015 effective date if they so choose. LANL is not responsible for updating labels on shipped containers, even if the shipped containers are labeled under the 1994 Hazard Communication Standard, unless the labels have been removed or defaced. However, if there are newly-identified hazards that are not disclosed on the label, RLMs and PICs must ensure that the workers are aware of the hazards as discussed below under workplace labels.

Primary chemical containers associated with the 1994 Hazard Communication Standard will have a label with the chemical name, and hazard warning. The hazard warning is a statement of the hazardous effect of the chemical (e.g., "flammable" or "causes lung damage") or a numerical rating such as that found on the NFPA label.

(CHP areas only) When one transfers a material from the original manufacturer's container to other vessels, these vessels are referred to as "secondary containers." Secondary containers in HAZCOM areas will include the chemical name, creation date, hazard warning, and manufacturer. Secondary containers in CHP areas will include the name of the chemical, date created, and the owner of the container.

Portable containers into which hazardous chemicals are transferred and which are intended only for the immediate use (i.e., use by one worker for one day, and always under the control of that one worker) of the chemical worker who performed the transfer are not required to be labeled. However, it is good practice to label the container with the name of the chemical and the owner.

Contact the CHO and OSH-ISH for assistance in developing labels

1.6 Methods Used to Inform Workers

Workers use the IWM process (see P300, *Integrated Work Management*) to develop IWDs for the proposed work activity. The IWD or other work document describes the scope, location, duration, hazards and environmental aspects, and controls (including PPE) to mitigate the hazards and negative environmental impact of the work. The IWD is used to authorize the work in accordance with P300. IWDs or other work documents will be used to address tasks involving hazardous chemicals.

Responsible Line Managers (RLMs) will ensure that all work involving hazardous chemicals is reviewed for impacts on security, environment, safety and health, facility or equipment, and facility safety basis concerns in accordance with P300. At a minimum, the following steps will be performed:

1. Initially categorize hazardous chemical work in accordance with P300. If categorized as high hazard/complex work, assemble a hazard analysis review team (see P300 Appendix A, *Integrated Work Management Process for Research and Development*). In addition to the required members for the team, include deployed industrial hygienist(s), and other hazardous chemical Subject Matter Experts (SMEs).
2. Create a detailed description of the work for the IWD involving hazardous chemicals that identifies the hazards associated with performing the work.
3. Specify hazard controls within the IWD using the following hierarchy of controls.
   a. Elimination or Substitution
   b. Engineering Controls
   c. Administrative Controls
      - qualifications
      - formal procedures
      - training
      - work practices

d. PPE

Note: Guidance for Preparing IWDs: Consider and understand the potential for generating new hazardous chemical-bearing waste streams. Consider substituting a less hazardous chemical and speak with your Waste Management Coordinator (WMC) before creating new waste streams.

4. Contact your deployed industrial hygienist to perform a qualitative exposure assessment in accordance with the Laboratory Industrial Hygiene and Safety Manual to evaluate the potential for worker exposure to hazardous chemicals.

Your deployed industrial hygienist will work with subcontractor personnel to ensure that the potential for subcontractor worker exposure to hazardous chemicals is evaluated before removing, remodeling, servicing, maintaining, or repairing laboratory equipment and exhaust systems.

1.7 Worker Exposure Assessments

Worker exposure assessments, including exposure monitoring, will be conducted in accordance with applicable sections of:

- P101-21, *Chronic Beryllium Disease Prevention Program*
- P101-32, *Worker Exposure Assessments*
- the Laboratory Industrial Hygiene and Safety Manual

1.8 Use and Maintenance of Laboratory Fume Hoods

Requirements that will be followed for the proper design, operation, and use of laboratory fume hoods are located in P101-16, *Local Exhaust Ventilation and HEPA Filtration Systems*.

1.9 Chemical Hygiene Officer (CHO) (Chemical Hygiene Plan [CHP] Only)

The LANL CHO resides in OSH-ISH. Each Division Leader will appoint a CHO to provide technical guidance to line management and chemical workers (CHP only). The CHO will be an authorized chemical worker with the education and experience to determine the hazards and consequences of exposure to the chemicals found in the chemical inventory.

*1.9.1 **Roles and Responsibilities*** (Based on 29 CFR 1910.1450*, Labor, Occupational Safety and Health Standards, Occupational Exposure to Hazardous Chemicals in Laboratories, Appendix A [nonmandatory] and Prudent Practices for Handling Hazardous Chemicals in Laboratories)*

LANL CHO:

- Establish, maintain, and revise the CHP.
- Create and revise CHP documentation.
- Communicate chemical safety lessons learned to Division CHOs for dissemination.

Division CHO:

- Liaise with OSH-ISH to ensure compliance with this document.
- Monitor procurement, use, and disposal of chemicals used in the Division.
- Seek ways to improve the LANL Hazard Communication and Chemical Hygiene program.

- Perform MOVs with Division management of laboratories, preparation rooms, and chemical storage rooms.
- Assist laboratory owners in developing and maintaining adequate facilities.
- Provide assistance to Division members for proposed research activities that involve hazardous chemicals.

1.10 Safety Showers and Eye Washes

- Safety Showers and Eye Washes will be maintained, inspected, and tested periodically as required by American National Standards Institute (ANSI)/International Safety Equipment Association (ISEA) z358.1-2009 *American National Standard for Emergency Eyewash and Shower Equipment*, with the exception of weekly activation of safety showers. Activation of safety showers will be done on a quarterly basis due to issues associated with containment of test water. See LANL Operations and Maintenance Manual, Criterion 407: Emergency Eyewash and Shower Equipment.

1.11 Provisions for Additional Employee Protection

1.11.1 Work with LANL Category 1 Chemicals

- Special handling procedures are necessary to minimize exposures to known human carcinogens, reproductive toxicants, and substances with high acute or high chronic toxicity. Chemicals in these hazard groups are identified in the LANL Cat 1 Chemicals list.
- Handling procedures for these agents will be defined in laboratory or work authorization documents and approved by Deployed Services Environment, Safety, and Health (DSESH) deployed personnel before initiation of work.
- Specific consideration will be given to the following controls, to be used as appropriate for the agent and process: establishment of designated areas; use of containment devices such as laboratory fume hoods or glove boxes; procedures for safe removal of contaminated waste; and decontamination procedures (see 29 CFR 1910.1450, *Labor, Occupational Safety and Health Standards, Occupational Exposure to Hazardous Chemicals in Laboratories* [e] [3] [viii]).

Decontamination is necessary before the affected work area can be released from “designated area” status. The type and level of decontamination should be defined by ISH personnel. After decontamination, the area will no longer be considered a “designated area,” and all warning and control signs will be removed. A wet mop or a vacuum cleaner equipped with a High-Efficiency Particulate Air (HEPA) filter will be used instead of dry sweeping.

1.11.2 Additional Requirements for Carcinogens

A regulated area will be established where a known human or suspected human carcinogen is manufactured, processed, used, repackaged, released, handled, or stored. All materials containing 0.1% (by weight) or more of a listed carcinogen will be clearly labeled to warn of a carcinogen hazard. A list of carcinogens, located in the LANL Cat 1 chemical list can be found on the Chemical Safety Webpage. Less-hazardous, noncarcinogenic chemicals that can be substituted for currently used carcinogens will be substituted when compatible with the work to be accomplished.

All areas in which carcinogens are used or stored will meet the following conditions:

- Clearly marked by posting signs warning of a carcinogen hazard. Additional signs and labels are required when OSHA-regulated carcinogens are in use. See P101-19, *Safety Signs, Labels, and Tags*.
- Signs posted prohibiting eating, drinking, gum chewing, smoking, or applying cosmetics or lip balm.
- Ventilation and hood performance that meet minimum requirements before beginning any new operations involving carcinogens. (See P101-16, *Local Exhaust Ventilation and HEPA Filtration Systems*.)
- Evaluation of carcinogen storage and use using the Laboratory Industrial Hygiene and Safety Manual, *Chapter 33, Carcinogens*. Request the Environment, Safety, Health (ESH) Qualified Person perform a re-evaluation of carcinogen hazards when the use of a carcinogen changes in quantity, concentration, frequency, or duration.
- Decontamination procedures for equipment and facilities will be documented in an IWD before new carcinogens are used.
- Notification of ISH and Occupational Medicine (OM) with names of authorized chemical workers working with carcinogens.

1.11.3 Evaluation of Laboratory Operations

- Before laboratory tests or chemical reactions begin, evaluations must be made for hazards that can be encountered or generated during the course of the work.
- Evaluations must include the hazards associated with the properties and the reactivity of the materials used and any intermediate and end products that can be formed, hazards associated with the operation of the equipment at the operating conditions, and hazards associated with the proposed reactions, for example, oxidation and polymerization.
- Where reactions are being performed to synthesize materials, the hazard characteristics of which have not yet been determined by test, precautions must be employed to control the highest possible hazard based on a known hazard of similar material.
- Where use of a new material might present an explosion potential, initial experiments or tests must be conducted in an enclosure that is designed to protect people and property from potential explosion damage.
- Unattended or automatic laboratory operations involving hazardous chemicals must be equipped with regular surveillance for abnormal conditions.

1.12 Personal Protective Equipment (PPE)

- The Laboratory requires that suitable clothing and equipment be used to protect workers and others in Laboratory spaces from hazards in the workplace. PPE is intended to protect the body (including eyes, face, feet, hands, head, hearing, and respiratory system) from hazards capable of causing injury, illness, or impairment of bodily function. No protective material will provide full protection against all hazards. PPE is considered for use as a hazard control strategy only after it has been determined that elimination, substitution and engineered and administrative controls are not feasible, or in the interim while engineered and administrative controls are being designed and implemented. Proper PPE will be identified in the work authorization documentation.

- The level of protection and type of PPE selected will match the applicable hazards. See P101-6, *Personal Protective Equipment*.

1.13 Flammable Liquids Storage Cabinets

A flammable liquids storage cabinet is a cabinet that is Underwriters Laboratories listed or Factory Mutual approved for storage of flammable liquids. The Fire Protection-Division Office (FP-DO) should be contacted for questions on what qualifies as a flammable storage cabinet and the chemical limits.

Not more than 60 gallons of Class I and/or Class II liquids, or not more than 120 gallons of Class III liquids may be stored in an individual cabinet. Storage cabinets shall be designed and constructed to limit the internal temperature to not more than 325ºF when subjected to a standardized 10-minute fire test. Storage cabinets shall be conspicuously labeled, "Flammable - Keep Fire Away."

The bottom, top, door, and sides of metal cabinets shall be at least No. 18 gage sheet metal and double walled with 1½-inch air space. The door shall be provided with a three-point lock, and the door sill shall be raised at least 2 inches above the bottom of the cabinet.

Note: Do not store compressed gases in these cabinets.

1.14 Hydrofluoric Acid (HF)

Hydrofluoric Acid (HF) is a particularly dangerous acid because of its unique ability among acids to penetrate tissue. This ability to penetrate tissue allows HF to cause severe systematic toxicity from even relatively small dermal exposures. For this reason, the following requirements and recommended safe practices apply to work with HF:

Requirements:

- Substitute less hazardous fluoride compounds, where possible, e.g., use aluminum fluoride instead of HF to remove silicates from aqueous solutions.
- An Integrated Work Document (IWD) (see P300, *Integrated Work Management*) is required for work with HF. The IWD must include the first-aid procedure in case of an exposure and what to do in case of a spill.
- As required in P300, the IWD must be readily accessible where the activity is being conducted.
- A Material Safety Data Sheet/Safety Data Sheet (MSDS/SDS) must be available.
- Before working with HF, workers must read the MSDS/SDS, read the IWD, complete training on the first-aid procedure in case of an exposure, and know what to do in case of a spill.
- Workers must be authorized in accordance with the requirements in P300.
- Workers who work with HF must be registered and trained by Occupational Medicine on first-aid procedures associated with HF exposure.

- Personal protection by engineered controls, personal protective equipment, or a combination is required for HF use. Controls must be commensurate with the HF hazard represented by a specific use or process involving HF. Your deployed industrial hygienist will assist in the development of and approve personal protective equipment and engineered controls for HF uses and processes through IWD development.
- A calcium gluconate skin exposure mitigation kit must be located in close proximity to the work involving HF. The kit must be replaced with new stock annually. A list of HF first-aid trained personnel must be posted near the kit. Contact Occupational Medicine for mitigation kits and replacement components.
- An HF spill kit must be available with calcium compounds such as calcium carbonate, calcium sulfate, or calcium hydroxide. It is advised that facilities that use or handle HF maintain on hand adequate compatible spill control materials to absorb or contain the volume of the largest volume container of HF commonly within the facility. In facilities with a "no spill cleanup" policy, these materials will supplement that which is immediately available to Hazardous Material (HAZMAT) first responders. Sodium bicarbonate should never be used with an HF spill since it does not bind the fluoride ion and can generate toxic aerosols.

Safe Practices

- Never work alone with concentrated (~6M or greater) HF or large volumes of dilute HF; use a buddy system. It is highly recommended that HF work not be conducted during hours when facilities may have minimum personnel such as nights and weekends even with small volumes and dilute solutions to ensure that there are adequate personnel to render aid in the event of an accident or spill.
- Use an HF-compatible tray or other suitable container while working with HF for containment in case of a spill.
- Store HF in compatible materials (e.g., Teflon, fluorinated ethylene propylene, polyethylene, etc.) containers and keep containers closed.
- Label all nonoriginal containers that contain HF and solutions other than that for immediate use (See Section 1.5).
- Store the stock HF in HF-compatible plastic secondary containment and label the cabinet. Store HF in lower cabinets near the floor. Store HF with other inorganic acids and away from bases, flammables, or oxidizers.
- Wash or wipe gloves with water before removing them, if permissible, by specific laboratory protocols.
- Protect exposed skin and nonresistant or absorbent clothing through:
  - enclosed processes and uses,
  - chemical fume hoods with sash down,
  - gloveboxes with HF-compatible gloves and windows,
  - specially engineered process enclosures, e.g., ventilated cabinets,

Note: Concentrated HF and hydrogen fluoride gas from reactions can etch the glass hood sash on a fume hood and make it hard to see through. If the hood sash becomes fogged and hard to see through because of etching, contact your Facility Operations Director (FOD) representative about installing a polycarbonate sash. In some cases, hood sashes as well as glove box windows may be protected before exposure with a transparent film of Polyvinylidene Fluoride (PVDF, Kynar, Hylar, and Sygef) or other HF-resistant plastic.

- HF-resistant rubber or plastic apron,
- HF-resistant plastic arm coverings,
- HF-resistant gloves and glove combinations,
  - incidental use of dilute acid solutions–double gloves with heavy nitrile exam gloves; re-glove if there is any exposure to the gloves,
  - extended use of concentrated acid–heavy neoprene or butyl gloves worn over nitrile or silver shield gloves,
  - fluorinated polymer gloves for high-concentration and/or high-concentration HF gas exposure,
- closed toe shoes or chemical resistant boots,
- long pants and a long-sleeve shirt with a reasonably high-neck (not low-cut).

- Protect the face and eyes through
  - safety glasses in conjunction with chemical fume hoods with sash down (dilute solutions),
  - splash goggles in conjunction with a fume hood sash (high-concentration, high-reactivity process), and
  - face shield in conjunction with splash goggles (open processes, open hood sash).

1.15 Emergency Procedures

Emergency procedures will be in accordance with requirements contained in PD1200, *Emergency Management*.

1.16 Medical Surveillance

Medical surveillance requirements will be in accordance with requirements contained in P102, *Occupational Health*.

1.17 Worker Information, Training and Authorization

Chemical workers who work with hazardous chemicals will receive training about those chemicals before they begin work. Chemical workers receive this training through a combination of formal training, reading assignments and job-specific information as specified in the work authorization documentation. Chemical workers who work in areas where hazardous chemicals are used, but who do not work directly with such chemicals, will be made aware of the hazards before they begin work in those areas. Formal training will be conducted and documented in accordance with Laboratory training policy. Chemical workers will be trained on chemicals in use in their workplace at the time of initial assignment and whenever new hazards are introduced. See Section 6.0 of this document.

1.18 Use of Non-medical Sharps

- Use the correct tool for the job, i.e., a box cutter to cut boxes.
- Do not shear, clip, or bend needles. Do not recap used disposable hypodermic needles. Do not remove used disposable hypodermic needles from the syringe. If you are using a glass syringe and a non-disposable needle, use extreme caution when recapping the needle, or removing the needle. To recap a non-disposable needle, use either a one-handed "scoop" technique or a mechanical device designed for holding the needle sheath.
- Do not walk with an unprotected sharp.
- Dispose of sharps at the point of use.
- Use needleless systems, or a blunt needle whenever possible.
- Organize your work space so that all materials for the experiment are ready and available before accessing the sharp device. This helps reduce the chance of having to set an exposed needle down on the lab bench in order to retrieve other necessary supplies.
- Be prepared to use the device the moment the sharp is exposed (e.g., when the needle is uncapped, the razor blade removed from its wrapper).
- Make sure you have adequate lighting to perform the task involving the sharp.
- Keep exposed sharps pointed away from yourself and others.
- Never directly hand an exposed sharp to another person. Instead, designate a "sharps passing zone" where exposed sharps are set down prior to being picked up by another person.
- Be accountable for the sharps you use.
- Look around after you complete your work and make sure that all sharps have been disposed of properly.
- Store sharps in a safe manner. Protect the sharp with a cap, cover, or store it in a rigid container.
- Use a dedicated, labeled sharps storage area.

Disposal of Non-medical Sharps:

- Hypodermic needles and contaminated sharps must always be discarded in an approved, rigid, leak-proof sharps container. Do not overfill the container. Do not open sharps containers. Note: sharps containers for personal medical use are available at Occupational Medicine.
- Do not discard loose sharps or sharps containers in the regular trash.
- **Broken glass:** (no regulated chemical or bioagent/biohazard contamination): Carefully sweep up any broken pieces into a dustpan and place them in a hard sided closed container (e.g., cardboard box) labeled "broken glass" with the technical area (TA), building number, room number and generator's name written on the container. The container can be placed in the regular trash provided the broken glass is not contaminated; coordinate disposal with your WMC.

- **Chemical contaminated sharps**: Store in leak-proof, rigid, puncture-resistant containers that are manufactured for the purpose of sharps containment and are taped closed or tightly lidded to preclude loss of contents. Label and manage in accordance with regulatory requirements for the material with which they are contaminated. Contact your WMC for assistance.
- **Uncontaminated (no rad, chemical, or biological) Sharps**: Store in leak-proof, rigid, puncture-resistant containers that are manufactured for the purpose of sharps containment and are taped closed or tightly lidded to preclude loss of contents. Label the container "non-infectious and non-hazardous waste" with the TA, building number, room number and generator's name written on the container. The container can be placed in the regular trash; however, coordinate with your WMC.
- **New Mexico special waste sharps (infectious waste sharps):** Refer to Tool 502 "Infectious Waste" for assistance.

The Chemical Safety Webpage also contains guidance on Working with Sharps and Management of Waste Sharps.

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LANL Waste Management

1.0 PURPOSE

All waste at Los Alamos National Laboratory (LANL or the Laboratory) is subject to one or more types of regulations and must be managed properly. This document describes LANL requirements for waste generated and managed by waste generators and Treatment and Storage Facilities (TSFs) to ensure compliance with legal mandates and Laboratory requirements as necessary to protect human health, safety, and the environment. This document has been revised as part of a process in which the Laboratory systematically plans, documents, executes, and evaluates its management of regulated waste streams.

This document addresses LANL's waste management requirements for waste generators and TSFs as necessary to safely manage, store, treat, and transport wastes. A waste generator is any person whose actions or processes produce any type of waste. The waste generator owns the waste and must know and document what is in the waste, and TSFs must ensure that the waste characterization meets the requirements of the Laboratory Hazardous Waste Facility Permit (Laboratory HWFP). TSFs must meet the requirements of the Laboratory HWFP for waste management, treatment or storage. This document also addresses LANL's Waste Certification and Assessment Programs, in accordance with DOE Order (O) 435.1 Chg 1, *Radioactive Waste Management*, to ensure there is a systematic, documented approach for measuring compliance with requirements in this document. This document aligns with the waste management process for transuranic waste as defined in P409-1, *LANL Waste Acceptance Criteria* and the Waste Isolation Pilot Plant (WIPP) Waste Acceptance Criteria (WAC).

The Environmental Protection Agency (EPA) and the New Mexico Environment Department (NMED) have established requirements, which are addressed in this document, for waste generators and TSFs to ensure regulated waste is characterized, managed, stored, treated, and transported compliantly. To ensure compliance with legal mandates, the requirements in this and other requirements documents (i.e., Associate Director for Environment, Safety, and Health [ADESH] documents; P409-1, *LANL Waste Acceptance Criteria*; and Functional Series Documents [FSDs]) are established to be consistent with Department of Energy (DOE) orders, federal and state laws and regulations, the Laboratory HWFP, and reporting requirements.

2.0 AUTHORITY AND APPLICABILITY

2.1 Authority

This document is issued under the authority of the Laboratory Director to direct the management and operation of the Laboratory, as delegated to ADESH as provided in the Prime Contract. This document derives from the Laboratory Governing Policies, particularly the section on Environment, and implements requirements in the Prime Contract, particularly Department of Energy Acquisition Regulation (DEAR) 970.5223-1, *Integration of Environment, Safety, and Health into Work Planning and Execution* (Dec. 2000), Part III, Section J, Appendix B 4.2 and Part III, Section J, Appendix G; DOE Order (O) 435.1 Chg 1, *Radioactive Waste Management*; DOE Manual (M) 435.1-1 Chg 1, *Radioactive Waste Management Manual*; the Resource Conservation and Recovery Act (RCRA); the Toxic Substances Control Act (TSCA); New Mexico Special Waste Act; 74-9-1 New Mexico Statutes Annotated (NMSA) 1978, *Solid Waste Act*; and 74-4-1 NMSA 1978, *Hazardous Waste Act*.

- Issuing Authority (IA): Associate Director for Environment, Safety, and Health (ADESH)
- Responsible Manager (RM): Environmental Protection and Compliance (EPC) Division Leader
- Responsible Office (RO): Environmental Protection and Compliance-Division Office (EPC-DO)

2.2 Applicability

This document applies to all workers (e.g., TSF Worker, General Site Worker, Remediation Worker, and Limited Site Worker), including subcontractors to LANL, who generate, manage, treat, transport or store regulated waste at the Laboratory as a waste generator or at a TSF. Regulated waste, as defined in this document, refers to all types of waste including office waste, solid waste, universal waste, hazardous waste, mixed radioactive waste, and radioactive-only waste. Waste generators may be any worker (Laboratory worker [e.g., LANS employee, Lab craft through visiting staff member], affiliate, external, vendor, military, and subcontractor) whose actions or processes generate any type of waste (e.g., hazardous, radioactive, mixed, universal, Polychlorinated biphenyl [PCB] or New Mexico [NM] Special waste) and stores the waste in staging areas, accumulation areas, or storage areas. An RLM may act as the assigned waste generator when responsible for mentoring and overseeing students, visiting scientists/researchers or foreign nationals. In that capacity the RLM must be knowledgeable of the waste generating process, waste management activities and associated accumulation or storage area status. The RLM acting in this manner (e.g., as the waste generator) is responsible for the authorized Waste Compliance and Tracking System (WCATS) functions.

TSF workers include personnel who manage, treat, transport or store regulated waste under the Laboratory HWFP. All other persons (i.e., subcontractors) working at the Laboratory must follow the requirements as set forth in their contractual agreements or subcontracts. Included in the contractual agreements is a Laboratory document, Exhibit F, *Environment, Safety, and Health Requirements for Subcontractors;* Exhibit G, *Security Requirements for Subcontractors*; and Exhibit H, *Quality Assurance Requirements*. Exhibit F comprises environmental, safety, health, and waste management requirements. Before submittal to the subcontractor, Exhibit F must be reviewed by ADESH Environmental Professional personnel (e.g., Deployed Environmental Professional [DEP], Waste Management Coordinator [WMC], Occupational Health and Safety [OSH], or EPC Core Environmental Professional staff) to ensure that waste is properly characterized, managed, treated, stored, and transported.

3.0 PROCEDURE DESCRIPTION

3.1 Overview

There are two main aspects to this document. First, it establishes specific responsibilities for waste generators and TSFs to manage and store regulated wastes to ensure the protection of human health, safety, and the environment (Sections 3.2 through 3.9). Second, it describes the LANL Radioactive Waste Certification Program defined in ADESH-AP-TOOL-300, *Radioactive Waste Management*, which requires a documented approach to ensure that waste management (treatment, storage, and disposal) of all radioactive waste streams, except for transuranic waste (TRU), which falls under an independent certification program, complies with applicable requirements (Sections 3.7–3.9) before off-site shipment.

Fig. 1 shows the components of the waste management process at LANL.



Fig. 1. LANL Waste Management Components

Waste generators and TSF workers will find more detailed information on waste compliance in the ADESH FSDs. These FSDs may consist of mandatory requirements, such as administrative procedures (APs) (ADESH-AP-TOOLs), or guidance information, such as aids and instructions, e.g., instructional guidelines (ADESH-IG-TOOLs). P409 and the associated tools are the primary guidance documents that address waste management questions at LANL. These FSDs provide LANL with direction regarding waste type and compliance factors and are issued by ADESH in accordance with PD311, *Requirements System and Hierarchy,* and ADESH-AP-007, *Document Control*.

Every procedure for LANL project- or task-level work that may involve generating or otherwise managing a waste must be reviewed by environmental staff at the time the procedure is developed or revised. This is a mandatory requirement, regardless of whether the work is being performed according to local-level procedures or Integrated Work Documents (IWDs). Those local procedures (and/or IWDs), and changes thereto, must be coordinated through and/or reviewed by the ADESH DEP and WMC, as appropriate. ADESH provides DEPs upon request to facility Responsible Associate Directors (RADs) or Facility Operations Directors (FODs). Environmental Protection and Compliance−Compliance Programs (EPC-CP) establishes criteria and manages the procedure reviews executed by the ADESH staff. The Responsible Line Manager (RLM) should to provide advance notification of waste-planning activities to the DEP and/or WMC. Work activity procedures may be subject to review in accordance with *Safety Basis Procedure* (SBP) SBP-112-3, *Unreviewed Safety Question (USQ) Process,* and P315, *Conduct of Operations Manual.*

Project Management (PM) projects, Environmental Remediation (ER), or Decontamination and Decommissioning (D&D) projects must notify EPC, in writing, of upcoming waste generation projects and provide pertinent planning documentation and characterization documentation for evaluation. EPC-DO must review and approve submitted characterization methodologies, as well as any treatment and/or processing methodologies planned for use in preparation of the waste for packaging and disposal (see ADESH-AP-TOOL-704, *Construction and Demolition Debris*). Use of the Permits and Requirements Identification (PRID) system is required (see SD400,

Environmental Management System). LANL subcontracts that include waste management scope such as characterization, packaging, storage, shipping, and/or disposal must be approved by LANL Waste Certification Official (WCO) or ADESH designee.

Before generating regulated waste or commencing waste characterization activities, a waste generator must consult with the designated WMC. TSFs must comply with the Laboratory HWFP and their local-level procedures.

Waste generators and TSFs must also meet the requirements of the LANL Pollution Prevention Program, which implements pollution minimization goals through Pollution Prevention Opportunity Assessments and other tools. The LANL Pollution Prevention Program requires waste generators and TSFs to identify potential alternatives to the generation of waste including use of less toxic materials, alternative processes, waste minimization techniques, and following the requirements of DOE O 435.1 Chg1, *Radioactive Waste Management/Manual*, DOE M 435.1-1 Chg 1, *Radioactive Waste Management Manual,* and DOE O 436.1 Chg 1, *Departmental Sustainability*.

In the event of a product or waste release (e.g., fire, spill, discharge or similar) or identification of unknown or unstable material that may pose "an imminent and substantial endangerment" to human health or the environment (the "situation"), the Laboratory invokes a formal process where local staff, the Los Alamos Fire Department (LAFD), and/or LANL Security and Emergency Operations - Emergency Response (SEO-ER) personnel provide mitigation. The process includes evaluation of the situation, addressing immediate hazards, and putting the situation into a safe configuration.

Once the immediate risk has been addressed, an evaluation of the actions needed to properly manage the material(s), resulting byproduct or residue, or impacted surrounding materials is performed by Associate Directorate of Mission Assurance, Security, and Emergency Response-Security and Emergency Operations (ADMASER-SEO), and EPC-CP. Depending upon several factors (e.g., materials, location of the release, proposed clean-up actions, etc.) these actions may include one or more of the following: implementation of the LANL RCRA Permit Contingency Plan, notifications, and reporting. If required, EPC-CP may request an emergency treatment permit from NMED.

EPC-Waste Management Program (WMP) established and implemented the Waste Characterization and Processing Review, as documented in WM-AP-0005, *Waste Characterization and Processing Review,* to provide the framework for Subject Matter Experts (SMEs) to participate in reviews of complex waste management issues for safety and compliance. The Waste Characterization and Processing Review is chartered to enhance RCRA compliance, reduce hazards, improve safety, and for the review and development of compliant resolution of complex waste issues associated with waste processing and management. The Waste Characterization and Processing Review is invoked when a complex waste management and/or processing issue surfaces and is best resolved with multi-discipline SMEs from within and potentially external to LANL. At a minimum, the Waste Characterization and Processing Review will be applied to waste characterization, waste management procedures, waste compatibility analyses, and other complex waste issues. All waste generators can raise complex waste issues to EPC-DO and participate in the Waste Characterization and Processing Review.

3.2 Identifying Waste

Solid waste is defined as any discarded material, either abandoned, recycled, or inherently waste-like. Solid waste can be hazardous, non-hazardous, radioactive, simply solid, special or mixed waste (ADESH-IG-TOOL-101, *Waste Management Glossary*). A waste generator "is any person, by site, whose act or process produces hazardous waste identified or listed in 40 CFR 261, *Identification and Listing of Hazardous Waste*, or whose act first causes a hazardous waste

to become subject to regulation" (ADESH-IG-TOOL-101, *Waste Management Glossary*). A waste generator may be LANL or subcontractor personnel. The waste generator responsibilities and the WCATS authorities are the same, regardless of employee status. Subcontractor staff access to the LANL Internal or Yellow computer network must be coordinated through the LANL Subcontract Technical Representative to enable access to WCATS. Waste generators must correctly identify characterize their waste through waste characterization steps listed in Section 3.2.1. Waste generators must consult with their WMCs to start the waste characterization process, including when working with a new process that may create a new regulated waste stream, or when an existing waste process has been modified. If a LANL worker or subcontractor discovers a waste stream with no identifiable waste generator, the worker must contact the designated WMC. See ADESH-AP-TOOL-213, *No Owner Waste*.

RLMs may act as the assigned waste generator when responsible for mentoring and overseeing students, visiting scientists/researchers or foreign nationals. In that capacity the RLM must be knowledgeable of the waste generating process, waste management activities, and associated accumulation or storage area status. The RLM acting in this manner (e.g., as the waste generator) is responsible for the authorized WCATS functions.

"Office waste" refers to wastes generated in an office environment and can include solid waste (e.g., office paper, food waste, trash), recyclables (e.g., paper, cardboard, plastics), universal waste (e.g., batteries, fluorescent light bulbs, and aerosol cans), and hazardous waste (e.g., acetone). ADESH-AP-TOOL-114, *Office Waste*; ADESH-AP-TOOL-111, *Waste Characterization*; and if in a radiological area, ADESH-AP-TOOL-314, *Radioactive Characterization of Waste,* help waste generators identify their regulated waste types and describe additional tools that address requirements for their regulated waste types.

When working in a radiological area, the requirements for requesting Authorized Release Limits (ARLs) for industrial landfill disposition of materials meeting the 1-mrem annual dose limit in compliance with DOE O 458.1 Chg 3, *Radiation Protection of the Public and the Environment*, resides with the EPC-WMP. The waste generator provides existing data that adequately characterizes the material proposed for disposition under an ARL, and provides the data to EPC-WMP for evaluation. If EPC-WMP determines the data are adequate, the ARL owner prepares and submits the final ARL proposal in accordance with ADESH-AP-TOOL-317, *Authorized Release Limits Proposal Process*.

3.2.1 Waste Characterization

Waste generators and TSFs are required to ensure that waste characterization is accurate, complete, and up-to-date. Waste generators must make a waste determination and characterize regulated waste by appropriate analytical testing or use of acceptable knowledge, e.g., Safety Data Sheets (SDSs), product labels, and historical data. TSFs and TSF workers must meet waste analysis plan requirements under the Laboratory HWFP before acceptance of the generator's waste for treatment or storage. If a waste generator does not supply complete and adequate waste characterization information, the TSF or off-site Treatment, Storage, and/or Disposal Facilities (TSDF) may not accept the waste, resulting in a Nonconformance Report (NCR), in accordance with P330-6 *Nonconformance Reporting*. Waste generators and TSFs must ensure that waste characterization documentation is maintained, protected, controlled, and available for internal and/or any third-party reviews.

Note: TSF workers become "waste generators" when activities at the TSF (e.g., repackaging, sorting, and segregation) lead to the generation of regulated waste or trigger re-characterization of the waste stream as described within this section.

As owners of the waste stream, waste generators must consult with their WMCs to start the waste characterization process, including when working with a new process that may create a new regulated waste stream, or when an existing waste process has been modified. At a minimum, waste generators should consult ADESH-AP-TOOL-111, *Waste Characterization,* and ADESH-AP-TOOL-314, *Radioactive Characterization of Waste,* for guidance in documenting and characterizing regulated wastes. These two tools address requirements for waste generators and their regulated wastes. The waste generator must sign a Waste Stream Profile (WSP) certification statement in WCATS, assuring that waste characterization is correct and meets applicable waste acceptance criteria. This certification attests to the accountability and legal defensibility of the waste characterization for internal or external third-party reviews.

As part of the requirement to characterize regulated waste, the waste generator must

- submit a waste stream profile in WCATS for each waste stream;
- upload all waste characterization documentation into WCATS and ensure that all documentation is referenced in WCATS with a unique identifier; and
- sign the WSP certification statement assuring accurate and complete characterization of the waste.

After waste has been identified and entered into WCATS, the waste characterization is reviewed by EPC-WMP before a new waste stream identification number is activated. EPC-WMP screens documentation for LANL facilities that characterize waste streams by acceptable knowledge, (e.g., process knowledge, historical data, etc.) Depending on the type of waste, additional EPC-CP screening may be necessary. Waste generators maintain the characterization process by performing the following:

- Annually re-evaluating waste characterization for each WSP to verify accuracy of the documented waste characterization. For compliance purposes, this annual period is defined as less than one year since the original waste characterization or the last re-characterization;
- Ensuring that actively generated waste streams or containers are never assigned to void or expired WSPs; and
- Submitting a waste stream profile annual update for each active waste stream in WCATS prior to reaching its term limit.

Note: If waste with no disposal path must be generated (see ADESH-AP-TOOL-300, *Radioactive Waste Management*), the waste generator must contact EPC-WMP in writing and request prior authorization.

3.2.1.a Re-characterization by the Waste Generator

Waste generators must re-characterize and update waste characterization if any of the following conditions apply:

- there is any change to waste characterization information, including changes to the waste-generating process or operations;
- analytical results indicate a change in the waste stream;
- new characterization information becomes available;
- a waste container is opened and secondary material is added to the container;
- waste is repackaged and secondary material is added during this process;

- there is a change in the ownership of a WSP; or
- the waste generator is notified that waste received at an off-site facility does not match a preapproved waste analysis certification or accompanying shipping documentation.

Note: TSF workers become waste generators when waste processing includes any of the activities described above.

Waste generators must contact EPC-WMP in the event that updates to waste characterization information are required as described above. EPC-WMP will work through appropriate SMEs to assess the identified changes in the waste characterization and recommend actions.

3.2.1.b Recharacterization at Treatment and Storage Facilities (TSFs)

Under the Laboratory HWFP, TSF workers must update their waste characterization when the following occurs:

- a waste generator determines one or more of the conditions in Section 3.2.1.a has occurred, or
- TSF workers have reason to believe that the process or operation generating/processing the waste has changed.

3.2.2 Waste Containing Potential Radioactive Contamination

Potentially radioactive wastes (e.g., the waste or waste item was generated in a radiologically contaminated area) are summarized in ADESH-AP-TOOL-306, *Potentially Radioactive or Mixed Investigation-Derived Waste*. The waste generator must meet the requirements specified in the tool.

If radioactive contamination is reasonably suspected to be present at a site (e.g., in wastes from potential release sites or poorly documented D&D sites), the waste must be characterized. See ADESH-AP-TOOL-314, *Radioactive Characterization of Waste*. The Authorized Release Limits Process is defined in ADESH-AP-TOOL-317, *Authorized Release Limits Proposal Process,* and is applicable only to materials that

- have residual radioactivity below the dose limits specified in DOE O 458.1 Chg 3, *Radiation Protection of the Public and the Environment;* and
- do not contain constituents identified in the 74-4-1 NMSA 1978, *Hazardous Waste Act,* and RCRA.

Note: For release of potentially activated metals previously stored in Radiation Control areas, see RP-SOP-077.004, *LANSCE Metals Clearance Process,* and RPSVS-RIC-TBD-03, *Technical Basis Documentation Regarding Health Physics Measurements for the Unrestricted Release of Metals from LANSCE*.

3.2.3 Waste Verification

To verify compliance with DOE directives; federal and state laws and regulations; P409-1, *LANL Waste Acceptance Criteria*; and reporting requirements, EPC-WMP completes a verification checklist in accordance with WM-PROG-QP-236, *Waste Certification Program Waste Verification,* and must verify accurate and thorough waste characterization. This verification includes a random or selected waste stream and can include the following (if applicable):

- a review of radiological assay;

- a visual examination of the waste;
- a sampling and chemical analysis of the waste;
- a verification that the waste has been properly characterized in accordance with applicable procedures, acceptable knowledge documentation, non-destructive assay records, chemical analysis documentation, and, if applicable, documentation of past visual examinations of the waste;
- a review of past verification results to determine the nature of any pre-existing problems; and
- a review of facility waste processes and procedures to verify operations meet radioactive waste certification requirements.

Note: The Laboratory HWFP requires an annual verification of the hazardous waste characterization of one percent of the total number of hazardous waste streams characterized solely by acceptable knowledge and managed at Technical Area 54 (TA-54) in the previous calendar year.

3.3 Packaging Waste

To prepare for waste disposition, the waste generator should refer to the 600 Series FSDs (*Transport of Waste*) and review WM-SVS-TP-10, *Preparing and Shipping Waste Off-Site,* to understand the input needed and steps taken by their WMC, EPC-WMP and EPC-WMS to ship their waste. All information regarding waste disposition must be documented in WCATS and a disposal request must be submitted through the WCATS system by the WMC. This disposal request will prompt EPC-WMS to initiate a waste shipment. EPC-WMP must be consulted on all specific waste issues as EPC-WMP and EPC-WMS are responsible for compliance with safe packaging and transportation requirements for off-site receiving facilities. Waste packaging and transportation must be performed by HMPT trained personnel, see Section 6.7 for LANL course references. Low-Level (LLW) and Mixed Low Level (MLLW) radioactive waste must meet waste package certification requirements before the waste is shipped and disposed. Refer to ADESH-AP-TOOL-316, *LLW/MLLW Procurement Requirements*, for procurement of LLW/MLLW items or services.

Generators of LLW and MLLW have two options in meeting the waste package certification requirements. For either option, the waste generator, supported by the assigned WMC, must make a request in writing to the WCO to arrange for waste package certification for the Nevada National Security Site (NNSS). For radioactive waste destined for the NNSS, requirements outlined in the LANL Off-Site Waste: Nevada National Security Site procedures must be met. For wastes destined for a non-NNSS facility, the requirements of this policy's associated FSDs and applicable WAC must be met. If there are specific waste issues regarding LLW and MLLW, the waste generator/WMC must contact the WCO. For NNSS destined waste, the WCO will rely on established waste disposition requirements that are consistent with NNSS WAC requirements, to ensure compliance with federal and state laws, regulations, and reporting requirements (see ADESH-AP-TOOL-316, *LLW/MLLW Procurement Requirements,* for procurement of LLW/MLLW items or services).

3.4 Storing Waste

Waste generators and TSFs will store their waste in accordance with the requirements listed below.

3.4.1 Waste Areas

Waste generators are responsible for ensuring that on-site waste accumulation and temporary storage of their waste (e.g., Central Accumulation Areas [CAAs]) are conducted in registered waste areas. For more detailed instruction see the following:

- ADESH-AP-TOOL-206, *Management of Hazardous Waste by Generators,*
- 300 Series Tools, (*Radioactive Waste*),
- 500 Series Tools, (*NM Special Waste*), and
- ADESH-AP-TOOL-712, *Polychlorinated Biphenyl (PCB) Waste.*

TSFs can meet the waste storage requirements in the Laboratory HWFP by operating to the 800 Series Tools *Treatment and Storage Facility* (*TSF*).

The WMC must also certify waste protection and storage by evaluating the waste and using ADESH-AP-TOOL-300, *Radioactive Waste Management*, and P409-1, *LANL Waste Acceptance Criteria*.

3.4.2 Site Treatment Plan for Mixed Transuranic and Mixed Low-Level Waste at TSFs

In accordance with the Site Treatment Plan (STP), LANL must report to NMED all Mixed Transuranic (MTRU) waste and MLLW that will be stored at the Laboratory after jone year of its accumulation start date. For STP waste containers, the start date refers to the date of receipt for storage at the LANL TSF. The STP summarizes the status of the current inventory, describes the progress being made to dispose of the waste, identifies treatment and disposal options for addressing the STP inventory, and provides overall schedules for management and disposition of mixed waste to demonstrate compliance with Land Disposal Requirement storage prohibitions under RCRA and demonstrates compliance with the Federal Facility Compliance Order issued by NMED under the New Mexico Hazardous Waste Act.

To meet these compliance requirements, waste generators must notify the STP manager in writing at least 3 months before the waste exceeds its one-year accumulation start date that their waste must be added to the STP. The waste generators must provide the following:

- For MLLW and MTRU waste, an explanation as to why the waste will exceed its one-year accumulation start date.
- For MLLW only, compliance milestone dates when waste will be shipped off-site for treatment and disposal.

3.4.3 Radioactive Waste Management Basis

In accordance with DOE O 435.1-1 Chg 1, *Radioactive Waste Management*, LANL must identify LLW, MLLW, TRU and MTU when it is generated, when there are changes in facility status (i.e., adding storage area, increasing waste volumes, etc.), and when the LLW/MLLW waste is about to exceed the one-year storage limit. LANL meets this requirement using Form 2107, *Radioactive Waste Management Basis Report Form* (hereinafter referred to as RWMB). It is required that the waste generator (e.g., Waste Generator, or RLM, not the WMC) submit the new or updated RWMB and attachments to EPC-WMP upon waste generation, when there are changes in facility operations or waste status. For assistance in completing the RWMB, contact EPC-WMP. Tasks associated with preparing a LANL RWMB are described below.

3.4.3.a Preparing an Original Radioactive Waste Management Basis

The original RWMB must include the following:

- Identification of the generating process owner (reporting organization),
- Identification of every technical area where radioactive waste is generated,
- Reference to documents that support the RWMB, including safety or facility documents, institutional documents applicable to waste management, and waste authorization basis documents pertinent to the waste-generating facility,
- Waste and activity by building and destination including TA-building-room and waste categories,
- Waste categories generated, (LLW, MLLW, TRU, and MTRU),
- Estimated annual volumes of waste generated, and waste matrix (solid or liquid),
- DOE O/M 435.1 Chg 1 facility/organization-specific summaries,
- Facility scope—activities and operations,
- Life-cycle waste management—waste management processes and proposed disposition for each waste,

- Characterization—characterization methods for each waste stream,
- Packaging and transportation—how waste certification is protected when waste is transported,
- Staging/storage—how waste certification is protected during waste storage,
- Quality assurance program—how the waste management quality assurance program protects waste certification,
- Training and qualification—how qualification standards are met, and
- Waste minimization and pollution prevention—what programs are in place before generation of waste.

After completing the RWMB, the FOD submits the RWMB to EPC-WMP and the RWMB is then reviewed, edited, and forwarded by EPC-WMP, to the DOE field element manager for review and approval. EPC-WMP monitors compliance and is responsible for reporting the status of compliance to the DOE field element manager.

3.4.3.b Preparing an Updated or Revised Radioactive Waste Management Basis

The FOD must submit an updated/revised RWMB when there are changes in facility operations or waste status. An "updated" RWMB means that a new RWMB (including Form 2107, *Radioactive Waste Management Basis Report Form*), must be written and approved by the FOD and then re-submitted to EPC-WMP and DOE for review and approval. If EPC-WMP identifies radioactive waste activities that were not included in the RWMB, EPC-WMP will notify the FOD or RLM to submit an updated RWMB with a description of the newly identified activities. DOE will not approve radioactive waste management activities that were not included in the RWMB and may terminate any unreported activities.

EPC-WMP may allow facilities to generate radioactive waste without continuous updates to the RWMB for special projects (e.g., remediation, Superfund projects, D&D projects, etc.) if the following conditions are met:

- The facilities (1) are performing work in accordance with this document and associated tools, where appropriate (e.g., ADESH-AP-TOOL-704, *Construction and Demolition Debris*), and (2) have provided EPC-WMP a completed and signed *Waste Characterization Strategy Form* (WCSF) before commencing waste generation activities, and

- EPC-DO has received DOE concurrence for the work proposed.

3.4.3.c Preparing Radioactive Waste Management Basis Storage Extension Requests

If it is foreseen that LLW/MLLW cannot be shipped for final disposition within one year of waste generation, the FOD or FOD designated RLM (e.g., facility Point of Contact [POC]) must submit a request for storage extension to EPC-WMP at least three months before exceeding the one-year expiration of the date the container was sealed so that the DOE field element manager receives and approves storage extension before the one-year waste expiration. Tentative shipping dates are subject to change pending DOE approval. The storage extension request must be submitted in writing as an updated RWMB, as described below.

- Inform EPC-WMP when it is identified that an RWMB storage extension needs to be processed.
- Fill out a new RWMB Form 2107, *Radioactive Waste Management Basis Report Form,* as follows. The new RWMB should reference the same information as the current RWMB (unless the RWMB is noted as an update in addition to a storage extension request):
  - Mark the "Extension Request" box (top left-hand corner of page 1),
  - Change the revision number (contact EPC-WMP for assistance),
  - Add the new report date,
  - Summarize the LLW/MLLW exceeding the one-year storage limit,
  - Fill out the table which provides specific details about the waste needing extension, and
  - Obtain FOD, report preparer, and the EPC-WMP waste certification specialist review and signatures.
- Submit the RWMB storage extension request to EPC-WMP.

After approving the request, the ADESH Associate Director will send a letter to the DOE field element manager at least 60 days before the storage expiration requesting DOE approval for continued storage. If DOE approval has not been received and the waste is nearing the storage expiration, the waste generator must notify EPC-WMP in writing at least three days before the expiration date that DOE approval has not been received. If approval for extension is not granted, DOE will provide direction back to ADESH-Associate Director.

Note: If EPC-WMP discovers that an extension request was never submitted, EPC-DO will initiate an Issues Management Tool (IMT) issue in accordance with P322-4, *Issues Management.*

3.4.4 Processing Waste at Treatment and Storage Facilities

Waste processing at TSFs is conducted within storage units and includes all activities that require opening of a container after it has been characterized and sealed, including but not limited to sorting, segregating, repacking, and resizing of waste. TSFs cannot engage in any sorting, segregating, repackaging, or resizing activities that involve the addition of any new material (e.g., sorbents, inert materials, secondary waste) or an activity that could potentially change the chemical or physical composition of the waste (i.e., that could constitute "waste treatment"). These activities at TSFs must be permitted in the Laboratory HWFP; otherwise, a permit modification is required. If processing will require a change to the physical, chemical, or biological character or composition of the waste, or any secondary material will be added to the waste, a permit modification may be required and EPC-CP must be contacted in writing. Waste processing activities are conducted in the areas outlined in ADESH-AP-TOOL-810, *Waste Processing at LANL Hazard Waste Permitted Units*.

3.4.5 Treating Waste

Waste generators and TSFs cannot engage in waste treatment activities unless one of two conditions exist:

- the waste treatment is authorized under the LANL HWFP, or
- the waste treatment is exempt from permitting requirements.

Waste treatment, as broadly defined, includes "any method ... or process ... designed to change the physical, chemical, or biological character or composition of any hazardous waste so as to neutralize such waste, or so as to recover energy or material resources from the waste, or so as to render such waste nonhazardous; less hazardous; (or) safer to transport, store, or dispose of" (40 Code of Federal Regulations [CFR] Section 260.10, *Hazardous Waste Management System: General, Definitions*). Waste treatment may be conducted under the Laboratory HWFP or interim status documents as outlined in the following:

- ADESH-IG-TOOL-903, *LANL Hazardous Waste Facility Permit: TA-55 Storage in Tanks and Treatment by Stabilization*,
- ADESH-IG-TOOL-904, *Treatment by Open Burning*,
- ADESH-IG-TOOL-905, *Treatment by Open Detonation,* and
- ADESH-AP-TOOL-907, *Stabilization in Containers*.

All other requirements that treatment units must comply with are in the Laboratory HWFP and can be implemented by operating to the 800 Series Tools *Treatment and Storage Facilities* (TSF). All LANL workers and subcontractors must contact EPC-CP before engaging in an activity that may constitute waste treatment (e.g., addition of sorbents, or neutralization). Refer to ADESH-AP-TOOL-901, *Elementary Neutralization,* and ADESH-AP-TOOL-902, *Sorption without a Permit,* for guidance on other limited permit-exempted treatments that do not have specific location requirements (i.e., waste generator areas or TSFs). Additionally, refer to ADESH-AP-TOOL-906, *Treatment by the Waste Generator*.

3.5 Shipping Waste

Once the waste is ready for shipment, EPC-WMS serves as the LANL POC for the off-site receiving facility and the DOE Los Alamos Field Office. EPC-WMS reviews and records the appropriate documentation pertaining to the off-site receiving facility and/or the Los Alamos Field Office, such as the TSDF waste profiles, DOE profiles, subcontracts, etc. (see ADESH-AP-TOOL-601 *Waste Container Closure for Transportation* and associated 600 Series Tools). All off-site waste shipments must be signed by a LANL authorized waste shipper.

Specific details for the packaging and shipment of waste to an approved off-site disposal facility are provided in WM-SVS-TP-10, *Preparing and Shipping Waste Off-Site*. The document provides guidance on planning and coordination with LANL facilities and support services, necessary tools and measuring test equipment, package requirements, and required documentation (e.g., shipping task creation, manifest requirements, land disposal restriction certifications, packing slips, driver package requirements, pre-shipment approval process/requirements, and container marking and labeling).

3.5.1 Shipments of Radioactive Waste to Non-Department of Energy (DOE) Treatment, Storage, and/or Disposal Facilities (TSDF)s

DOE O 435.1 Chg 1, *Radioactive Waste Management,* requires an exemption if waste is not shipped to a DOE-owned or -operated facility. For a waste generator to send waste to a facility

that is not owned or operated by DOE for treatment, storage, or disposal, the Laboratory must submit an Exemption Request for Direct Off-Site Shipment of Radioactive Waste to Non-DOE TSDFs (DOE O 435.1 Chg 1 exemption request). To obtain this exemption, the waste generator must contact EPC-WMP in writing, identifying

- the specific waste stream with background description (including radioactivity),
- the exact location and volume of waste to be generated or placed in a container, and
- the time needed to complete the project's waste disposition.

EPC-WMP reviews the request and notifies EPC-WMS. EPC-WMS coordinates the shipment request with appropriate LANL workers, organizations, and subcontractors. EPC-WMP and LANL's shipping subcontractor prepare the DOE O 435.1 Chg 1 exemption request, which includes a cost analysis and description of the waste generator's request. EPC-WMP then submits the final DOE O 435.1 Chg 1 exemption request to the DOE Los Alamos Field Office.

The DOE Los Alamos Field Office will review the EPC-WMP submittal and evaluate the request. If approved, the DOE Los Alamos Field Office will forward the request to DOE Headquarters. EPC-WMP will be notified if the request has been approved by DOE, and an approval letter distribution will follow. If notification is not received within 15 working days from EPC-WMP's submittal to the DOE Los Alamos Field Office, EPC-WMP will contact the DOE Los Alamos Field Office for a documented response. Approval letters, along with the referenced DOE O 435.1 Chg 1 exemption requests, must be uploaded with the waste documentation to WCATS. Approved DOE O 435.1 Chg 1 exemption requests are posted on the LANL Waste web page.

3.6 Disposing Waste

LANL does not have on-site disposal capacity for solid waste, hazardous waste, TRU, or MLLW wastes. LANL retains limited capacity for on-site disposal for LLW under special circumstances and with prior approval from EPC-WMS. EPC-WMS will determine the optimal disposal path for each waste stream in consultation with its disposal subcontractor(s) and DOE and based on a cost-benefit analysis of available options. Primary consideration will be given to off-site DOE TSDFs, commercial TSDFs approved by DOE, and on-site disposal respectively.

All waste shipments (on-site and off-site) must be coordinated through EPC-WMS. This process supports waste certification to final TSDF destination.

3.7 LANL's Oversight of Waste Management

Compliance oversight at LANL occurs throughout the life-cycle of waste planning, minimization, generation, characterization, accumulation, packaging, management, and disposition. EPC-CP provides guidance on DOE directives and state regulatory requirements. Waste management operations, including waste certification, are conducted by EPC-WMP. Internal assessments and external inspections are performed to verify institutional waste management compliance is met and waste certification is maintained. The WCO is notified by the originating organization when a Nonconformance Report (NCR) or an IMT issue is entered into the system regarding LLW/MLLW. WCO concurrence for corrective actions must be obtained through the Performance Feedback and Improvement Tracking System (PFITS)/IMT and/or the NCR tracking system before closure. See P322-4, *Issues Management*.

3.7.1 Waste Assessments

To certify that facility waste operations are in accordance with this document, WM-PROG-QP-250*, Waste Assessments,* and ADESH-AP-TOOL-300, *Radioactive Waste Management*, EPC-WMP performs compliance assessments at a facility level. Radioactive waste

assessments are performed to verify that operations meet applicable requirements of DOE O 435.1 Chg 1, *Radioactive Waste Management;* DOE M 435.1-1 Chg 1, *Radioactive Waste Management Manua*l; and RCRA regulations and requirements. These assessments are documented in an independent assessment report in accordance with P328-2, *Independent Assessment*, and distributed to the FOD, RLM, and participants after the assessment has been completed. If EPC-WMP discovers discrepancies, EPC-WMP will initiate an IMT issue in accordance with P322-4, *Issues Management.*

Assessments include, but are not limited to the following:

- an evaluation of registered waste areas (e.g., radioactive waste storage areas, SAAs, CAAs, and permitted TSFs) for waste compliance. RCRA and radioactive waste area corrective actions and opportunities for improvement must be reported to EPC-WMP.
- an inspection of the registered waste area and review of the inspection records.
- a tracking and review of past corrective actions resulting from independent assessments conducted by LANL, other organizations, DOE, or their contractors, where applicable.
- a review of nonconformance and corrective action documentation and, when appropriate, a corrective action plan to monitor facilities to ensure appropriate corrective actions are being taken.
- an effectiveness evaluation to determine the nature of any pre-existing problems. When pre-existing problems are found, the assessment team reviews corrective actions that have been taken and determines whether the corrective actions are effective for continuous quality improvement.

Evaluations may include sites outside registered areas (see the ADESH FSDs for requirements on various registered waste areas including TSF requirements, P328-2, *Independent Assessment* and P328-3, and *Management Assessment*). EPC-WMP must notify the FOD and RLM in advance of upcoming site visits and assessments and any issues are tracked in the IMT(see P322-4, *Issues Management*). Registered waste area information will be recorded and tracked in a database managed by ADESH.

3.7.2 LANL Waste Assistance

LANL provides waste generator support for waste management and facility compliance (see ENV-CP-QP-115 *Compliance Technical Assistance Program [CTAP])*. EPC-CP waste generator assistance may include accumulation and registered waste areas, LANL inspection forms, containers or tanks, labels, time limits, worker health and safety practices, and the waste generator's process or acceptable knowledge documents and training records.

3.8 Radioactive Waste Certification

LANL develops and implements DOE O 435.1 Chg 1, *Radioactive Waste Management* certification oversight and compliance support programs to assure that the waste acceptance requirements of facilities receiving waste for storage, treatment, and disposal are met. In addition, the Central Characterization Program (CCP) characterizes and certifies TRU and MTRU waste destined for the WIPP in accordance with the WIPP Waste Analysis Plan (WAP) and the WIPP WAC. The CCP is a Nuclear Waste Partnership, LLC, program contracted through the National TRU Program at the DOE Carlsbad Field Office. Program interfaces and roles, responsibilities, authorities, and accountability (R2A2) are described in the CCP-PO-012, *CCP/Los Alamos National Laboratory (LANL) Interface Document.* CCP provides services related to characterization and certification of waste to the WIPP WAC that consist of acceptable knowledge compilation and reporting, data generation, project level validation and verification, records management and document control. LANL TRU and MTRU waste generators must comply with

P409 for all aspects of LANL cradle-to-grave management of waste leading up to its transfer to CCP for final certification and WIPP disposition.

Waste certification is a process by which a waste generator affirms that waste meets P409, the DOE O 435.1 Chg 1 certification criteria, and the WAC of the facility to which the waste generator intends to transfer the waste for treatment, storage, and disposal. This affirmation encompasses generation to disposition (cradle-to-grave) for all regulated wastes. A waste generator identifies and characterizes waste with a WSP. Interim management of the waste includes segregation, storage inspections, packaging, labeling, and maintenance of operating records. Final disposition is initiated with a Waste Disposal Request (WDR). Waste shipping and acceptance of waste at an on-site TSF or off-site TSDF complete the waste management life cycle. EPC-WMP assures compliance through waste verification, storage area inspections, packaging certification, data management, and STP and RWMB reporting. Finally, EPC-WMP conducts facility assessments and surveillance to evaluate LANL compliance with DOE O 435.1 Chg 1 and LANL policy and procedure. Fig. 2 illustrates key components of LANL's compliance program for waste management.



Fig. 2. Key Components of the LANL Waste Certification Program

Failure to comply with P409 and associated Functional Series Document requirements, P409-1, *LANL Waste Acceptance Criteria*, DOE O 414.1D, *Quality Assurance*, or a specific component of the generator's program may result in one or more of the following actions:

- Facility waste operations shut down;
- Denial of waste shipment to an off-site TSDF or other approved waste facilities;
- Initiation of IMT (see P322-4, *Issues Management*). IMT actions may include conduct of a causal analysis and preparation of a corrective action plan, at WMP discretion;
- The facility must complete real-time corrective actions that will be verified by WMP; or
- Inclusion as nonconformance reporting item(s) (see P330-6, *Nonconformance Reporting*)

4.0 Responsibilities

4.1 Facility Operations Directors

- Establish and maintain the environmental compliance envelope.
- Understand and implement the appropriate requirements of all applicable permits at their facilities.
- Confirm that accepted facility-related corrective and preventive actions arising from internal and external assessments relating to the assigned facilities are corrected in a timely manner.

- Issue local-level procedures for waste-management activities, in accordance with Section 3.3.
- Route local-level procedures through the review and approval process managed by ADESH.
- Verify completion and management of the assigned facility's RWMB report (Form 2107, *Radioactive Waste Management Basis Report Form*).
- Request and ensure that FOD support personnel with waste management responsibilities have appropriate training and qualifications.
- Review and release all facility waste management activities.
- Understand operating limits for hazardous material within each facility and notify facility tenant(s) and RLM(s) of these limits.
- Ensure that hazardous material inventories do not exceed facility operating limits.
- Notify Security Emergency Operations – Emergency Response Organization (EO-ERO) before the start of a new activity that will cause a change in the hazardous material inventory in the facility.
- Notify EO-ERO in the event that hazardous material inventories exceed the facility operating limits.
- Work with EO-ERO when changes occur in security or building access, building configuration, or operations, or if significant changes are planned or have occurred in hazards, material operations, or inventories.
- If an Emergency Planning Hazard Assessment (EPHA) is required, ensure that the facility has a current EPHA.
- Ensure that an EPHA is prepared or updated by EO-ERO before operating a facility or a changed process that involves hazardous materials that exceed the facility operating limits.

4.2 Responsible Line Managers

- Understand and implement the appropriate requirements of all applicable permits for their operations, activities, and facilities.
- Ensure appropriate management of program owned waste generation, accumulation and storage sites.
- Participate, encourage, and document SME participation in EPC-WMP's assessments.
- Assist in the management and implementation of corrective actions, issues, and opportunities for improvement regarding their facilities.
- Require waste management compliance on their projects.
- Verify all new and modified work is evaluated for environmental risks and controls using the PRID according to SD400, *Environmental Management System*.
- Verify that all workers are trained, qualified, and authorized to perform their assigned work in accordance with P781-1, *Conduct of Training*.
- Establish effective controls to reduce risks (environmental compliance or waste management, industrial safety and/or personnel health) and document them in IWDs or alternative work control documents so that the workers can understand when and how they are to be used.

- Verify that at any given time there is a single person-in-charge for work execution who is identified to all workers on the activity.
- Determine the competence and commitment of workers to perform specific work assignments in a safe, secure, and environmentally responsible manner and authorize them as appropriate.

4.3 EPC Division Leader (EPC-DL)

- Ensures waste management and compliance oversight are implemented across the Laboratory.
- Chairs or assigns delegates to lead the Waste Characterization and Processing Review for communication of waste management and/or processing issues.
- Interfaces with the transuranic waste generators to review and comment on CCP waste documentation and characterization.
- Documents compliance or noncompliance with characterization/certification requirements and reports to DOE Los Alamos Field Office and DOE-Environmental Management (EM) Los Alamos Field Office.
- Documents waste certification status resulting from internal (e.g., authorization authority) audits and responds to external (e.g., DOE) audits and assessments, tracking corrective actions and reporting observations to management.
- Provides notification and reporting to client and regulatory oversight bodies.

4.4 EPC Waste Management Program (EPC-WMP) Group Leader

- Maintains the LANL Waste Stream Characterization process including WCATS.
- Initiates the review of waste characterization documentation when new information or discrepancies in waste characterization are discovered.
- Supports the monitoring for work in progress and conducts effectiveness evaluations (i.e., through independent assessment and waste verification) in accordance with Section 3.7.1.
- Maintains the WMC qualification and training program.
- Determines whether waste management facilities and systems are adequate to maintain waste certification until shipment and for continuous waste generation.
- Provides support for waste with no disposal path.

4.5 EPC-WMP Waste Certification Official (WCO)

- Verifies NNSS-destined LLW/MLLW waste containers are certified by a qualified Waste Package Certifier (WPC).
- Maintains LANL facility operations certification and off-site receiving facility certification.
- Provides WCO disposition approval for final off-site TSDF destination.
- Identifies the facility's waste management quality assurance program and how it protects waste certification and the proposed disposition for each waste stream.
- Verifies that the WCO and designees certify waste for disposition to off-site TSDFs.
- Provides NNSS notification and reporting to regulatory oversight bodies.
- Evaluates corrective actions regarding waste management.

- Verifies waste personnel (such as Alternate Waste Certification Official [AWCO] and Waste Packaging Certifiers [WPCs]) have appropriate training, evaluates and documents qualification to support waste management activities.

4.6 EPC Waste Management Services (EPC-WMS) Group Leader

- Reviews and approves EPC-WMS procedures and verifies EPC-WMS personnel are adequately trained to procedures.
- Provides support for the annual verification of the waste characterization of one percent of the total number of hazardous waste streams characterized solely by acceptable knowledge in the previous calendar year.
- Serves as the final authority for approving the shipment and disposal of waste.
- Verifies completion of the receiving facility documentation and notifications for LANL.
- Determines whether waste management facilities and systems are adequate to maintain waste certification until shipment and for continuous waste generation.
- Implements the WMC qualification and training program.
- Verifies waste personnel have appropriate training and qualification to support waste management activities.

4.7 EPC Compliance Program (EPC-CP) Group Leader

- Ensures waste personnel (such as compliance support personnel) have appropriate support to adequately perform waste management activities.
- Coordinates information and compliance requests and activities with regulators.
- Manages the ADESH Functional Series Document (FSD) collection.
- Assists EPC-WMP by providing regulatory information and institutional guidance on waste compliance requirements.
- Maintains the Laboratory HWFP and is responsible for developing permit modification requests.

4.8 Waste Management Coordinators

- Assist waste generators in the implementation of cradle-to-grave controls for generation, handling, storage, and disposal of facility and process waste.
- Provide guidance to generators in characterizing waste, developing Acceptable Knowledge documentation, and preparing WSPs.
- Serve as the Primary Facility (FOD) POC on waste management compliance issues.
- Validate that waste meets LANL registered storage area requirements.
- Verify waste containers or tanks meet the requirements for storage at their facility or transfer to a TSF or off-site TSDF.
- Validate that waste characterization and acceptable knowledge documentation is accurate, defensible, complete and current.
- Verify packaged waste meets accepting facility WAC and follows the ADESH FSD processes.

- Interact with the generator to validate that the generator knows the data in the WSP and understands WSP certification, and that the WSP is accurate and complete. Verifies that the WSP process is complete in WCATS.
- Ensure waste containers are closed in accordance with manufacturer's instructions before shipment.
- Ensure compliant waste container or tank usage.
- Support waste generator in completing waste compatibility evaluations.
- Maintain familiarity with waste-generating processes. Be familiar with scopes of work (e.g., work documents) to ensure that waste management is properly addressed.
- Verify the waste generator is aware of all activities contributing to the WSP.
- Ensure the waste generating procedures and waste generation processes are documented in the WSP within WCATS.
- Validate WSP extensions with generators, and enter/update waste volumes.
- Disseminate waste management information to generators in their facilities.
- Ensure compliant labeling, packaging, and storage of waste.
- Coordinate waste shipments, as needed.
- Support the completion and implementation of Waste Certification Programs, and assist with pollution prevention and waste minimization opportunities.
- Manage facility or Generator-owned regulated areas (i.e., Treatment and Storage Facility [TSF], radioactive waste areas or less-than-ninety day waste storage areas) in accordance with Laboratory requirements.
- Assist operating groups and property custodians in minimizing accumulation or storage of excess materials and recommend reuse, recycle, or disposition of expired materials.
- Serve as POC during waste management inspections and assessments, providing support to the Waste Generator.
- Coordinate with the FOD and waste generators to implement Waste Certification Programs for radioactive waste.
- Provide review and recommendations for all generator requests for No Path Forward waste before submittal to DOE for formal approval, and ensure that no waste is generated until DOE approval is received (see P409-1, *LANL Waste Acceptance Criteria*).
- Report events related to the improper generation, handling, storage, and disposal of waste, including spills, releases, leaks, or discharges, to the RLM, FOD, EPC-WMS and EPC-WMP.

4.9 Deployed Environmental Professionals

- Support implementation of institutional compliance policies and strategies at assigned facilities.
- Act as the Primary Facility (FOD) POCs on environmental requirements, non-waste management compliance, and stewardship issues.
- Participate in procedure and work document reviews, serving as the first screen for potential compliance issues.
- Provide customers with onsite guidance and programmatic support regarding the wide spectrum of requirements related to solid waste, hazardous waste, water quality, air quality

laws, regulations and permits, EMS program; National Environmental Policy Act, Biological and Cultural Resources Management, Pollution Prevention/Waste Minimization, and EPC Project Planning Review.

- Coordinate with core organizations (EPC-DO, EPC-CP, EPC-WMP, and EPC-WMS) on compliance requirements on behalf of the customer.
- Coordinate site-specific waste Compliance Assessments/Audits/Reviews.
- Perform walk-arounds to assist EPC personnel with identification of waste compliance issues.

4.10 Waste Generators

- Comply with the requirements in this document and other requirements documents referenced herein.
- Characterize waste pursuant to the requirements in this document and the ADESH FSDs, consulting with the WMC on any questions or uncertainties.
- Before waste is generated and/or packaged, conduct waste avoidance or minimization analysis in consultation with the WMC.
- Implement the cradle-to-grave controls for generation, handling, storage, and disposal of waste.
- Validate and certify that all planned, generated, or actively managed waste is assigned a WSP in WCATS.
- Ensure adequacy (e.g., accurate, defensible and complete) of the documentation used for waste characterization (acceptable knowledge and physical/chemical analysis).
- Implement Waste Certification Program requirements for facility and programmatic operations.
- Maintain ownership of registered waste areas within their span of control.
- Verify controls are in place to ensure WSP parameters are met.
- Validate and certify WSP extensions with the WMC.
- Notify the STP manager in writing, at least 3 months before the waste exceeds its one-year accumulation start date that their waste must be added to the STP.
- Minimize waste to continually improve the facility waste management program.
- If the WMC and EPC management agree a “no path” waste stream must be generated, work with the WMC to prepare a “Waste with No Disposal Path” approval package. Note: No waste may be generated prior to receipt of DOE approval. See P409-1, *LANL Waste Acceptance Criteria.*
- Minimize waste generation and/or segregate waste streams to reduce the costs of waste management and meet the off-site TSDF waste acceptance criteria.
- Notify the FOD or designees—or, if unavailable, notify Emergency Management and Response—and responsible WMCs of a release of waste or wastewater into the environment or of an accidental discharge to a wastewater treatment facility.

5.0 IMPLEMENTATION

The requirements in this document are effective on the issue date. All ADESH FSDs that are referenced in this document have been updated in accordance with ADESH-AP-007, *Document*

Control, and PD311, *Requirements System and Hierarchy*. New FSDs are issued as needed and existing FSDs are updated on a routine schedule. The FSDs will be reviewed and updated on a 3-year schedule beginning with the issue date of P409, Rev. 5.

6.0 TRAINING

The training courses listed in this section are required for all workers who generate waste (except office trash) and workers who manage waste or work at TSFs. Workers must notify their managers of expired training. Unless specified, there is no grace period for the training requirements below; this training must be completed and kept current.

Note: Site-specific training may be required and directed by RLMs.

6.1 Waste generators and WMCs must complete the following:

- Course #23263, *Waste Generation Overview*–Live*,* and
- Course #21464, *Waste Generation Overview Refresher SS*, every 12 months.

The following course is suggested:

- Course #8504, *WCATS: Waste Documentation*

6.2 Persons who work in, or are owners of, Radioactive Waste Areas must complete the following:

- Course #20301, *Radiological Worker II Classroom Training and Examination*
- Facility Site-Specific access training

6.3 Persons who work in, or are owners of, CAAs must complete the following:

- Course #7488, *RCRA Personnel Training,* and
- Course #28582, *RCRA Refresher (Self-Study)*, every 12 months.

Note: The RCRA-related training listed above must be completed within 6 months of employment or new assignment; during this period, workers must work under the supervision of a trained worker.

6.4 Persons who work in TSFs must complete the following:

- Course #7488, *RCRA Personnel Training*,
- Course #28582, *RCRA Refresher (Self-Study)*, every 12 months,
- Course #23263, *Waste Generation Overview*–Live, and
- Course #21464, *Waste Generation Overview Refresher SS*, every 12 months.

Note: The RCRA-related training listed above must be completed within 6 months of employment; during this period, workers must work under the supervision of a trained worker.

6.5 Remediation Workers must complete the following:

- Course #23263, *Waste Generation Overview*–Live*,*
- Course #21464, *Waste Generation Overview Refresher SS*, every 12 months.
- Course #4464, *HAZWOPER: General Site Worker*, or Course #4465, *HAZWOPER: Limited Site Worker*,

- Course #28652, *HAZWOPER: Refresher*, every 12 months,
- Course #7488, *RCRA Personnel Training*,
- Course #28582, *RCRA Refresher (Self-Study)*, every 12 months, and/or
- Other courses as assigned by the supervisor.

6.6 Emergency Responders must complete the following:

- Course #31514, *HAZWOPER: CSTI Emergency First Responder*, Initial instructor-led course,
- Proctored Test #25068, *HAZWOPER: First Responder Awareness Level Examination*, and
- Course #23263, *Waste Generation Overview*–Live*, and*
- Course #21464, *Waste Generation Overview Refresher SS*, every 12 months.

6.7 Shippers of waste must complete the following:

Hazardous Materials, Packaging and Transportation (HMPT) Course Courses:

- HMPT*: Introduction* – Live, Course #27916 and Exam #27917
- HMPT: *Identification of Hazardous Materials*, Course # 27918 and Exam #27919
- HMPT: *Preparing Shipments* – Live, Course #27920 and Exam #27921
- HMPT: *Movement by Highway* – Live, Course #27922 and Exam #27923
- HMPT: Core Courses – Equivalency, Curriculum #36784;

Equivalency provides credit for all of the above courses when taken offsite and approved by OS-PT.

- HMPT: *Driver Training* – Live, Course #27930 and Exam #27931
- HMPT: *Driver Training* –Live, Equivalency Curriculum #36786

Equivalency provides credit for Driver Training – Live course when taken offsite in OS-PT approved course.

- HMPT*: Hazardous Waste Transportatio*n Course #27928 and *HMPT: Hazardous Waste Transportation* – Test #27929
- HMPT*: Hazardous Waste Transportation Cours*e, Equivalency Curriculum #36820;

Equivalency provides credit for Hazardous Waste Transportation Course and exam (Courses #27928 and 27929) when taken offsite in OS-PT approved course.

- HMPT: *Basic Radioactive material [RAM] Transportation* – Live (Course #30462) and HMPT: *Basic RAM Test* (Course #30463)
- HMPT: *Basic RAM Equivalency* (Course #36819)
- HMPT: *Advanced RAM* – Live (Course #30464) and HMPT: Advanced RAM Test (Course #30465)
- HMPT: *Advanced RAM Equivalency with Test* (Course #36773)
- *Federal Motor Carrier Safety Regulations Introduction*, Self-Study Course #27005

7.0 EXCEPTION OR VARIANCE

Changes in the processes conducted at the TSF or changes to the TSF structure must be reviewed by EPC-CP for necessary permit modifications. Hazardous waste treatment activities that are not authorized by the Laboratory HWFP or interim status documents must be reviewed by EPC-CP for regulatory compliance.

8.0 DOCUMENTS AND RECORDS

8.1 Office of Record

The Policy Office is the Laboratory Office of Record for this institutional document and maintains the administrative record.

8.2 Waste Management Records

EPC-WMP and EPC-CP work with waste generators, FODs, and RLMs to ensure that the following records and documentation are kept in accordance with PD1020, *Document Control and Records Management*:

- WCATS for waste characterization
- Form 2107, *Radioactive Waste Management Basis Report Form*
- *RWMB Storage Extension Request*
- DOE O 435.1 Chg 1, *Exemption Request*
- STP plan and correspondence to and from NMED
- Independent assessment reports
- Trend analysis on waste management data
- ADESH database containing registered waste areas
- Inspection forms
- Facility operating records generated under ADESH FSD implementation

9.0 DEFINITIONS AND ACRONYMS

9.1 Definitions

See LANL *Definition of Terms* and ADESH-IG-TOOL-101, *Waste Management Glossary*.

9.2 Acronyms

See LANL *Acronym Master List*.

ADESH	Associate Director for Environment, Safety, and Health
AP	Administrative Procedure
EPC-DO	Environmental Protection and Compliance-Division Office
CCP	Central Characterization Program
CFR	Code of Federal Regulations
D&D	Decontamination and Decommissioning
DEAR	Department of Energy Acquisition Regulation
DEP	Deployed Environmental Professional

DOE	Department of Energy
EM&R	Emergency Management and Response
EPA	Environmental Protection Agency
EPC-CP	Environmental Protection and Compliance–Compliance Program
EPC-DO	Environmental Protection and Compliance–Division Office
EPC-WMP	Environmental Protection and Compliance–Waste Management Program
EPHA	Emergency Planning Hazard Assessment
ER	Environmental Restoration
FMCSR	Federal Motor Carrier Safety Regulations
FOD	Facility Operations Director
FSD	Functional Series Document
HMPT	Hazardous Materials Packaging and Transportation
HRCQ	Highway Route Controlled Quantity
HWFP	Hazardous Waste Facility Permit
IA	Issuing Authority
IATA	International Air Transport Association
IG	Instruction Guideline
IWD	Integrated Work Document
IWM	Integrated Work Management
LANL	Los Alamos National Laboratory
LLW	Low-Level Waste
MLLW	Mixed Low-Level Waste
MSDS	Material Safety Data Sheet
MTRU	Mixed Transuranic
NCR	Nonconformance Report
NMED	New Mexico Environment Department
NMSA	New Mexico Statutes Annotated
NNSS	Nevada National Security Site
OSH	Occupational Safety and Health
PCB	Polychlorinated Biphenyl
PFITS	Performance Feedback and Improvement Tracking System
PM	Project Management
POC	Point of Contact
PRID	Permits and Requirements Identification
RAD	Responsible Associate Director
RAM	Radioactive Material
RCRA	Resource Conservation and Recovery Act
RLM	Responsible Line Manager
RM	Responsible Manager
RO	Responsible Office
RWMB	Radioactive Waste Management Basis
SBP	Safety Basis Procedure

SEO-ERO	Security and Emergency Operations-Emergency Response Organization
SME	Subject Matter Expert
SOP	Standard Operating Procedure
STP	Site Treatment Plan
TA	Technical Area
TP	Technical Procedure
TRU	Transuranic
TSCA	Toxic Substances Control Act
TSDF	Treatment, Storage, and/or Disposal Facility
TSF	Treatment and Storage Facility
USQ	Unreviewed Safety Question
WAC	Waste Acceptance Criteria
WAP	Waste Analysis Plan
WCATS	Waste Compliance and Tracking System
WCO	Waste Certification Official
WCSF	Waste Characterization Strategy Form
WIPP	Waste Isolation Pilot Plant
WM	Waste Management (Division)
WMC	Waste Management Coordinator
WPC	Waste Package Certifier
WSP	Waste Stream Profile

10.0 HISTORY

Revision History		
03/27/08	P409, Rev. 0	Initial Issue. This document and its linked Waste Management Tools replaces and cancels the Laboratory Implementation Requirements (LIRs) and Laboratory Implementation Guidance (LIG) listed below. The LIRs will remain in force and effect for each nuclear facility until that facility completes the Unreviewed Safety Question (USQ) or Unreviewed Safety Issue (USI) review determinations. ▪ LIG 404-00-02, *Acceptable Knowledge Guidance* ▪ LIR 404-00-02, *General Waste Management Requirements* ▪ LIR 404-00-03, *Hazardous and Mixed Waste Requirements* ▪ LIR 404-00-04, *Managing Solid Waste* ▪ LIR 404-00-05, *Managing Radioactive Waste* ▪ LIR 404-00-06, Managing Polychlorinated Biphenyls
05/22/08	P409, Rev. 1	Section 6.0 Training: Changed Waste Profile Form Signers to Waste Generators and removed Waste Documentation Forms from the Waste Generators list.
06/04/10	P409, Rev. 2	Extensive revision: Clarified training requirements and responsibilities, corrected links to tools, clarified tool creation process, and simplified the document.

Revision History		
03/19/12	P409, Rev. 3	This document cancels RN0808, *Requirements for Recycling Metal from Areas posted for Radiological Hazards*. Section 6.0: Separated the third bullet into two bullets, reflecting the separate training requirements for persons who work in Treatment, Storage, and/or Disposal Facilities (TSDFs) and Remediation Workers, to align with the Laboratory's Hazardous Waste Permit. Added Course #23263, *Waste Generation Overview Live,* as a training requirement for persons who work in TSDFs and Remediation Workers.
04/10/13	P409, Rev. 4	Removed references to cancelled Form 1346, *Waste Profile Form*, which has been replaced by the Waste Stream Profile (found in the Waste Compliance and Tracking System (WCATS). Section 5.0: Updated to reflect effective date of May 28, 2013 for applicable nuclear, high- and moderate-hazard facilities and accelerators. Performed three year review in accordance with PD311, *Requirements System and Hierarchy*. Updated links, titles, and acronyms.
07/30/15	P409, Rev. 5	Performed three-year review in accordance with PD311, *Requirements System and Hierarchy*. This document cancels P930-2, *Radioactive Waste Certification Program* and P930-3, *Off-Site Shipment of Chemical, Hazardous, or Radioactive Waste.* Although this is not "a new document," it is a complete re-write of P409, Rev. 4 as the requirements from P930-2 have been merged with this document. P409 title has also changed to "LANL Waste Management."

Revision History		
04/21/17	P409, Rev. 6	Clarified several sections and consolidated requirements. Replaced ENV and WM with EPC throughout document. Section 3.1: Corrected Deployed Environmental Professional (DEP) responsibility, separated waste characterization and processing review responsibilities, clarified FSD tool types, and added FSD references for ADESH-AP-TOOL-704, *Construction and Demolition Debris*; and ADESH-AP-TOOL-316, *LLW/MLLW Procurement Requirements*. Section 3.2.1b: Added reference to ADESH-AP-TOOL-906, *Treatment by Waste Generator*. Section 3.3: Clarified packaging requirements for NNSS and non-NNSS waste. Section 3.4.3: Clarified language and process. Section 4.0: Clarified responsibilities and incorporated roles, responsibilities, authorities, and accountability (R2A2s) listed in P313, *Roles, Responsibilities, Authorities and Accountability.* Section 11.1: Deleted all references to ADESH-AP-TOOLs and replaced with reference to P409 *Waste Management Tools* http://int.lanl.gov/org/padops/adesh/environmental-protection/quality-assurance/p409-tools.shtml.
11/29/17	P409, Rev. 7	Section 1.0: Clarified LANL's waste management requirements for waste generators. Section 2.0: Defined the term 'Worker' and removed reference to ADESH-AP-TOOL300, Radioactive Waste Management. Section 3.0: Edited and revised language throughout Section 3.0 and moved paragraphs within Section 3.0 to help with readability. Section 6.1, 6.4 and 6.5: Clarified existing training frequency requirements. Sections 6.2 and 6.3: Clarified requirements for <90-day radioactive waste areas and for CAAs. Section 6.6: Edited and revised language to Include existing Emergency Responder's training. Section 6.7: Edited and revised language of Waste Shippers [existing] training requirements. Section 11.0: References updated. Updated Acronyms and hyperlinks.

11.0 REFERENCES

Prime Contract:

- DEAR 970.5223-1, Integration of Environment, Safety, and Health into Work Planning and Execution (Dec. 2000)
- Part II, Section H-83 (DEAR 5223-1)
- Part III, Section J, Appendix B 4.2
- Part III, Section J, Appendix G

- Appendix B, Statement of Work: §1.0 General
- DOE O 414.1D, *Quality Assurance*
- DOE O 435.1 Chg 1, *Radioactive Waste Management*
- DOE M 435.1-1 Chg 1, *Radioactive Waste Management Manual*
- DOE O 436.1, *Departmental Sustainability*
- DOE O 458.1 Chg 3, *Radiation Protection of the Public and the Environment*
- DOE O 430.1B Chg 1, Real Property Asset Management

11.1 Other References

- LANL Hazardous Waste Facility Permit
- P409-1, *LANL Waste Acceptance Criteria*
- Resource Conservation and Recovery Act (RCRA)
- Toxic Substances Control Act (TSCA)
- New Mexico Special Waste Act
- 74-9-1 NMSA 1978, *Solid Waste Act*
- 74-4-1 NMSA 1978, *Hazardous Waste Act*
- PD311, *Requirements System and Hierarchy*
- ADESH-AP-007, *Document Control*
- SBP-112-3, *Unreviewed Safety Question (USQ) Process*
- P315, *Conduct of Operations Manual*
- *CCP-PO-012, CCP/Los Alamos National Laboratory (LANL) Interface Document*
- P409 *Waste Management Tools* at http://int.lanl.gov/org/padops/adesh/environmental-protection/quality-assurance/p409-tools.shtml
- P322-4, *Issues Management*
- WM-AP-0005, *Waste Characterization and Processing Review*
- SD400, *Environmental Management System*
- P781-1, Conduct of Training
- P322-3, *Performance Improvement from Abnormal Events*
- Waste Compliance and Tracking System (WCATS)
- ADESH-AP-TOOL-317 *Authorized Release Limits Proposal Process*
- RP-SOP-077.004, *LANSCE Metals Clearance Process*
- RPSVS-RIC-TBD-03, *Technical Basis Documentation Regarding Health Physics Measurements for the Unrestricted Release of Metals from LANSCE*
- WM-PROG-QP-236, *Waste Certification Program Waste Verification*
- LANL Off-Site Waste: Nevada National Security Site procedures
- Registered Waste Areas
- EP-DIR-SOP-10021, *Characterization and Management of Environmental Programs Waste*

- 40 CFR 260.10, *Hazardous Waste Management System: General, Definitions*
- WM-PROG-QP-250, *Waste Assessments*
- P328-2, *Independent Assessment*
- P328-3, *Management Assessment*
- PD1020, *Document Control and Records Management*
- ENV-CPQP-115, Compliance Technical Assistance Program (CTAP)

12.0 FORMS

Form 2107, *Radioactive Waste Management Basis Report Form*

13.0 ATTACHMENTS

There are no attachments associated with this document.

14.0 CONTACT

Environmental Protection and Compliance-Division Office (EPC-DO)
Telephone: (505) 667-2211
Website: http://int.lanl.gov/org/padops/adesh/waste-management/index.shtml

PRO-0493-STO-HAZMAT, R1

STO Spill Response Procedure

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Classification Review

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PRO-0493-HAZMAT, R0	2/28/10	Original issue
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Description: Periodic Review, No Revision		
PRO-0493-HAZMAT, R1	12/08/14	Major
Description: Editorial changes throughout document, updated references and organizations.		

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1.0 PURPOSE

This procedure provides emergency actions and a formal approach to responding to spills of hazardous materials including:

- Spill prevention,
- Spill response,
- Staging response materials; and,
- Response preparations

2.0 SCOPE

This procedure applies to Science and Technology Operations (STO) personnel involved in responding to spills within STO managed facilities with hazardous materials (including direct, deployed and subcontractor employees).

3.0 IMPLEMENTATION

PRO-0493-STO-HAZMAT

4.0 INTRODUCTION

If handled properly, a spill may be nothing more than a nuisance. If handled improperly, a spill can seriously disrupt activities and the STO mission. At worst, a spill can cause personnel injury/illness, environmental damage, and/or property damage.

To prepare for spill, you should: (1) learn about the hazards of the spills in your workplace, (2) understand processes/controls for spill prevention and containment, (3) understand the responses to spills and response procedures for higher probability spills, (4) make sure that you have the personnel equipment and training necessary to follow those procedures, and (5) practice spill response.

In most cases, incidental and simple spills involve small quantities of materials and, if precautions are taken, present minimal hazards. Local workers are usually the most appropriate people to clean up simple spills because them are more likely than others to be familiar with the spilled material's hazardous characteristics; can respond quickly; know about other potential hazards or complicating factors in their work area; should be familiar with the proper cleanup techniques for a particular spill; and are authorized by their management to clean up simple spills through written procedures or IWDs.

Complex spills require Emergency Operations (EO) assistance because of the spill's size or its unusual hazards. Trained hazardous material spill responders have learned that it is much better to be overly cautious in responding to a spill than to risk lives for something that "shouldn't be too dangerous." Do not downplay the seriousness of large or complex spills.

The priority of actions taken during spill response shall be (1) protect personnel, (2) protect the environment, and (3) protect facility and programmatic equipment.

5.0 DEFINITIONS/ACRONYMS

5.1 Incidental Spill:

A minor spill incidental to routine work where no special spill response is needed. (For example: minor drips from a pipette onto an absorbent, drips from a chemical container cap, or minor spills of analytical chemical, sample, or other materials. Also, a minor spill that is entirely confined within a working fume hood, glove box, dry box, secondary containment, or other containment and that does not create exposure beyond the containment). Incidental spills are limited to the following conditions:

- The spill is minor and incidental to routine work and anticipated to happen; and,
- The hazards and controls created by the spill are bounded by the IWD or other procedure; and,
- The current exposure assessment is adequate to address cleanup; and,
- The worker is authorized to cleanup the incidental spill by their management.

5.2 Simple Spill:

A spill that is not a part of routine work, but may be cleaned up by local workers. Simple spills do not require Emergency Operations (EO) assistance to manage. Attributes of a simple spill include the following:

- The hazards and controls created by the spill are bounded by the IWD or other approved procedure.
- The workers(s) are authorized to cleanup the simple spill by their management.
- The worker(s) are trained in spill response.
- The current exposure assessment is adequate to address spill cleanup.
- Respiratory protection is not required to clean up the spill.
- Workers have appropriate PPE and spill cleanup materials.
- Does not endanger non-involved workers.
- Does not endanger the environment or facility.
- Lacks potential to become an emergency.
- There are no electrical safety concerns.

5.3 Complex Spill:

A spill that is not a part of routine work and requires EO response (SEO-1 – Emergency Response - HAZMAT) for cleanup. Attributes of a complex spill include any of the following:

- The hazards and controls are NOT identified in the IWD, or exceed those in the IWD or other approved procedure.
- The worker is NOT authorized to cleanup the spill by their management.
- The current exposure assessment is NOT adequate to address spill cleanup.
- Workers do NOT have appropriate personal protective equipment (PPE) and spill clean-up.
- Respiratory protection is required to cleanup the spill.
- Does endanger non-involved workers.
- Does endanger the environment or facility.

- The spill has the potential to become an emergency, personnel are injured, fire is present, or there is a gas leak (CALL 911).
- There are electrical safety concerns.
- In a confined space, or releases hazardous vapors in an area that is unventilated.
- There is need for building evacuation or increased traffic control or increased building security
- Incompatible or reactive materials are spilled.
- Flammable materials in quantities that are not approved to be cleaned up by management are spilled.
- Carcinogenic or highly toxic materials are spilled.
- Lastly, a simple spill where the workers are not comfortable performing spill cleanup may be managed as complex.

5.4 Involved Worker:

Workers directly involved in the spill area, causing the spill, or in the immediate vicinity.

5.5 Immediate Action:

Emergency action that should be accomplished promptly and before any follow-up actions. When multiple emergency actions are required, they may be performed simultaneously unless there is a specific order of actions required.

5.6 Spill Kit:

A kit that is an accumulation of supplies useful in responding to spills. Supplies that may be in the spill kit include barrier devices, absorbents, PPE, bags and are customized to the activity or facility that may cause a spill. Spill kits are maintained and inventoried on a regular basis. Details for Spill Kits are included in Appendix C.

5.7 Acronyms

EO – Emergency Operations

ENV - Environmental

ESH – Environment, Safety, Health and Quality

FOD – Facility Operations Director

IHS – Industrial Hygiene and Safety

IWD – Integrated Work Document

HAZMAT – Security and Emergency Operations – Emergency Response (SEO-1)

OM – Operations Manager

PIC – Person in Charge

PPE – Personal Protective Equipment

RLM – Responsible Line Manager

RCT – Radiological Control Technician

STO- Science and Technology Operations

WMC – Waste Management Coordinator

6.0 RESPONSIBILITIES

Refer to section 8 for detailed responsibilities for spill response. Additionally, the following responsibilities are developed in this document.

6.1 ESH (deployed IHS, RCT, ENV, WMC)

Prepare and maintain facility spill kits as directed by the ESH/WS Manager and the Operations Manager.

6.2 Facility Operations Director (FOD)

Responsible to:

- Establish and maintain the safety, security, and environmental compliance envelope.
- Approve and issue procedures that accurately establish administrative, technical, and response guidance for the overall safe, secure, and environmentally compliant operation of the assigned facilities.
- Request and ensure that FOD personnel (operations, maintenance, facility engineering, ES&H, waste management, technical support, and administrative personnel) have appropriate training and qualifications to support facility and programmatic activities.
- In emergencies, ensure that personnel know who to call and what to do. For medical emergencies, life-threatening situations such as a fire, explosion, bomb threat, or terrorist attack call 911. Callers using mobile phones should be prepared to state the location of the emergency as precisely as possible. For all other situations requiring immediate response or dispatch, to include abnormal/unusual events, unattended packages, spills, leaks, and contamination contact Emergency Management by calling the Emergency Operations Support Center (EOSC) at 667-6211.
- Assist the EO-EM IC or EM at the scene of an emergency, and provide support to the EOC during activation.

6.3 Operations Manager (OM)

Responsible to oversee development and placement of spill kits adequate to respond to spills for facility or maintenance, activities that are a concern for the facility.

6.4 Person-in-charge (PIC)

Responsible to include spill prevention and response controls and processes in developing IWDs or other work control documents, and as necessary for higher probability or risk spill to document them.

Responsible to create and maintain spill kits adequate to respond to spills for activities where they are the PIC.

7.0 GENERAL REQUIREMENTS FOR A SPILL RESPONSE

7.1 Spill Prevention Processes/Controls

Spills can occur during a material's storage, transportation, or transfer, as well as in a laboratory. Spill prevention minimizes the likelihood of a spill. Details on spill prevention programs are in Appendix A.

7.2 Know Your Hazards and know Spill Response Plans as needed (Refer to Appendix B for more details)

PICs take into consideration the "what-if" planning for spill response and potential problems. Include spill prevention and response controls and processes in developing IWDs or other work control documents. Document controls for materials with unique specific hazards (e.g. Lead, Mercury, Plutonium) and spills of higher probability or risk.

Organizations should ensure that bounding conditions for simple versus complex spills are clearly identified and communicated so that employees have a clear understanding of when a spill is no longer simple and outside assistance is required.

Where non-routine and/or specific procedures for spill response are a important control, they should be included in the IWD or other local document that covers a group of activities, a facility, a work group, etc.

7.3 Make Materials and Equipment Available

PICs shall prepare and maintain spill kits appropriate for the activity. Operations Managers shall prepare and maintain spill kits appropriate for facility operations and to address major potential spill hazards in the facility. Details on Spill Kits are in Appendix C.

7.4 Routinely Practice Spill Response

Facility and Programs should practice spill response to verify procedures and IWD effectiveness. Simple training that includes tabletop discussions can be used to introduce and verify personnel knowledge about specific spill responses.

8.0 SPILL RESPONSE EMERGENCY INSTRUCTIONS

Note: This section applies to simple and complex spills. Incidental Spills (see definitions) are not required to follow this section.

Action	Responsible Person
Warn Others (This is an immediate action an applies to both simple and complex spills.) **WARNING** **IF THERE IS A FIRE, INJURY, GAS LEAK OR OTHER EMERGENCY – CALL 911 FIRST. THESE CIRCUMSTANCES DEFINE SUCH SITUATIONS AS A COMPLEX SPILL AND REQUIRE EO RESPONSE. IF THERE ARE INJURED PERSONNEL, THE PRIORITY IS TO FIRST CARE FOR THE INJURED.** The **Involved Workers** must immediately communicate the spill to the workers in the immediate vicinity. The **Involved Workers** shall notify, or have a co-worker immediately notify the First Line Manager (RLM) and the Operations Manager. The **RLM** shall notify their Line Management. The Operations Manager shall notify the FOD, or designee. Note: For off-hours response the Duty Operations Manager shall be contacted at pager # 664-4444.	Involved Workers RLM Operations Manager
Stop the Spill – If it is safe to do so (This is an immediate action and applies to both simple and complex spills.) **WARNING** **INVOLVED EMPLOYEES SHOULD ONLY ATTEMPT TO STOP THE SPILL IF IT IS SAFE TO DO SO AND SHOULD NOT LINGER IN THE SPILL AREA TO PERFORM THIS ACTION. IF IN DOUBT, EXIT THE AREA AND SEEK ASSISTANCE.** **Involved Workers** should stop the work that caused the spill and if possible stop the spill. This may be performed simultaneously with warning others. I some cases simple actions such as righting an overturned container, shutting a valve, or applying approved and ready-to-use absorbents will reduce or stop the spill.	Involved Workers

Once Involved Workers have exited the area, they should not reenter the spill area to further stop a spill. Re-entry will be controlled to ensure personnel exposures are prevented.	
Isolate the area This is an immediate action and applies to both simple and complex spills. The **Involved Workers and Responders** shall isolate the area to prevent non-involved workers from being exposed to the spill area. For a simple spill this may be as simple as closing a door. For larger spills or a complex spill this may require use of barricade material and warning signs. Note: Barricade and other spill response materials are in the spill kit.	Involved Workers and Non-Involved Workers responding to assist
Reduce Exposure to Personnel: This is an immediate action and applies to both simple and complex spills. **Involved Workers that may have been exposed to spilled materials** or their by-products shall be taken to Occupational Medicine by their RLM. All **Non-involved Workers** and personnel in the adjacent areas shall move well away from the area to minimize potential exposure risks. For a small simple spill this may require minimal actions. For example, a small simple spill may be easily isolated to a room or section of a facility. **EO and Operations Manager**, with advice from ESH, has the key responsibility to ensure that all employees are moved to a safe area to prevent inadvertent exposure to airborne exposures, or other exposures from the spill or its vapors. In some cases, spills may require evacuation of all or part of a facility. The **Operations Manager** should evaluate the ventilation systems; drain systems, etc. to determine if any system alignment changes need to be made to reduce the spread of the spill and airborne concerns or other hazards from the spill. This could include securing unfiltered ventilation, redirecting a ventilation duct that is blowing on the spill area, securing a fan, increasing exhaust filtered ventilation flow from a spill area, isolating a drain system, and protecting the environment. The Operations Manager should consult with involved workers, ESH, ENG as needed. Facility **ESH** staff shall respond to all simple and complex spills as directed by the Operation Manager and/or EO. **IHS and RCT** staff (for complex spill EO) shall verify that the spill has not spread by appropriate observations and measurements. Particular attention should be on verifying that non-involved workers are not exposed to hazards resulting from the spill, such as liquids, vapors, gases, fumes, etc.	Exposed Workers, RLM All Workers EO, Operations Manager, IHS, Engineering IHS, RCT, ENV, WMC IHS, RCT, EO

Action	Responsible Person
Determine if the spill is simple or complex This is not an immediate action – in most cases. **If there is any doubt on the spill being potentially complex, or if workers are not comfortable performing spill cleanup – conservatively assume the spill is complex and seek assistance from EO.** While spill response should be timely, there are few situations when one must unduly rush to classify and cleanup a spill. Situations where speed is of the essence should have local IWDs and procedures to address that circumstance. The pace of response should be in a controlled fashion with emphasis on good decision-making. Involved Workers shall classify the spill. For most spills, the decision to classify the spill as simple vs. complex is clear. There are two types of spills. • Simple spills, which the authorized worker with an approved IWD or procedure can clean up (refer to definitions). • Complex spills, which require EO assistance (refer to definitions). When the classification decision is more difficult, **Involved Workers** should methodically evaluate the spill, consult their PIC and RLM, consult procedures, consult MSDS sheets, consult with ESH, and Operations as needed.	Involved Workers
Cleanup a Complex Spill **Involved Workers** contact HAZMAT for assistance at 667-6211. **Involved Workers** shall obtain the most up-to-date inventory of chemicals in the spill area and provide that to Emergency Responders **Operations Manager** meet with HAZMAT response and provide assistance as requested. IHS, RCT, WMC, ENV rallies at the Emergency Response staging area to provide advice and support assistance to HAZMAT	Involved Workers Involved Workers Operations Manager Operations Manager, ESH, WMC

Action	Responsible Person
Cleanup A Simple Spill **CAUTION 1** **UNLESS OTHERWISE APPROVED BY THE RLM, THE TWO-PERSON RULE APPLIES TO CLEANUP OF SIMPLE SPILLS. (NOT TO INCIDENTAL SPILLS.)** **CAUTION 2** **IF THE SPILL PRESENTS HAZARDS THAT ARE BEYOND THE LOCAL IWD OR APPROVD PROCEDURE, THEN THE SPILL IS COMPLEX.** **Involved Workers** follow the guidelines in the IWD or local procedure for cleaning up a simple spill. **IHS and RCT** staff shall monitor conditions in the spill area to measure the level of exposure that personnel are exposed to. Note: A general discussion of spill response is located in Appendix A.	Involved Workers RLM, Operations Manager, and ESH
Document the Process: The **Operations Manager** will document the spill cleanup process in the Operations Manager's logbook, if applicable	Operations Manager
Post Spill Cleanup and Follow-up Some spills leave residual conditions in the area that require further decontamination and/or ESH clearance to release the area to routine operations. **Operations Manager** will involve Waste Management personnel to manage spill cleanup materials. **IHS and RCT** staff may be asked to reconstruct exposures to workers in the spill area and should seek assistance from their Supervisors as needed.	Operations Manager, ESH, WMC IHS, RCT

Action	Responsible Person
Return to Normal Operations and Follow-up **CAUTION** **ONLY THE OPERATIONS MANAGER OR EO HAS THE AUTHORITY TO RELEASE A SPILL AREA FOR NORMAL OPERATIONS TO RESUME. (This does not apply to incidental spills.)** **Operations Manager** with advice from Involved Workers, the PIC, ESH, and WMC will determine when to transition from cleanup operations to normal operations. Normally, a fact-finding or critique may be needed following a spill. In some cases, normal operations should not be allowed until that is complete.	Operations Manager

9.0 SPILL KIT INSTRUCTIONS

- PICs shall prepare and maintain spill kits appropriate for the activity. Operations Managers shall oversee preparation and maintenance of spill its appropriate for the facility and to address major potential spill hazards in the facility. ESH/WS staff will prepare and maintain spill kits for facilities as directed by the ESH Manager and Operations Manager. For example, RP staff for radiological facilities should prepare spill kits appropriate for spill response to radiological materials.

- Spill Kit Owners shall regularly inspect all kits and equipment to ensure that they will function properly when needed.

- A tamper-indicating device may be used to ensure that the spill kit is always ready to use.

- Recommendations for Spill Kits are in Appendix C.

10.0 REFERENCES

Guide for Hazardous Material Spill Response Planning in Laboratories, ACS, 1995
P 101-13, Electrical Safety Program
P 101-14, Chemical Management
P 101-32, Worker Exposure Assessments
P 300, Integrated Work Management
P 313, Roles, Responsibilities, Authorities, and Accountability
P 322-4, Laboratory Performance Feedback and Improvement Process
P 405, National Environmental Policy Act (NEPA), Cultural Resources, and Biological Resources (NCB) Reviews
P 1201-4, LANL Emergency Procedures and Protective Actions

11.0 APPENDICES

Appendix A, Spill Prevention
Appendix B, Spill Response Guidelines
Appendix C, Spill Kits

Appendix A, Spill Prevention Methods

Page 1 of 2

Acknowledgement:

Portions of the following are excerpted from the American Chemical Society's pamphlet "Guide for Chemical Spill Response Planning in Laboratories. Prepared by the American Chemical Society's CEI/CCS Task Force on Laboratory Waste Management American Chemical Society, Washington, DC 1995

Common examples of spill causing incidents and associated prevention techniques are shown in Table 1. Laboratory spills can occur during a chemical's storage, transportation, or transfer, as well as in the actual experiment. A spill prevention program for storage areas should include the following:

- Sturdy shelves and properly designed storage areas to minimize breakage and tipping;
- Secondary containment for stored chemicals and materials;
- Containers stored by hazard class;
- Larger containers stored closer to the floor;
- Containers stored on shelves sufficiently away from the shelf edge to minimize the danger of falling;
- Storage shelves with lips to reduce the danger of falling;
- Regular inspection of the integrity of containers; and
- Seismic security in earthquake-prone areas

To minimize spills during transport, a laboratory should integrate the following:

- carts, where appropriate,
- safety containers,
- rubberized buckets,
- straps to secure containers, and
- properly trained and thoughtful workers.

For the transfer of liquids from one container to another, the risk of spills can be reduced by

- paying careful attention to the size of containers to avoid overfilling;
- using pumps or other mechanical devices rather than simply pouring directly into a container;
- providing spill containment to capture any leaks; and
- bonding and grounding containers when flammable liquids are involved.

In addition to chemical spills, water spills can be caused by loose connections or breaks in lines to water condensers or cooling systems. Such spills can cause damage and inconvenience, even if they do not present environmental or health risks. Appropriate planning, including use of security clamps or devices to prevent loosening of connections or automatic shut-off devices, can reduce the likelihood of flood damage. Occasionally, a laboratory may be affected by a leaking roof or a flood elsewhere in a building. Planning to prevent damage from incidents should include the protection of instruments that might be harmed by water. Similarly, storing chemicals and supplies so that they will not be touched by leaking water will minimize damage and inconvenience.

Appendix A, Spill Prevention Methods (continued)

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While considerable attention is given to potential spills or leaks of liquids, laboratories using gases should also develop spill prevention plans for these materials. Such plans should consider safety concerns related to securing tanks and other gas containers. Additionally, frequent checks of valves and tubing can be useful in spill and leak prevention. A laboratory should take care to prevent gas from escaping down a drain or up a fume hood.

Finally, pay attention to physical details in the laboratory, such as

- reducing clutter and unnecessary materials.
- Eliminating tripping hazards and other obstructions, and
- Having all needed equipment readily available before starting work.

In addition to prevention or spills, having an up-to-date list of chemicals in the laboratory is important to those responding to a spill or emergency responders.

Table 1: Spill Prevention:

Potential Cause of Spill	**Prevention Technique**
Container, such as a flask or beaker, tips over	Secure containers and equipment to minimize the possibility of tipping.
Container dropping	Keep containers and experimental equipment as low as possible.
Breaking a container or a piece of experimental apparatus	Protect containers from breakage by keeping other items from falling on them.
A runaway reaction	Plan experimental reactions to anticipate and to provide controls for undesired outcomes such as overheating.
Releases during transfer of materials from one container to another	Pay attention to what you are doing. Provide secondary containment in the event of spills.
Holes and other leaks in transfer equipment such as pipes, hose, or valves	Check for holes or leaks before use.
Placing material in an incompatible container	Check for compatible uses of chemicals, particularly solvents or aggressive solutions. Check the material and construction of containers and equipment with a goal of maintaining structural integrity.
Breakage of thermometers or similar experimental equipment	Select equipment that has reduced potential for breakage, e.g., replace mercury thermometers and electronic temperature devices.

Appendix B, Discussion of Spill Response

Page 1 of 8

Acknowledgement:

Portions of the following are excerpted from the American Chemical Society's pamphlet "Guide for Chemical Spill Response Planning in Laboratories. Prepared by the American Chemical Society's CEI/CCS Task Force on Laboratory Waste Management American Chemical Society, Washington, DC 1995.

Introduction to Spill Response and Planning

Evaluate the Risks

The first step in evaluating whether a spill is "simple" is to estimate the risks created by the spill. In spill response, the key risks of concern are human health effects, property damage, and environmental damage.

When evaluating potential impacts, a prompt response can minimize adverse consequences. On the other hand, an inappropriate response can turn a simple spill into a complex situation.

Human Health Effects

Potential health effects is the most important hazard category to consider when deciding whether or not to attempt a spill cleanup. Some hazardous material releases may result in health hazards such as fires or explosions. Other hazardous material releases may present health threats because of their ability to spread rapidly and enter the body readily. A spill is not "simple" if it presents these risks.

If the potential for fire or explosion exists, seek outside assistance from trained emergency responders. Releases of flammable hazardous materials (liquid or solid) can present significant fire and explosion risks when one or more of the following is present:

- volatile vapors,
- water reactive or air reactive hazardous materials,
- ignition sources,
- oxidizers, and
- significant quantities of combustible materials.

Toxic vapors and dust are also hazardous. Avoid direct contact with such hazards because they spread quickly, are easily absorbed through the skin, and may damage tissue.

A hazardous material spill is not a health risk if it has a low toxicity (especially if it is not volatile or a dust), is not highly corrosive, and is not a strong oxidizer. Such spills may be considered "simple" only if physical damage or environmental factors are absent. When a spilled chemical's toxicity is unknown, treat the spill like a potential human health hazard by avoiding exposure and seeking outside assistance.

Appendix B, Discussion of Spill Response (continued)

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Physical Damage to Property

The potential for physical damage to property (Equipment, building materials, structures, or cleanup materials) also is important when determining whether you have a simple spill. Remember a common first response to a spill is to try to protect equipment and property, but any real threat to such items will also threaten the persons cleaning up the spill. Do not attempt to protect property if there are any human health or fire/explosion hazards present.

In addition to potential fire and explosion hazards, strong corrosives and oxidizers typically fall under the property damage category. If any hazards are present that would damage property, treat the spill as complex and contact the appropriate authorities.

Environmental Threats

Some laboratory spills have the potential for escaping into the environment. Spills may release into the atmosphere, discharge into the sewer system, or leak directly into soils or surface water. While few laboratory spills present environmental threats, it is necessary to notify the appropriate authorities if a spill has the potential to cause environmental damage. If you can do so safely, it may be prudent to take interim measures before the hazardous materials response team arrives, such as blocking a Spreading spill with absorbents or covering a floor drain with a rubber mat.

Though small amounts of some hazardous materials pose environmental problems, most environmental risks are presented by large-quantity releases of materials. A large-quantity release that threatens the environment is not a simple spill, but requires the attention of trained responders.

Evaluate Quantities

The next step to take when determining whether a spill is "simple" is to evaluate the quantity of material released. If a spilled hazardous material is not hazardous, its cleanup (without the assistance of an emergency response team) is dependent on the ability to control the spill, as well as the availability of sufficient spill control materials (e.g., an absorbent for liquids). Factors that may complicate a cleanup effort (such as the unique characteristics of a spill's surroundings or the restricted access to a spill) must be determined on a case-by-case basis.

If the spilled hazardous material is hazardous, the threshold quantity for a simple spill cleanup depends on the spilled chemical's physical properties and hazards. This quantity depends on situational factors such as

1. the training and experience of laboratory personnel,
2. the availability of spill control materials,
3. the availability of personal protective equipment, and
4. the physical layout of the spill location.

The more toxic, corrosive, or flammable a material is, the less likely that the spill can be defined as "simple". Thresholds for flammable liquids and solids, as well as volatile toxics, should be relatively low.

Appendix B, Discussion of Spill Response (continued)

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Spills of reactive hazardous materials should only be managed by trained responders (who may be in-house). In general, simple spill thresholds for liquids will be lower than the thresholds for solids. Additionally, simple spill thresholds for volatiles will be lower than the thresholds for non-volatiles.

Evaluate Potential Impacts

The third step to take when deciding whether a spill can be managed as a simple spill is to evaluate the potential broader impacts of the spill. A hazardous material spill in an area where its potential risks are magnified by specific situations (such as physical situations or the presence of a large number of people) should not be managed as a simple spill. For instance, the presence of boxes, hazardous materials, and other ignition sources would magnify the impact of a one-gallon release of acetone. Since acetone is highly flammable and volatile, this situation would be immediately dangerous to both human health and property, cleanup should be handled by and emergency responder.

Other factors that may magnify a spill's impact and require emergency response are

- the possibility that hazardous vapors or dusts might enter the building's ventilation system (and be distributed to other areas);
- the possibility that spilled liquids might flow into other areas, this expanding the threat of harm (such as reaching ignition sources, exposing other people, damaging delicate equipment);
- the presence of incompatible hazardous materials;
- the proximity of classrooms or offices containing people who could be harmed by the spill's consequences; and
- spills in sinks that might be connected to other sinks through the plumbing system.

To determine whether a spill is simple or complex (which is often the hardest part of spill response), you need to know (1) the hazard(s) posed by the spilled hazardous material and d(2) the spill's potential impact. Both these factors are, in large part, determined by the spill's size. The following information will help you determine whether you have a simple spill:

- the type of chemical(s) spilled,
- the amount,
- the hazardous characteristics of the spilled chemical(s),
- the location,
- the proper method for cleaning up the spill,
- the personal protective equipment available, and
- the training of the laboratory's personnel.

Training and Authorization for Spill Response:

To remediate a simple spill, a worker must have all required site-specific training for the work location and work activity and be authorized under the IWD governing the work which produced the spill.

Appendix B, Discussion of Spill Response (continued)

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Spill Response Steps and Discussion:

The steps to follow in spill response are located in section 8 of this procedure. The following additional information is provided.

More Detail: SOLIDS & LIQUIDS

Make a decision on whether to evacuate immediate area of the spill. If the spill is outside your lab fume hood or other containment and ventilated areas, evacuation of the lab will often be necessary. If you are unsure about the need for lab evacuation, get out. For spills of solids or liquids, it will often not be necessary to evacuate other areas, since labs with hazardous materials are normally under negative pressure with respect to the surrounding areas. Take note of the identity and quantity of the spilled material upon leaving your lab.

Determine the need for evacuation of additional areas. If you are using a highly hazardous material and have reason to believe it can enter the hallway, please do not hesitate to pull a fire alarm if you feel the need for building-wide evacuation. If only lab evacuation is necessary, post a sign, or better yet a person, outside each lab entrance to assure others do not enter.

When you contact your RLM and Operations Manager, you should do it from a safe location. Unless you have persons to help you secure the lab, it is best to phone from a location where you can see the lab entrance to keep people away.

Cleanup A Simple Spill

Spills are a reasonable "what-if" hazard that should always be considered when developing IWDs and local procedures. Any non-routine controls should be established in these documents to allow involved workers to respond to simple spills in a pre-planned way that authorizes them to respond to simple spills and equips them with the equipment and materials needed to do so. If the spill presents hazards beyond those in the IWD or local procedure – then the involved worker, the First Line Manager, ESH and the Operations Manager should agree on a spill response. Involved workers must have the right personal protective equipment and exposure monitoring:

- including, at a minimum, appropriate eye protection, protective gloves, and a lab coat.
- additional protective equipment may be required for spills that present special hazards (such as corrosive or reactive spills or spills that have a splash potential).
- as a rule of thumb, if you need a respirator, you should request outside assistance because you do not have a simple spill unless specific planning is included in approved work control documents to address this case.

The following steps should be taken during simple spill cleanup. Most importantly, before cleaning up a simple spill, be sure that you can do so safely.

Appendix B, Discussion of Spill Response (continued)

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Prevent the spread of dusts and vapors

If the substance is volatile or can produce airborne dusts, close the laboratory door and, where possible, the facility Operations Manager can increase ventilation (through fume hoods, for example) to prevent the spread of dust and vapors to other areas. **Neutralize acids and bases, if possible.**

Spills of most liquid acids or bases, once neutralized, can be mopped up and rinsed down the drain (to the sanitary sewer). However, be careful because the neutralization process is often vigorous, causing splashes and yielding large amounts of heat. Neutralize acids with soda ash or sodium bicarbonate. Bases can be neutralized with citric acid or ascorbic acid. Use pH paper to determine when acid or base spills have been neutralized.

Control the spread of the liquid

Contain the spill. Make a dike around the outside edges of the spill. Use absorbent materials such as vermiculite, cat litter, or spill pillows.

Absorb the liquid

Add absorbents to the spill working from the spill's outer edges toward the center. Absorbent materials, such as cat litter or vermiculite, are relatively inexpensive and work well, although they are messy. Spill pillows are not as messy as other absorbents, but they are more expensive. Note that special absorbents are required for hazardous materials such as hydrofluoric and concentrated sulfuric acids.

Collect and contain the cleanup residues

The neutralized spill residue or the absorbent should be scooped, swept, or otherwise placed into a plastic bucket or other container. For dry powders or liquids absorbed to dryness, double bag the residue using plastic bags. Additional packaging may be required before the wastes can be transported from your laboratory. For spills of powders or solid materials, you may need to add a dust suppressant. Be sure to place descriptive labels on each container.

Dispose of the wastes

Keep cleanup materials separate from normal trash. Contact your environmental health and safety officer for guidance in packaging and labeling cleanup residues. Promptly place cleanup wastes in an appropriate hazardous waste receptacle.

Decontaminate the area and affected equipment

Ventilating the spill area may be necessary. Open windows or use a fan unless the area is under negative pressure. In some instances, your environmental health and safety officer can test the air to ensure that hazardous vapors are gone. For most spills, conventional cleaning products, applied with a mop or sponge, will provide adequate decontamination. If you have any question about the suitability of a decontaminating agent, seek expert advice.

Appendix B, Discussion of Spill Response (continued)

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Special Precautions

The following precautions apply to hazardous materials that have hazardous characteristics. Note that some hazardous materials may exhibit more than one characteristic.

Spill Mitigation for Nano Materials:

- Contact the Emergency Operations at 7-6211 in the event of a large spill (i.e., a spill that cannot be safely contained by the engineered nanoparticle worker).
- Contact the Sanitary Waste Water System office at 7-7711 if nanoparticle spills occur down sanitary drains.
- Engineered nanoparticle workers will determine the extent of the area affected, and demarcate it with barricade tape or use another reliable means to restrict entry into the area.
- Allow trained personnel to clean up smaller spills, following the approved cleanup procedures listed in the IWD.
- Refer personnel exposed to nanoparticles in the course of a spill to Occupational Medicine.
- Manage all debris and waste resulting from the cleanup of a spill as though it contains engineered nanoparticles.

Flammable Liquids

Remove all potential sources of ignition. Vapors are what actually burn, and they tend to accumulate near the ground.

Flammable liquids are best removed through the use of spill pillows or pads. Spill pads backed with a vapor barrier are available from most safety supply companies. Because flammable liquids will probably be incinerated, avoid using inert absorbents such as cat litter. All used absorbent materials should be placed in heavy-duty poly bags, which are then sealed, labeled, and disposed through your facility's hazardous waste management program. Before resuming work, make sure the spill area has been adequately ventilated to remove flammable vapors.

Volatile Toxic Compounds

Use appropriate absorbent material to control the extent of the spill. Spill pillows or similar absorbent material usually work best because they do not have the dust associated with cat litter, vermiculite, or corn cobs. Place all used absorbent materials in heavy-duty poly bags. Seal the bags, label them, and hand them over to your facility's hazardous waste management program. Again, make sure the spill area has been adequately ventilated before resuming work.

Direct Contact Hazards

Carefully select suitable personal protective equipment. Make sure all skin surfaces are covered and that the gloves you use protect against the hazards posed by the spilled chemical. Often it is a good idea to wear two sets of gloves: one as the primary barrier, the second as a thin inner liner in

Appendix B, Discussion of Spill Response (continued)

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the event the primary barrier fails. When the cleanup is completed, be sure to wash hands and other potentially affected skin surfaces.

Mercury Spills

Mercury spills rarely present an imminent hazard unless the spill occurs in an area with extremely poor ventilation. The main exposure route of mercury is via vapor inhalation. Consequently, if metallic mercury is not cleaned up adequately, the tiny droplets remaining in surface cracks and crevices may yield toxic vapors for years.

When a mercury spill occurs, first cordon off the spill area to prevent people from inadvertently tracking the contamination over a much larger area. Generally, a special mercury vacuum cleaner provides the best method of mercury spill cleanup. DO NOT use a regular vacuum cleaner because you will only disperse toxic vapors into the air and contaminate your vacuum cleaner. If a special mercury vacuum is not available, first use an appropriate suction device to collect the big droplets, then use a special absorbent (available from most laboratory supply vendors) to amalgamate smaller mercury droplets.

Ideally, mercury spills should be prevented in the first place. Examine all uses of mercury to see if substitutes are available. If substitutes are not available, use trays or other equipment to provide spill containment. Spilled mercury often accumulates in sink traps. Be prepared to contain the mercury when servicing such facilities.

THINGS TO REMEMBER

Don't walk through the spill.

Don't dilute the spill or disturb it in other ways without first diking around the perimeter of the spill with pillows or other spill absorbent materials.

If a spilled material has contacted any part of your body, start first aid measures immediately. Shout for help and move directly to the nearest eyewash or shower. Disrobe promptly if clothing is involved. Flush for a minimum of 15 minutes whether eyes or skin are involved. Other persons should assist (you will need help with eye flushing) and should contact 911 at the earliest possible time to obtain additional assistance and further treatment.

Decontamination

Decontamination is the process of physically removing or neutralizing contaminants that have accumulated on personnel and equipment; the last step of spill cleanup.

Appendix B, Discussion of Spill Response (continued)

Page 8 of 8

Evaluate the following. Are they contaminated?

- All cleanup supplies and equipment (brooms, dustpans, shovels, containers, pipettes, suction tubes, sponges, vacuum cleaners, monitoring equipment, etc.)
- Personal protective equipment (hazardous material suits, respirators, gloves, boots, aprons, etc.)
- Any additional equipment in the area may have been contaminated during the spill or release, but may not be obvious. Examples might include analytical and/or computer equipment (particularly for releases of dusts), glassware, bench tops, etc.
- The probability and extent of permeation is directly linked to the length of contact. The longer the contact, the more effort that will be required to decontaminate.
- Loose contaminants such as dust or vapors may be removed by scrubbing, washing, and rinsing.
- Adhering contaminants such as resins and muds may require physical removal by brushing and wiping.
- The effectiveness of this removal may be improved by solidifying, freezing, and absorption procedures.

Appendix C, Recommended Components of a Laboratory Hazardous Material Spill Kit

Instructions:

- PICs shall prepare and maintain spill kits appropriate for the activity. ESH/WS staff shall prepare and maintain spill kits appropriate for the facility and to address major potential spill hazards in the facility.
- The following is a sample of a spill kit inventory checklist.

Item	Requirement	Inventory Checked by Initials and Date
Kit Basic Requirements	• Tool Kit. Bucket etc. to hold necessary materials. • Kit should be stationed in accessible locations that are visible • Kit should be inventoried routinely and secured by a tamper indicating device to prevent pilfering of materials	
Barrier Materials	• Safety rope – 100' • Safety tapes / ribbon 100' • Warning signs – 5 • Tape - roll	
Absorbents	• Paper towels (two rolls) • Pillows and brooms • Sheets and pads • Loose bulk absorbents (e.g., cat litter)	
Residue Management	• Whisk broom or hand-held brush • Plastic dust pan • Metal dust pan • Large, sealable (e.g., Ziploc) plastic bags • 5-gallon plastic drum liners • 5-gallon waste disposal container with lid	

Personal Protective Equipment (PPE)	• Hazardous material splash goggles
	• Face shields
	• Gloves (proper elastomer for the material in the lab)
	• Appropriate body protection, such as
	  o Lab coat
	  o Elastomeric aprons
	  o Tyvek suits
	  o Shoe/foot coverings	

Emergency Equipment (should be close at hand and documented in the IWD)	• Respiratory Protection (if applicable) • Neutralizers (citric acid, sodium bicarbonate, etc.) • Special reactants (chelating agents, etc.) • Decontaminants and biostats (e.g., for blood-borne pathogen cleanup) • Specialized PPE • Mercury Spill Kit (unless it is known that there is no mercury in the laboratory)	

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Rich Norman Document Preparer	SEO-4	8-10-15	R a Norman
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STO-DO PLAN

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	☒ Reference ☐ Use every Time	☐ Self paced Instruction (e.g., webpage or instruction manual)

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Approval:				
	Terry Morrison	STO-DO	8/21/12	
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HISTORY OF REVISIONS

Document Number	Effective Date	Action	Description
STO-PLAN-010, R0	6/14/10	New	This document supersedes MAN-0021-SIGMA-BTF-EMG PREP, *Chapter 12: SIGMA & Beryllium Technology Facility (BTF) Complexes Building Emergency Plan.*
STO-PLAN-010, R1	12/08/2010	Major	Assembly areas need a better explanation of current locations. Also Assembly Area maps need to be replaced to properly identify Assembly Areas. Add verbiage to identify what needs to be done if there is a discovery of an abnormal event or condition 5.3
STO-PLAN-010, R2	3/6/12	Major	Add procedure to the BEP for room P-100. Add additional notifications to 5.3 for LANL Emergency Operations Division. Update the BEP to include the tie to P1201-4 that indicates accountability steps. Add SIP and Stay Put definitions, Assembly Area Leader responsibilities, and reason and purpose for Accountability Add SAFE-4 notification
STO-PLAN-010, R2.1	8/22/12	Minor	Update the instructions for SIP in the BEP with the verbiage that can be found in P1201-4 Replace Duty Officer Pager 664-3865 with 664-4444
STO-PLAN-010, R2.1-EXT1	3/7/13	Extension	Allow preparer time to review and update.
STO-PLAN-010, R2.1	6/4/13	Annual Review, No Change	Annual Review, No Change

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1.0 PURPOSE

This facility-specific Building Emergency Plan, (BEP), in addition to P1201-4, *LANL Emergency Procedures and Protective Actions,* describes the steps for accountability, the emergency response actions for responding to abnormal conditions and emergency situations in the SIGMA and Beryllium Technology Facility (BTF) Complexes, which includes the following buildings:

TA-03-0035, Press Building; **TA-03-0066,** Sigma Building; **TA-03-0067,** Guard Station;
TA-03-0159, Thorium Storage Building; **TA-03-0169,** Warehouse; **TA-03-0451,** Office Building;
TA-03-0541, Unoccupied Structure;
TA-03-2132, Unoccupied Structure, **TA-03-0141**, BTF and **TA-03-0317**, BTF Storage.

2.0 SCOPE

This document applies to personnel, tenants, temporary occupants, visitors, and facility emergency workers responding to emergencies and other abnormal event within STO-Supported Facilities.

3.0 OVERVIEW

3.1 Fire Alarms

SIGMA

Buildings 0035, 0159, and 0169 do **not** have alarms or lights. Buildings 0035, 0159 and 0169 are not routinely occupied. A runner notifies tenants in these buildings to evacuate.

BTF

Workers in the beryllium areas of the BTF must

1. Discontinue operations and ***if safe to do so***, place operations in a safe configuration.
2. ***If safe to do so***, evacuate across the barrier bench.

If directed to do so

1. Doff outer layer of Personal Protective Equipment (PPE) and air sampling pump at the downdraft.
2. Proceed to the Assembly Area and remain separated from others in the area designated for potentially contaminated until released by an Industrial Hygiene representative.

If **not** directed to doff PPE

1. Go directly to the Assembly Area and remain separated from others in the area designated for potentially contaminated until released by an Industrial Hygiene representative.
3. Report any operation left in a hazardous mode.
4. Do **not** re-enter the building or your work area once you have exited.
5. Remain at the designated assembly/muster area for further instructions or until the "All Clear" (return to normal operations) signal is given by the Incident Commander or designee.

3.2 Ventilation Light Indicators P-100

SIGMA

The Ventilation Light Indicators located in building 0066, Room P-100 monitors the ventilation system **ONLY**, using light indicators. Before entering the room, check the status of the ventilation system. There is a sign next to the door way that provides the following information:

1. Two red lights lit:
   a. Indicates it is safe to enter and perform work
2. One red light lit;
   a. Indicates it is safe to enter, but no work can be done
3. If no red lights are lit, it is not safe to enter
   a. Notify your RLM **AND** the STO Duty Officer at **664-4444** (pager).

(Please be aware the red lights indicate that the fans are energized; the green lights indicate that the fans are de-energized.)(This system was put in place from a Maintenance point of view.)

NOTE: The room has 3 red lights and 3 green lights at the entrance. If all green lights are lit **DO NOT** enter the room. Follow step 3.

3.3 Oxygen Alarm

SIGMA
The Oxygen Monitor Alarm in building 0066, Room G105B is an audible (beeping tone). When the Oxygen Monitor Alarm activates, workers must

1. Evacuate the room.
2. Notify your RLM **AND** the STO Duty Officer at **664-4444** (pager).

3.4 Hydrogen Monitor Alarm

SIGMA
Hydrogen Monitor Alarms located in various areas of Building **0066** are low-level alarm and high-level alarms.

- The low-level alarm emits a pulsating beep and is set for 30% of the hydrogen lower explosive limit.
- The high-level alarm emits a continuous beep and is set for 60% of the lower explosive limit.

In the event a hydrogen alarm is activated, qualified workers in the vicinity must

1. Secure any torches in use, and discontinue the use of any ignition source (e.g., open flames, electrical switches, welding, grinding, spark producing operations).
2. Turn off the main gas line (oxygen and hydrogen).
3. Call your RLM **AND** the STO Duty Officer at **664-4444** (pager).

IF the condition persists or **NO** qualified workers are in the vicinity:

1. Evacuate the area and notify others in the area,

2. Close the doors and secure the area to prevent others to enter,
3. Call your RLM **AND** the STO Duty Officer at **664-4444** (pager).

3.5 Hydrogen Fluoride Sensors

SIGMA

In Building **0066** RM D106 there is a Hydrogen Fluoride sensor and (HF/F_2) alarm. The HF/F_2 sensors and alarm are inside the room and are both audible and visual. They are set to alarm as follows:

2ppm – Caution (Yellow light)

3ppm – Warning (Orange light)

4ppm – Alarm (Red light and horn)

Should the Hydrogen Fluoride Alarm activates, workers in the vicinity must

1. Evacuate the room.
2. Close the door.
3. Notify others in the vicinity.
4. Call the point of contact on the Hazardous Communications form posted on the door, your RLM **AND** the STO Duty Officer at **664-4444** (pager).
5. Alarm rest button is located on wall to left of door and should be pushed to see if Alarm sounds.
6. Do not enter the room until the alarm is no longer audible.

3.6 Ventilation Alarm

BTF

The Loss of Ventilation alarm at the BTF is a blue strobe light and a continuous ringing of an alarm bell. This alarm is activated if both of the main exhaust fans fail or if there is a loss of 50% or more of the supply air. Unless deactivated, the alarm will sound for 10 minutes.

When the Loss of Ventilation alarm is activated, personnel **must**:

1. Bring operations to a safe state as listed in the Integrated Work Document.
2. Evacuate all beryllium areas.
3. Assemble in the support zone at the barrier bench and await for further instructions
4. Notify your RLM **AND** the STO Duty Officer at **664-4444** (pager).
5. Await further instructions.

The Partial Loss of Ventilation Alarm at the BTF is indicated by a yellow strobe light (no siren). A planned partial shutdown of the ventilation system is **not** considered an emergency and an evacuation is **not** necessary. When a Partial Loss of Ventilation Alarm is indicated, workers in a yellow strobe area must

1. Bring beryllium operations to a safe state as listed in the IWD. All non-beryllium activities may continue.
2. Limit Be activities to areas where there is **not** a yellow strobe light.
3. Consult with the IH prior to entering an area with a yellow strobe light where Be operations were not secured.
4. Notify your RLM **AND** the STO Duty Officer at **664-4444** (pager).

3.7 Equipment-specific Ventilation Alarm

The Equipment-specific Ventilation Alarm at the BTF is a small red light with a horn placed at specific piece of equipment. When the Equipment-specific Ventilation Alarm activates, workers must

1. Immediately discontinue affected operations that generate airborne beryllium.
2. Place affected operations/equipment in a safe configuration. All other operations may continue.
3. Notify your RLM **AND** the STO Duty Officer at or **664-4444** (pager).
4. Await further instructions.

4.0 ACRONYMS

BEP	Building Emergency Plan
BTF	Beryllium Technology Facility
PPE	Personal Protective Equipment
RLM	Responsible Line Manager
STO	Science & Technology Operations
VTR	Vault Type Room

5.0 INSTRUCTIONS

5.1 Shelter-in-Place (SIP)

Some kinds of chemical/radiological accidents or violent terrorism events may make going outdoors dangerous. Leaving the area might take too long or put those trying to evacuate in harm's way. In such a case it may be safer to stay indoors than to go outside.

- If the ventilation system has a simple wall-mounted thermostat-controlled heat/cool system: turn off ventilation
- If there is a trained energized worker present with appropriate personal protective equipment: have him or her turn off the ventilation, otherwise workers must do the following:
    1. Cover vents with plastic sheeting and/or duct tape

Note: The ability to cover the ventilation with plastic and/or duct tape is dependent on facilities providing SIP Kits.

5.2 Shelter-in-Place Location

SIGMA

Assemble in the following location for each building:

- Buildings 0066 and 0451 proceed to the first floor hallway (S100), and
- Buildings 0035, 0067, 0159, and 0169 remain inside the building you are in and (if possible) congregate in an interior room, such as a building conference room or main hallway, in order to better account for personnel.

BTF

Assemble in the following location for each building:

- Bldg. **TA-03-0141**, BTF
    - Room 127, report to the conference room without going outside if possible.
    - Room 120, report to the break room

- Bldg. **TA-03-0317**, this building is considered outside, personnel **should** go to the nearest building (BTF) for shelter.

NOTE: Workers in Rooms 126 and 137 must go through a stand-alone door to get from Room 120 without going outside.

5.3 Stay-Put

Stay-put, is the protective action used during non-hazardous material abnormal events. Examples of these events are wild land fire, a terrorism event, or inclement weather. This protective action calls for personnel to move or remain indoors but not confined to a specific area or room.

5.4 Assembly Areas

The Assembly Area for the SIGMA is listed here and shown on Figure 1.

TA-3-66 Assembly Area is located North-West of the Building and North of the field inside the security fence. The Assembly Area is organized by team and is designated by signs. Assemble in the appropriate location as designated by the signs.

The Assembly Area for BTF is listed here and shown on Figure 2.

The TA-3 141 Assembly Area is located East side of the building

5.5 Assembly Area Leader

1. Identify oneself upon arrival to assembly area.
2. Performs an informal headcount of evacuees present at assembly area.
3. Question all persons gathered at assembly area about personnel accountability and if anyone is missing.
4. Gather information (such as – smoke, pool of water, person down, medical emergencies, strange odors, etc.) obtained during a sweep of the building or buildings from everyone present at the assembly area.
5. Report information gathered to the Facility Leader or Incident Command.
6. Make notifications to SAFE-4 of Vault/Vault Type Room (VTR) that could potentially have remained open and unsecure.
    - For normal working hours contact SAFE-4: 667-5886
    - For non-working hours contact Associate Director Security and Safeguards (ADSS) on-call
        - (cell) 699-4094
        - (pager) 949-0156

5.6 Accountability

Accounting for all persons after emergency evacuation is essential. Anyone who has knowledge of any worker(s) inside a building needs to inform the emergency responders (e.g., fire department, EO-EM).

The object of accountability is to ensure that search, rescue, and assistance efforts can be initiated promptly to help provide for the safety of facility personnel who may be injured, trapped, or unaware of the emergency condition.

5.7 Primary Response to Discovery of an Abnormal Event or Condition

Before all else, a worker who discovers an abnormal condition or event must ensure his own safety and then the safety of others. If the worker thinks a building evacuation is necessary, the individual should pull the Fire Alarm to alert others to exit the building. Upon leaving the building, the worker should call 911 to

report the type of emergency (for example, chemical spill) to the 911 operator before they arrive on-scene and make notifications to 667-6211 for Emergency Management. If it is not possible to use a telephone, the worker should communicate to the Assembly Area Leader why the Fire Alarm was activated before the Emergency Responders arrives on scene.

Remember, activate the Fire Alarm whenever you need an immediate evacuation from a building, whether there is a fire or not.

6.0 REFERENCE

P1201-4, *LANL Emergency Procedures and Protective Actions*

Figure 1

SIGMA Assembly Area

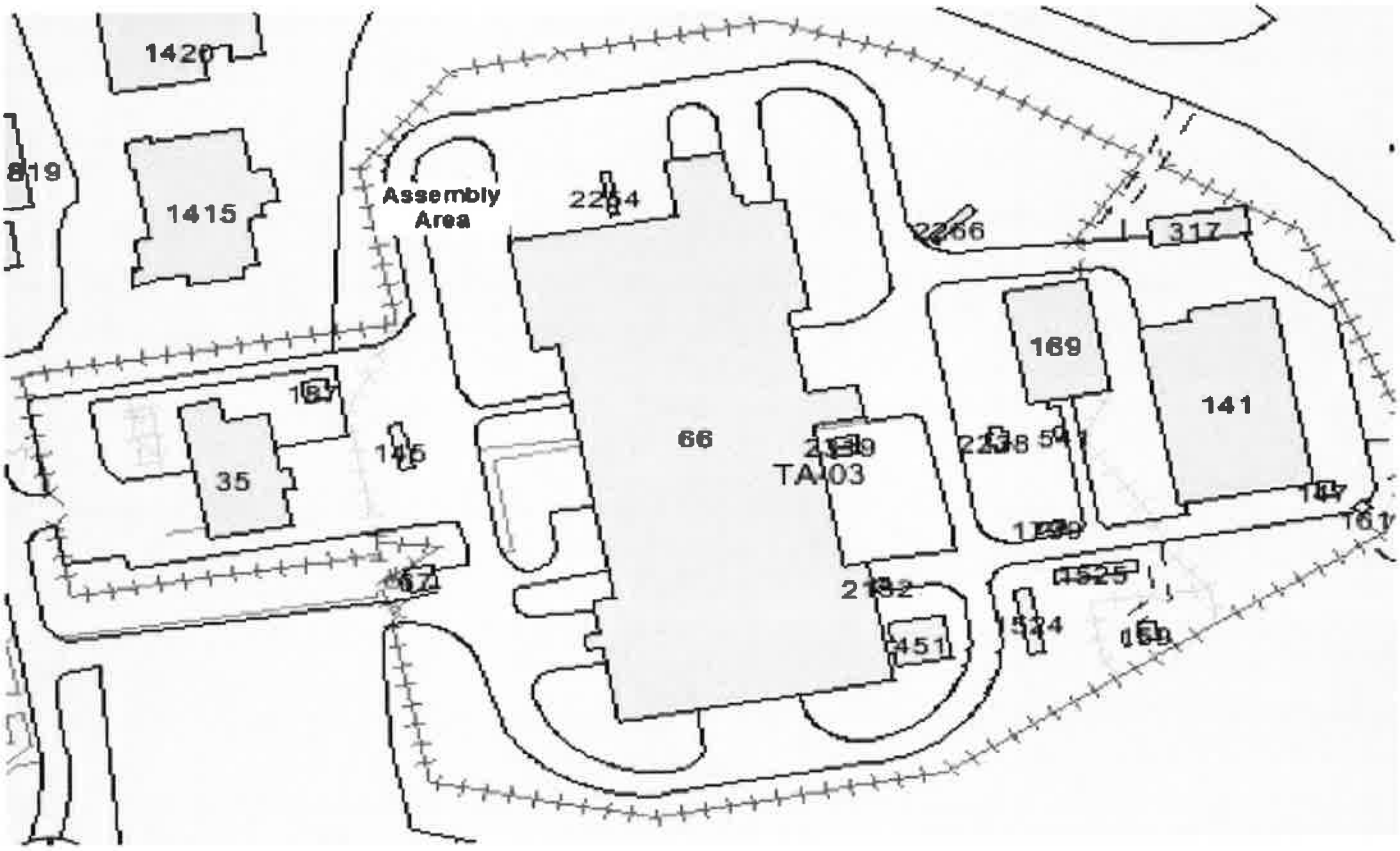
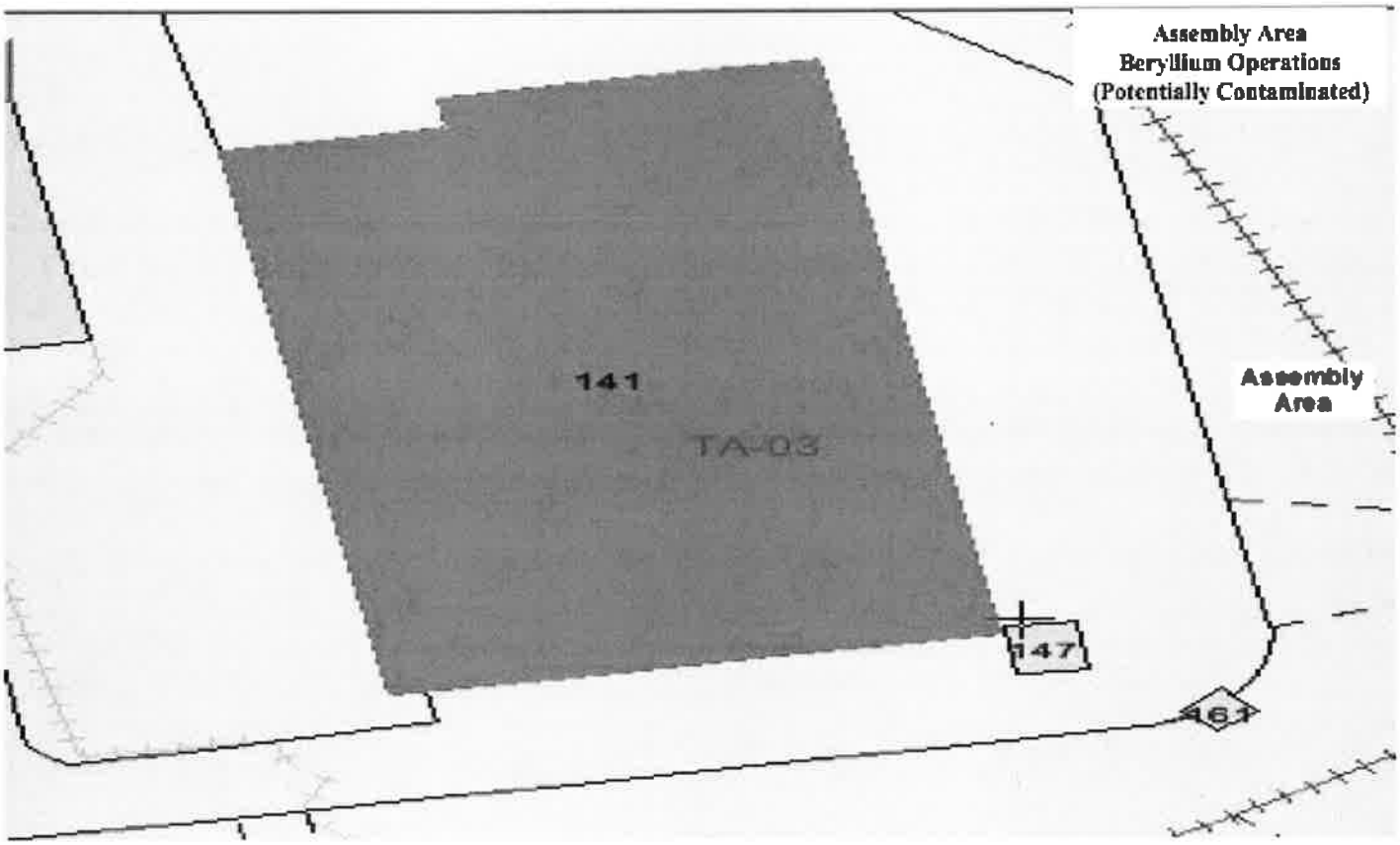


Figure 2

BTF Assembly Area



Gallegos, Marc Raymond

From: Dunn, Paul Stanton
Sent: Friday, April 21, 2017 4:13 PM
To: Gallegos, Marc Raymond; Morrison, Terry A
Cc: Korzekwa, Deniece Rochelle; Duffield, Andrew Nathan; Hochanadel, Pat
Subject: Graphite on north end of Sigma

Marc/Terry

All of the graphite on the north end of Sigma has been consolidated into one area per our meeting with storm water people. Please feel free to have them come out and figure out how they want to sample.

Thanks

p

Paul S. Dunn
Sigma Division
Division Leader
Los Alamos National Laboratory
Los Alamos, New Mexico 87544
505-665-3180

Gallegos, Marc Raymond

From: Dunn, Paul Stanton
Sent: Tuesday, January 17, 2017 10:25 AM
To: Gallegos, Marc Raymond
Cc: Korzekwa, Deniece Rochelle; Imhoff, Seth D; Alexander, David John
Subject: Graphite chemistry and other items
Attachments: Graphite CS chemistry.pdf; Graphite CS ash content.pdf

Hey Marc

I will send this info to you and ask that you forward to all interested individuals. I do not want to miss anyone.

Please note the info below with explanations:

Graphite chemistry:

- The graphite that is outside is almost all CS grade. Note the grade when you are looking at the attached table.
- The attached pdf's represent over 90% of all the graphite that is outside. The remaining 10% is higher purity than CS grade so the impurities will be less.
- All the impurities listed will not be in the graphite as standalone elements but will be compounds, more than likely as carbides.

Graphite consolidation:

-We have discussed consolidation with two Sigma team leaders and this should happen within the next week or so.

Please let me know if you need additional info.

Thanks

Paul

Paul S. Dunn
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TABLE 5D.01.01 — Content and Composition of Ash in Graphite

GRADE	SIZE	MAX. GRAIN SIZE (in)	% Total Ash		% Fe		%V		%S		%Ca	
			Ave.	Std. Dev.	Ave.	Std. Dev.	Ave.	Std. Dev.	Ave.	Std. Dev.	Ave.	Std. Dev.
AGSR	1-2¾" diam.	0.015	0.114	0.050	0.033	0.022	0.0100	0.0041	0.115	0.081	0.0012	0.00089
	3-5¾" diam.	0.03	0.303	0.314	0.127	0.204	"	"	"	"	"	"
	6-12" diam.	0.06	0.794	0.305	0.370	0.245	"	"	"	"	"	"
	14-35" diam.	0.25	0.958	0.660	0.407	0.321	"	"	"	"	"	"
AGA	+35" diam.	0.50	0.985	0.338	0.288	0.090	0.0100	0.0041	0.115	0.081	0.0012	0.00089
AGSX	1-2¾" diam.	0.015	0.131	0.067	0.047	0.033	0.0062	0.00305	0.122	0.109	0.0122	0.0020
	3-5¾" diam.	0.03	0.416	0.357	0.113	0.104	"	"	"	"	"	"
	6-12" diam.	0.06	0.684	0.411	0.361	0.240	"	"	"	"	"	"
CS	1-10" diam.	0.015	0.090	0.034	0.032	0.010	0.0049	0.0017	0.145	0.057	0.0116	0.0019
	12-18" diam.	0.03	1.180	0.570	0.337	0.340	"	"	"	"	"	"
ATL	20-24" diam.	0.03	1.240	0.528	0.645	0.367	0.0049	0.0017	0.145	0.057	0.0116	0.0019
	30-50" diam.	0.03	0.981	0.513	0.170	0.280	"	"	"	"	"	"
ATJ	9x20x24"	0.006	0.158	0.038	0.042	0.031	≈0.004	—	≈0.043	—	≈0.0111	—
CEQ	6x5x2⅞"	0.008	0.05	0.014	—	—	≈0.002	—	≈0.033	—	≈0.0037	—

GRADE	SIZE	MAX. GRAIN SIZE (in)	%Ti		%Al		%B		%Li		%Cd	
			Ave.	Std. Dev.	Ave.	Std.	Ave.	Std. Dev.	Ave.	Std. Dev.	Ave.	Std. Dev.
AGSR	1-2¾" diam.	0.015	0.0090	0.0031	0.031	0.0026	0.00013	0.000053	<0.0010	—	<0.0010	—
	3-5¾" diam.	0.03	"	"	"	"	"	"	"	—	"	—
	6-12" diam.	0.06	"	"	"	"	"	"	"	—	"	—
	14-35" diam.	0.25	"	"	"	"	"	"	"	—	"	—
AGA	+35" diam.	0.50	0.0090	0.0031	0.031	0.0026	0.00013	0.000053	<0.0010	—	<0.0010	—
AGSX	1-2¾" diam.	0.015	0.0070	0.0020	0.031	0.0155	0.00015	0.00003	<0.0010	—	<0.0010	—
	3-5¾" diam.	0.03	"	"	"	"	"	"	"	—	"	—
	6-12" diam.	0.06	"	"	"	"	"	"	"	—	"	—
CS	1-10" diam.	0.015	0.0060	0.0017	0.035	0.023	0.00013	0.000026	<0.0010	—	<0.0010	—
	12-18" diam.	0.03	"	"	"	"	"	"	"	—	"	—
ATL	20-24" diam.	0.03	0.0060	0.0017	0.035	0.023	0.00013	0.000026	<0.0010	—	<0.0010	—
	30-50" diam.	0.03	"	"	"	"	"	"	"	—	"	—
ATJ	9x20x24"	0.006	≈0.004	—	≈0.0125	—	≈0.00011	—	<0.0010	—	<0.0010	—
CEQ	6x5x2⅞"	0.008	≈0.005	—	≈0.016	—	≈0.00015	—	<0.0010	—	<0.0010	—

Ash Content

The ash content of all graphite is low since most of the impurities originally present in the raw materials are volatilized and driven off at the temperatures encountered in the graphitization of the product.

In Table 5D.01.01 total ash contents and ash compositions of different graphite sizes in the more frequently used graphite grades are presented. Note that for grades AGSR and AGSX, the ash content increases as the diameter increases.

Extremely high purity graphite (e.g., total impurities 20 ppm or less) can be manufactured under special conditions, with, of course, an increase in the cost.