

# LA-UR-20-21001

Approved for public release; distribution is unlimited.

MSGP Stormwater Pollution Prevention Plan TA-60 Material Recycling Title:

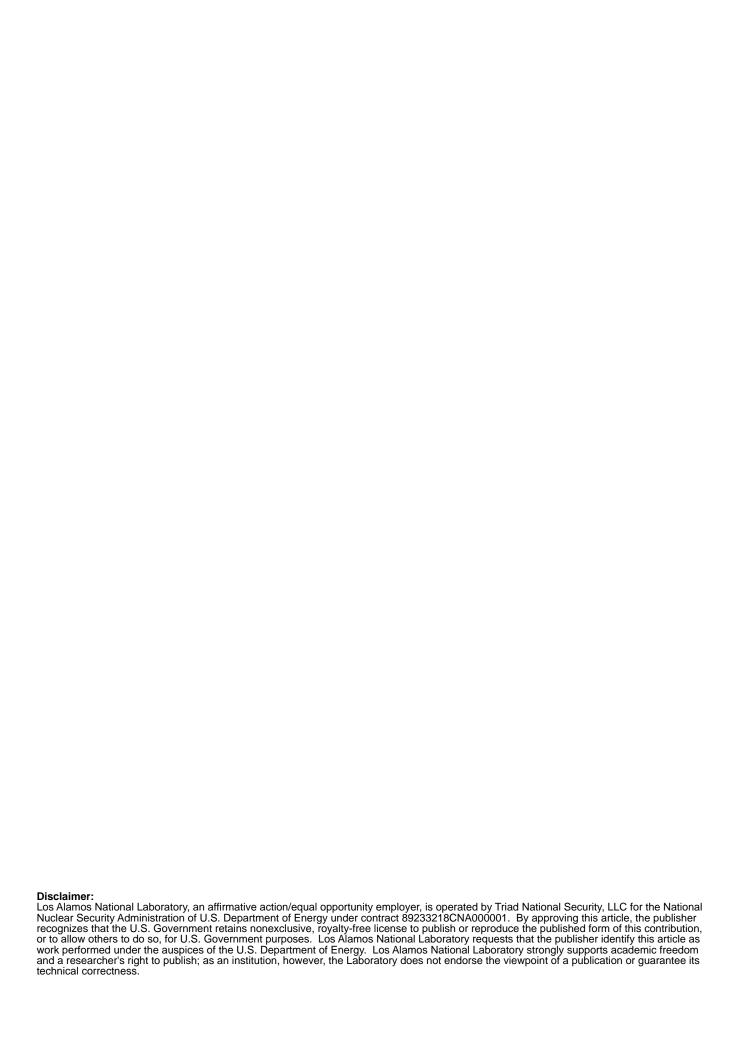
Facility

Author(s):

Wheeler, Holly Lynn Sandoval, Leonard Frank

**Environmental Regulatory Document** Intended for:

Issued: 2020-02-24 (rev.1)



TA-60 Material Recycling Facility MSGP Stormwater Pollution Prevention Plan UI-PLAN-PPP-005-R1 Revision 1, January 2020

# MSGP Stormwater Pollution Prevention Plan

# **TA-60 Material Recycling Facility**

Triad National Security, LLC Los Alamos National Laboratory

January 2020

**Revision 1** 

TA-60 Material Recycling Facility MSGP Stormwater Pollution Prevention Plan UI-PLAN-PPP-005-R1 Revision 1, January 2020

Page intentionally blank

# **TABLE OF CONTENTS**

PREFA	\CE		6						
1.0	FACIL	ITY DESCRIPTION	6						
1.1	FACILI	FACILITY INFORMATION6							
1.2	STORM	MWATER POLLUTION PREVENTION TEAM (PPT)	7						
1.3	SITE D	SITE DESCRIPTION8							
1.4	GENER	GENERAL LOCATION MAPS9							
1.5	SITE M	1APS	9						
2.0	POTE	NTIAL POLLUTANT SOURCES	11						
2.1	POTEN	NTIAL POLLUTANTS ASSOCIATED WITH INDUSTRIAL ACTIVITY	11						
2.2	SPILLS	AND LEAKS	11						
2.3	UNAU	THORIZED NON-STORMWATER DISCHARGES	12						
2.4	SALT S	STORAGE	12						
2.5	HISTO	RICAL DATA SUMMARY	13						
3.0	STOR	MWATER CONTROL MEASURES	14						
3.1	NON-I	NUMERIC TECHNOLOGY-BASED EFFLUENT LIMITS	14						
	3.1.1	MINIMIZE EXPOSURE	14						
	3.1.2	GOOD HOUSEKEEPING	14						
	3.1.3	MAINTENANCE	15						
	3.1.4	SPILL PREVENTION AND RESPONSE	15						
	3.1.5	EROSION AND SEDIMENT CONTROL	16						
	3.1.6	MANAGEMENT OF RUNOFF	17						
	3.1.7	SALT STORAGE PILES OR PILES CONTAINING SALT	17						
	3.1.8	DUST GENERATION AND VEHICLE TRACKING OF INDUSTRIAL MATERIALS	17						
3.2	MSGP	SECTOR SPECIFIC NON-NUMERIC EFFLUENT LIMITS	17						
3.2.1	NUME	RIC EFFLUENT LIMITATIONS BASED ON EFFLUENT LIMITATIONS GUIDELINES	18						
3.3	WATE	R QUALITY-BASED EFFLUENT LIMITATIONS AND WATER QUALITY STANDARDS	18						
4.0	SCHE	DULES AND PROCEDURES	18						
	4.1.1	GOOD HOUSEKEEPING	19						
	4.1.2	MAINTENANCE	19						
	4.1.3	SPILL PREVENTION AND RESPONSE	19						
	4.1.4	EROSION AND SEDIMENT CONTROL	19						

4.5	EMPLO	YEE T	RAINING	19
4.6	ROUTII	NE FA	CILITY INSPECTIONS AND QUARTERLY VISUAL ASSESSMENTS	20
	4.6.1	ROU	TINE FACILITY INSPECTIONS	20
	4.6.2	QUA	RTERLY VISUAL ASSESSMENTS	21
4.7	MONIT	ORIN	G	22
4.7.1	REQUII	RED N	ONITORING FOR CALENDAR YEAR 2020	24
5.0	DOCUM	MENT	ATION FOR ELIGIBILITY CONSIDERATIONS UNDER OTHER FEDERAL LAWS	25
5.1	ENDAN	IGERE	D SPECIES	25
5.2	HISTOF	RIC PR	OPERTIES	25
6.0	CORRE	CTIV	E ACTIONS AND DEADLINES	26
6.1	IMMED	DIATE	ACTIONS	26
6.2	SUBSE	QUEN	T ACTIONS	27
6.3	CORRE	CTIVE	ACTION DOCUMENTATION	27
7.0	ACRO	NYMS	5	27
8.0	SWPPI	P CER	TIFICATION	29
FIGUR	E A:	GEN	ERAL LOCATION MAP	30
FIGUR	E B-1:	FAC	ILITY SITE MAP	31
FIGUR	E B-2:	NEA	RBY RECEIVING WATERS	31
FIGUR	E B-3:	LAN	L ENDANGERED SPECIES MAP	31
ATTAC	CHMEN	Т 1:	NOTICE OF INTENT, SUPPORTING DOCUMENTATION, AND UPDATES	34
ATTAC	CHMEN	T 2:	SWPPP AMENDMENTS	35
ATTAC	CHMEN	Т 3:	CERTIFICATION OF NO UNAUTHORIZED STORMWATER DISCHARGES	36
ATTAC	CHMEN	T 4:	DULY AUTHORIZED SIGNATORY MEMORANDUM	37
ATTAC	CHMEN	T 5:	DISCHARGE MONITORING REPORTS	38
ATTAC	CHMEN	Т 6:	ANNUAL REPORTS	39
ATTAC	CHMEN	Т 7:	ROUTINE FACILITY INSPECTIONS	40
	CHMEN		QUARTERLY VISUAL ASSESSMENTS	
ATTAC	CHMEN	Т 9:	CORRECTIVE ACTION DOCUMENTATION AND CERTIFICATION	42
ATTAC	CHMEN	T 10:	SCHEDULED MAINTENANCE LOG	
			TRAINING DOCUMENTATION	
			MSGP (OR ACTIVE URL)	

	THREATENED AND ENDANGERED SPECIES HABITAT MANAGEMENT PLA AMOS NATIONAL LABORATORY	
ATTACHMENT 14:	MSGP IPAC TRUST RESOURCES REPORT	47
ATTACHMENT 15:	ENV-CP-QAPP-MSGP	48
ATTACHMENT 16:	EPC-CP-QP-023, MSGP ROUTINE FACILITY INSPECTIONS	49
ATTACHMENT 17:	EPC-CP-QP-022, MSGP CORRECTIVE ACTIONS	50
ATTACHMENT 18:	EPC-CP-QP-064, MSGP STORMWATER VISUAL ASSESSMENTS	51
	EPC-CP-QP-047, INSPECTING STORMWATER RUNOFF SAMPLERS AND SAMPLES FOR THE MSGP	52
ATTACHMENT 20:	EPC-CP-QP-2106, PROCESSING MSGP STORMWATER SAMPLES	53
	EPC-DO-QP-101, ENVIRONMENTAL REPORTING REQUIREMENTS FOR REVENTS	54
ATTACHMENT 22:	EPC-CP-QP-007, SPILL INVESTIGATIONS	55
	EPC-CP-QP-2110, MSGP STORMWATER POLLUTION PREVENTION PLAN ON AND MAINTENANCE	
ATTACHMENT 24:	SPILL LOGS	57
ATTACHMENT 25:	LOCAL PROCEDURES	58

# TA-60 Material Recycling Facility 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 *United States Environmental Protection Agency (EPA) National Pollutant Discharge Elimination System (NPDES) Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity (MSGP)* (U.S. EPA, June 2015) issued by EPA, and using the industry specific permit requirements for Sector N: Scrap Recycling and Waste Recycling Facilities as a guide. The applicable stormwater discharge permit is EPA General Permit Tracing Number NMR050013 [Triad National Security, LLC (Triad)]. Click here to view contents of the 2015 Multi-Sector General Permit.

This SWPPP applies to discharges of stormwater from the operational areas of the TA-60 Material Recycling Facility at Los Alamos National Laboratory. Los Alamos National Laboratory (also referred to as LANL or the "Laboratory") is owned by the Department of Energy (DOE), and is operated by Triad. Throughout this document, the term "facility" refers to the TA-60 Material Recycling Facility. The current MSGP expires at midnight on June 4, 2020.

#### 1.0 FACILITY DESCRIPTION

#### 1.1 Facility Information

Name of Facility: TA-60 Material Recycling Facility					
Street:					
City: Los Alamos State: NM ZIP Code: 87545					
County: Los Alamos					
NPDES ID (i.e., permit tracking number): NMR050013					
Primary Industrial Activity SIC code, and Sector and Subsector (2015 MSGP, Appendix D and Part 8): Sector N					
Estimated area of industrial activity at site exposed to stormwater: 1.8 acres					
Discharge Information					
Name(s) of surface water(s)/segment that receives stormwater from your facility: Sandia Canyon from NPDES Outfall 029.					

Does this facility discharge industrial stormwater directly into any segment of an "impaired water" (see definition in 2015 MSGP, Appendix A)? ⊠Yes No					
Pollutants causing the impairment: Total Recoverable Aluminum, Dissolved Copper, PCB (Aroclors), and Temperature					
Pollutants causing the impairment (see above) that may be present in industrial stormwater discharges from this Facility:					
Are any of your stormwater discharges subject to effluent limitation guidelines (ELGs) (2015 MSGP Table 1-1)? □Yes ⊠No					
If Yes, which guidelines apply? Not applicable.					

# 1.2 Stormwater Pollution Prevention Team (PPT)

The TA-60 MRF is part of the Utilities and Institutional (UI-DO) Facilities Facility Operations Director at Los Alamos National Laboratory with day to day management provided by Logistics Division-Heavy Equipment Roads & Grounds (LOG-HERG), which has established a PPT whose members are responsible for assisting the facility manager in developing and revising the facility's SWPPP as well as maintaining control measures and taking corrective actions when required. All PPT members will have access to either a hard copy or an electronic version of this SWPPP.

The specific duties of individual team members of the PPT are listed in the following table:

Staff Names	Individual Responsibilities
Team/Group Leader: Russell Stone, ESH Manager, DESH, UI	Responsible for the management of all environmental, safety, health, and quality programs for the yards, buildings and facilities 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 problems noted during inspections are corrected. The Group Leader must also ensure adequate resources are obtained to ensure compliance requirements of the MSGP and this SWPPP are met.
Deployed Environmental Professionals (DEPs): Leonard Sandoval, DESH-UI	Responsible for the management of all environmental programs and issues for the yards, buildings and facilities listed within this Plan. The DEP is responsible for training, recordkeeping, and SWPPP revision. The DEP ensures documentation of inspections and other required MSGP records relative to the SWPPP are managed in accordance with the Permit and established document

Staff Names	Individual Responsibilities
	control procedures and that the SWPPP is kept current. The DEP provides technical and regulatory support to facility and operations personnel regarding implementation of the MSGP and this SWPPP. Lastly, the DEP conducts routine facility inspections and if necessary, visual assessments, in accordance with the Permit. Identified conditions requiring corrective actions from routine facility inspections are entered into the Environmental Protection and Compliance-Compliance Programs (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.
Facility Operations Division (FOD) Manager: Lawrence Chavez, Operations Manager, UI-DO	Responsible for managing the maintenance and operation of all aspects of the yards, buildings and facilities listed within this Plan. The manager shall provide review and ensure coordination with core personnel and the PPT, as appropriate, when tenants within the FOD propose new processes, operations, features, or a new site that may be subject to the MSGP.
EPC Core: Holly Wheeler, MSGP Team Lead, EPC-CP	The MSGP Program Lead is responsible for managing and administering the MSGP Program for all industrial facilities operated by Triad within Los Alamos National Laboratory. The MSGP Program Lead advises and provides guidance to facility or operations personnel on NPDES MSGP regulations/requirements. The Program Lead also acts as the institutional point of contact for all interactions with the regulatory authority (EPA) and supervises personnel implementing stormwater monitoring requirements for the facility.
Operations Manager(s):  Danny Esquibel, Maintenance Manager (LOG-HERG)	Responsible for day-to-day operations at the facility. Assists the DEP and EPC with inspections; spill reporting; implementing, installing and maintaining storm water controls (also known as Best Management Practices) (BMPs); and providing documentation as requested by other team members. The Operations Manager is key to ensuring adequate communication and coordination of issues regarding implementation of the MSGP and this Plan. Operations Managers also assist the DEP/EPC with SWPPP training and/or briefings, as requested.

# 1.3 Site Description

The activities at this site may be classified under Sector N: Scrap Recycling and Waste Recycling Facilities. The primary operation of the TA-60 MRF is for consolidation, staging, and shipment of source separated recyclable materials (metals, paper, cardboard etc.) from LANL to off-site recycling facilities. Dome 60-0085 was historically

used to segregate solid waste from recycling materials and potential hazardous waste. However, this activity no longer occurs at the facility. The Dome is currently being used for storage of the paper dumpsters in the west half of the dome and used by Roads & Grounds crews for storage of snow removal four wheelers.

Of the 2-acre MRF site, approximately 90% (1.8-acres) consists of impervious surfaces in the form of rooftops, asphalt, compacted asphalt millings or concrete surfaces. Stormwater flow direction on the site is primarily to the east. Run-on to the site has been diverted into two primary drainage channels as seen on the site map.

A grated trench drain structure was installed directly to the west of the entrance in October 2005. This structure diverts the majority of the stormwater run-on away from the site into a small drainage swale along the south side of the site.

Stormwater runoff flows from west to east across the site and drains into a concrete catch basin in the northeast corner of the facility. The concrete catch basin was constructed during October 2005, and a drain valve was installed at the outlet of the basin. The increased catchment size and drain allows for water captured in the basin to be detained longer and released at a much slower rate than was previously allowed. The increased retention time allows for sediment transported by stormwater to settle out before its release. Also, grated filters were installed in conjunction with the basin. The runoff flows into the basin and eventually through the four filters. The filters provide additional sediment and debris removal. The drain valve is kept in a closed and locked position.

#### **Outfalls**

There is one stormwater outfall associated with this facility:

<u>Outfall 029:</u> Is representative of all stormwater runoff associated with the facility. Stormwater discharges from the facility are to the east into Sandia Canyon (impaired waters), which is a tributary of the Rio Grande located approximately 10 miles east of the facility. Automated monitoring station **MSGP02901** is located at Outfall 029.

## 1.4 General Location Maps

General facility site map of the facility can be found in Figure B-1. The nearby receiving waters map (Figure B-2) shows the locations of all receiving waters associated with stormwater discharges from the facility. 100% of the site flows to Sandia Canyon. The canyon at this location is a perennial stream and eventually flows into the Rio Grande approximately 10 miles southeast of the site.

#### 1.5 Site Maps

Site maps illustrate the facility's activities: including property boundaries, structures, impervious surfaces, operational areas as well as information on drainage patterns,

stormwater and erosion control structures, potential pollutant sources, and nearby receiving streams.

- Site Boundaries and Acreage. The site covers approximately 1.8 acres
- **Significant Structures and Impervious Surfaces.** The site is 90% impervious, primarily rooftops, asphalt, compacted asphalt millings or concrete surfaces.
- **Direction of Stormwater Flow and Site Drainage.** Direction of flow is indicated with arrows.
- Locations of Structural Stormwater Control Measures.
- Locations of all Receiving Waters in the immediate vicinity of the facility, indicating if any of the waters are Impaired and, if so, whether the waters have TMDLs established for them (see paragraph below this list). Maps of nearby receiving waters is provided in Figure B-2.
- Locations of all Stormwater Conveyances. This includes all ditches, pipes, and swales.
- Locations of Potential Pollutant Sources.
- Locations of Significant Spills or Leaks.
- Locations of all Stormwater Monitoring Points.
- Locations of Stormwater Inlets and Outfalls. Of which each will require a unique identification code for each outfall (e.g., Outfall 029, etc.), indicating if you are treating one or more outfalls as "substantially identical" and an approximate outline of the areas draining to each outfall.
- This facility is not associated with a municipal separate storm sewer system (MS4)
- Areas of designated critical habitat for endangered or threatened species.
   There are none in the direct vicinity of the facility. However, a map for threatened and endangered species within LANL property is included in Figure B-3.
- There are no non-stormwater discharges at the facility (see certification in Attachment 3)
- Locations of the following activities where such activities are exposed to precipitation:
  - o fueling stations (refueling trucks are kept on site);
  - vehicle and equipment maintenance and/or cleaning areas;
  - loading/unloading areas;
  - o locations used for the treatment, storage, or disposal of wastes;
  - liquid storage tanks;
  - processing and storage areas;
  - immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility;
  - o transfer areas for substances in bulk;
  - o machinery; and
  - location and sources of run-on to the site.

#### 2.0 POTENTIAL POLLUTANT SOURCES

Industrial activities that could potentially result in releases to the environment are summarized in 2.1. The site map for the facility is provided in Figure B-1.

# 2.1 Potential Pollutants Associated with Industrial Activity

Industrial Activity	Associated Pollutants
Recycling material staging and storage	Metal contaminated water, paper debris, and liquid draining from soda cans
Recycling container/roll-off handling and transport	Motor and transmission oils, antifreeze, fuels, grease, battery acid

#### 2.2 Spills and Leaks

#### **Past Spills and Leaks**

Spills and leaks for the past 3 years (2017-2019) are summarized in Attachment 24. Spills and leaks that occurred prior to 2017 are documented in previous SWPPP revisions.

### Areas on Site Where Spills/Leaks Could Occur

Location	Discharge Points
Recyclable metals roll-off bin staging and loading/unloading area at the far east end of the facility	Single ENV-CP monitoring outfall 60-MRF-1 ID# 029 east of MRF fence-gage station E122.35
Transformer 60-0188 located SE of covered Dome 60-0085 with 205 gallons of Non- PCB mineral oil and covered under an existing SPCC Plan	Single ENV-CP monitoring outfall 60-MRF-1 ID# 029 east of MRF fence-gage station E122.35

In the event of a future spill or leak at any of the facility areas, a spill report documenting the occurrence and the nature of the spill or leak, will be completed. The spill report will be filed promptly upon completion and documentation of the spill clean-up, and will be summarized in this section of the SWPPP.

The probability of spills or releases at the facility is minimized by the application of good housekeeping procedures and appropriate operational methods. As this facility regularly repairs heavy equipment and vehicles, spill protection is readily available on site. Appropriate response measures for a spill or release of hazardous materials are applied when addressing spills. The specific spill response and cleanup procedures will depend

on the nature of the spilled material. Specific spill response and reporting procedures for LANL are listed in Section 3.4 of this SWPPP.

### 2.3 Unauthorized Non-Stormwater Discharges

Non-storm water discharges are also identified in the "Non-Storm water Discharge Assessment and Certification" that is located in Attachment 3. This certification form certifies that all storm water outfalls have been evaluated for the presence of non-storm water discharges. This form will be updated whenever a change in possible non storm water discharges is determined.

# 2.4 Salt Storage

No salt storage piles used for de-icing or other commercial or industrial purposes are located at the TA-60 Material Recycling Facility.

# 2.5 Historical Data Summary

# Permitted Facility: TA-60 Materials Recycling Facility

# Calendar Year 2019

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.
029	N/A¹	Total Aroclor,	N/A	N/A	N/A	Al	Cu

<sup>&</sup>lt;sup>1</sup>N/A – No quarterly benchmark monitoring required.

#### 3.0 STORMWATER CONTROL MEASURES

Control measures at the facility are designed to minimize the potential release of pollutants that could adversely affect water quality.

#### 3.1 Non-Numeric Technology-Based Effluent Limits

#### 3.1.1 Minimize Exposure

To minimize exposure of industrial activities to precipitation events, the MRF utilizes covers for recyclable material containers and roll-off bins that are typically stored at the east end of the site. Metal canopies located in the central portion of the site (north and south side), and a fabric tension dome on the west end of the site are utilized to store recyclable materials, small amounts of waste, and protect equipment during inclement weather.

### 3.1.2 Good Housekeeping

Good housekeeping practices specifically applicable to the prevention of stormwater contamination include the following measures:

Operations personnel at the MRF perform weekly inspections/rounds at the facility which are focused toward keeping the site clean, spill prevention and detection, and identification of potential compliance issues. If a spill is witnessed it is remediated in accordance with this procedure and notifications are made in accordance with P 322-3 "Manual for Communicating, Investigating, and Reporting Abnormal Events". Per Part 2.1.2.2 of the 2015 MSGP, the following actions need to be implemented to ensure good housekeeping:

- Store material in appropriate containers;
- Keep all dumpster lids closed when not in use. For dumpster and roll off boxes that do not have lids and could leak, ensure that discharges have a control (e.g., secondary containment). Consistent with Part 1.1.3 above, this permit does not authorize dry weather discharges from dumpsters or roll off boxes.
- Minimize the potential for waste, garbage and floatable debris to be discharged by keeping exposed areas free of such materials, or by intercepting them before they are discharged.

All site areas exposed to precipitation are walked down during daily operations and monthly routine facility inspections to ensure that the grounds are kept in an orderly condition. The outdoor metal storage areas are inspected to ensure all piping and metal raw material is off the ground on storage racks and covered, or stored inside buildings, sheds or transportable containers. Vehicle and forklift parking areas are inspected for leaks or spills as well as storage areas containing oil-filled equipment. The entire site, including loading areas and outfalls, are inspected for floatable debris, garbage, waste

and all other potential pollutants. All dumpsters and roll-off bins are inspected to ensure they are closed.

#### 3.1.3 Maintenance

Control measures at the facility will be kept in effective operating condition by the implementation of scheduled preventive maintenance, standard operating procedures (SOPs), engineering guidance, and manufacturer's specifications as applicable. If control measures need to be replaced or repaired to maintain compliance with the 2015 MSGP, necessary modifications will be made according to the timelines specified in the *Corrective Action and Deadlines* requirements of Section 6.0 of this SWPPP.

Deficient items identified during routine facility inspections, walk-downs, or by any other means of identification, will be documented on the routine facility inspection forms and entered into the MSGP CAR database. The condition requiring corrective action will remain open until proper maintenance or corrective action has been completed. CAR information, along with documentation of maintenance/repair of control measures, is in Attachment 9 of the SWPPP.

Note: "All reasonable steps" means that the permittee has undertaken initial actions to assess and address the condition causing the corrective action, including for example, cleaning up any exposed material that may be discharged in a storm event (e.g., through sweeping, vacuuming) or making arrangement (i.e., scheduling) for a new best management practice to be installed at a later date. If a control measure was never installed, was installed incorrectly or not in accordance with Part 2 and/or 8 of the 2015 MSGP, or is not being properly operated or maintained site personnel must conduct corrective action as specified in Part 4 of the 2015 MSGP.

The retention pond is cleaned at the end of every March prior to the beginning of the new sampling season in April or when the depth of sediment or debris reached two-thirds (2/3) of the depth of the pond and when and if debris is at least six inches from the outlet pipe. According to the manufacturing specifications the functional longevity of the floc logs is 6 months to a year and at the MRF they will be replaced as soon as they deteriorate to the point where they no longer function properly. According to the manufacturing specifications the functional longevity for the Enviro-soxx with Metal-Loxx wattles is also 6 months to a year. At the material recycling facility every March prior to the beginning of the new sampling season in April and every 3 months after in June and September the Metal-Loxx wattles are replaced.

#### 3.1.4 Spill Prevention and Response

Spills, leaks, or other releases will be prevented and minimized by the application of good housekeeping procedures and regular visual inspections.

In general, the approach to spill cleanup is to secure the spill area and contact the Operations and Maintenance Coordinator (OMC) and/or the Security and Emergency Operations (SEO) Emergency Management & Response (EM&R) Team (if necessary).

For incidental releases, Micro-Blaze or dry absorbents can be used and the contaminated absorbents disposed of properly.

All spills or releases are reported to EPC-CP by using the spills pager (505) 664-7722. Although incidental spills may be cleaned up by facility personnel, all emergency spills or releases are reported to Emergency Management Division-Emergency Response (EMD-ER) and/or the Facility Duty Officer by calling 667-2400. If 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. In the event of a spill, EMD-ER will coordinate appropriate cleanup procedures and EPC-CP will notify the individuals or organizations responsible for completing spill reports and providing information needed to fulfill regulatory reporting requirements.

Unauthorized releases or discharges within industrial facility boundaries are entered into the MSGP Corrective Action Reporting database in accordance with EPC-CP-QP-022, *MSGP Corrective Actions*. In addition, the completion of an Unplanned Release Report is required in the event of a spill. The report will be submitted to EPC-CP personnel and handled according to internal spill record keeping procedures. Spills may be "reportable" (requiring external agency notification) depending on the nature of the spilled material and the location of the release. External agency notification may consist of verbal and/or written notification to the National Response Center, Environmental Protection Agency Region VI, or the New Mexico Environment Department (NMED). EMD-ER, the FOD and EPC-CP, in accordance with Laboratory and DOE policies and federal and state regulatory reporting requirements, will make the determination for the type of reporting required. EPC-DO-QP-101, *Environmental Reporting Requirements for Releases or Events* is used for this purpose (see Attachment 21).

Copies of internal spill reports are maintained by the responsible organization and in the EPC-CP database. The EPC-CP procedure for spill reporting and response, ENV-CP-QP-007, *Spill Investigations*, can be found in Attachment 22 of this SWPPP.

Additional EPC-CP procedures for spill reporting and response (see Attachments 21 and 22) include:

- ENV-CP-QP-007, Spill Investigations
- EPC-DO-QP-101.3, Environmental Reporting Requirements for Releases or Events

#### 3.1.5 Erosion and Sediment Control

At the northeast corner of the TA-60 MRF stormwater flows into a concrete retention pond and through four drop inlets with floc logs before it discharges into a 24 inch CMP culvert onto a concrete flume upstream of the MSGP sampler. The east end of the facility is covered with compacted asphalt millings and at the northeast corner there's a retention pond with a locked drain valve. Along and adjacent to the receiving end of the concrete retention pond there's a section of angular rock and Enviro-soxx with Metal-Loxx wattle. East of the Dome 60-0085 and along the north perimeter fence line there's a small sediment trap made of angular rock. Between covered structures 60-0251 and

60-0217 and adjacent to the perimeter fence line there is a small section of angular rock. There is also an asphalt berm that runs along and adjacent to sections of the north, east, and south perimeter fence lines.

#### 3.1.6 Management of Runoff

At the west entrance to the TA-60 MRF Eco-Blocs and a grated trench drain divert runon from stormwater runoff into a drainage swale along the south boundary of the facility. Run-on from stormwater runoff from the adjacent roadway to the west is also diverted into another drainage swale along the north boundary of the facility. Runoff is also managed by a 24 inch CMP culvert that discharges from the retention pond onto a concrete flume to the MSGP sampler. The concrete retention basin at the northeast corner of the MRF also has a drain valve that is locked. Along and adjacent to the receiving end of the concrete retention pond there's also angular rock and Enviro-soxx with Metal-Loxx wattle. East of Dome 60-0085 and along the north perimeter fence line there's also a small sediment trap made of angular rock. There's also an asphalt berm along and adjacent to sections of the north, east, and south perimeter fence lines.

#### 3.1.7 Salt Storage Piles or Piles Containing Salt

No salt storage piles used for de-icing or other commercial or industrial purposes are located at the TA-60 Material Recycling Facility.

## 3.1.8 Dust Generation and Vehicle Tracking of Industrial Materials

The east end of the MRF facility, which is primarily used for roll-off bin storage, is the only area that is not covered by asphalt, concrete or structures. This area of the facility has asphalt millings to reduce erosion and sediment transport and to facilitate loading and unloading operations. Once loaded, the vehicles must travel across the MRF site (to the West) which is covered in asphalt. Due to the millings and the asphalt lot, there is little potential for either dust generation or tracking of sediment.

## 3.2 MSGP Sector-Specific Non-Numeric Effluent Limits

- Inbound Recycling Material Control: The MRF and LANL utilize the institution's recycling web site
   (<a href="http://int.lanl.gov/environment/p2/recycle/index/shtml">http://int.lanl.gov/environment/p2/recycle/index/shtml</a>) to educate and inform LANL personnel about acceptable recycling items for shipment to the MRF.
   Drivers responsible for pickup of recycled material inspect their shipment prior to transport and will look for non-recyclable items, chemicals or hazardous waste, and bins containing liquids. If these items are present the shipment will be rejected until the generator can remediate the unacceptable condition.
- Outdoor Storage: The MRF minimizes exposure of recyclables to precipitation and runoff by storing as many materials as practical under metal canopies or in the tension fabric Dome.

- Indoor Storage: Recyclable materials are stored inside Dome 60-0085 and several metal canopies. MRF personnel perform weekly rounds where housekeeping issues are identified and promptly remediated.
- Vehicle and Equipment Maintenance and Refueling: Vehicle/heavy equipment maintenance is provided by LANL's Maintenance and Site Services (MSS) Division at the TA-60 Heavy Equipment Yard and not done at the MRF. Refueling of vehicle/heavy equipment is also not performed at the MRF.

#### 3.2.1 Numeric Effluent Limitations Based on Effluent Limitations Guidelines

The TA-60 Material Recycling Facility is classified under <u>Sector N- Scrap Recycling</u> <u>and Waste Recycling Facilities</u> and does not meet the industrial category requirements for effluent monitoring as listed in Part 2.1.3 (*Table 2-1 Applicable Effluent Limitations Guidelines*) of the 2015 MSGP. Benchmark monitoring is not required at the facility.

#### 3.3 Water Quality-Based Effluent Limitations and Water Quality Standards

Impaired waters monitoring is performed annually at the facility as listed in Section 4.7 of this SWPPP. The pollutants monitored can change yearly based on the requirements of the MSGP. The table in Section 4.7 lists the current year monitoring requirements and standards.

Stormwater from the TA-60 Material Recycling Facility discharges to Sandia Canyon. Certain stream reaches within Sandia Canyon have been identified as impaired waters by the NMED Surface Water Quality Bureau (SWQB). According to the 2014-2016 State of NM Clean Water Act 303b/305b Integrated Report and Final List of Assessed Surface Waters, pollutants causing the impairment are listed as: *Gross Alpha, Aluminum, PCB (Aroclors), Copper, and Thallium.* Primary potential pollutant sources have been identified as post development erosion/sedimentation and urban runoff (NMED 2014). EPA has not yet approved or established TMDLs for Sandia Canyon.

Refer to Section 4.7 for specific actions that will be taken when a water quality standard is exceeded.

#### 4.0 SCHEDULES AND PROCEDURES

Preventative maintenance of control measures used to comply with the Permit effluent limits can avoid situations that result in discharges to the environment. Part 5.2.5 of the 2015 MSGP specifies control measures will have a schedule or frequency for maintenance and procedures specifying how maintenance is conducted. Part 5.5 requires documentation of maintenance and repairs including the date(s) of regular maintenance. See Attachment 10 for the Scheduled Maintenance Log.

#### 4.1 Good Housekeeping

See Section 3.1.2 of this SWPPP.

#### 4.2 Maintenance

See Section 3.1.3 of this SWPPP.

#### 4.3 Spill Prevention and Response

See Section 3.1.4 of this SWPPP. All referenced procedures will be provided in Attachments 21 and 22 of this SWPPP.

#### 4.4 Erosion and Sediment Control

See Section 3.1.5 of this SWPPP.

#### 4.5 Employee Training

Employee training is essential for effective implementation of the SWPPP and MSGP requirements. The goals for the training program are to ensure that employees: (1) are aware of what happens when pollutants come in contact with stormwater; (2) are familiar with and will implement the requirements of this SWPPP; (3) are capable of preventing spills; (4) respond safely and effectively to an accident when one occurs; (5) recognize when there is an issue with a control measure; (6) recognize when additional control measure are necessary; and (7) identify situations that could lead to stormwater contamination.

Per Part 2.1.2.8 of the 2015 MSGP, training relevant to the SWPPP and MSGP is required for all workers at the facility that work in areas where industrial materials or activities are exposed to stormwater (MSGP sites); workers, managers, and supervisors who are responsible for implementing activities necessary to meet the conditions of this permit (e.g., inspectors, maintenance personnel); and all members of the PPT. Training is designed to ensure these personnel understand the MSGP and SWPPP requirements, as well as their specific responsibilities regarding these requirements.

Training provided and assigned to these personnel cover both the specific control measures used at the facility; along with monitoring, inspection, planning, reporting, and documentation requirements described in this SWPPP. Training will be conducted at least annually. The DEP, Deployed Environment Safety and Health (DESH) Group Leader and Pollution Prevention Team members are responsible for ensuring all appropriate personnel receive this training

Training activities are documented in accordance with LANL's Training Standards. In cases where training is formalized enough to require specific curricula and reoccurrence, the training activity will be recorded in LANL's official U-TRAIN database. Informal briefings, such as those included in-group safety meetings are not typically recorded in U-TRAIN. Sign-in sheets are used to document attendance and will be kept on file in Attachment 11 of this SWPPP.

The topics in this SWPPP that are covered in the latest version of the facility-specific annual MSGP training (see Attachment 11) include the following:

- Overview of the SWPPP contents;
- Spill response and cleanup procedures, good housekeeping, maintenance requirements, and material management practices to prevent stormwater pollution;
- The location of all controls on the site required by this permit and how they are maintained;
- The proper procedures to follow with respect to the permit's pollution prevention requirements; and
- When and how to conduct inspections, record applicable findings, and take corrective actions

### 4.6 Routine Facility Inspections and Quarterly Visual Assessments

Routine inspections at this facility are conducted and documented monthly in accordance with EPC-CP-QP-023, MSGP Routine Facility Inspections (Attachment 16).

Visual assessments are conducted in accordance with EPC-CP-QP-064, MSGP Stormwater Visual Assessments (Attachment 18).

#### 4.6.1 Routine Facility Inspections

At least once each calendar year, the routine facility inspection is conducted during a period when a stormwater discharge is occurring. A qualified member of the PPT (typically the DEP, a representative from the EPC-CP Storm Water Permitting/Compliance Team or EPC-CP Program Lead) performs the inspection. The 2015 MSGP consolidates the different and separate documentation requirements in the Comprehensive Site Inspection Procedures and Routine Facility Inspection Procedures from the 2008 MSGP. EPC-CP will perform at least one routine inspection per year in order to evaluate corrective action status for the Annual Report requirements.

Routine inspections will evaluate the following areas, at a minimum:

- Areas where industrial materials or activities are exposed to stormwater;
- Areas identified in the SWPPP and those that are potential pollutant sources;
- Areas where spills and leaks have occurred in the last three years;
- Discharge points(outfalls/Substantially Identical Outfalls (SIOs); and
- Control measures used to comply with the effluent limits contained in this permit.
- Specific areas of the facility to be inspected are described in Section 2.1.

During routine inspections, the following must be examined and looked for:

- 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, 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 maintenance, repairs or replacement.

Inspections performed by the PPT member are documented by completing the routine facility inspection form, which identifies all conditions requiring corrective action and other potential stormwater pollution issues that were encountered. All conditions requiring corrective actions identified during the inspection are addressed in accordance with Section 6.0 *Corrective Actions and Deadlines* of this plan. Facility personnel or the DEP may also perform daily, weekly, or other periodic facility surveys (walk downs) between monthly routine inspections to ensure compliance with the SWPPP and MSGP. Completed routine facility inspection forms are provided in Attachment 7 of this SWPPP and meet the requirements listed in the 2015 MSGP (Part 3.1.2.).

# 4.6.2 Quarterly Visual Assessments

Once each quarter, (April 1-May 31, June 1-July 31, August 1-September 30, October 1-November 30) a stormwater sample is obtained and visual assessment performed at each outfall, if a measureable storm event occurred. A qualified member of the PPT (DEP, EPC-CP field team member or MSGP Program Lead) conducts the visual assessment. The visual assessment will be:

- Of a sample in a clean, clear colorless glass or plastic container and examined in a well-lit area;
- On samples collected within the first 30 minutes of an actual discharge from a storm event or as soon as practicable thereafter. Alternatively, document why it was not possible to collect the sample within the first 30 minutes (i.e. adverse conditions, not enough flow, etc.); and
- Conducted at least 72 hours since the last storm event; or document that the 72-hour period is representative of local storm events during the sampling period.

**Note:** Snowmelt samples need only be collected during a period of measurable discharge.

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 stormwater pollution.

Exceptions to visual assessments:

- Document rationale if a visual assessment is unable to be collected in a quarter (no precipitation event or adverse conditions, etc.);
- Perform an additional assessment during the next qualifying storm event if unable to perform in a particular quarter; and
- Perform one quarterly assessment during snowmelt discharge (taken during a measurable discharge from the site).

For facilities with substantially identical outfalls, quarterly visual assessments may be performed at only one of the outfalls, provided that you perform visual inspections on a rotating basis at each substantially identical outfall.

The PPT member performing the visual assessment documents potential stormwater pollution problems that were observed during the assessment on the quarterly visual assessment form. Any required corrective actions identified during the assessment are addressed in accordance with Section 6.0 *Corrective Actions and Deadlines* of this plan. Completed quarterly visual assessments are provided in Attachment 8 of this SWPPP and meet the requirements listed in the 2015 MSGP (Part 3.2.2).

# 4.7 Monitoring

Analytical monitoring comprising Impaired Waters monitoring for industrial activity identified in Tables 1-1 and 6-1 of the 2015 MSGP is performed annually on stormwater discharges from the site. Benchmark constituents are monitored quarterly. Monitoring occurs when storm events result in an actual discharge from the site and follow the preceding measurable storm event by at least 72 hours (3 days), unless documented that the storm event is representative of local storm events during the sampling period. For runoff from snowmelt, the monitoring is 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 is collected as soon as practicable after the first 30 minutes and documentation is kept with the SWPPP explaining why it was not possible.

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. If adverse weather conditions prevent the collection of a sample according to the relevant monitoring schedule, a sample will be collected during the next qualifying storm event or as soon as practicable.

Monitoring occurs at automated sampling station **MSGP02901** as identified in Section 1.5. Discharge from the facility are to the east into Sandia Canyon (impaired waters), which is a tributary of the Rio Grande located approximately 10 miles east of the facility.

Outfall locations are shown on the site map provided in Figure B-1.

Monitoring will continue annually for constituents associated with impaired waters until that constituent is no longer detected in stormwater samples.

If the impaired water or benchmark constituent value exceeds the New Mexico Water Quality criterion, the Pollution Prevention Team will:

 Review the selection, design, installation, and implementation of control measures to determine if modifications are necessary to meet the effluent limits;

- Implement the necessary modifications within the timeframe specified for corrective action; and
- Continue benchmark or annual monitoring of the constituent (as required by Part 6.2 of the 2015 MSGP);

For each monitoring event, except snowmelt monitoring, the following information will be recorded and maintained through work orders, 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
- 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.

All records of monitoring information, including all calibration and maintenance records are maintained for a minimum period of at least three years from the date the permit expires.

LANL's applicable stormwater monitoring procedures can be found in the following Attachments:

- EPC-CP-QP-047, Inspecting Stormwater Runoff Samplers and Retrieving Samples for the MSGP (Attachment 19)
- EPC-CP-QP-2106, Processing MSGP Stormwater Samples (Attachment 20).

# 4.7.1 Required Monitoring for CY 2020

Permitted Facility: TA-60 MRF

Outfall: 029(60-MRF-1)

Monitored Outfall	Monitoring Requirement	Industrial Sector	Assessment Unit	Analyte	Filtered/ Unfiltered	Regulatory Standard	Units	Regulatory Standard Type	Regulatory Standard Reference
	Impaired Waters	-	NM-9000.A_047	Al	F10u <sup>1</sup>	1010	ug/L	NM 2010 Aquatic Chronic 80 mg	20.6.4.900 NMAC Subpart I
029	Impaired Waters	-	NM-9000.A_047	Cu	F <sup>2</sup>	7	ug/L	NM 2010 Aquatic Chronic 80 mg	20.6.4.900 NMAC Subpart I
	Quarterly Benchmark	N2		No Benchmark Monitoring Required					

¹F10u − 10 µm filter

 $<sup>^2\</sup>text{F}$  - 0.45  $\mu m$  filter

# 5.0 DOCUMENTATION FOR ELIGIBILITY CONSIDERATIONS UNDER OTHER FEDERAL LAWS

# 5.1 Endangered Species

The Final Site-Wide Environmental Impact Statement (EIS) for the Operation of Los Alamos National Laboratory (DOE/EIS-0380) was issued in May 2008, and a Record of Decision in September 2008. Stormwater 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 LANL's Integrated Review Tool (IRT), which incorporates both the Excavation Permit (EX-ID) and Permit Requirements Identification (PR-ID) process. Stormwater 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 stormwater pollution prevention compliance at MSGP sites in accordance with Section 4.7 *Monitoring* of this plan. Corrective actions are taken as necessary as described in Section 6.0 *Corrective Actions and Deadlines* of this plan.

Part 5.2.2 of the 2015 MSGP requires areas of designated critical habitat for endangered or threatened species, as applicable, be included in the SWPPP. The *Threatened and Endangered Species Habitat Management Plan for Los Alamos National Laboratory* (LA-UR-17-29454) was last updated in October 2017 (see Attachment 13). This document provides a management strategy for the protection of threatened and endangered species and their habitats on LANL property. The MSGP IPaC Trust Resource Report (see Attachment 14) is also attached for informational purposes.

#### **5.2** 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 RANT

#### 6.0 CORRECTIVE ACTIONS AND DEADLINES

When any of the following conditions occur or are detected during an inspection, monitoring or any other means, this SWPPP (e.g., sources of pollution; spill and leak procedures; non-stormwater discharges; the selection, design, installation and implementation of control measures) is reviewed and revised (as appropriate). The purpose is to ensure effluent limits of the 2015 MSGP permit are met and pollutant discharges are minimized:

- An unauthorized release or discharge (e.g., spill, leak, or discharge of nonstormwater not authorized by this or another NPDES permit to a water of the U.S.) occurs at the facility;
- A discharge violates a numeric effluent limit;
- Control measures are not stringent enough for the discharge to meet applicable water quality standards or non-numeric effluent limits;
- An inspection identifies that a required control measure was never installed, was installed incorrectly or is not being properly operated or maintained; and
- Whenever a visual assessment shows evidence of stormwater pollution.

When any of the following conditions occur, a review of the selection, design, installation, and implementation of control measures is 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 the facility significantly changes the nature of pollutants discharged in stormwater from the facility, or significantly increases the quantity of pollutants discharged; or
- The average of 4 quarterly sampling results exceeds an applicable benchmark. If less than 4 benchmark samples have been taken, but the results are such that an exceedance of the 4 quarter average is mathematically certain (i.e., if the sum of quarterly sample results to date is more than 4 times the benchmark level) this is considered a benchmark exceedance, triggering this review (see Section 4.7); or
- If an impaired water constituent exceeds the NM Water Quality criterion (see Section 4.7).

When the review identifies the need to modify the SWPPP, it will be revised within 14 calendar days of completion of the associated condition requiring corrective action.

#### 6.1 Immediate Actions

When a condition requiring corrective action is identified, all reasonable steps necessary to minimize or prevent the discharge of pollutants are immediately taken (i.e. spill clean-up, scheduling repairs) until a permanent solution (if needed) can be implemented. Immediate action means all reasonable steps are taken the same workday or no later than the following workday (when it is too late in the day to take corrective action).

## 6.2 Subsequent Actions

When additional corrective actions are required (e.g. installing or making operational a new or modified control, completing repairs, ordering BMPs) they will be completed by the next storm event, if possible, or within 14 calendar days (from initial discovery). When it is determined that it is infeasible to complete corrective actions within 14 days, documentation of infeasibility and a schedule for completion of the work is documented in the CAR database, which will be completed no later than 45 days (from initial discovery). When it is determined that corrective actions will exceed 45 days, EPA is notified and provided justification of why actions will exceed the timeframe; and a minimal amount of additional time to complete the work may be approved.

#### 6.3 Corrective Action Documentation

Upon discovery, conditions requiring corrective action are documented by the DEP or EPC-CP on a Routine Facility Inspection Form and/or entered into the CAR database. The action will be kept open in the database until the issue has been resolved. Documentation of maintenance and repairs of stormwater control measures (BMPs) will be kept in Attachment 10 of this SWPPP. Where corrective actions result in changes to procedures or controls documented in this SWPPP, modifications to the SWPPP are made accordingly within 14 calendar days of completing the corrective action(s). LANL procedure EPC-CP-QP-022, *MSGP Corrective Actions* can be found in Attachment 17.

#### 7.0 ACRONYMS

BMP	Best Management Practice
CAR	Corrective Action Report
DEP	Deployed Environmental Professional
DESH	Deployed Environmental Safety and Health
DOE	Department of Energy
EIS	Environmental Impact Statement
ELG	Effluent Limitation Guidelines
EMD-ER	Emergency Management Division-Emergency Response
EPA	Environmental Protection Agency
EPC-CP	Environmental Protection and Compliance – Compliance Programs
FOD	Facility Operations Division
IPaC	Information for Planning and Consultation
LANL or the Laboratory	Los Alamos National Laboratory
MSGP or Permit	Multi-Sector General Permit
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
PPT	Pollution Prevention Team
SWPPP	Stormwater Pollution Prevention Plan

URL	Uniform Resource Locator
-----	--------------------------

#### 8.0 SWPPP CERTIFICATION

# STORMWATER POLLUTION PREVENTION PLAN TA-60 Material Recycling Facility Los Alamos National Laboratory

#### **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.

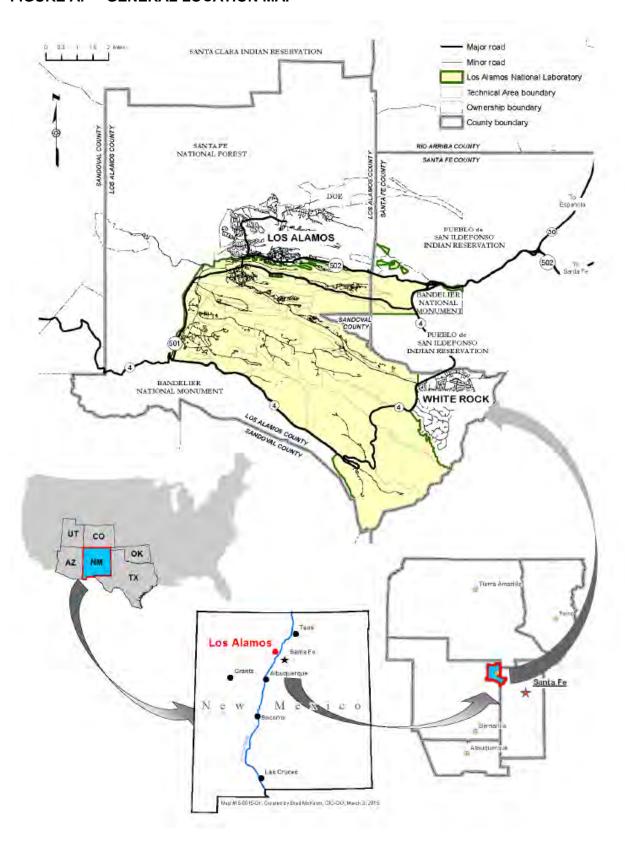
DateDate	Kundl Ster con	Signature
Date	7	oignature

Andrew W. Erickson

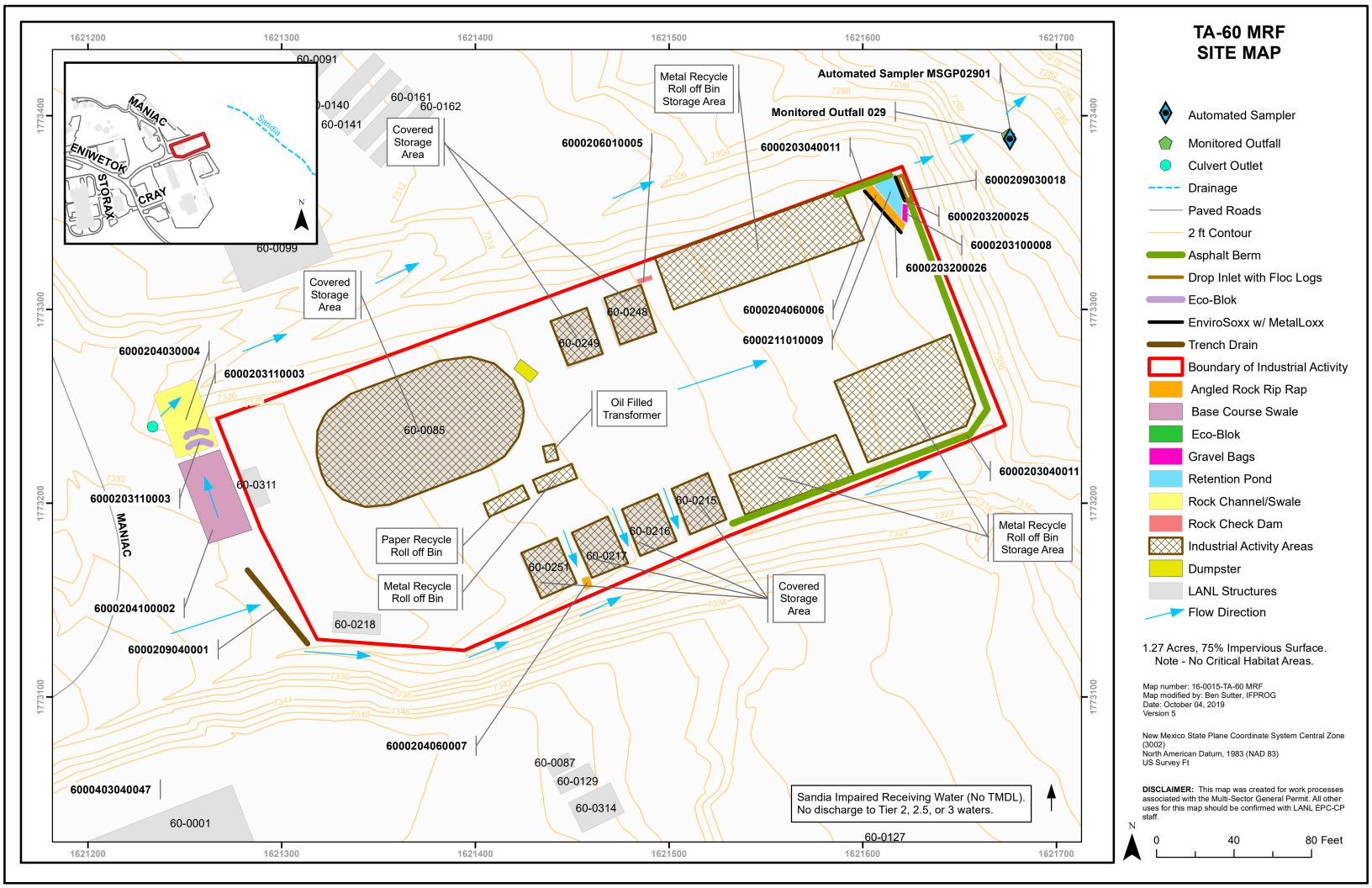
**Facility Operations Director** 

Utilities and Institutional Facilities, UI-DO

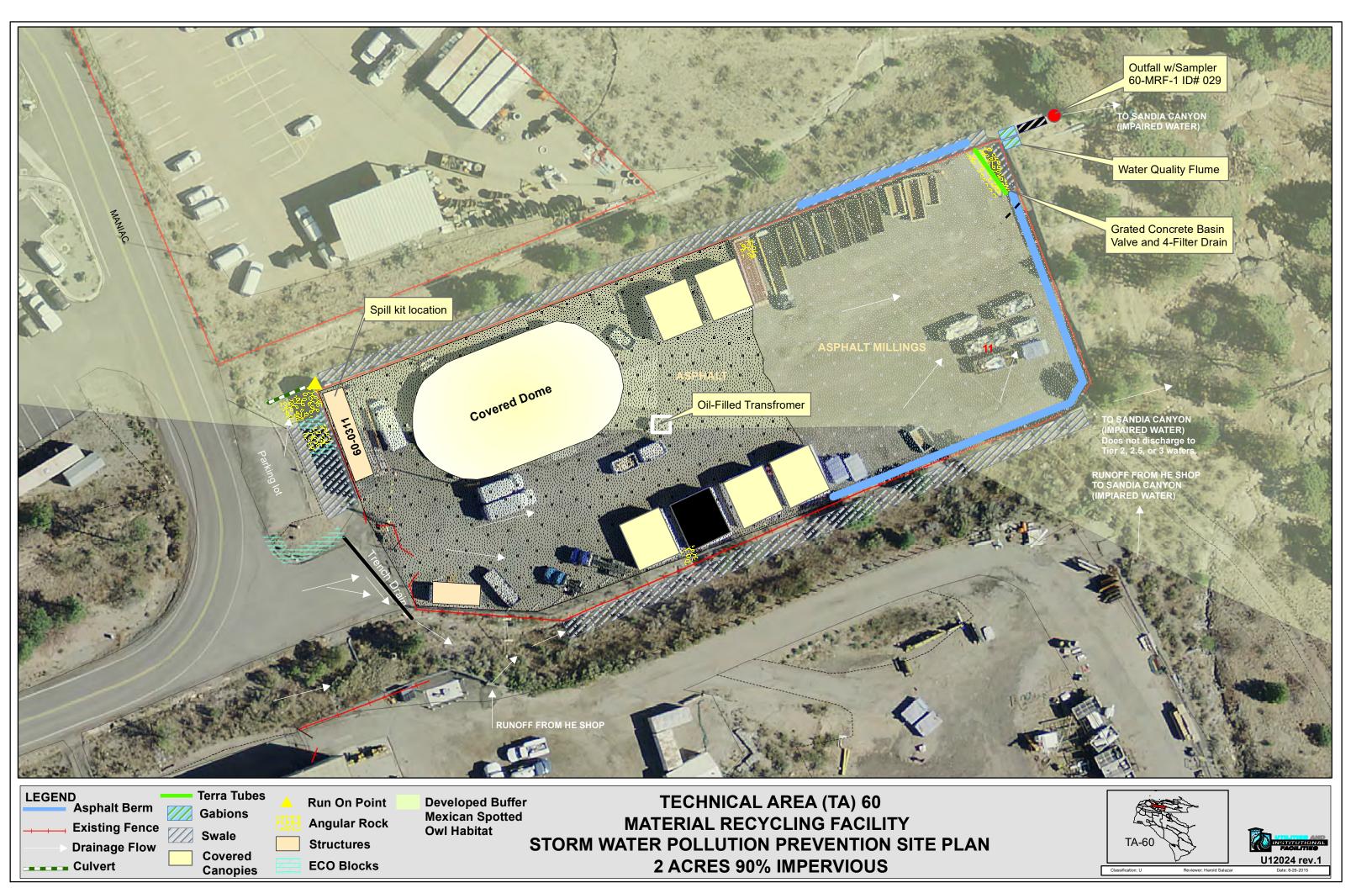
FIGURE A: GENERAL LOCATION MAP



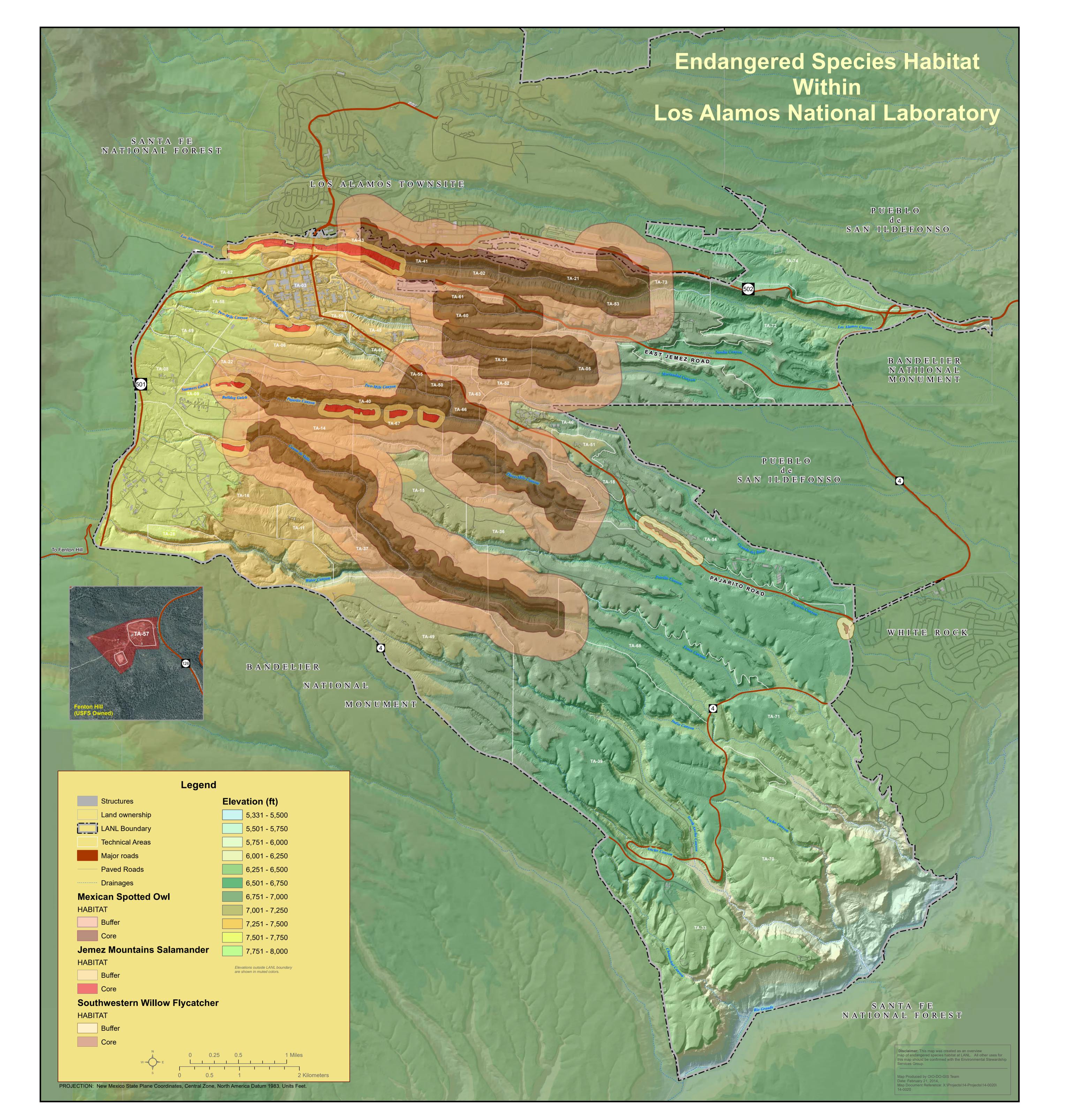
# FIGURE B-1: FACILITY SITE MAP



# FIGURE B-2: NEARBY RECEIVING WATERS



### FIGURE B-3: LANL ENDANGERED SPECIES MAP



# ATTACHMENT 1: NOTICE OF INTENT, SUPPORTING DOCUMENTATION, AND UPDATES



Environmental Protection & Compliance Los Alamos National Laboratory PO Box 1663, K490 Los Alamos, New Mexico 87545 (505) 667-0666

Date:

APR 2 3 2018

Symbol: EPC-DO: 18-165

LA-UR:

18-23181

Locates Action No.:

N/A

Helen Nguyen NetDMR & ICIS-NPDES Coordinator Surface Water Compliance Section (6EN-WC) U.S. EPA, Region 6 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) Change Notice of Intent (Change NOI) Reporting Pursuant to Part 7.4

Dear Ms. Nguyen:

The purpose of this letter is to submit Change NOI information to modify outfall and monitoring requirements related to MSGP Permit Tracking No. NMR053195. Due to system limitations, Los Alamos National Security (LANS) was previously unable to submit a complete and accurate NOI using the MSGP NeT reporting tool, and was granted a waiver to submit paper NOI forms by Nasim Jahan on February 9, 2016. As LANS submitted a paper NOI, subsequent Change NOIs or Notice of Termination (NOTs) must also be submitted via the paper form.

Additionally, pursuant to MSGP Part 9.6.2, Permittees in New Mexico must also comply with benchmark values that are modified to reflect New Mexico water quality standards based on the Standards for Interstate and Intrastate Surface Waters (20.6.4.900 NMAC). These modified benchmarks, as well as New Mexico impaired waters standards, are currently not incorporated into the electronic reporting tools so as to automatically populate correct monitoring requirements in NetDMR. EPA R6 is aware of this issue and has previously assisted in the resolution of LANS' limit sets in NetDMR. Per discussion during our meeting on March 29, 2018, LANS is requesting the assistance of EPA R6 to facilitate implementation of the enclosed Change NOI to ensure assignment of the correct monitoring requirements in NetDMR. The Change NOI is included in Enclosure 1; correct limit sets for new monitored outfall 017 are included in Enclosure 2. The Change NOI needs to be implemented no later than the end of LANS' monitoring period 1, May 31, 2018, to allow accurate reporting in NetDMR by the DMR due date of July 30, 2018.



Your assistance is appreciated as LANS is committed to maintaining compliance with the MSGP requirements. If you have any questions, please contact Terrill Lemke (505) 665-2397 or Leslie Dale (505) 606-2371.

Sincerely,

Tauria S. Van Valkenburg

Group Leader

Environmental Compliance Programs Los Alamos National Security, LLC

TSV:TWL:LJD:eim

Enclosures: 1) Change NOI for MSGP Permit Tracking No. NMR053195

2) Limit Sets to Assign to Monitored Outfall 017 in NetDMR for Permit Tracking

No. NMR053195

Copy: Karen E. Armijo, NA-LA, (E-File)

Timothy A. Dolan, LC-ESH, (E-File)

William R. Mairson, ADESH, (E-File)

Benjamine B. Roberts, EPC-DO, (E-File)

Taunia S. Van Valkenburg, EPC-CP, (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-CP, (E-File)

adesh-records@lanl.gov. (E-File)

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

# **ENCLOSURE 1**

Change NOI for MSGP Permit Tracking No. NMR053195

EPC-DO: 18-165

LA-UR-18-23181

Date: APR 2 3 2018

NPDES FORM 3510-6



# United States Environmental Protection Agency Washington, DC 20460 ICE OF INTENT (NOI) FOR STORMWATER DISCHARGES ASSOCIATED V

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.

riever eligible for	permit coverage, keller to the instructions of the end of this form to complete your Not.
A. Approval to	Use Paper NOI Form
1. Have you been	n granted a waiver from electronic reporting from the EPA Regional Office*?
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 gra	nted: 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 El	PA staff person that granted the waiver: Nasim Jahan
Dale appro	oval obtained: 0 2 / 0 9 / 2 0 1 6 Note: This form is submitting Change NOI information. Modified items/sections are highlighted.
must file this for	required to abtain approval from the applicable EPA Regional Office prior to using this paper NOI form. If you have not obtained a waiver, you rm electronically using the NPDES eReporting Tool (NeT) at <a href="http://water.epa.gov/polwaste/npdes/stormwater/Stormwater-eNOI-System-for-or-General-Permit.ctm">http://water.epa.gov/polwaste/npdes/stormwater/Stormwater-eNOI-System-for-or-General-Permit.ctm</a>
B. Permit Inform	nation NPDES ID (EPA Use Only):  N M R   0   5   3   1   9   5
1. Master Permit N	Number: (see Appendix C of the MSGP for the list of eligible moster permit numbers)
2. Are you a new	discharger or a new source as defined in Appendix A? TYES 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, provid individual pe	de the NPDES ID if you had coverage under EPA's 2008 MSGP or the NPDES ID if you had coverage under an EPA ermit:
C. Facility Oper	rator Information
1. Operator Inform	nation:
Operator Name:	
Mailing Address:	
Street:	
City:	State: ZIP Code: -
County or Similar	Government Subdivision:
Phone:	
E-mail:	
	of Contact Information:
	e Initial, Last Name:
risi Name, Middle	a inimal, casi Name:
Title:	
3. NOI Preparer In	formation (Complete if NOI was prepared by someone other than the certifier):
First Name, Middle	e Initial. Last Name:
Organization:	
Phone:	Ext.
E-mail:	

D. Facility Information
1. Facility Name:
2. Facility Address:
Street/Location:
City: State: ZIP Code: -
County or Similar Government Subdivision:
3. Latitude/Longifude for the facility:
Lafitude:° N (decimal degrees) Longitude:° W (decimal degrees)
Latitude/Longitude Data Source:
If you used a USGS topographic map, what was the scale?
Horizonfal Reference Datum: □ NAD 27 □ NAD 83 □ WG\$ 84
4, Is your facility located on Indian Country lands? TES 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 awnership type of the lacifity (U.S. Government) Privately Owned Facility Municipality County Government
□ Corporation □ State Government □ Tribal Government □ School District
☐ District ☐ Mixed Ownership (e.g. ☐ Municipal or Water Public/Private) District
125.25
7. Estimated area of industrial activity at your facility exposed to stormwater; (to the nearest quarter acre)  8. Sector-Specific Information
Identify the 4-digit Standard Industrial Classification (SIC) code or 2-letter Activity Cade 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: OR Primary Activity Code: Sector: Subsector: Subsector:
Identify the applicable sector(s) and subsector(s) of any co-located industrial activity for which you are requesting permit coverage:
Sector:   Subsector:   Sector:   Subsector:   Subsector:
entral I constitution III constitution III constitution III
Sector: Subsector: Sector: Subsector: Subsec
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?
Check the type of ore you mine at your facility:
☐ 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?*
* Note that if your facility becomes inactive and unstaffed during the permit ferm, 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?

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, linished product, by-products or waste products (SIC 2874)	c	4/8/1974	п
Part 423	Coal pile runoff at steam electric generaling facilities	0	11/19/1982 10/8/1974 <sup>1</sup>	
Parl 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	1	N/A	0
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	
Parl 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	п

INSPS 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: (Altach a separate list if necessary)

mies 11 11 - 11 - 11 - 11 - 11 - 1	e stormwater outfalls	For each outfall, provide the following	receiving water information:			
must be ide 3-digit ID (e provide the	acility. Each outfall entified by a unique e.g., 001, 002). Also e latitude and n degrees decimal for all.	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 a TMDL been completed for this receiving waterbody, providing the following information:			
Outfall ID	018 (Sector AA, F)	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	01040 Copper, dissolved [as Cu]; 01057 Thallium, dissolved [as TI]; 01104	TMDL Name and ID: N/A		
Latitude	35.872834	Note: Remove Outfall 018. Outfall no longer exists and	Aluminum, total recoverable; 39516 Polychlorinated biphenyls [PCBs]; 51931	Pollutant(s) for which there is a TMDL:		
Longitude	-106.317653	was replaced by Outfall 017 as the monitored outfall effective December 17, 2016.	Alpha, gross adjusted	N/A		
Outfall ID	017 (Sector AA, F)	Sandia Canyon (Sigma Canyon to NPDES outfall 001)  Note: Change Outfall 017 from an	01040 Copper, dissolved [as Cu]; 01057 Thallium,	TMDL Name and ID: N/A		
Latitude	35.872599	SIO to a monitored outfall. Outfall 017 replaced Outfall 018 as the monitored outfall effective December 17, 2016 and is	dissolved [as TI]; 01104 Aluminum, total recoverable; 39516	Pollutant(s) for which there is a TMDL:		
Longitude	-106.317066	associated with the SIOs listed below. In ICIS, please assign the limit sets provided in Enclosure 2 of this submittal.	Polychlorinated biphenyls [PCBs]; 51931 Alpha, gross adjusted	N/A		

Outfall ID	013 (Sector AA, F)	Mortandad Canyon (Within LANL)	01040 Copper, dissolved [as Cu]; 01104 Aluminum, total	N/A
Latitude	35.870797		recoverable; 39516 Polychlorinated biphenyls [PCBs]; 51931 Alpha, gross	Pollutant(s) for which there is a TMDL:
-106.317867			IN/A	
If substantio	l ally identical to other o	utfall, list identical outfall ID: 017		
Outfall ID	014 (Sector AA, F)	Mortandad Canyon (Within LANL)	01040 Copper, dissolved [as Cu]; 01104 Aluminum, total	TMDL Name and ID: N/A
Latitude	35.870890		recoverable; 39516 Polychlorinated biphenyls [PCBs];	Pollutant(s) for which there is a TMDL:
Longitude	-106.317393		51931 Alpha, gross adjusted	N/A
If substantic	ally identical to other o	utfall, list identical outfall ID: 017		
lf substantic	015 (Sector AA, F)	utfall, list identical outfall ID: 017  Mortandad Canyon (Within LANL)	01040 Copper, dissolved [as Cu]; 01104 Aluminum, total	TMDL Name and ID:
J.U	015	Mortandad Canyon (Within		N/A  Pollutant(s) for which there is a TMDL:
Ouffall ID	015 (Sector AA, F)	Mortandad Canyon (Within	dissolved [as Cu]; 01104 Aluminum, total recoverable; 39516 Polychlorinated	N/A  Pollutant(s) for which
Outfall ID  Latitude  Longitude	015 (Sector AA, F) 35.871389 -106.316397	Mortandad Canyon (Within	dissolved [as Cu]; 01104 Aluminum, total recoverable; 39516 Polychlorinated biphenyls [PCBs]; 51931 Alpha, gross	N/A  Pollutant(s) for which there is a TMDL:
Outfall ID  Latitude  Longitude	015 (Sector AA, F) 35.871389 -106.316397	Mortandad Canyon (Within LANL)  utfall, list identical outfall ID: 017  Sandia Canyon (Sigma Canyon to NPDES outfall	dissolved [as Cu]; 01104 Aluminum, total recoverable; 39516 Polychlorinated biphenyls [PCBs]; 51931 Alpha, gross	N/A  Pollutant(s) for which there is a TMDL:
Outfall ID  Latitude  Longitude	015 (Sector AA, F) 35.871389 -106.316397	Mortandad Canyon (Within LANL)  uffall, list identical outfall ID: 017  Sandia Canyon (Sigma	dissolved [as Cu]; 01104 Aluminum, total recoverable; 39516 Polychlorinated biphenyls [PCBs]; 51931 Alpha, gross adjusted 01040 Copper, dissolved [as Cu]; 01057 Thallium,	N/A  Pollutant(s) for which there is a TMDL:  N/A  TMDL Name and ID:

Outfall ID	019 (Sector AA, F)	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	01040 Copper, dissolved [as Cu]; 01057 Thallium, dissolved [as TI]; 01104	TMDL Name and ID:
Latitude	35.872682		Aluminum, total recoverable; 39516 Polychlorinated	Pollutant(s) for which there is a TMDL:
Longitude	-106.318467		biphenyls [PCBs]; 51931 Alpha, gross adjusted	N/A
If substantia	Lally identical to other o	outfall, list identical outfall ID: 017		
Outfall ID	004 (Sector AA)	Two Mile Canyon (Pajarito to headwaters)	01104 Aluminum, total recoverable; 39516 Polychlorinated	TMDL Name and ID: N/A
Latitude	35.8714131	Note: Remove Outfall 004. Site achieved No Exposure	biphenyls [PCBs]; 51931 Alpha, gross adjusted	Pollutant(s) for which there is a TMDL:
Longitude	-106.323832	status effective July 17, 2017.		N/A
If substantia	lly identical to other o	outfall, list identical outfall ID:		
If substantia	047 (Sector K)	Canada del Buey (within LANL)	01104 Aluminum, total recoverable; 39516	TMDL Name and ID:
	047	Canada del Buey (within LANL)  Note: Remove Outfall 047 and associated SIOs listed	recoverable; 39516 Polychlorinated biphenyls [PCBs]; 51931 Alpha, gross	N/A
Outfall ID	047 (Sector K)	Canada del Buey (within LANL)  Note: Remove Outfall 047	recoverable; 39516 Polychlorinated biphenyls [PCBs];	N/A Pollutant(s) for which
Outfall ID  Latitude  Longitude	047 (Sector K) 35.844895 -106.264513	Canada del Buey (within LANL)  Note: Remove Outfall 047 and associated SIOs listed below. Site achieved No Exposure status effective	recoverable; 39516 Polychlorinated biphenyls [PCBs]; 51931 Alpha, gross	N/A  Pollutant(s) for which there is a TMDL;
Outfall ID  Latitude  Longitude	047 (Sector K) 35.844895 -106.264513	Canada del Buey (within LANL)  Note: Remove Outfall 047 and associated SIOs listed below. Site achieved No Exposure status effective March 20, 2018.	recoverable; 39516 Polychlorinated biphenyls [PCBs]; 51931 Alpha, gross adjusted  01104 Aluminum, total recoverable; 39516	N/A  Pollutant(s) for which there is a TMDL:
Outfall ID  Latitude  Longitude	047 (Sector K) 35.844895 -106.264513	Canada del Buey (within LANL)  Note: Remove Outfall 047 and associated SIOs listed below. Site achieved No Exposure status effective March 20, 2018.	recoverable; 39516 Polychlorinated biphenyls [PCBs]; 51931 Alpha, gross adjusted	N/A  Pollutant(s) for which there is a TMDL:  N/A

Outfall ID	045 (Sector K)	Canada del Buey (within LANL)	01104 Aluminum, total recoverable; 39516 Polychlorinated	N/A		
Latitude	35.845586		biphenyls [PCBs]; 51931 Alpha, gross adjusted	Pollutant(s) for which there is a TMDL:		
Longitude	-106.265214			N/A		
If substantie	ally identical to other	outfall, list identical outfall ID: 047				
Outfall ID	046 (Sector K)	Canada del Buey (within LANL)	01104 Aluminum, total recoverable; 39516 Polychlorinated	TMDL Name and ID: N/A		
Latitude	35.845200		biphenyls [PCBs]; 51931 Alpha, gross adjusted	Pollutant(s) for which there is a TMDL:		
Longitude	-106.264844			N/A		
If substantio	ally identical to other	outfall, list identical outfall ID: 047				
Outfall ID	048 (Sector K)	Canada del Buey (within LANL)	01104 Aluminum, total recoverable; 39516 Polychlorinated	TMDL Name and ID: N/A		
	35.844590		biphenyls [PCBs]; 51931 Alpha, gross	Pollutant(s) for which there is a TMDL:		
Latitude	00.011000		adjusted	0740		
Latitude Longitude	-106.265044			N/A		
Longitude	-106.265044	outfall, list identical outfall ID: 047		N/A		
Longitude	-106.265044	outfall, list identical outfall ID: 047		N/A  TMDL Name and ID:		
Longitude If substantio	-106.265044	outfall, list identical outfall ID: 047		TMDL Name and ID:		
Longitude If substantio	-106.265044	outfall, list identical outfall ID: 047		TMDL Name and ID:		

9. WOT 2 WO TH A FAMILY	16.5%	6.7		- 6			COL.		- 10	J.F	ar er	1000		177	0.00				-	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_		_	_	_	_		_		_
4. Provide the follow					1			/OU	LOU	illa	ill la	itite	ude																															
Lalitude/Longitude	Da	a Se	our	ce:		] M	ap							I	] (	SPS	2			L		Oth	er																					
If you used a US	iGS I	opo	ogra	aph	nic r	maj	5, W	ha	t wo	as t	he !	500	ale	_	_	_	_	_	_	_	_		_			_	_	_	_	_	_	_		_	_	_	_	_	_	_	_	_	_	-
Horizontal Reference	ce D	atur	m:			] N/	AD 2	27		I	N	IAI	83	3					I	1	NG	5 8	4																					
5. Does your facility	disc	char	rge	inte	0 0	Mu	nci	pal	Ser	oar	ote	St	orm	Se	we	rs	yste	em	(N	\$4	is [		YES			NO	0																	
If yes, provide	the	nar	ne	oft	he	MS.	4 or	ser	ator	-							_															_		_	_	_	_	_						5
Check if you disc 2.5] water (water water (Outstand)	rqu	ality	/ ex	cee	eds	lev	els r	nec	cess	ary	to	5U	ppo	ort p	orop	pa																												
☐ Fier 2/2.5. Provid	le th	e no	ame	e(s)	ol	rec	eivi	ng	wa	ler	s :_	_													_																			1
☐ Tier 3 (Outstand)	ing t	Vatir	onc	al Re	eso	urc	e W	late	ars)*																																			
Note: You are in antidegradation 7. If you are subject	pur <sub>l</sub>	pose	es u	inde	er 4	10 C	FR 1	131	.13(	(a)(	(3).				÷											6								-7										
8, If you are subject		-		nar	k m	noni	torir	ng	req	uire	eme	ent	s fo	ra	har	dn	ies	i-de	ере	enc	der	nt n	net	al,	do	es	yo	ur f	icil	ity	disc	hai	ge ir	nlo	any	sal	iltw	rate	err	ece	eivir	ng v	vale	ers?
9. Does your facility	disc	char	rge	lo	a fe	ede	ral (	CEF	RCL.	A si	ile li	iste	ed in	n A	оре	ene	dix	Þ.S.		YE	S	Ė	IN	0																				
If yes, did you	not	ify II	he	EPA	Re	egio	nal	Of	fice	in	adv	var	nce												PA	Re	gio	ono	10	ffic	e de	ete	rmine	e Ih	oty	/OU	ar	ее	eligi	ible	for	pe	mit	
coverage pur • Note: If you disc		60.00	3 / 3	200	000		-	_			_				die	0				no	llei	ble	la		o.u.	ara	-	un	dar	th:		rm	it uni		uni	ı ne	-616	. 0	hal	EDA	Pe	ato	nal	
Office in advance Part, the EPA Reg recontamination	e a	nd th	he i	EPA e m	Re	gio	nal	Off	lice whe	de	terr er y	min ou	ies ha	you ve	inc	luc	elig ded	ible d ac	e c	ove	ero	ge	un	ide ols	r th	d/c	per or p	mit	. In	de	tern s to	nini en	ng y	our	elig	gibli	ility	for	r co	ove jes	rag	e u	nde	
F. Stormwater Po	llutio	on I	Pre	ver	ntlo	on F	lar	1 (5	WP	PP	) In	ifo	rme	atle	on	ī																												
1. Has the SWPPP b	een	pre	pa	red	inx	adv	and	cer	of fil	inc	thi:	s N	101.	as	rec	uir	ed	s		YES			N	0	_	_	_		_			_						_	_					
2, SWPPP Contact I					low.	957	111		W1 -500			7	-																															
First Name, Middle	Initio	ıl, Lc	ast t	Nar	ne:	1						_	1	1	1	1	1	]		L	1		L	1	1	1	1	1	1	L	Ш	1				1	1	I	1	1				
Professional Title:	L	1	1	L	Ш		1	1	1						1	1				1		1		1				1	1	1														
Phone:	Ш	1	]-	L	П		L		1				E	xt.	1																													
E-mail:		1	1																																									
3. SWPPP Availabilit Your current SWPPP provide the require * Note: You are not redacted), but you  Option 1: Mainta Provide the web ac Option 2: Provide A. Describe your on and potential spi	or o	form puire it cle cur ss Uf e foll indu	matin ed to earl men RL_ llow	on* o po ly ic  nt co  ving ial c	ost oby	any itify	tho:	on I	deni port WPF	tial tion	bus is of	sin t th an	ess ie S Inte	info WP	PP t	iall	lon it a	(C re I	BI) bei	or ng	res wil	tric	ted eld urc	d in	Loc	pu	blio or o	n (e	RL)	defiess.	ned	In	Арр	end	dix A	A) (s	suc	ch i	info	orm	atio	on n	nay	be

i, List the pollutant(s) or pollutant constituent(s) associated with each industrial activity exposed to stormwater that could be discharged in stormwater and an authorized non-stormwater discharges listed in Part 1.1.3:
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 ony other measures taken to comply with the requirements in Part 2.2 Water Quality-Based Effluent Limitations (see Part 5,2,4):
a. 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):
5. Endangered Species Protection
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.  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);
If you select criterion B, provide the NPDES ID from the other operator's NOI authorized under this permit:
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 Eligibility Form was sent to EPA:     /     /
☐ 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:
If you select criterion D or E, you must altach copies of any letters or other communications with the U.S. Fish and Wildlife Service or National Marine Fisheries Service.

H. Historic	Preservation	on												
☐ YES	□ NO			y lands, is your facility to associated with the prop		perty of religious o	or cult	ural si	gnifica	nce to	an Ind	lian trib	)eş	
		ns in Appe only check		GP, under which historic	properties pre	servation criterion	listed	in Par	11,1,4	.6 are y	ou elig	jible fo	r coverd	oge
	□в	□с	□ D											
I. Certifica	tion Inform	aflon												
to assure t system, or	hat qualifie those pers	ed personne ons directly	el properly gathe responsible for g	l and all attachments wered and evaluated the gathering the information cant penalties for subm	e information su on, the informa	abmitted. Based or tion submitted is, I	n my in o the	nquiry best o	of the	person	or pe	rsons v	vho mar ef, true, c	nage the accurate,
First Name	, Middle Ini	tial, Last No	me: Ben	jamine	В	Rober	t B			11		11		
Title:	D	ivis	i o n L e	a d e t	ШШ	ППП								
Signature:	E	10	22					Date:	04	10	4/1	201	8	
E-mail:	ь	b r o b	e r t B @ 1	anl.gov	ШШ	$\Pi\Pi\Pi\Pi$								

.

## **ENCLOSURE 2**

Limit Sets to Assign to Monitored Outfall 017 in NetDMR for Permit Tracking No. NMR053195

EPC-DO: 18-165

LA-UR-18-23181

Date: APR 2 3 2018

#### Limit Sets to Assign to Monitored Outfall 017 in NetDMR

Permit ID	Facility	Permitted Feature	Discharge #	Discharge Description	Parameter Code	Parameter Name	Symbol	Quality Value	Limit Type	Units	Freq. of Analysis	10000	Monitoring Period Begin Date	Monitoring Period End Date	DMR Due Date
NMR053195	TA-3-66 Sigma Complex	017	017-11	11- Fabricated Metal Products, except Coating	01045 1 0	Iron, total [as Fe]	<=	1000	Maximum	ug/L	1/60	Gr	4/1	5/31	7/31
VMR053195	TA-3-66 Sigma Complex	017	017-11	11- Fabricated Metal Products, except Coating	0110410	Aluminum, total recoverable [as Al]	<=	681	Maximum	ug/L	1/60	Gr	4/1	5/31	7/31
NMR053195	TA-3-66 Sigma Complex	017	017-11	11- Fabricated Metal Products, except Coating	51450 1 0	Nitrite Plus Nitrate Total	<=	0.68	Maximum	mg/L	1/60	Gr	4/1	5/31	7/31
VMR053195	TA-3-66 Sigma Complex	017	017-11	UC - Copper: Water Hardness 50-74.99 mg/L	01040 1 0	Copper, dissolved [as Cu]	<=	6	Maximum	ug/L	1/60	Gr	4/1	5/31	7/31
NMR053195	TA-3-66 Sigma Complex	017	017-11	ZC - Zinc: Water Hardness 50-74.99 mg/L	0109010	Zinc, dissolved [as Zn]	<=	76	Maximum	ug/L	1/60	Gr	4/1	5/31	7/31
VMR053195	TA-3-66 Sigma Complex	017	017-11	11- Fabricated Metal Products, except Coating	01045 1 0	Iron, total [as Fe]	<=	1000	Maximum	ug/L	1/60	Gr	6/1	7/31	9/30
VMR053195	TA-3-66 Sigma Complex	017	017-11	11- Fabricated Metal Products, except Coating	0110410	Aluminum, total recoverable [as Al]	<=	681	Maximum	ug/L	1/60	Gr	6/1	7/31	9/30
VMR053195	TA-3-66 Sigma Complex	017	017-11	11- Fabricated Metal Products, except Coating	51450 1 0	Nitrite Plus Nitrate Total	<=	0.68	Maximum	mg/L	1/60	Gr	6/1	7/31	9/30
NMR053195	TA-3-66 Sigma Complex	017	017-11	UC - Copper: Water Hardness 50-74.99 mg/L	01040 1 0	Copper, dissolved (as Cu)	<=	6	Maximum	ug/L	1/60	Gr	6/1	7/31	9/30
VMR053195	TA-3-66 Sigma Complex	017	017-11	ZC - Zinc: Water Hardness 50-74.99 mg/L	0109010	Zinc, dissolved [as Zn]	<=	76	Maximum	ug/L	1/60	Gr	6/1	7/31	9/30
VMR053195	TA-3-66 Sigma Complex	017	017-11	11- Fabricated Metal Products, except Coating	01045 1 0	Iron, total [as Fe]	<=	1000	Maximum	ug/L	1/60	Gr	8/1	9/30	11/30
NMR053195	TA-3-66 Sigma Complex	017	017-11	11- Fabricated Metal Products, except Coating	0110410	Aluminum, total recoverable [as Al]	<=	681	Maximum	ug/L	1/60	Gr	8/1	9/30	11/30
NMR053195	TA-3-66 Sigma Complex	017	017-11	11- Fabricated Metal Products, except Coating	51450.10	Nitrite Plus Nitrate Total	<=	0.68	Maximum	mg/L	1/60	Gr	8/1	9/30	11/30
NMR053195	TA-3-66 Sigma Complex	017	017-11	UC - Copper: Water Hardness 50-74.99 mg/L	01040 1 0	Copper, dissolved [as Cu]	<=	6	Maximum	ug/L	1/60	Gr	8/1	9/30	11/30
NMR053195	TA-3-66 Sigma Complex	017	017-11	ZC - Zinc: Water Hardness 50-74.99 mg/L	01090 1 0	Zinc, dissolved [as Zn]	<=	76	Maximum	ug/L	1/60	Gr	8/1	9/30	11/30
NMR053195	TA-3-66 Sigma Complex	017	017-11	11-Fabricated Metal Products, except Coating	01045 1 0	Iron, total [as Fe]	<=	1000	Maximum	ug/L	1/60	Gr	10/1	11/30	1/31
NMR053195	TA-3-66 Sigma Complex	017	017-11	11- Fabricated Metal Products, except Coating	0110410	Aluminum, total recoverable [as Al]	<=	681	mumixsM	ug/L	1/60	Gr	10/1	11/30	1/31
NMR053195	TA-3-66 Sigma Complex	017	017-11	11- Fabricated Metal Products, except Coating	51450 1 0	Nitrite Plus Nitrate Total	<=	0.68	Maximum	mg/L	1/60	Gr	10/1	11/30	1/31
NMR053195	TA-3-66 Sigma Complex	017	017-11	UC - Copper: Water Hardness 50-74.99 mg/L	01040 1 0	Copper, dissolved [as Cu]	<=	6	Maximum	ug/L	1/60	Gr	10/1	11/30	1/31
NMR053195	TA-3-66 Sigma Complex	017	017-11	ZC - Zinc: Water Hardness 50-74 99 mg/L	01090 1 0	Zinc, dissolved [as Zn]	<=	76	Maximum	ug/L	1/60	Gr	10/1	11/30	
NMR053195	TA-3-66 Sigma Complex	017	017-IW	IW - Impaired Water	01040 1 0	Copper, dissolved [as Cu]	<=	6	Maximum	ug/L	1/YR	Gr	4/1	11/30	1/31
NMR053195	TA-3-66 Sigma Complex	017	017-IW	IW - Impaired Water	01057 1 0	Thallium, dissolved [as TI]	<=	0.47	Maximum	ug/L	1/YR	Gr	4/1	11/30	1/31
NMR053195	TA-3-66 Sigma Complex	017	017-IW	IW - Impaired Water	01104 1 0	Aluminum, total recoverable [as Al]	<=	681	Maximum	ug/L	1/YR	Gr	4/1	11/30	1/31
NMR053195	TA-3-56 Sigma Complex	017	017-IW	IW - Impaired Water	51931 1 0	Adjusted Gross Alpha	<=	15	Maximum	pCi/L	1/YR	Gr	4/1	11/30	1/37
NMR053195	TA-3-66 Sigma Complex	017	017-IW	IW - Impaired Water	3951610	Polychlorinated biphenyls [PCBs]	<=	0.2	Maximum	lug/L	1/YR	Gr	4/1	11/30	

EPC-DO-18-165



Environmental Protection & Compliance Los Alamos National Laboratory PO Box 1663, K490 Los Alamos, New Mexico 87545 (505) 667-0666

Date:

JUL 1 0 2018

Symbol:

EPC-DO: 18-223

LA-UR:

18-25473

Locates Action No.:

N/A

Stormwater Notice Processing Center William Jefferson Clinton East Building – Room 7420 ATTN: 2015 MSGP U.S. Environmental Protection Agency 1201 Constitution Avenue, NW Washington, DC 20004

Subject: National Pollutant Discharge Elimination System (NPDES) Permit Tracking No. NMR053195, Multi-Sector General Permit (MSGP) Change Notice of Intent (Change NOI) Reporting Pursuant to Part 7.4

To Whom It May Concern:

The purpose of this letter is to submit Change NOI information to remove outfall and monitoring requirements related to MSGP Permit Tracking No. NMR053195. Due to system limitations, Los Alamos National Security (LANS) was previously unable to submit a complete and accurate NOI using the MSGP NeT reporting tool, and was granted a waiver to submit paper NOI forms by Nasim Jahan (EPA Region 6) on February 9, 2016. As LANS submitted a paper NOI, subsequent Change NOIs must also be submitted on the paper form.

Pursuant to MSGP Part B.12.C, three industrial sites within the Los Alamos National Laboratory complex that were formerly managed by LANS have been transferred to a new operator, N3B-Los Alamos, effective April 30, 2018. As such, LANS is submitting a Change NOI to remove these sites from coverage under NPDES Tracking No. NMR035195. Per direction from EPA Region 6 staff on March 29, 2018, LANS is not submitting a Notice of Termination because LANS will continue to manage nine active MSGP industrial facilities under NPDES Tracking No. NMR035195. LANS' required 2018 NetDMR reporting for these three sites is complete. The Change NOI is included as Enclosure 1, and needs to be implemented upon receipt to remove all future "Ready for Data Entry" Discharge Monitoring Reports associated with benchmark and impaired water limit sets at these sites.



Your assistance is appreciated as LANS is committed to maintaining compliance with the MSGP requirements. If you have any questions, please contact Terrill Lemke (505) 665-2397 or Leslie Dale (505) 606-2371.

Sincerely,

Taunia S. Van Valkenburg

Group Leader

TSV:TWL:LJD:cmh

Enclosure:

1) Change NOI for MSGP Permit Tracking No. NMR053195

Copy: Nasim Jahan, EPA Region 6, (E-File),

Helen Nguyen, EPA Region 6, (E-File),

Karen E. Armijo, NA-LA, (E-File)

Timothy A. Dolan, LC-ESH, (E-File)

William R. Mairson, ADESH, (E-File)

Enrique Torres, EPC-DO, (E-File)

Taunia S. Van Valkenburg, EPC-CP, (E-File)

Terrill W. Lemke, EPC-CP (E-File)

Holly L. Wheeler, EPC-CP (E-File)

Leslie J. Dale, EPC-CP (E-File)

Celina M. Huerta, EPC-CP, (E-File)

locatestream@lanl.gov (E-File)

adesh-records@lanl.gov. (E-File)

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

## **ENCLOSURE 1**

Change NOI for MSGP Permit Tracking No. NMR053195

EPC-DO: 18-223

LA-UR-18-25473

JUL 1 0 2018

Date:\_\_\_\_

NPDES FORM 3510-6



#### 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 approva
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: 0 2 / 0 9 / 2 0 1 6 Note: This form is submitting Change NOI information. Modified items/sections are highlighted.
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 <a href="http://water.epa.gov/polwaste/npdes/stormwater/Stormwater-eNOI-System-for-EPAs-MultiSector-General-Permit.cfm">http://water.epa.gov/polwaste/npdes/stormwater/Stormwater-eNOI-System-for-EPAs-MultiSector-General-Permit.cfm</a>
B. Permit Information NPDES ID (EPA Use Only):  N M R   0   5   3   1   9   5
1. Master Permit Number: (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:
C. Facility Operator Information
1. Operator Information:
Operator Name:
Mailing Address:
Street:
City: State: ZIP Code:
County or Similar Government Subdivision:
Phone: Ext. Ext.
E-mail:
2. Operator Point of Contact Information:
First Name, Middle Initial, Last Name:
Title:
3, NOI Preparer Information (Complete if NOI was prepared by someone other than the certifier):
First Name, Middle Initial, Last Name:
Organization:
Phone: Ext.
E-mail:

D. Facility Information
1. Facility Name:
2, Facility Address:
Street/Location:
City: State: ZIP Code:
County or Similar Government Subdivision:
3. Latitude/Longitude for the facility:
Latitude: o N (decimal degrees) Longitude: o 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?
☐ Corporation ☐ State Government ☐ Tribal Government ☐ School District
District   Mixed Ownership (e.g.   Municipal or Water   District
7. Estimated area of industrial activity at your facility exposed to stormwater; 60.50 (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: OR Primary Activity Code:
Sector: Subsector: Note: REMOVE the following Sector / Subsector from permit coverage.
Identify the applicable sector(s) and subsector(s) of any co-located industrial activity for which you are requesting permit coverage:
Sector: K Subsector: K 1 Sector: Subsector: Subsector: Subsector:
Sector: Subsector: Subsector: Subsector: Subsector: Subsector: 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   YES
2. Federal Effluent Limitation Guidelines
Are you requesting permit coverage for any stormwater discharges subject to effluent limitation guidelines? 🔲 YES 🔲 NO

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)	С	4/8/1974	
Part 423	Coal pile runoff at steam electric generating facilities	0	11/19/1982 10/8/1974 <sup>1</sup>	
Part 429, Subpart I	Discharges resulting from spray down or intentional wetting of logs at wet deck storage areas	Α	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	0
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	

<sup>1</sup>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)

from your formust be ide 3-digit ID (e provide the	e stormwater outfalls acility. Each outfall entified by a unique e.g., 001, 002). Also e latitude and n degrees decimal for ill.	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	049 (Sector P)	Pajarito Canyon (within LANL below Arroyo de la Delfe)	01104 Aluminum, total recoverable; 39516 Polychlorinated	TMDL Name and ID: N/A
Latitude	35.837228	Note: Remove Outfall 049 from NOI and DMRs with a monitoring period end date after 6/1/2018 for limit set 049-IW from	biphenyls [PCBs]	Pollutant(s) for which there is a TMDL:
Longitude	-106.254840	NetDMR. Site and outfall transferred to new operator effective 4/30/2018.		N/A
Outfall ID	050 (Sector K)	Canada del Buey (within LANL)  Note: Remove Outfall 050 from	01104 Aluminum, total recoverable; 39516 Polychlorinated	TMDL Name and ID:
Latitude	35.835746	NOI and DMRs with a monitoring period end date after 6/1/2018 for limit sets 050-K1 and 050-IW from NetDMR.	biphenyls [PCBs]; 51931 Alpha, gross adjusted	Pollutant(s) for which there is a TMDL:
Longitude	-106.250832	Site and outfall transferred to new operator effective 4/30/2018.		N/A

Outfall ID	051 (Sector K)	Pajarito Canyon (within LANL below Arroyo de la Delfe)  Note: Remove Outfall 051 and the	01104 Aluminum, total recoverable; 39516 Polychlorinated	TMDL Name and ID:
Latitude	35.830143	associated SIO listed below from NOI and DMRs with a monitoring period end date after 6/1/2018 for limit sets 051-K1 and 051-IW from	biphenyls [PCBs]	Pollutant(s) for which there is a TMDL:
Longitude	-106.242662	NetDMR. Site and outfalls transferred to new operator effective 4/30/2018.		N/A
If substantio	ally identical to other	outfall, list identical outfall ID:		
Outfall ID	052 (Sector K)	Pajarito Canyon (within LANL below Arroyo de la Delfe)	01104 Aluminum, total recoverable; 39516 Polychlorinated	TMDL Name and ID: N/A
Latitude	35.831852		biphenyls [PCBs]	Pollutant(s) for which there is a TMDL:
Longitude	-106.242928			N/A
		A contract of the contract of		
If substantio	ally identical to other	outfall, list identical outfall ID: 051		b.
lf substantio	053 (Sector K)	Pajarito Canyon (within LANL below Arroyo de la Delfe)	01104 Aluminum, total recoverable; 39516 Polychlorinated	TMDL Name and ID:
	053	Pajarito Canyon (within LANL below Arroyo de la Delfe)  Note: Remove Outfall 053 and the associated SIOs listed below from NOI and DMRs with a monitoring period end date after 6/1/2018 for		
Outfall ID	053 (Sector K)	Pajarito Canyon (within LANL below Arroyo de la Delfe)  Note: Remove Outfall 053 and the associated SIOs listed below from NOI and DMRs with a monitoring	recoverable; 39516 Polychlorinated	N/A  Pollutant(s) for which
Outfall ID Latitude Longitude	053 (Sector K) 35.829232 -106.236793	Pajarito Canyon (within LANL below Arroyo de la Delfe)  Note: Remove Outfall 053 and the associated SIOs listed below from NOI and DMRs with a monitoring period end date after 6/1/2018 for limit sets 053-K1 and 053-IW from NetDMR. Site and outfalls transferred to new operator	recoverable; 39516 Polychlorinated	N/A  Pollutant(s) for which there is a TMDL:
Outfall ID Latitude Longitude	053 (Sector K) 35.829232 -106.236793	Pajarito Canyon (within LANL below Arroyo de la Delfe)  Note: Remove Outfall 053 and the associated SIOs listed below from NOI and DMRs with a monitoring period end date after 6/1/2018 for limit sets 053-K1 and 053-IW from NetDMR. Site and outfalls transferred to new operator effective 4/30/2018.  Dutfall, list identical outfall ID:  Pajarito Canyon (within LANL below Arroyo de la	recoverable; 39516 Polychlorinated biphenyls [PCBs]  01104 Aluminum, total recoverable; 39516	N/A  Pollutant(s) for which there is a TMDL:
Outfall ID  Latitude  Longitude	053 (Sector K) 35.829232 -106.236793	Pajarito Canyon (within LANL below Arroyo de la Delfe)  Note: Remove Outfall 053 and the associated SIOs listed below from NOI and DMRs with a monitoring period end date after 6/1/2018 for limit sets 053-K1 and 053-IW from NetDMR. Site and outfalls transferred to new operator effective 4/30/2018.	recoverable; 39516 Polychlorinated biphenyls [PCBs]	N/A  Pollutant(s) for which there is a TMDL:  N/A

Outfall ID	066 (Sector K)	Pajarito Canyon (within LANL below Arroyo de la Delfe)	01104 Aluminum, total recoverable; 39516 Polychlorinated	TMDL Name and ID:	
Latitude	35.830185		biphenyls [PCBs]	Pollutant(s) for which there is a TMDL:	
Longitude	-106.236107			N/A	
If substantia	I ally identical to other	outfall, list identical outfall ID: 053			
Outfall ID	069 (Sector K)	Pajarito Canyon (within LANL below Arroyo de la Delfe)	01104 Aluminum, total recoverable; 39516 Polychlorinated	TMDL Name and ID: N/A	
Latitude	35.830285	Note: Remove Outfall 069 and the associated SIOs listed below from NOI and DMRs with a monitoring period end date after	biphenyls [PCBs]	Pollutant(s) for which there is a TMDL:	
Longitude	-106.234518	<ul> <li>6/1/2018 for limit sets 069-K1 and 069-IW from NetDMR. Site and outfalls transferred to new operator effective 4/30/2018.</li> </ul>		N/A	
If substantia	ally identical to other	outfall, list identical outfall ID:			
lf substantia	054 (Sector K)	Pajarito Canyon (within LANL below Arroyo de la	01104 Aluminum, total recoverable; 39516	TMDL Name and ID:	
	054	Pajarito Canyon (within			
Outfall ID	054 (Sector K)	Pajarito Canyon (within LANL below Arroyo de la	recoverable; 39516 Polychlorinated	N/A  Pollutant(s) for which	
Outfall ID  Latitude  Longitude	054 (Sector K) 35.829036 -106.235125	Pajarito Canyon (within LANL below Arroyo de la	recoverable; 39516 Polychlorinated	N/A  Pollutant(s) for which there is a TMDL:	
Outfall ID  Latitude  Longitude	054 (Sector K) 35.829036 -106.235125	Pajarito Canyon (within LANL below Arroyo de la Delfe)  outfall, list identical outfall ID: 069  Pajarito Canyon (within LANL below Arroyo de la	recoverable; 39516 Polychlorinated biphenyls [PCBs]  01104 Aluminum, total recoverable; 39516	N/A  Pollutant(s) for which there is a TMDL:	
Outfall ID  Latitude  Longitude	054 (Sector K) 35.829036 -106.235125	Pajarito Canyon (within LANL below Arroyo de la Delfe)  outfall, list identical outfall ID: 069	recoverable; 39516 Polychlorinated biphenyls [PCBs]	N/A  Pollutant(s) for which there is a TMDL:  N/A	

Outfall ID	056 (Sector K)	Pajarito Canyon (within LANL below Arroyo de la Delfe)	01104 Aluminum, total recoverable; 39516 Polychlorinated	TMDL Name and ID:	
Latitude	35.829310		biphenyls [PCBs]	Pollutant(s) for which there is a TMDL:	
Longitude	-106.236107			N/A	
If substantio	ally identical to other	outfall, list identical outfall ID: 069			
Outfall ID	057 (Sector K)	Pajarito Canyon (within LANL below Arroyo de la Delfe)	01104 Aluminum, total recoverable; 39516 Polychlorinated	TMDL Name and ID: N/A	
Latitude	35.829440		biphenyls [PCBs]	Pollutant(s) for which there is a TMDL:	
1	-106.235117			N/A	
Longitude			U		
	ally identical to other	outfall, list identical outfall ID: 069			
	058 (Sector K)	Pajarito Canyon (within LANL below Arroyo de la	01104 Aluminum, total recoverable; 39516	TMDL Name and ID:	
lf substantic	058	Pajarito Canyon (within	V .		
lf substantid	058 (Sector K)	Pajarito Canyon (within LANL below Arroyo de la	recoverable; 39516 Polychlorinated	N/A Pollutant(s) for which	
if substantion Outfall ID Latitude Longitude	058 (Sector K) 35.829573 -106.235112	Pajarito Canyon (within LANL below Arroyo de la	recoverable; 39516 Polychlorinated	N/A  Pollutant(s) for which there is a TMDL:	
if substantion Outfall ID Latitude Longitude	058 (Sector K) 35.829573 -106.235112	Pajarito Canyon (within LANL below Arroyo de la Delfe)  outfall, list identical outfall ID: 069  Pajarito Canyon (within LANL below Arroyo de la	recoverable; 39516 Polychlorinated biphenyls [PCBs]  01104 Aluminum, total recoverable; 39516	N/A  Pollutant(s) for which there is a TMDL:	
If substantion Outfall ID Latitude Longitude	058 (Sector K) 35.829573 -106.235112	Pajarito Canyon (within LANL below Arroyo de la Delfe)  outfall, list identical outfall ID: 069  Pajarito Canyon (within	recoverable; 39516 Polychlorinated biphenyls [PCBs]	N/A  Pollutant(s) for which there is a TMDL:  N/A	

Outfall ID	060 (Sector K)	Pajarito Canyon (within LANL below Arroyo de la Delfe)	01104 Aluminum, total recoverable; 39516 Polychlorinated	TMDL Name and ID:	
Latitude	35.830340		biphenyls [PCBs]	Pollutant(s) for which there is a TMDL:	
Longitude	-106.234802			N/A	
If substanti	ally identical to other	outfall, list identical outfall ID: 069			
Outfall ID	061 (Sector K)	Pajarito Canyon (within LANL below Arroyo de la Delfe)	01104 Aluminum, total recoverable; 39516 Polychlorinated	TMDL Name and ID: N/A	
Latitude	35.830343		biphenyls [PCBs]	Pollutant(s) for which there is a TMDL:	
Longitude	-106.234766			N/A	
If substantio	ally identical to other	outfall, list identical outfall ID: 069			
lf substantio	062 (Sector K)	Pajarito Canyon (within LANL below Arroyo de la	01104 Aluminum, total recoverable; 39516	TMDL Name and ID:	
	062	Pajarito Canyon (within			
Outfall ID	062 (Sector K)	Pajarito Canyon (within LANL below Arroyo de la	recoverable, 39516 Polychlorinated	N/A Pollutant(s) for which	
Outfall ID Latitude Longitude	062 (Sector K) 35.830344 -106.234725	Pajarito Canyon (within LANL below Arroyo de la	recoverable, 39516 Polychlorinated	N/A  Pollutant(s) for which there is a TMDL:	
Outfall ID Latitude Longitude	062 (Sector K) 35.830344 -106.234725	Pajarito Canyon (within LANL below Arroyo de la Delfe)  outfall, list identical outfall ID: 069  Pajarito Canyon (within LANL below Arroyo de la	recoverable; 39516 Polychlorinated biphenyls [PCBs]  01104 Aluminum, total recoverable; 39516	N/A  Pollutant(s) for which there is a TMDL:	
Outfall ID  Latitude  Longitude	062 (Sector K) 35.830344 -106.234725	Pajarito Canyon (within LANL below Arroyo de la Delfe)  outfall, list identical outfall ID: 069  Pajarito Canyon (within	recoverable; 39516 Polychlorinated biphenyls [PCBs]	N/A  Pollutant(s) for which there is a TMDL:  N/A	

Outfall ID	064 (Sector K)	Pajarito Canyon (within LANL below Arroyo de la Delfe)	01104 Aluminum, total recoverable; 39516 Polychlorinated	TMDL Name and ID:	
Latitude	35.830340		biphenyls [PCBs]	Pollutant(s) for which there is a TMDL:	
Longitude	-106.234656			N/A	
If substantio	ally identical to other	outfall, list identical outfall ID: 069			
Outfall ID	067 (Sector K)	Pajarito Canyon (within LANL below Arroyo de la Delfe)	01104 Aluminum, total recoverable; 39516 Polychlorinated	TMDL Name and ID: N/A	
Latitude	35.829856		biphenyls [PCBs]	Pollutant(s) for which there is a TMDL:	
Longitude	-106.235110			N/A	
If substantic	ally identical to other	outfall, list identical outfall ID: 069			
lf substantic	068 (Sector K)	Pajarito Canyon (within LANL below Arroyo de la	01104 Aluminum, total recoverable; 39516	TMDL Name and ID:	
	068	Pajarito Canyon (within			
Outfall ID	068 (Sector K)	Pajarito Canyon (within LANL below Arroyo de la	recoverable; 39516 Polychlorinated	N/A Pollutant(s) for which	
Outfall ID Latitude Longitude	068 (Sector K) 35.830051 -106.235103	Pajarito Canyon (within LANL below Arroyo de la	recoverable; 39516 Polychlorinated	N/A  Pollutant(s) for which there is a TMDL:	
Outfall ID Latitude Longitude	068 (Sector K) 35.830051 -106.235103	Pajarito Canyon (within LANL below Arroyo de la Delfe)  outfall, list identical outfall ID: 069  Canada del Buey (within LANL)  Note: Remove Outfall 072 and	recoverable; 39516 Polychlorinated biphenyls [PCBs]  01104 Aluminum, total recoverable; 39516	N/A  Pollutant(s) for which there is a TMDL:	
Outfall ID  Latitude  Longitude	068 (Sector K) 35.830051 -106.235103	Pajarito Canyon (within LANL below Arroyo de la Delfe)  outfall, list identical outfall ID: 069  Canada del Buey (within LANL)	recoverable; 39516 Polychlorinated biphenyls [PCBs]	N/A  Pollutant(s) for which there is a TMDL:  N/A	

Outfall ID	070 (Sector K)	Canada del Buey (within LANL)	01104 Aluminum, total recoverable; 39516 Polychlorinated	TMDL Name and ID:
Latitude	35.832404		biphenyls [PCBs]; 51931 Alpha, gross adjusted	Pollutant(s) for which there is a TMDL:
Longitude	-106.240510			N/A
If substantic	ally identical to other	outfall, list identical outfall ID: 072		
Outfall ID	071 (Sector K)	Canada del Buey (within LANL)	01104 Aluminum, total recoverable; 39516 Polychlorinated	TMDL Name and ID: N/A
Latitude	35.832701		biphenyls [PCBs]; 51931 Alpha, gross adjusted	Pollutant(s) for which there is a TMDL:
Longitude	-106.240994			N/A
If substantic	ally identical to other	outfall, list identical outfall ID: 072		
				TMDL Name and ID:
Outfall ID				TMDL Name and ID:
Outfall ID				TMDL Name and ID:  Pollutant(s) for which there is a TMDL:
				Pollutant(s) for which
Latitude Longitude	lly identical to other	outfall, list identical outfall ID:		Pollutant(s) for which
Latitude Longitude	Illy identical to other	outfall, list identical outfall ID:		Pollutant(s) for which
Latitude Longitude If substantic	Illy identical to other	outfall, list identical outfall ID:		Pollutant(s) for which there is a TMDL:

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:	
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 (o 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)*	
<ul> <li>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).</li> <li>If you are subject to benchmark monitoring requirements for a hardness-dependent metal, what is the hardness of your receiving water(s) (see Appendent metal).</li> </ul>	
8. If you are subject to benchmark monitoring requirements for a hardness-dependent metal, does your facility discharge into any saltwater receiving wat	ersÿ
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 permi coverage pursuant to Part 1.1.4.10*? 🔲 YES 🔠 NO	t
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 the EPA Regional Office may evaluate whether you have included adequate controls and/or procedures to ensure that your discharges will not led recontamination of aquatic media at the CERCLA Site such that it will to cause or contribute to an exceedance of a water quality standard.	er this
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:	
Professional Title:	
Phone: Ext. Ext.	
E-mail:	
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 all provide the required information*:	nd
* Note: You are not required to post any confidential business information (CBI) or restricted information (as defined in Appendix A) (such information may redacted), but you must clearly identify those portions of the SWPPP that are being withheld from public access.	be
Option 1: Maintain a current copy of your SWPPP on an Internet page (Universal Resource Locator or URL).	
Provide the web address URL:	-1
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 ber and potential spill and leak areas:	,(smx

C. Describe the control measures you will engley to correly with the non-remercial technology-based offluent limits required in Part 2.1.2 and Part 8, and any other measures taken to comply with the requirements in Part 2.2 Wollar Quality flated Effluent Limitators jees 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):  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):  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):  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):  D. Provide a schedule for good housekeeping and maintenance (see Part 5.2.5.1) and a schedule for all inspections required in Part 4.1.4.5 are you eligible for coverage under this permit (prity check I box)?*  D. Provide a schedule for good housekeeping and maintenance (see Part 5.2.5.1) and a schedule for all inspections required in Part 1.1.4.5 are you eligible for coverage under this permit (prity check I box)?*  Note: After you build you for load before your NOI is estherized. EPA may notify you if eny additional controls are necessary to ensure your discharges in Note: After your additional measures in likely adverse effects on the box's for the clieston selected in Appendix E. Jog., 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;  D. Using the Appendix E workshoot. Check writch of the following is applicable to your facility and answer any corresponding questions:  a. What federally-listed species or designated critical hobitat are load days give to submitting this NOI and have not be		rized non-sto	mwater di:	icharges lis	ted in Part	1.1.3:							in stormwater and
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 I box) \$?  A												n Part 2.1.2 c	and Part 8, and ar
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 I box)?*    A	D. Provide	e a schedule	; for good I	nousekeepi	ing and mo	aintenance (	see Part 5.2	2.5.1) and a s	chedule for a	inspectic	ons required	∣in Part 4 (se	e Part 5.2.5.2);
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 I box)?*    A	G. Enda	naered Spi	ecies Prot	ection									
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 nove 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):  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 Eligibility Form was sent to EPA:	1. Using th	he instruction	ns in Apper		e MSGP, un	der which e	ndangered	d species crite	erion listed in	Part 1.1.4.5	are you eli	gible for cov	verage under this
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):  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 Eligibility Form was sent to EPA:    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.    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:	permit	(only check	1 pox) \$*								-		
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 Eligibility Form was sent to EPA:	have no	o likely adve	erse affects mary of the	on listed sp	pecies and he criterion	selected in	itat. Appendix I	E (e.g., comm	nunication wi	th U.S. Fish	and Wildlife	·	
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:   c. Using the Appendix E worksheet, check which of the following is applicable to your facility and answer any corresponding questions:   c. Using the Appendix E worksheet, check which of the following is applicable to your facility and answer any corresponding questions:   c. Using the Appendix E worksheet, check which of the following is applicable to your facility and answer any corresponding questions:   c. Using the Appendix E worksheet, check which of the following is applicable to your facility and answer any corresponding questions:   c. Using the Appendix E worksheet, check which of the following is applicable to your facility and answer any corresponding questions:   c. Using the Appendix E worksheet, check which of the following is applicable to your facility and answer any corresponding questions:   c. Using the Appendix E worksheet, check which of the following is applicable to your facility and answer any corresponding questions:   c. Using the Appendix E worksheet, check which of the following is applicable to your facility and answer any corresponding questions:   c. Using the Appendix E worksheet, check which of the following is applicable to your facility and answer any corresponding questions:   c. Using the Appendix E worksheet is applicable to your facility and answer any corresponding questions:   c. Using the Appendix E worksheet is applicable to your facility and answer any corresponding questions:   c. Using the Appendix E worksheet is applicable to your facility and answer any corresponding questions:   c. Using the Appendix E worksheet is applicable to your facility and answer any corresponding questions:   c. Using the Appendix E worksheet is applicable to your facility and answer any corresponding questions:   c. Using the Appendix E worksheet is ap							rator's NOI	authorized u	nder this perr	mit:			
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 Eligibility Form was sent to EPA:				ust answer	the fellowin	a 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 Eligibility Form was sent to EPA:	( L wwith a	if lederally-ii.	tad maria	o or decian				- vour lactio					
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 Eligibility Form was sent to EPA: / / /	d. mid		sted specie	s or design				n your "actio	n area":				
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:		the Appen			ated critico	al habitat are	e located i			swer any co	orrespondin	g questions:	
☐ 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:	b. Using	omitted my o were detern	dix E worksh completed mined by EF	heet, checl Criterion C	ated critico	al habitat are the following	e located in grant is applica	ble to your fo	icility and an	NOI and a	agree to imp	olement any	/ additional measu
measures necessary to ensure no likely adverse affects on listed species and critical habitat.  Date your Criterion C Eligibility Form was sent to EPA: // / / / / / / / / / / / / / / / / /	b. Using  I sub that listed	omitted my c were detern d species and	dix E worksh completed nined by EF d critical ho	heet, checl Criterion C PA to be ne abitat.	k which of l Eligibility Fo	the following	e located in grant is applica	ble to your fo	icility and an	NOI and a	agree to imp	olement any	/ additional measu
measures necessary to ensure no likely adverse affects on listed species and critical habitat.  Date your Criterion C Eligibility Form was sent to EPA: // / / / / / / / / / / / / / / / / /	b. Using  I sub that listed	omitted my committed my committ	dix E worksh completed by Er mined by Er d critical ha	heet, checl Criterion C PA to be ne abitat. Form was s	k which of the Eligibility For ecessary to EPA:	the following	g is applica at least 30 d my dischar	ble to your fo days prior to si rges and/or a	ucility and ans ubmitting this lischarge-rela	NOI and a ated activiti	agree to imp ies will not t	olement any nave likely ad	/ additional measu
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	b. Using  I sub that listed	omitted my committed my committ	dix E worksh completed by Er mined by Er d critical ha	heet, checl Criterion C PA to be ne abitat. Form was s	k which of the Eligibility For ecessary to EPA:	the following	g is applica at least 30 d my dischar	ble to your fo days prior to si rges and/or a	ucility and ans ubmitting this lischarge-rela	NOI and a ated activiti	agree to imp ies will not t	olement any nave likely ad	/ additional measu
	b. Using  I sub that listed  Date ye  Describ	omitted my c were detern d species and rour Criterion be any EPA-c	dix E worksh completed on the completed of the complete of the co	heet, checl Criterion C PA to be ne abitat. Form was s neasures yo Criterion C	k which of the Eligibility For ecessary to EPA:  bu will imple the Eligibility For each to Epa.	the following  orm to EPA a  ensure that  :	g is applica at least 30 d my dischar  sure no likel	ble to your fo days prior to si rges and/or o ly adverse afl	ucility and ansubmitting this lischarge-relations on listed	NOI and a ated activiti	gree to implies will not b	olement any nave likely ad nabitat:	v additional measu dverse affects on

EPC-DO: 18-223 LA-UR-18-25473 Page 11 of 12

H. Historic Preservation
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:
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: B n r 1 q u e
Title: Division Leader
Signature: Date: 67/10/24/8
E-mail: etorres@lanl.gov



**Environmental Protection and Compliance** 

Los Alamos National Laboratory PO Box 1663, K491 Los Alamos, NM 87545 (505) 667-2211

Date: JUN 1 1 2019 Symbol: EPC-DO: 19-191

LA-UR: 19-25199

Stormwater Notice Processing Center William Jefferson Clinton East Building – Room 7420 ATTN: 2015 MSGP Signature Agreement U.S. Environmental Protection Agency 1201 Constitution Avenue, NW Washington, DC 20004

Subject: National Pollutant Discharge Elimination System (NPDES) Permit Tracking No. NMR050013, Multi-Sector General Permit (MSGP) Change Notice of Intent

(Change NOI) Reporting Pursuant to Part 7.4

To Whom It May Concern:

This letter serves to submit Change NOI information to modify outfalls and monitoring requirements related to MSGP Permit Tracking No. NMR050013 for Triad National Security, LLC (Triad) as the operator for Los Alamos National Laboratory pursuant to Part 7.4 of the MSGP.

Environmental Protection Agency's (EPA's) Electronic Reporting Rule requires that NOIs be submitted using the NeT-MSGP program service on the EPA Central Data Exchange system. However, due to system limitations previously identified by Triad and verified with EPA Region 6 personnel, a complete and accurate NOI could not be created in NeT-MSGP. Therefore, change NOI information cannot be submitted using NeT-MSGP (Attachment 1). As a result, Triad was granted a waiver to submit paper NOI forms from Nasim Jahan (EPA Region 6) on September 26, 2018 (Attachment 1).

Part 6.2.4.1 of the MSGP indicates no monitoring is required when a waterbody's impairment is related to a non-pollutant. EPA Region 6 has concurred that temperature is a non-pollutant, therefore monitoring for temperature in stormwater as an impairment is not required (Attachment 2).

To accurately update the NOI and to facilitate complete and accurate information in NetDMR, Triad is submitting a paper NOI on EPA Form 3510-6 (Attachment 3) and an additional table defining



EPC-DO: 19-191 Stormwater Notice Processing Center

modifications to the monitored outfall-specific Sector and impaired waters limits sets (Attachment 4) currently populated in the NetDMR system.

Your assistance is greatly appreciated as Triad is committed to maintaining compliance with the MSGP requirements. If you have any questions, please contact Terrill Lemke (505) 665-2397 or Leslie Dale (505) 606-2371.

Very Truly Yours,

Enrique Torres Division Leader

Environmental Protection & Compliance Division

ET/TWL/LJD:jdm

Attachment(s): Attachment 1 EPA Region 6 Approval for Triad National Security, LLC to Submit a Paper NOI; EPA Guidance to Submit Change NOI Information via EPA Form

3510-6

Attachment 2 EPA Region 6 Concurrence Regarding Temperature as a Non-

Pollutant

Attachment 3 Change NOI for Stormwater Discharges Associated with Industrial

Activity under the NPDES Multi-Sector General Permit

Attachment 4 NetDMR Monitoring Requirements for Los Alamos National Laboratory, Operated by Triad National Security, LLC, MSGP ID NMR050013

Copy: Nasim Jahan, EPA Region 6, jahan.nasim@epa.gov, (E-File)

Helen Nguyen, EPA Region 6, nguyen.helen@epa.gov, (E-File)

Sarah Holcomb, NMED/SWQB, sarah.holcomb@state.nm.us, (E-File)

Karen E. Armijo, NA-LA, karen.armijo@nnsa.doe.gov, (E-File)

Michael W. Hazen, ALDESHOSS, mhazen@lanl.gov, (E-File)

William R. Mairson, ALDESHQSS, wrmairson@lanl.gov, (E-File)

Timothy A. Dolan, GC-ESH, tdolan@lanl.gov, (E-File)

Taunia S. Van Valkenburg, EPC-CP, tauniav@lanl.gov, (E-File)

Terrill. W. Lemke, EPC-CP, tlemke@lanl.gov, (E-File)

Holly L. Wheeler, EPC-CP, hbenson@lanl.gov, (E-File)

Leslie J. Dale, EPC-CP, leslie@lanl.gov, (E-File)

adesh-records@lanl.gov, (E-File)

lasomailbox@nnsa.doe.gov, (E-file)

epccorrespondence@lanl.gov, (E-File)



### Attachment 1

EPA Region 6 Approval for Triad National Security, LLC to Submit a Paper NOI; EPA Guidance to Submit Change NOI Information via EPA Form 3510-6

EPC-DO: 19-191

LA-UR-19-25199

Date:	JUN 1 1 2019

### Dale, Leslie J

From: Lemke, Terrill W

Sent: Wednesday, September 26, 2018 4:16 PM

To: Dolan, Timothy Aloysius; Dale, Leslie J; Wheeler, Holly Lynn

Subject: FW: Request for LANL Paper MSGP NOI Waiver

Follow Up Flag: Follow up Flag Status: Flagged

FY

Terrill Lemke, PE, CPESC, CISEC Environmental Compliance Programs Los Alamos National Laboratory Los Alamos, NM

Office: 505-665-2397 Cell: 505-699-0725

From: Jahan, Nasim < Jahan. Nasim@epa.gov>
Sent: Wednesday, September 26, 2018 2:43 PM

To: Lemke, Terrill W <tlemke@lanl.gov>

Cc: Emily Gorman <emily@avanticorporation.com>
Subject: RE: Request for LANL Paper MSGP NOI Waiver

Dear Mr. Terrill:

EPA, Region 6 is approving your request for paper submission as the facility is unable to submit the NOI online.. Please mail the hardcopies to the following address:

#### For Regular U.S. Mail Delivery:

Stormwater Notice Processing Center
Mail Code 4203M, ATTN: 2015 MSGP Signature Agreement
U.S. EPA
1200 Pennsylvania Avenue, NW
Washington, DC 20460

#### For Overnight/Express U.S. Mail Delivery:

Stormwater Notice Processing Center
William Jefferson Clinton East Building – Room 7420
ATTN: 2015 MSGP Signature Agreement
U.S. EPA
1201 Constitution Avenue, NW
Washington, DC 20004

Thank you,

Nasim Jahan

Environmental Engineer
Permits and Technical Section (6WQ-PP)
EPA Region 6 Water Quality Protection Division
1445 Ross Avenue, Ste. 1200
Dallas, TX 75202-2733

Phone: 214.665.7522 Fax: 214.665.2191

From: Lemke, Terrill W [mailto:tlemke@lanl.gov]
Sent: Wednesday, September 26, 2018 3:30 PM
To: Jahan, Nasim < Jahan, Nasim@epa.gov>

Cc: Dale, Leslie J < leslie@lanl.gov>; Dolan, Timothy Aloysius < tdolan@lanl.gov>

Subject: Request for LANL Paper MSGP NOI Waiver

Nasim,

Thank you for speaking with us today. We've had the opportunity to review the changes implemented in the updated NeT-MSGP system that rolled out earlier this year, and have identified the following issues as problematic for submitting an accurate and complete electronic NOI.

A new NOI must be submitted for Triad National Security, LLC (Triad) as a new operator for Los Alamos National Laboratory (LANL) pursuant to Part B.12.C of the 2015 MSGP. Triad is replacing Los Alamos National Security, LLC (LANS) as operator of LANL effective November 1, 2018. Per the schedule in Table 1-2 of the MSGP, Triad's NOI must be submitted by October 2, 2018.

EPA's Electronic Reporting Rule requires that NOIs be submitted using the NeT-MSGP program service on the EPA Central Data Exchange system. However, due to the following system limitations previously identified by LANS and coordinated by EPA Region 6 personnel, a complete and accurate NOI cannot be submitted using NeT-MSGP.

- Part 9.6.2 of the 2015 MSGP, Permit Conditions for the State of New Mexico, requires that benchmark values be modified to reflect New Mexico water quality standards for facilities in New Mexico, based on benchmark values from the Standards for Interstate and Intrastate Surface Waters (20.6.4.900 New Mexico Administrative Code [NMAC]). These modified benchmark values are not recognized by NeT-MSGP and populated in NetDMR.
- The 2018-2020 State of New Mexico Clean Water Act §303(d)/ §305(b) Integrated Report requires monitoring of impaired waters pollutants not available for selection in NeT-MSGP (e.g., Adjusted Gross Alpha and Temperature).
- 20.6.4.900 NMAC requires monitoring of certain modified benchmark and impaired waters metals pollutants as
  dissolved species, which are not available for selection in NeT-MSGP. Currently, only total metals species may be
  assigned in NeT-MSGP.
- 4. Due to extended frozen conditions during the winter and a semi-arid climate, Triad will implement an alternative 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 alternate monitoring schedule does not coincide with the default four (4) three-month quarters listed in Part 6.1.7 of the 2015 MSGP and NeT-MSGP does not allow input of an alternate monitoring schedule. Accordingly, annual impaired waters and Effluent Limitation Guideline monitoring will be conducted between April 1 and November 30 of each year.

April 1 through May 31 June 1 through July 31 August 1 through September 30 October 1 through November 30

These system limitations directly result in inaccurate pollutants, limits, monitoring periods and DMR due dates being populated in NetDMR.

EPA Region 6 has recognized the challenges that the outgoing operator (LANS) has identified with NeT-MSGP related to compliance with Part 9.6.2 of the 2015 MSGP, Permit Conditions for the State of New Mexico, and has been instrumental in helping LANS to resolve these issues. Therefore, per your verbal direction, we are requesting a waiver for Triad to submit a paper NOI in lieu of submitting an inaccurate and incomplete NOI in NeT-MSGP. Please advise at your earliest convenience if you concur with our submittal of a paper NOI, as we must submit by Oct 2.

We appreciate your assistance in helping us maintain compliance. If you have any questions, please contact me at (505) 665-2397.

Terrill

Terrili Lemke, PE, CPESC, CISEC Environmental Compliance Programs Los Alamos National Laboratory Los Alamos, NM Office: 505-665-2397 Cell: 505-699-0725 From: Emily Hack (Avanti) (EPA NeT Support)

Cc: Jahan Nasim; Wheeler, Holly Lynn; Dale, Leslie J; Hazen, Michael W
Subject: NMR050013 - Triad National Security LLC - MSGP Notice of Intent

Date: Friday, October 26, 2018 11:13:07 AM

Attachments: NMR050013 Triad Los Alamos National Laboratory 2015 MSGP NOI Acknowledgement.pdf

Triad National Security LLC Los Alamos National Laboratory 10-02-2018.pdf

The second of th

You are CC'ed on this support request (10066). Reply to this email to add a comment to the request.

Emily Hack (Avanti) (EPA NeT Support)

Good afternoon,

The paper Notice of Intent (NOI) submitted under EPA's Multi-Sector General Permit (MSGP) for Los Alamos National Laboratory under Triad National Security LLC has been processed by the EPA NPDES eReporting Help Desk. The facility was assigned NPDES ID NMR050013. Please, retain the attached acknowledgement letter for your records.

Due to the unique nature of the outfall sequence and monitoring requirements, EPA instructed that we enter the NOI directly into the back-end system. Therefore, the NOI will not be generated in the NeT MSGP program at this time. Attached is the NOI that we received. As I'm sure you are aware, for any changes to the NOI in the future, please submit them via paper as well.

Please, let me know if you have any questions.

Sincerely,

Emily Hack
NPDES eReporting Help Desk
Staffed by Avanti Corporation
1-877-227-8965
NPDESeReporting@epa.gov

## Attachment 2

EPA Region 6 Concurrence Regarding Temperature as a Non-Pollutant

EPC-DO: 19-191

LA-UR-19-25199

Date: JUN 1 1 2019

### Dale, Leslie J

From: Jahan, Nasim < Jahan.Nasim@epa.gov>
Sent: Wednesday, March 27, 2019 10:40 AM

To: Dale, Leslie J

Cc: Lemke, Terrill W; Dolan, Timothy Aloysius; Wheeler, Holly Lynn; Holcomb, Sarah,

**NMENV** 

Subject: RE: Temperature Monitoring for MSGP

Dear Leslie:

I concur your decision based on your reference. Please let me know if you have any other concerns...

Thank you,

Nasim..

From: Dale, Leslie J <leslie@lanl.gov>

Sent: Wednesday, March 27, 2019 11:16 AM To: Jahan, Nasim < Jahan. Nasim@epa.gov>

Cc: Lemke, Terrill W <tlemke@lanl.gov>; Dolan, Timothy Aloysius <tdolan@lanl.gov>; Wheeler, Holly Lynn

<hbenson@lanl.gov>; Holcomb, Sarah, NMENV <sarah.holcomb@state.nm.us>

Subject: Temperature Monitoring for MSGP

Good Morning Nasim,

We (Los Alamos National Laboratory, NMR0050013) have a question regarding whether temperature is considered a pollutant with respect to impaired waters monitoring under the MSGP. Part 6.2.4.1 of the MSGP, paragraph 2 states "No monitoring is required when a waterbody's biological communities are impaired but no pollutant, including indicator or surrogate pollutants, is specified as causing the impaired, or when a waterbody's impairment is related to hydrologic modifications, impaired hydrology, or other non-pollutant."

For context, the 2018-2020 State of New Mexico CWA Section 303(d)/Section 305(b) Integrated Report listed temperature as an impairment to Sandia Canyon (Sigma Canyon to NPDES outfall 001, AU ID: NM-9000.A\_047). Upon release of the revised Integrated Report, we included temperature as an impairment in our NOI submitted under Triad National Security, LLC (the new operator of Los Alamos National Laboratory) effective November 1, 2018.

We sought clarification from the New Mexico Environment Department – Surface Water Quality Bureau on March 25, 2019. Upon visiting the language in Part 6.2.4.1 of the MSGP, Sarah Holcomb provided guidance that temperature is a non-pollutant.

According to 40 CFR 122.2, Pollutant means dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials (except those regulated under the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 et seq.)), heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water. It does not mean:

(a) Sewage from vessels; or

(b) Water, gas, or other material which is injected into a well to facilitate production of oil or gas, or water derived in association with oil and gas production and disposed of in a well, if the well used either to facilitate production or for

disposal purposes is approved by authority of the State in which the well is located, and if the State determines that the injection or disposal will not result in the degradation of ground or surface water resources.

We interpret "heat" to mean heat generated by MSGP industrial activities and not ambient temperature associated with stormwater runoff from MSGP facilities, and therefore believe that monitoring for temperature in stormwater as an impairment is not required.

Please let us know whether you concur, as we are preparing to modify our NOI to remove temperature from our monitoring requirements for the 2019 monitoring season.

Thank you,
Leslie Dale, CHMM
Environmental Compliance Programs (EPC-CP)
Los Alamos National Laboratory
PO Box 1663, MS K490
Los Alamos, NM 87545
(505) 606-2371

## Attachment 3

Change NOI for Stormwater Discharges Associated with Industrial Activity under the NPDES Multi-Sector General Permit

EPC-DO: 19-191

LA-UR-19-25199

Description	JUN 1 1 2019	
Date:		

NPDES FORM 3510-6



## 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 of	coverage. Refer to the instruction	ons at the end of this form to complete your NOL	
A. Approval to Use Pa	per NOI Form		
1. Have you been grante	d a waiver from electronic rep	orling from the EPA Regional Office*?	0
If yes, check which w	aiver you have been granted,	the name of the EPA Regional Office staff person who	granted the waiver, and the date of approval:
Waiver granted:		eadquarters is physically located in a geographic area adband Internet access in the most recent report from	
	The owner/operator has	s issues regarding available computer access or compu	uter capability.
Name of EPA staff	person that granted the waive		шшшшш
Date approval obt	tained: 09/26/	2018 Note: This form is submitting Chan- items/sections are highlighted.	ge NOI information. Modified
	tronically using the NPDES eRep	oplicable EPA Regional Office prior to using this paper N porting Tool (NeT) at http://water.epa.gov/polwaste/npc	
B. Permit Information		NPDES ID (EPA Use C	Only):  NMR 0 5 0 0 1 3
I. Master Permit Number:	ШШШ	(see Appendix C of the MSGP for the list of eligib	ole master permit numbers)
2. Are you a new dischard	aer or a new source as defined	In Appendix A? ☐ YES ☐ NO (If yes, skip to Part C o	of this form)
		e stormwater discharges from your facility been covered	
☐ YES ☐ NO			
If yes, provide the Ni individual permit:	PDES ID if you had coverage ur	nder EPA's 2008 MSGP or the NPDES ID if you had cover	age under an EPA
C. Facility Operator Ini	lormation		
1. Operator Information:			
Operator Name:			
Mailing Address:			
Street:			
City:	шшш		ZIP Code;
County or Similar Governr	ment Subdivision:		
Phone:	11-1111-111	Ext.	
E-mail:	ПППППП		
2. Operator Point of Confe	act Information:		
First Name, Middle Initial, l	Last Name:		
Title:		пининини	
3. NOI Preparer Information	on (Complete if NOI was prepa	red by someone ofher than the certifier):	
First Name, Middle Initial, L			
Organization:			
Phone:		Ext.	
E-mail:	HILLIAM	THE HOLD THE STATE OF THE STATE	

D. Facility Information			
1. Facility Name:			
2. Facility Address:			
Street/Location:			
City:		State: ZIP Code:	
County or Similar Government Subdivision			
3. Lalitude/Longitude for the facility:			
Lalitude:°N (c	decimal degrees) Longitude;	• W (decimal degrees)	
Latitude/Longitude Data Source; 🔲 Mar	□ GPS □	Other	
If you used a USGS topographic map,	what was the scale?		
Horizontal Reference Datum: NAC	27 NAD 83 WGS 84		
4. Is your facility located on Indian Countr	y lands? YES NO		
If yes, provide the name of the India	n tribe associated with the area of Indian	country (including name of Indian reservation, if	applicable):
5. Are you requesting coverage under this	s 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 y	our lacility exposed to starmwater 51	(to the nearest quarter acre)	
8, Sector-Specific Information			
		ode that best represents the products produced	
1 1 1 1 1	1.1.1	e sector and subsector of your primary industrial o	activity (See Appendix D);
Primary SIC Code: OR	Primary Activity Code:		
Sector: Subsector:	Note: REMOVE the following Sect	or/Subsector from permit coverage.	
Identity the applicable sector(s) and subs	sector(s) of any co-located industrial activ	rity for which you are requesting permit coverage	0.
Sector: F Subsector: F4	Sector: Subsector:	Sector: Subsector:	
Sector:   Subsector:	Sector:   Subsector:	Sector:   Subsector:	
		Than 100,000 gallans of pure glycol in glycol-base	ed descina lluids and/or 100
lans or more of urea on an average		man regions gallions of pare gives in gives base	o doleng news anator rec
If you are a Sector G (Metal Mining)	facility, do you have discharges from was	te rock and overburden piles? YES NO	)
Check the type of ore you mine at y	our facility: Tungsten Ore	☐ Nickel Ore ☐ A	luminum 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 un			
* Note that if your facility becomes i	nactive and unstalled during the permit t	erm, you must submit an NOI modification to refle	ect the change.
E. Discharge Information			
non-stormwater discharges listed in Par under CWA section 402(k) by disclosure be covered by the permit, the Stormwo	t 1,1,3, Any discharges not expressly author to EPA, state, or local authorities after iss ater Pollution Prevention Plan (SWPPP), du	izes the allowable stormwater discharges in Part- prized in this permit cannot become authorized o uance of this permit via any means, including the ring an inspection, etc. If any discharges requiring rts 1.1.2 and 1.1.3 will be discharged, they must b	r shielded from liability Notice of Intent (NOI) to NPDES permit coverage
MLDE2 Delium P 152	to hon standing of the gest table in the	and the state of t	
Federal Effluent Limitation Guidelines	ia iai summa a asalia go iso any a		

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 facilifies that comes into contact with any raw materials, linished product, by-products or waste products (SIC 2874)	Ċ	4/8/1974	
Part 423	Coal pile runoff at steam electric generating facilities	0	11/19/1982 10/8/1974 <sup>1</sup>	
Part 429, Subpart I	Discharges resulting from spray down or intentional wetting of logs at wet deck storage areas	٨	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	,	N/A	п
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	п

INSPS 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)

3621 (20) 20 HI	e stormwater outfalls	For each outfall, provide the following	receiving water information:	
must be ide 3-digit ID (e provide the	acility. Each outfall entified by a unique e.g., 001, 002). Also e latitude and n degrees decimal for all.	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 (Sector AA, Subsector AA1)	Sandia Canyon (Sigma Canyon to NPDES outfall 001)		TMDL Name and ID:
Latitude		Remove monitored outfall 002 from permit coverage and NetDMR. Outfall was		Pollutant(s) for which there is a TMDL:
Longitude		eliminated effective May 1, 2019.		N/A
Outfall ID	005 (Sector O, Subsector O1)	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	Remove 00010 Temperature, water deg.	TMDL Name and ID:
Latitude			centrigrade from list of impairments	Pollutant(s) for which there is a TMDL:
Longitude				N/A

Outfall ID	006 (Sector O, Subsector O1)	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	Remove 00010 Temperature, water deg.	TMDL Name and ID:
Lafifude			centrigrade from list of impairments	Pollutant(s) for which there is a TMDL:
Longitude				
If substantio	ally identical to other	outfall, list identical outfall ID: 005		
Ouffall ID	009 (Sector O, Subsector O1)	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	Remove 00010 Temperature, water deg.	TMDL Name and ID: N/A
Latitude			centrigrade from list of impairments	Pollutant(s) for which there is a TMDL:
Longitude				
lf aubalantie	I dentical to other	outfall, list identical outfall ID:		
II SUDSIGNIIC	any identical to office	oonali, iisi ideniicai oonali ib.	_	
Outfall ID	007 (Sector O, Subsector O1)	Sandia Canyon (Sigma Canyon to NPDES outfall	Remove 00010 Temperature, water deg.	TMDL Name and ID:
dies h	007 (Sector O,	Sandia Canyon (Sigma	Temperature,	N/A  Pollutant(s) for which there is a TMDL:
Outfall ID	007 (Sector O,	Sandia Canyon (Sigma Canyon to NPDES outfall	Temperature, water deg. centrigrade from	N/A Pollutant(s) for which
Outfall ID Latitude Longitude	007 (Sector O, Subsector O1)	Sandia Canyon (Sigma Canyon to NPDES outfall	Temperature, water deg. centrigrade from	N/A  Pollutant(s) for which there is a TMDL:
Outfall ID Latitude Longitude	007 (Sector O, Subsector O1)	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	Temperature, water deg. centrigrade from	N/A  Pollutant(s) for which there is a TMDL:
Outfall ID  Latitude  Longitude	007 (Sector O, Subsector O1)	Sandia Canyon (Sigma Canyon to NPDES outfall 001)  outfall, list identical outfall ID: 009  Sandia Canyon (Sigma Canyon to NPDES outfall	Temperature, water deg. centrigrade from list of impairments  Remove 00010 Temperature,	N/A  Pollutant(s) for which there is a TMDL:  N/A  TMDL Name and ID:

Outfall ID	010 (Sector O, Subsector O1)	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	Remove 00010 Temperature, water deg.	TMDL Name and ID:
Latitude			centrigrade from list of impairments	Pollutant(s) for which there is a TMDL:
Longitude				
If <mark>substanti</mark>	ally identical to other o	utfall, list identical outfall ID: 009		
Outfall ID	012 (Sector O, Subsector O1)	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	Remove 00010 Temperature, water deg.	TMDL Name and ID: N/A
Latitude			centrigrade from list of impairments	Pollutant(s) for which there is a TMDL: N/A
Longitude				
If substantic	l ally identical to other o	l utfall, list identical outfall ID:	L	
7,53/12/11/19				
Outfall ID	011 (Sector O, Subsector O1)	Sandia Canyon (Sigma Canyon to NPDES outfall	Remove 00010 Temperature, water deg.	TMDL Name and ID:
	011 (Sector O,	Sandia Canyon (Sigma	Temperature,	N/A  Pollutant(s) for which there is a TMDL:
Ouffall ID	011 (Sector O,	Sandia Canyon (Sigma Canyon to NPDES outfall	Temperature, water deg. centrigrade from	N/A Pollutant(s) for which
Outfall ID Latitude Longitude	011 (Sector O, Subsector O1)	Sandia Canyon (Sigma Canyon to NPDES outfall	Temperature, water deg. centrigrade from	N/A  Pollutant(s) for which there is a TMDL:
Outfall ID Latitude Longitude	011 (Sector O, Subsector O1)	Sandia Canyon (Sigma Canyon to NPDES outfall 001)  utfall, list identical outfall ID: 012  Sandia Canyon (Sigma Canyon to NPDES outfall	Temperature, water deg. centrigrade from	N/A  Pollutant(s) for which there is a TMDL:
Outfall ID  Latitude  Longitude	011 (Sector O, Subsector O1)	Sandia Canyon (Sigma Canyon to NPDES outfall 001)  utfall, list identical outfall ID: 012  Sandia Canyon (Sigma	Temperature, water deg. centrigrade from	N/A  Pollutant(s) for which there is a TMDL:  N/A  TMDL Name and ID:

Outfall ID	013 (Sectors AA, F Subsectors AA1, F4)	Mortandad Canyon (Within LANL)	N/A
Latitude		Pamaya CIO 012 from narmit	Pollutant(s) for which there is a TMDL:
Longitude		Remove SIO 013 from permit coverage. Site achieved No Exposure Status effective December 18, 2018.	N/A
If substanti	ally identical to other o	u <mark>tfall,</mark> list identical outfall ID: 017	
Ouffall ID	014 (Sectors AA, F Subsectors AA1, F4)	Mortandad Canyon (Within LANL)	TMDL Name and ID: N/A
Latitude			Pollutant(s) for which there is a TMDL:
Longitude		Remove SIO 014 from permit coverage. Site achieved No Exposure Status effective December 18, 2018.	N/A
lf substanti	ally identical to other o	utfall, list identical outfall ID: 017	
	015 (Sectors AA, F	Mortandad Canyon (Within LANL)	TMDL Name and ID:
Outfall ID	Subsectors AA1, F4)	EANE)	IN/A
Ouffall ID			
		Remove SIO 015 from permit coverage. Site achieved No Exposure Status effective December 18, 2018.	Pollutant(s) for which
Latitude Longitude	Subsectors AA1, F4)	Remove SIO 015 from permit coverage. Site achieved No Exposure Status effective	Pollutant(s) for which there is a TMDL:
Latitude Longitude	Subsectors AA1, F4)	Remove SIO 015 from permit coverage. Site achieved No Exposure Status effective December 18, 2018.	Pollutant(s) for which there is a TMDL:
Latitude Longitude If <mark>substanti</mark>	Subsectors AA1, F4)  ally identical to other or  016 (Sectors AA, F	Remove SIO 015 from permit coverage. Site achieved No Exposure Status effective December 18, 2018.  Utfall, list identical outfall ID: 017  Sandia Canyon (Sigma Canyon to NPDES outfall	Pollutant(s) for which there is a TMDL: N/A TMDL Name and ID:

Outfall ID	019 (Sectors AA, F Subsectors AA1, F4)	Sandia Canyon (Sigma Canyon to NPDES outfall 001)		N/A
Latitude				Pollutant(s) for which there is a TMDL:
Longitude		Remove SIO 019 from permit coverage. Site achieved No Exposure Status effective December 18, 2018.		N/A
If substanti	ally identical to other o	utfall, list identical outfall ID: 017		
Outfall ID	020 (Sectors AA, F Subsectors AA1, F4)	Sandia Canyon (Sigma Canyon to NPDES outfall 001)		TMDL Name and ID: N/A
Latitude		Remove monitored outfall 020 from permit coverage and		Pollutant(s) for which there is a TMDL:
Longitude		NetDMR. Site achieved no Exposure Status effective December 18, 2018.		IN/A
				_
If substantio	ally identical to other o	utfall, list identical outfall ID:	_	
lf substantio	022 (Sectors AA, P, Subsectors AA1, P1)	Sandia Canyon (Sigma Canyon to NPDES outfall	Remove 00010 Temperature, water deg.	TMDL Name and ID:
7 242	022 (Sectors AA, P,	Sandia Canyon (Sigma	Temperature,	N/A  Pollutant(s) for which there is a TMDL:
Outfall ID	022 (Sectors AA, P,	Sandia Canyon (Sigma Canyon to NPDES outfall	Temperature, water deg. centrigrade from	N/A Pollutant(s) for which
Outfall ID  Latitude  Longitude	022 (Sectors AA, P, Subsectors AA1, P1)	Sandia Canyon (Sigma Canyon to NPDES outfall 001)  Add Sector AA, Subsector AA1 to permit coverage for	Temperature, water deg. centrigrade from	N/A  Pollutant(s) for which there is a TMDL:
Outfall ID  Latitude  Longitude	022 (Sectors AA, P, Subsectors AA1, P1)	Sandia Canyon (Sigma Canyon to NPDES outfall 001)  Add Sector AA, Subsector AA1 to permit coverage for monitored outfall 022.	Temperature, water deg. centrigrade from list of impairments  Remove 00010 Temperature, water deg.	N/A  Pollutant(s) for which there is a TMDL:
Outfall ID  Latitude  Longitude	022 (Sectors AA, P, Subsectors AA1, P1)	Sandia Canyon (Sigma Canyon to NPDES outfall 001)  Add Sector AA, Subsector AA1 to permit coverage for monitored outfall 022.  Utfall, list identical outfall ID:  Sandia Canyon (Sigma Canyon to NPDES outfall	Temperature, water deg. centrigrade from list of impairments  Remove 00010 Temperature,	N/A  Pollutant(s) for which there is a TMDL: N/A  TMDL Name and ID:

Outfall ID	023 (Sector AA, P, Subsector AA1, P1)	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	Remove 00010 Temperature, water deg.	N/A
Latitude			centrigrade from list of impairments	Pollutant(s) for which there is a TMDL:
Longitude		Add Sector AA, Subsector AA1 to permit coverage for SIO 023.		N/A
lf <mark>substanti</mark>	ally identical to other o	utfall, list identical outfall ID: 022		
Outfall ID	024 (Sector AA, P, Subsector AA1, P1)	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	Remove 00010 Temperature, water deg.	TMDL Name and ID:
Latitude			centrigrade from list of impairments	Pollutant(s) for which there is a TMDL:
Longitude		Add Sector AA, Subsector AA1 to permit coverage for SIO 024.		N/A
lf <mark>substanti</mark> d	ally identical to other o	utfall, list identical outfall ID: 022	_	
Outfall ID	025 (Sector AA, P, Subsector AA, P1)	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	Remove 00010 Temperature, water deg.	TMDL Name and ID:
Latitude			centrigrade from list of impairments	Pollutant(s) for which there is a TMDL:
Longitude		Add Sector AA, Subsector AA1 to permit coverage for SIO 025.		N/A
lf <mark>substantic</mark>	ally identical to other o	uffall, list identical outfall ID: 022		
Ouffall ID	026 (Sector P, Subsector P1)	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	Remove 00010 Temperature, water deg.	TMDL Name and ID: N/A
Latitude			centrigrade from list of impairments	Pollutant(s) for which there is a TMDL:
Longitude				
Longitude				N/A

027 (Sector P, Subsector P1)	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	Remove 00010 Temperature, water deg.	N/A
		centrigrade from list of impairments	Pollutant(s) for which there is a TMDL:
ally identical to other	outfall, list identical outfall ID: 026		
028 (Sector P, Subsector P1)	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	Remove 00010 Temperature, water deg.	TMDL Name and ID: N/A
		centrigrade from list of impairments	Pollutant(s) for which there is a TMDL:
ally identical to other	outfall, list identical outfall ID: 026		
029 (Sector N, Subsector N2)	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	Remove 00010 Temperature, water deg.	TMDL Name and ID:
		centrigrade from list of impairments	Pollutant(s) for which there is a TMDL:
lly identical to other	outfall, list identical outfall ID:		
032 (Sector P, Subsector P1)	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	Remove 00010 Temperature, water deg.	TMDL Name and ID:
		centrigrade from	
		list of impairments	Pollutant(s) for which there is a TMDL:
	(Sector P, Subsector P1)  O28 (Sector P, Subsector P1)  O29 (Sector N, Subsector N2)  O32 (Sector P, O32 (Secto	Canyon to NPDES outfall 001)  Canyon to NPDES outfall 001)  Canyon to NPDES outfall 1D: 026  Canyon to NPDES outfall 001)  Canyon to NPDES outfall 001)	Canyon to NPDES outfall   Temperature, water deg. centrigrade from list of impairments

Outfall ID	033 (Sector P, Subsector P1)	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	Remove 00010 Temperature, water deg.	TMDL Name and ID:
Latitude			centrigrade from list of impairments	Pollutant(s) for which there is a TMDL:
Longitude				
If substantio	ally identical to other	outfall, list identical outfall ID: 032		
Outfall ID	034 (Sector P, Subsector P1)	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	Remove 00010 Temperature, water deg.	TMDL Name and ID: N/A
Latitude			centrigrade from list of impairments	Pollutant(s) for which there is a TMDL:
Longitude				
377127	I.			
If substantio	ally identical to other	outfall, list identical outfall ID: 032		
lf <mark>substantid</mark> Outfall ID	035 (Sector P, Subsector P1)	Sandia Canyon (Sigma Canyon to NPDES outfall	Remove 00010 Temperature, water deg.	TMDL Name and ID:
	035 (Sector P,	Sandia Canyon (Sigma	Temperature,	N/A  Pollutant(s) for which there is a TMDL:
Outfall ID	035 (Sector P,	Sandia Canyon (Sigma Canyon to NPDES outfall	Temperature, water deg. centrigrade from	N/A Pollutant(s) for which
Outfall ID Latitude Longitude	035 (Sector P, Subsector P1)	Sandia Canyon (Sigma Canyon to NPDES outfall	Temperature, water deg. centrigrade from	N/A  Pollutant(s) for which there is a TMDL:
Outfall ID  Latitude  Longitude	035 (Sector P, Subsector P1)	Sandia Canyon (Sigma Canyon to NPDES outfall 001)  outfall, list identical outfall ID: 032  Sandia Canyon (Sigma	Temperature, water deg. centrigrade from	N/A  Pollutant(s) for which there is a TMDL:  N/A  TMDL Name and ID:
Outfall ID Latitude Longitude	035 (Sector P, Subsector P1)	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	Temperature, water deg. centrigrade from	N/A  Pollutant(s) for which there is a TMDL:  N/A
Outfall ID  Latitude  Longitude	035 (Sector P, Subsector P1)	Sandia Canyon (Sigma Canyon to NPDES outfall 001)  outfall, list identical outfall ID: 032  Sandia Canyon (Sigma Canyon to NPDES outfall	Temperature, water deg. centrigrade from	N/A  Pollutant(s) for which there is a TMDL:  N/A  TMDL Name and ID:

Outfall ID	037 (Sector P, Subsector P1)	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	01104 Aluminum, total recoverable [as Al]; 01040 Copper,	N/A
Latitude	35.867859		dissolved [as Cu]; 39516 Polychlorinated biphenyls [PCBs]	Pollutant(s) for which there is a TMDL:
Longitude	-106.292992	Change outfall 037 from SIO to Monitored Outfall effective March 26, 2019.	Remove 00010 Temperature, water deg. centrigrade from list of impairments	N/A
If substantio	ally identical to other	outfall, list identical outfall ID:		
Outfall ID	039 (Sector P, Subsector P1)	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	Remove 00010 Temperature, water deg.	TMDL Name and ID: N/A
Latitude			centrigrade from list of impairments	Pollutant(s) for which there is a TMDL: N/A
Longitude				
If substantio	ally identical to other	outfall, list identical outfall ID:		
If substantio	038 (Sector P, Subsector P1)	Sandia Canyon (Sigma Canyon to NPDES outfall		TMDL Name and ID:
	038 (Sector P,	Sandia Canyon (Sigma Canyon to NPDES outfall 001)		
Outfall ID	038 (Sector P,	Sandia Canyon (Sigma Canyon to NPDES outfall		N/A Pollutant(s) for which
Outfall ID  Latitude  Longitude	038 (Sector P, Subsector P1)	Sandia Canyon (Sigma Canyon to NPDES outfall 001)  Remove SIO 038 from permit coverage. Outfall was eliminated effective April 23,		N/A  Pollutant(s) for which there is a TMDL:
Outfall ID  Latitude  Longitude	038 (Sector P, Subsector P1)	Sandia Canyon (Sigma Canyon to NPDES outfall 001)  Remove SIO 038 from permit coverage. Outfall was eliminated effective April 23, 2019.		N/A  Pollutant(s) for which there is a TMDL:
Outfall ID  Latitude  Longitude  If substantic	038 (Sector P, Subsector P1)	Sandia Canyon (Sigma Canyon to NPDES outfall 001)  Remove SIO 038 from permit coverage. Outfall was eliminated effective April 23, 2019.  outfall, list identical outfall ID: 039  Sandia Canyon (Sigma Canyon to NPDES outfall		N/A  Pollutant(s) for which there is a TMDL:  N/A

Outfall ID	042 (Sector P, Subsector P1)	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	Remove 00010 Temperature, water deg.	N/A
Latitude			centrigrade from list of impairments	Pollutant(s) for which there is a TMDL:
Longitude				
If substantio	I ally identical to other	outfall, list identical outfall ID:	1	
Outfall ID	041, Sector P, Subsector P1)	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	Remove 00010 Temperature, water deg.	TMDL Name and ID:
Latitude			centrigrade from list of impairments	Pollutant(s) for which there is a TMDL:
Longitude	- 1			
If <mark>substantic</mark>	ally identical to other	outfall, list identical outfall ID: 042		
Ouffall ID	074 (Sector A, Subsector A4)	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	Remove 00010 Temperature, water deg.	TMDL Name and ID:
Ouffall ID Latitude	(Sector A,		With the second second second	N/A  Pollutant(s) for which there is a TMDL:
	(Sector A,	Canyon to NPDES outfall	Temperature, water deg. centrigrade from	N/A Pollutant(s) for which
Latitude Longitude	(Sector A, Subsector A4)	Canyon to NPDES outfall	Temperature, water deg. centrigrade from	N/A  Pollutant(s) for which there is a TMDL:
Latitude Longitude	(Sector A, Subsector A4)	Canyon to NPDES outfall 001)	Temperature, water deg. centrigrade from	N/A  Pollutant(s) for which there is a TMDL:
Latitude Longitude If substantic	(Sector A, Subsector A4)	outfall, list identical outfall ID:  Sandia Canyon (Sigma Canyon to NPDES outfall	Temperature, water deg. centrigrade from list of impairments  Remove 00010 Temperature,	N/A  Pollutant(s) for which there is a TMDL:  N/A  TMDL Name and ID:

Outfall ID	075 (Sector P, Subsector P1)	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	Remove 00010 Temperature, water deg.	TMDL Name and ID: N/A
Latitude			centrigrade from list of impairments	Pollutant(s) for which there is a TMDL:
Longitude	-			
If substantio	I ally identical to other	outfall, list identical outfall ID:		
Outfall ID	076 (Sector AA, Subsector A1)	Sandia Canyon (Sigma Canyon to NPDES outfall 001)	01104 Aluminum, total recoverable [as Al]; 01040 Copper,	TMDL Name and ID: N/A
Latitude	35.8758507		dissolved [as Cu]; 39516 Polychlorinated	Pollutant(s) for which there is a TMDL:
Longitude	-106.327924	Add new monitored outfall 076 to permit coverage and NetDMR. Monitoring began June 1, 2019.	biphenyls [PCBs]	N/A
If substantic	ally identical to other	outfall, list identical outfall ID:		
Outfall ID				TMDL Name and ID:
		3.		
Latitude				Pollutant(s) for which there is a TMDL:
Longitude	ılly identical to other	outfall, list identical outfall ID:		
Longitude If substantia	ally identical to other	outfall, list identical outfall ID:		
Longitude If substantia	illy identical to other	outfall, list identical outfall ID:		there is a TMDL:
Longitude	ally identical to other	outfall, list identical outfall ID:		TMDL Name and ID:

4. Provide the following	Interne	dian cibai	it oner	nuttalli	atitude (	landitude	1.		-		_		_		
	2000			Contant	Gillous .			По	1						
Latitude/Longitude Dat						☐ GPS			her						
If you used a USGS I	opograp	shic map	, what	was the	scale?				_	_		_	_		-0
Harizontal Reference D		□ NA	-1-4		NAD 83			☐ WG5							
5. Does your facility disc	charge in	ilo a Mur	rcipal!	Separat	e Storm	Sewer Sy	stem (I	W24)\$ [	YES		NO				
If yes, provide the	name of	the MS4	opera	tor:							_		_		
	ality exce	eeds leve	els nece	essary to	ogque	rl propag								under its antidegradation policy as a Tier 2 d recreation in and on the water) or as a Tie	
☐ Tier 2/2,5. Provide the	e name (	s) of rece	aiving v	vater(s):							_				_
☐ Tier 3 (Outstanding N	vational I	Resource	Water	rs)*											
antidegradation purp 7. If you are subject to b	poses un benchma	der 40 CF	FR 131.	13(a)(3)										Ter 3 (outstanding national resource waters raness of your receiving water(s) (see Appe	
Total Casto Class Total	g/L) benchmo	ark monit	oring r	equirem	ents for	a hardne	ess-dep	pendent	meto	al, do	es y	our f	acili	lity discharge into any saltwater receiving v	vaters?
9. Does your facility disc	horne li	a feder	ol CER	CIAsite	listed in	Annend	iv PS	TVES	INC	7					
									200		Reg	niono	ol Of	ffice determine that you are eligible for pe	rmit
coverage pursuar	nt to Parl	1.1.4.10*	S A	res 🗆	NO										
Office in advance an Part, the EPA Regions	nd the EP of Office	A Region may eva	nal Offici luate v	ce deter whether	rmines y you hav	rou are el re include	ligible ed ode	coverag	e uno	der th	his p	ermi pro	in ed	this permit unless you notify the EPA Region determining your eligibility for coverage ul lures to ensure that your discharges will not ance of a water quality standard.	nder this
F. Stormwater Pollutio	on Preve	ention Pi	lan (SI	WPPP) I	nforma	itlon									
1. Has the SWPPP been	prepare	d in adva	ance o	f filing th	nis NOI, c	as require	eds 🛘	YES [	INC	)	_				
2. SWPPP Contact Inform		EN ANIV		Transfer State	Walter or .	es a maria		dba.		1					
First Name, Middle Initia	I Last No	ame:	111	11	111	THE	11	11	1	11	1	11	1	HITTITE THE	
100010000000000000000000000000000000000	4 7 1	V 1 1	ببل	111	7 (1 )	1 1 1		1 T T	10	11.1	-	0.1	1		
Professional Title:					100				1.						
Phone:	Tital	TTT:	11	111	F	+ 11	1.1	l .							
Thomas L_I	111	111		بلط		" LL			~ T	Ü.,	-	, II.	ς.		
E-mail:							1	$\Pi \Pi$							
3, SWPPP Availability:															
Your current SWPPP or o			n from	your SW	PPP mus	st be man	de avo	allable th	roug	h one	e of	the I	olla	wing two options. Select one of the option	s and
	uired to	post any												defined in Appendix A) (such information mass.	ay be
Option 1: Maintain a	current	convols	YOUR SV	VPPP on	an Inter	mel naai	a // Iniv	areal Res	ource	a loc	cata	rorl	ID()		
Provide the web addres		CODY OF	Cui or	Hill Au	Gri in it.	Helber	z-Inca.	CIJUI NO.	ÇU(C)	D Luc	-015	01.	ne.		
Option 2: Provide the		ac inform	ation fo	rom vou	r SWPPP	in.									-
A. Describe your onsite i	industrial	activities					malen	al storag	e; eq	uipm	nent	luel	ng,	mainlenance, and cleaning; cutting steel	beams)
and potential spill an	d leak ar	eas:													

B. List the pollutant(s) or pollutant constituent(s) associated with each industrial activity exposed to stormwater that could be discharged in stormwater and an 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 5.2.5.7):
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
<ul> <li>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.</li> <li>Provide a brief summary at 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):</li> </ul>
3. If you select criterion B, provide the NPDES ID from the other operator's NOI authorized under this permit:
1. 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:
Is submitted my completed Criterian 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.
114101111
Date your Criterian C Eliability Form was sent to EPA: 1 1 1 1 1 1 1 1 1 1
Date your Criterion C Eligibility Form was sent to EPA://
Date your Criterion C Eligibility Form was sent to EPA://  Describe any EPA-approved measures you will implement to ensure no likely adverse affects an listed species and critical habitat:

H. Historic	Preservation	on												
☐ YES	□ NO			ands, is your facility to aciated with the pro		operly of religi	ious or ci	ultural s	ignilica	ince to	an Ind	dian tri	beş	
2. Using th under the	ne instruction his permit (	ons in Appe only check	ndix Fol the MSGF 1 box)?	<sup>2</sup> , under which histori	ic properties pre	eservation crit	erion liste	ed in Pa	rt 1.1.4	.6 are y	you eli	gible li	or cover	oge
ПА	□в	ПС	□ D											
I. Certifica	ition Inform	atlon												
lo assure t system, or	hat qualifie those pers olete, I am	ed personne ons directly	el properly gathere responsible for ga	and all attachments of ed and evaluated the othering the information of penallies for subn	ne information st tion, the informa	ubmitted. Base ation submitted	ed on m d is, to th	y inquin e best	of the	person	n or pe	ersons o	who mo ef, true,	nage the accurate,
First Name	, Middle In	itial, Last No	me: Enrí	que		Tor	res			11	Ш		11	
Tille:	D	ivis	ion Lea	der	ШШ	ШШ	11							
Signature:		5	~2					Date	06	11	1/	20	19	
E-mail:	é	torr	es@lan	l lglolv	ШШ	1111	Ш							

## Attachment 4

NetDMR Monitoring Requirements for Los Alamos National Laboratory, Operated by Triad National Security, LLC, MSGP ID NMR050013

EPC-DO: 19-191

LA-UR-19-25199

Date:	JUN 1 1 2019	
The second second		

											ired Waters Lim .4.900 NMAC [N						
Permit ID	Facility	Permitted Feature	Sector(s)	Subsector	Consolidated Discharge # (Limit Set)	Discharge Description	Parameter Code	Parameter Name	Symbol	Quality Value	Limit Type	Units	Freq. of	Smpl.	Monitoring Period Start Date	Monitoring Period End Date	DMR Due
NMR050013	Los Alamos National Laboratory	002	AA	AA1	002-11	11 Fabricated Metal Products, except Coating	01104 1 0	Aluminum, total recoverable (as Al)	4=	1010 N	Aaximum	ug/L	1/60	Gr	4/1/2019	5/31/2019	7/31/201
WMR050013	Los Alamos National Laboratory	002	AA	AA1	002-11	11- Fabricated Metal Products, except Coating	01045 1 0	Iron, total [as Fe]	4=		Aaximum	ug/L	1/60	Gr	4/1/2019	5/31/2019	7/31/201
NMR050013	Los-Alamos National Laboratory	002	AA	AA1	002-11	11 Fabricated Metal Products, except Coating	51450 1 0	Nitrite Plus Nitrate Total	40		Aaximum	mg/L	1/60	GF	4/1/2019	5/31/2019	7/31/201
NMR050013	Los Alamos National Laboratory	002	AA	AA1	002-11	11- Fabricated Metal Products, except Coating	01090-1-0	Zinc, dissolved (as Zn)	4=		Aaximum	ug/L	1/60	Gf	4/1/2019	5/31/2019	7/31/201
NMR050013	Los Alamos National Laboratory	002	AA	AA1	002-11	11- Fabricated Metal Products, except Coating	01104 1 0	Aluminum, total recoverable (as Al)	4=	1010 N	Aaximum	ug/L	1/60	Gr	6/1/2019	7/31/2019	9/30/201
NMR050013	Los Alamos National Laboratory	002	AA	AA1	002-11	11- Fabricated Metal Products, except Coating	01045 1 0	Iron, total [as Fe]	<b>4=</b>	1000 N	Aaximum	ug/L	1/60	GF	6/1/2019	7/31/2019	9/30/201
NMR050013	Los Alamos National Laboratory	002	AA	AA1	002-11	11- Fabricated Metal Products, except Coating	51450-1-0	Nitrite Plus Nitrate Total	<b>4=</b>	0.68 N	Aaximum	mg/L	1/60	Gŧ	6/1/2019	7/31/2019	9/30/201
NMR050013	Los Alamos National Laboratory	002	AA	AA1	002-11	11- Fabricated Metal Products, except Coating	01090 1 0	Zinc, dissolved (as Zn)	4=	99 M	Aaximum	ug/L	1/60	Gr	6/1/2019	7/31/2019	9/30/201
NMR050013	Los Alamos National Laboratory	002	AA	AA1	002-11	11 Fabricated Metal Products, except Coating	01104 1 0	Aluminum, total recoverable [as Al]	4=	1010 M	Aaximum	ug/L	1/60	Gr	8/1/2019	9/30/2019	11/30/201
NMR050013	Los Alamos National Laboratory	002	AA	AA1	002-11	11- Fabricated Metal Products, except Coating	01045 1 0	Iron, total [as Fe]	<b>&lt;=</b>	1000 N	Aaximum	ug/L	1/60	Gr	8/1/2019	9/30/2019	11/30/201
NMR050013	Los Alamos National Laboratory	002	AA	AA1	002-11	11- Fabricated Metal Products, except Coating	51450 1 0	Nitrite Plus Nitrate Total	<b>4=</b>	0.68 M	Aaximum	mg/L	1/60	Gr	8/1/2019	9/30/2019	11/30/201
NMR050013	Los Alamos National Laboratory	002	AA	AA1	002-11	11 Fabricated Metal Products, except Coating	01090 1 0	Zinc, dissolved (as Zn)	<b>4=</b>	99 M	Aaximum	ug/L	1/60	Gr	8/1/2019	9/30/2019	11/30/201
WMR050013	Los Alamos National Laboratory	002	AA	AA1	002-11	11- Fabricated Metal Products, except Coating	01104 1 0	Aluminum, total recoverable [as Al]	4=	1010 M	Aaximum	ug/L	1/60	Gr	10/1/2019	11/30/2019	1/31/202
VMR050013	Los Alamos National Laboratory	902	AA	AA1	002-11	11 Fabricated Metal Products, except Coating	01045 1 0	Iron, total [as Fe]	<b>&lt;=</b>		Aaximum	ug/L	1/60	Gr	10/1/2019	11/30/2019	1/31/202
NMR050013	Los Alamos National Laboratory	002	AA	AA1	002-11	11 Fabricated Metal Products, except Coating	51450-1-0	Nitrite Plus Nitrate Total	<b>4=</b>	39.53	Aaximum	mg/L	1/60	GF	10/1/2019	11/30/2019	1/31/202
NMR050013	Los Alamos National Laboratory	002	AA	AA1	002-11	11- Fabricated Metal Products, except Coating	01090 1 0	Zinc, dissolved (as-Zn)	4=	7.12	Aaximum	ug/L	1/60	Gř	10/1/2019	11/30/2019	1/31/202
NMR050013	Los Alamos National Laboratory	002	AA	AA1	002-IW	IW Impaired Water	01104 1 0	Aluminum, total recoverable las All	<b>4=</b>		Aaximum	ug/L	1/YR	Gr	4/1/2019	11/30/2019	1/31/2020
NMR050013	Los Alamos National Laboratory	002	AA	AA1	002-IW	IW-Impaired Water	01040 1 0	Copper, dissolved (as Cu)	4=		<del>laximum</del>	ug/L	1/YR	GF	4/1/2019	11/30/2019	1/31/2020
NMR050013	Los Alamos National Laboratory	002	AA	AA1	002-IW	IW Impaired Water	3951610	Polychlorinated biphenyls [PCBs]	4=	0.2 M	4aximum	ug/L	1/YR	Gř	4/1/2019	11/30/2019	1/31/2020
VMR050013	Los Alamos National Laboratory	002	AA	AA1	002-fW/	IW Impaired Water	00010-1-0	Temperature, water-deg. centigrade	<b>4=</b>		Aaximum	deg C	1/YR	Gr	4/1/2019	11/30/2019	1/31/2020
								0			100000000000000000000000000000000000000				11,41,115.12	24/20/2022	2/02/202
NMR050013	Los Alamos National Laboratory	005	0	01	005-01	O1 - Steam Electric Generating Facilities	01045 1 0	Iron, total [as Fe]	<=	1000 M	laximum	ug/L	1/60	Gr	4/1/2019	5/31/2019	7/31/2019
NMR050013	Los Alamos National Laboratory	005	0	01		O1 - Steam Electric Generating Facilities	01045 1 0	Iron, total [as Fe]	<=		/aximum	ug/L	1/60	Gr	6/1/2019	7/31/2019	9/30/2019
NMR050013	Los Alamos National Laboratory	005	0	01	005-01	O1 - Steam Electric Generating Facilities	01045 1 0	Iron, total [as Fe]	<=		1aximum	ug/L	1/60	Gr	8/1/2019	9/30/2019	11/30/2019
VMR050013	Los Alamos National Laboratory	005	0	01	005-01	O1 - Steam Electric Generating Facilities	01045 1 0	Iron, total [as Fe]	<=		1aximum	ug/L	1/60	Gr	10/1/2019	11/30/2019	1/31/2020
VMR050013	Los Alamos National Laboratory	005	0	01	005-IW	IW - Impaired Water	01104 1 0	Aluminum, total recoverable [as Al]	<=		1aximum	ug/L	1/YR	Gr	4/1/2019	11/30/2019	1/31/2020
VMR050013	Los Alamos National Laboratory	005	0	01	005-IW	IW - Impaired Water	01040 1 0	Copper, dissolved [as Cu]	<=		laximum	ug/L	1/YR	Gr	4/1/2019	11/30/2019	1/31/2020
VMR050013	Los Alamos National Laboratory	005	0	01	005-IW	IW - Impaired Water	39516 1 0	Polychlorinated biphenyls (PCBs)	<=	7 10 10 10	laximum	ug/L	1/YR	Gr	4/1/2019	11/30/2019	1/31/2020
VMR050013	Los Alamos National Laboratory	005	0	01	005 IW	IW-Impaired Water	00010-1-0	Temperature, water deg. centigrade	4=		laximum	deg C	1/YR	Gr	4/1/2019	11/30/2019	1/31/2020
											72-101114-111			_	26.47.44.25		2/22/232
VMR050013	Los Alamos National Laboratory	009	0	01	009-01	O1 - Steam Electric Generating Facilities	01045 1 0	Iron, total [as Fe]	<=	1000 M	laximum	ug/L	1/60	Gr	4/1/2019	5/31/2019	7/31/2019
VMR050013	Los Alamos National Laboratory	009	0	01	009-01	O1 - Steam Electric Generating Facilities	01045 1 0	Iron, total [as Fe]	<=		faximum	ug/L	1/60	Gr	6/1/2019	7/31/2019	9/30/2019
VMR050013	Los Alamos National Laboratory	009	0	01	009-01	O1 - Steam Electric Generating Facilities	01045 1 0	Iron, total [as Fe]	<=		laximum	ug/L	1/60	Gr	8/1/2019	9/30/2019	11/30/2019
	Los Alamos National Laboratory	009	0	01		O1 - Steam Electric Generating Facilities		Iron, total [as Fe]	<=	1000 M	CD DOUGLE DO	ug/L		Gr	10/1/2019	11/30/2019	1/31/2020
	Los Alamos National Laboratory	009	0	01	009-IW	IW - Impaired Water		Aluminum, total recoverable [as Al]	<=		1aximum	ug/L	1/YR	Gr	4/1/2019	11/30/2019	1/31/2020
THE STREET	Los Alamos National Laboratory	009	0	01	009-IW	IW - Impaired Water	01040 1 0	Copper, dissolved [as Cu]	<=		laximum	ug/L	1/YR	Gr	4/1/2019	11/30/2019	1/31/2020
	Los Alamos National Laboratory	009	0	01	009-IW	IW - Impaired Water	3951610	Polychlorinated biphenyls [PCBs]	<=		laximum	ug/L	1/YR	Gr	4/1/2019	11/30/2019	1/31/2020
VMR050013	Los Alamos National Laboratory	009	0	01	009 IW	IW Impaired Water	00010 1 0	Temperature, water deg. centigrade	45		laximum	deg€		Gr	4/1/2019	11/30/2019	1/31/2020
													F A. H				
VMR050013	Los Alamos National Laboratory	012	0	01	012-01	O1 - Steam Electric Generating Facilities	01045 1 0	Iron, total [as Fe]	<=	1000 M	laximum	ug/L	1/60	Gr	4/1/2019	5/31/2019	7/31/2019
NMR050013	Los Alamos National Laboratory	012	0	01		O1 - Steam Electric Generating Facilities	01045 1 0	Iron, total [as Fe]	<=	1000 M		ug/L	1/60	Gr	6/1/2019	7/31/2019	9/30/2019
VMR050013	Los Alamos National Laboratory	012	0	01	012-01	O1 - Steam Electric Generating Facilities	01045 1 0	Iron, total [as Fe]	<=	1000 M	20.27 At 1 At 2 At 1	ug/L	1/60	Gr	8/1/2019	9/30/2019	11/30/2019
VMR050013	Los Alamos National Laboratory	012	0	01	012-01	O1 - Steam Electric Generating Facilities	01045 1 0	Iron, total [as Fe]	<=	1000 M		ug/L	1/60	Gr	10/1/2019	11/30/2019	1/31/2020
NMR050013	Los Alamos National Laboratory	012	0	01	012-IW	IW - Impaired Water	0110410	Aluminum, total recoverable [as Al]	<=	1010 M		ug/L	1/YR	Gr	4/1/2019	11/30/2019	1/31/2020
NMR050013	Los Alamos National Laboratory	012	0	01	012-IW	IW - Impaired Water	01040 1 0	Copper, dissolved [as Cu]	<=		laximum	ug/L	1/YR	Gr	4/1/2019	11/30/2019	1/31/2020
NMR050013	Los Alamos National Laboratory	012	0	01	012-IW	IW - Impaired Water	3951610	Polychlorinated biphenyls [PCBs]	<=	10.00	laximum	ug/L	1/YR	Gr	4/1/2019	11/30/2019	1/31/2020
VMR050013	Los Alamos National Laboratory	012	9	01	012-IW	IW-Impaired Water	00010-1-0	Temperature, water deg. centigrade	<b>4=</b>		laximum	deg C	1/YR	Gr	4/1/2019	11/30/2019	1/31/2020
															- 19 1		
VMR050013	Los Alamos National Laboratory	017	AA, F	AA1, F4	017-11	11-Fabricated Metal Products, except Coating	0110410	Aluminum, total recoverable [as Al]	<b>&lt;=</b>	1010 M	laximum	ug/L	1/60	Gr	4/1/2019	5/31/2019	7/31/2019
VMR050013	Los Alamos National Laboratory	017	AA, F	AA1, F4	017-11	11 Fabricated Metal Products, except Coating	01040 1 0	Copper, dissolved [as Cu]	<b>4=</b>		laximum	ug/L	1/60	Gr	4/1/2019	5/31/2019	7/31/2019
VMR050013	Los Alamos National Laboratory	017	AA, F	AA1, F4	017-11	11- Fabricated Metal Products, except Coating	01045 1 0	Iron, total [as Fe]	4=	1000 M	DE 2 (10 ) ( PO) ( 10 )	ug/L	1/60	Gr	4/1/2019	5/31/2019	7/31/2019
VMR050013	Los Alamos National Laboratory	017	AA, F	AA1, F4	017-11	11 Fabricated Metal Products, except Coating	51450 1 0	Nitrite Plus Nitrate Total	4=		laximum	mg/L	1/60	Gr	4/1/2019	5/31/2019	7/31/2019
VMR050013	Los Alamos National Laboratory	017	AA, F	AA1, F4	017-11	11 Fabricated Metal Products, except Coating	01090 1 0	Zinc, dissolved [as Zn]	4=		laximum	ug/L	1/60	GF	4/1/2019	5/31/2019	7/31/2019
VMR050013	Los Alamos National Laboratory	017	AA, F	AA1, F4	017-11	11 Fabricated Metal Products, except Coating	01104-1-0	Aluminum, total recoverable [as Al]	4=	1010 M		ug/L	1/60	Gr	6/1/2019	7/31/2019	9/30/2019
VMR050013	Los Alamos National Laboratory	017	AA, F	AA1, F4		11 Fabricated Metal Products, except Coating	01040 1 0	Copper, dissolved [as Cu]	<b>4</b> =		laximum	ug/L	1/60	Gr	6/1/2019	7/31/2019	9/30/2019

						1				aired Waters Lim 5.4.900 NMAC [N						
Facility	Permitted Feature	Sector(s)	Subsector	Consolidated Discharge # (Limit Set)	Discharge Description	Parameter Code	Parameter Name	Symbol	Quality Value	Limit Type	Units	Freq. of	Smpl.	Monitoring Period Start Date	Monitoring Period End Date	DMR Due Date
amos National Laboratory	017	AA, F	AA1, F4	017-11	11 Fabricated Metal Products, except Coating	01045-1-0	Iron, total (as Fe)	4=	1000	Maximum	ug/L	1/60	Gr	6/1/2019	7/31/2019	9/30/20
amos National Laboratory	017	AA, F	AA1, F4	017-11	11- Fabricated Metal Products, except Coating	51450-1-0	Nitrite Plus Nitrate Total	4=	0.68	Maximum	mg/L	1/60	GF	6/1/2019	7/31/2019	9/30/20
amos National Laboratory	017	AA, F	AA1, F4	017-11	11-Fabricated Metal Products, except Coating	01090-1-0	Zinc, dissolved (as Zn)	4=	99 1	Maximum	ug/L	1/60	GF	6/1/2019	7/31/2019	9/30/20
amos National Laboratory	017	AA, F	AA1, F4	017-11	11- Fabricated Metal Products, except Coating	01104 1 0	Aluminum, total recoverable (as Al)	4=		Maximum	ug/L	1/60	Gr	8/1/2019	9/30/2019	11/30/20
amos National Laboratory	017	AA, F	AA1, F4	017-11	11- Fabricated Metal Products, except Coating	01040-1-0	Copper, dissolved (as Cu)	4=	7.4	Maximum	ug/L	1/60	GF	8/1/2019	9/30/2019	11/30/20
amos National Laboratory	017	AA, F	AA1, F4	017-11	11 Fabricated Metal Products, except Coating	01045-1-0	Iron, total (as Fe)	4=	1000	Maximum	ug/L	1/60	Gr	8/1/2019	9/30/2019	11/30/20
THE RESIDENCE OF SHIP PROPERTY AND ADDRESS OF THE PARTY AND ADDRESS OF	017	AA, F	AA1, F4	017-11	11 Fabricated Metal Products, except Coating	51450-1-0	Nitrite Plus Nitrate Total	4=	-	Maximum	mg/L	1/60	Gr	8/1/2019	9/30/2019	11/30/20
amos National Laboratory	017	AA, F	AA1, F4	017-11	11- Fabricated Metal Products, except Coating	01090 1 0	Zinc, dissolved (as Zn)	4=		Waximum	ug/L	1/60	Gr	8/1/2019	9/30/2019	11/30/20
amos National Laboratory	017	AA, F	AA1, F4	017-11	11 Fabricated Metal Products, except Coating	01104-1-0	Aluminum, total recoverable [as Al]	<b>4=</b>		Maximum	ug/L	1/60	Gr	10/1/2019	11/30/2019	1/31/20
amos National Laboratory	_	AA, F	AA1, F4	017-11	11 Fabricated Metal Products, except Coating	01040-1-0	Copper, dissolved (as Cu)	40		Maximum	ug/L	1/60	Gr	10/1/2019	11/30/2019	1/31/20
amos National Laboratory	017	-	AA1, F4	017-11	11 Fabricated Metal Products, except Coating	01045-1-0	Iron, total las Fel	4=		Maximum	ug/L	1/60	Gr	10/1/2019	11/30/2019	1/31/20
amos National Laboratory	017	AA, F		017-11	11 Fabricated Metal Products, except Coating	51450-1-0	Nitrite Plus Nitrate Total	<≈		Maximum	mg/L	1/60	Gr	10/1/2019	11/30/2019	1/31/20
amos National Laboratory	017	AA, F	AA1, F4	017-11	11 Fabricated Metal Products, except Coating	01090-1-0	Zinc, dissolved (as Zn)	4=	-	Maximum	ug/L	1/60	Gr	10/1/2019	11/30/2019	1/31/20
amos National Laboratory	017	AA, F	AA1, F4		IW Impaired Water	01104 1 0	Aluminum, total recoverable [as Al]	4=		<del>Vaximum</del> Vaximum	ug/t	1/YR	Gr	4/1/2019	11/30/2019	1/31/20
amos National Laboratory	017	AA, F	AA1, F4	017-IW	IW Impaired Water	01040 1 0	Copper, dissolved las Cul	4=		<del>Vaximum</del> Maximum	ug/t	1/YR	Gr	4/1/2019	11/30/2019	1/31/20
amos National Laboratory	017	AA, F	AA1, F4	017 IW		39516 1 0						1/YR	Gr	4/1/2019	11/30/2019	1/31/20
amos National Laboratory	017	AA, F	AA1, F4	017-IW	IW Impaired Water	17.5	Polychlorinated biphenyls [PCBs]	<b>4=</b>		Maximum	ug/L	-	_			1/31/20
amos National Laboratory	017	AA, F	AA1, F4	017-IW	IW Impaired Water	00010-1-0	Temperature, water deg. centigrade	40	24 1	Waximum	deg-C	1/YR	Gr	4/1/2019	11/30/2019	1/31/20
			100000	2000	The second secon	0110110	ALCOHOLOGICA AND CONTRACTOR AND CONT		1010	i de contraction de la contrac	100	1/00	F.	1/1/2010	r /24 /2040	7/24/20
amos National Laboratory	020	AA, F	AA1, F4	020-11	11 Fabricated Metal Products, except Coating	01104 1 0	Aluminum, total recoverable [as Al]	4=		<del>Vaximum</del>	ug/L	1/60	Gf	4/1/2019	5/31/2019	7/31/20
amos National Laboratory	020	AA, F	AA1, F4	020-11	11 Fabricated Metal Products, except Coating	01040 1 0	Copper, dissolved (as Cu)	44		<del>Vaximum</del>	ug/L	1/60	Gr	4/1/2019	5/31/2019	7/31/20
amos National Laboratory	020	AA, F	AA1, F4	020-11	11 Fabricated Metal Products, except Coating	01045-1-0	Iron, total [as Fe]	4=		Maximum	ug/L	1/60	Gr	4/1/2019	5/31/2019	7/31/20
amos National Laboratory	020	AA, F	AA1, F4	020-11	11 Fabricated Metal Products, except Coating	51450 1 0	Nitrite Plus Nitrate Total	€=		Maximum	mg/L	1/60	Gf	4/1/2019	5/31/2019	7/31/20
amos National Laboratory	020	AA, F	AA1, F4	020-11	11- Fabricated Metal Products, except Coating	01090-1-0	Zinc, dissolved [as Zn]	40		mumixeN	UB/L	1/60	GF	4/1/2019	5/31/2019	7/31/20
amos National Laboratory	020	AA, F	AA1, F4	020-11	11- Fabricated Metal Products, except Coating	01104 1 0	Aluminum, total recoverable [as Al]	4=		Maximum	ug/L	1/60	Gf	6/1/2019	7/31/2019	9/30/20
amos National Laboratory	020	AA, F	AA1, F4	020-11	11 Fabricated Metal Products, except Coating	01040 1 0	Copper, dissolved [as Cu]	<b>4</b> =		<del>Vaximum</del>	ug/L	1/60	Gf	6/1/2019	7/31/2019	9/30/20
amos National Laboratory	020	AA, F	AA1, F4	020-11	11 Fabricated Metal Products, except Coating	01045 1 0	Iron, total [as Fe]	4=		Waximum	ug/L	1/60	GF	6/1/2019	7/31/2019	9/30/20
amos National Laboratory	020	AA, F	AA1, F4	020-11	11 Fabricated Metal Products, except Coating	51450 1-0	Nitrite Plus Nitrate Total	4=	4 83.0	Maximum	mg/L	1/60	Gr	6/1/2019	7/31/2019	9/30/20
amos National Laboratory	929	AA, F	AA1, F4	020-11	11 Fabricated Metal Products, except Coating	01090 1 0	Zinc, dissolved (as Zn)	<b>&lt;=</b>	99 4	Vaximum	ug/L	1/60	GF	6/1/2019	7/31/2019	9/30/20
ames National Laboratory	020	AA, F	AA1, F4	020-11	11 Fabricated Metal Products, except Coating	01104 1 0	Aluminum, total recoverable [as Al]	<b>4=</b>	1010 A	Maximum	ug/L	1/60	Gr	8/1/2019	9/30/2019	11/30/20
amos National Laboratory	020	AA, F	AA1, F4	020-11	11 Fabricated Metal Products, except Coating	01040-1-0	Copper, dissolved (as-Cu)	<b>4=</b>	7 4	Vlaximum	ug/L	1/60	Gr	8/1/2019	9/30/2019	11/30/20
amos National Laboratory	020	AA, F	AA1, F4	020 11	11 Fabricated Metal Products, except Coating	01045-1-0	iron, total (as Fe)	<b>&lt;=</b>	1000 A	Maximum	ug/L	1/60	GF	8/1/2019	9/30/2019	11/30/20
lamos National Laboratory	020	AA, F	AA1, F4	020-11	11 - Fabricated Metal Products, except Coating	51450 1 0	Nitrite Plus Nitrate Total	4=	0.68	<del>Vaximum</del>	mg/L	1/60	Gr	8/1/2019	9/30/2019	11/30/20
lamos National Laboratory	020	AA, F	AA1, F4	020-11	11 Fabricated Metal Products, except Coating	01090 1 0	Zinc, dissolved [as Zn]	4=	4 66	<del>Vaximum</del>	ug/L	1/60	Gr	8/1/2019	9/30/2019	11/30/20
lamos National Laboratory	020	AA, F	AA1, F4	020-11	11 Fabricated Metal Products, except Coating	01104 1 0	Aluminum, total recoverable (as Al)	<b>&lt;=</b>	1010 A	Maximum	ug/L	1/60	Gr	10/1/2019	11/30/2019	1/31/20
lamos National Laboratory	020	AA, F	AA1, F4	020-11	11 Fabricated Metal Products, except Coating	01040-1-0	Copper, dissolved [as Cu]	<b>4=</b>	7 A	Maximum	ug/L	1/60	Gr	10/1/2019	11/30/2019	1/31/20
lamos National Laboratory	020	AA, F	AA1, F4	020-11	11 Fabricated Metal Products, except Coating	01045-1-0	iron, total (as Fe)	4=	1000 A	Maximum	ug/L	1/60	Gf	10/1/2019	11/30/2019	1/31/203
lamos National Laboratory	020	AA, F	AA1, F4	020-11	11 Fabricated Metal Products, except Coating	51450 1-0	Nitrite Plus Nitrate Total	<b>4=</b>	0.68 A	Vaximum	mg/L	1/60	GF	10/1/2019	11/30/2019	1/31/202
lamos National Laboratory	020	AA, F	AA1, F4	020-11	11 Fabricated Metal Products, except Coating	01090 1-0	Zinc, dissolved [as Zn]	<b>4=</b>	4 99	Maximum	ug/L	1/60	GF	10/1/2019	11/30/2019	1/31/207
lamos National Laboratory	020	AA, F	AA1, F4	020-IW	IW—Impaired Water	01104 1 0	Aluminum, total recoverable [as Al]	<b>&lt;=</b>	1010 A	Maximum	ug/L	1/YR	GF	4/1/2019	11/30/2019	1/31/202
lamos National Laboratory	020	AA, F	AA1, F4	020 IW	IW Impaired Water	01040 1 0	Copper, dissolved (as Cu)	4=		Vlaximum	ug/L	1/YR	GF	4/1/2019	11/30/2019	1/31/20
lamos National Laboratory	020	AA, F	AA1, F4	020 IW	IW-Impaired Water	39516-1-0	Polychlorinated biphenyls [PCBs]	4=	0.2 A	Maximum	ug/L	1/YR	Gr	4/1/2019	11/30/2019	1/31/202
lamos National Laboratory	020	AA, F	AA1, F4	020-IW	IW Impaired Water	00010-1-0	Temperature, water-deg. centigrade	<b>4=</b>	24 4	Maximum	deg-€	1/YR	Gr	4/1/2019	11/30/2019	1/31/200
idinos ivational tabolistory	OZU	70.9.1	(4.12)13							7 (4 - 104 - 144		TIT FEE				
Iswaa National Laboratory	022	AA	AA1	022-11	11- Fabricated Metal Products, except Coating	0110410	Aluminum, total recoverable [as Al]	<=	1010 N	Maximum	ug/L	1/60	Gr	4/1/2019	5/31/2019	7/31/20:
lamos National Laboratory	022	AA	AA1	022-11	11- Fabricated Metal Products, except Coating	01045 1 0	Iron, total [as Fe]	<=		Maximum	ug/L	1/60	Gr	4/1/2019	5/31/2019	7/31/20
lamos National Laboratory		AA	AA1	022-11	11- Fabricated Metal Products, except Coating	51450 1 0	Nitrite Plus Nitrate Total	<=		Maximum	mg/L	1/60	Gr	4/1/2019	5/31/2019	7/31/20
lamos National Laboratory	022		AA1	022-11	11- Fabricated Metal Products, except Coating	01090 1 0	Zinc, dissolved [as Zn]	<=		Vlaximum	ug/L	1/60	Gr	4/1/2019	5/31/2019	7/31/20
lamos National Laboratory	022	AA	AA1	022-11	11- Fabricated Metal Products, except Coating	0110410	Aluminum, total recoverable [as Al]	<=		Maximum	ug/L	1/60	Gr	6/1/2019	7/31/2019	9/30/20
lamos National Laboratory	022	AA	_	022-11	11- Fabricated Metal Products, except Coating	01045 1 0	Iron, total [as Fe]	<=		Maximum	ug/L	1/60	Gr	6/1/2019	7/31/2019	9/30/20
lamos National Laboratory	022	AA	AA1	-	11- Fabricated Metal Products, except Coating	51450 1 0	Nitrite Plus Nitrate Total	<=		Maximum	mg/L	1/60	Gr	6/1/2019	7/31/2019	9/30/20
lamos National Laboratory	022	AA	AA1	022-11		01090 1 0	Zinc, dissolved [as Zn]	<=					Gr	6/1/2019	7/31/2019	9/30/20
lamos National Laboratory		-				10 20 20 20 20 20 20 20 20 20 20 20 20 20					_					11/30/20
lamos National Laboratory	-	_	-							30.00						11/30/20:
lamos National Laboratory	_	-	-					-					_			
lamos National Laboratory	022	-	-					-								11/30/20:
lamos National I lamos National I	Laboratory Laboratory Laboratory	Laboratory 022 Laboratory 022 Laboratory 022	Laboratory 022 AA Laboratory 022 AA Laboratory 022 AA	Laboratory 022 AA AA1 Laboratory 022 AA AA1 Laboratory 022 AA AA1	Laboratory         022         AA         AA1         022-11	Laboratory 022 AA AA1 022-11 11- Fabricated Metal Products, except Coating Laboratory 022 AA AA1 022-11 11- Fabricated Metal Products, except Coating Laboratory 022 AA AA1 022-11 11- Fabricated Metal Products, except Coating 11- Fabricated Metal Products, except Coating 11- Fabricated Metal Products except Coating 11- Fabricated Metal	AA	Laboratory 022 AA AA1 022-11 11- Fabricated Metal Products, except Coating 01104 1 0 Aluminum, total recoverable [as Al] Laboratory 022 AA AA1 022-11 11- Fabricated Metal Products, except Coating 01045 1 0 Iron, total [as Fe] Laboratory 022 AA AA1 022-11 11- Fabricated Metal Products, except Coating 51450 1 0 Nitrite Plus Nitrate Total	Laboratory 022 AA AA1 022-11 11- Fabricated Metal Products, except Coating 01104 1 0 Aluminum, total recoverable [as Al] <= Laboratory 022 AA AA1 022-11 11- Fabricated Metal Products, except Coating 01045 1 0 Iron, total [as Fe] <= Laboratory 022 AA AA1 022-11 11- Fabricated Metal Products, except Coating 51450 1 0 Nitrite Plus Nitrate Total <= Laboratory 022 AA AA1 022-11 11- Fabricated Metal Products, except Coating 51450 1 0 Nitrite Plus Nitrate Total <=	Laboratory 022 AA AA1 022-11 11- Fabricated Metal Products, except Coating 01104 1 0 Aluminum, total recoverable [as Al] <= 1010 P.  Laboratory 022 AA AA1 022-11 11- Fabricated Metal Products, except Coating 01045 1 0 Iron, total [as Fe] <= 1000 P.  Laboratory 022 AA AA1 022-11 11- Fabricated Metal Products, except Coating 51450 1 0 Nitrite Plus Nitrate Total <= 0.68 P.  Laboratory 022 AA AA1 022-11 11- Fabricated Metal Products, except Coating 51450 1 0 Nitrite Plus Nitrate Total <= 0.68 P.  Laboratory 022 AA AA1 022-11 11- Fabricated Metal Products, except Coating 51450 1 0 Nitrite Plus Nitrate Total <= 0.68 P.  Laboratory 022 AA AA1 022-11 11- Fabricated Metal Products, except Coating 51450 1 0 Nitrite Plus Nitrate Total <= 0.68 P.  Laboratory 022 AA AA1 022-11 11- Fabricated Metal Products, except Coating 51450 1 0 Nitrite Plus Nitrate Total <= 0.68 P.  Laboratory 022 AA AA1 022-11 11- Fabricated Metal Products, except Coating 51450 1 0 Nitrite Plus Nitrate Total <= 0.68 P.  Laboratory 022 AA AA1 022-11 11- Fabricated Metal Products, except Coating 51450 1 0 Nitrite Plus Nitrate Total <= 0.68 P.  Laboratory 022 AA AA1 022-11 11- Fabricated Metal Products, except Coating 51450 1 0 Nitrite Plus Nitrate Total <= 0.68 P.  Laboratory 022 AA AA1 022-11 11- Fabricated Metal Products, except Coating 51450 1 0 Nitrite Plus Nitrate Total <= 0.68 P.  Laboratory 022 AA AA1 022-11 11- Fabricated Metal Products, except Coating 51450 1 0 Nitrite Plus Nitrate Total <= 0.68 P.  Laboratory 022 AA AA1 022-11 11- Fabricated Metal Products, except Coating 51450 1 0 Nitrite Plus Nitrate Total <= 0.68 P.  Laboratory 022 AA AA1 022-11 11- Fabricated Metal Products (Except Coating 51450 1 0 Nitrite Plus Nitrate Total	Laboratory 022 AA AA1 022-11 11- Fabricated Metal Products, except Coating 01104 1 0 Aluminum, total recoverable [as Al] <= 1010 Maximum  Laboratory 022 AA AA1 022-11 11- Fabricated Metal Products, except Coating 01045 1 0 Iron, total [as Fe] <= 1000 Maximum  Laboratory 022 AA AA1 022-11 11- Fabricated Metal Products, except Coating 51450 1 0 Nitrite Plus Nitrate Total <= 0.68 Maximum  Laboratory 022 AA AA1 022-11 11- Fabricated Metal Products, except Coating 51450 1 0 Nitrite Plus Nitrate Total <= 0.68 Maximum	Laboratory 022 AA AA1 022-11 11- Fabricated Metal Products, except Coating 01104 1 0 Aluminum, total recoverable [as AI] <= 1010 Maximum ug/L aboratory 022 AA AA1 022-11 11- Fabricated Metal Products, except Coating 01045 1 0 Iron, total [as Fe] <= 1000 Maximum ug/L ug/L aboratory 022 AA AA1 022-11 11- Fabricated Metal Products, except Coating 51450 1 0 Nitrite Plus Nitrate Total <= 0.68 Maximum mg/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L u	Laboratory 022 AA AA1 022-11 11-Fabricated Metal Products, except Coating 01104 1 0 Aluminum, total recoverable [as AI] <= 1010 Maximum ug/L 1/60 Laboratory 022 AA AA1 022-11 11-Fabricated Metal Products, except Coating 01045 1 0 Iron, total [as Fe] <= 1000 Maximum ug/L 1/60 Laboratory 022 AA AA1 022-11 11-Fabricated Metal Products, except Coating 51450 1 0 Nitrite Plus Nitrate Total <= 0.68 Maximum mg/L 1/60 Laboratory 022 AA AA1 022-11 11-Fabricated Metal Products, except Coating 51450 1 0 Nitrite Plus Nitrate Total <= 0.68 Maximum mg/L 1/60	Laboratory 022 AA AA1 022-11 11- Fabricated Metal Products, except Coating 01104 1 0 Aluminum, total recoverable [as AI] <= 1010 Maximum ug/L 1/60 Gr Laboratory 022 AA AA1 022-11 11- Fabricated Metal Products, except Coating 01045 1 0 Iron, total [as Fe] <= 1000 Maximum ug/L 1/60 Gr Laboratory 022 AA AA1 022-11 11- Fabricated Metal Products, except Coating 01045 1 0 Nitrite Plus Nitrate Total <= 0.68 Maximum mg/L 1/60 Gr	Laboratory         022         AA         AA1         022-11         11- Fabricated Metal Products, except Coating         01104 1 0 Aluminum, total recoverable [as Al]         <=         1010 Maximum         ug/L         1/60         Gr         8/1/2019           Laboratory         022         AA         AA1         022-11         11- Fabricated Metal Products, except Coating         01045 1 0 Iron, total [as Fe]         <=	Laboratory         022         AA         AA1         022-11         11- Fabricated Metal Products, except Coating         01104 1 0 Aluminum, total recoverable [as Al]         <=         1010 Maximum         ug/L         1/60 Gr         8/1/2019         9/30/2019           Laboratory         022         AA         AA1         022-11         11- Fabricated Metal Products, except Coating         01045 1 0 Iron, total [as Fe]         <=

											paired Waters Lin 6.4.900 NMAC [N	The section of					
Permit ID	Facility	Permitted Feature	Sector(s)	Subsector	Consolidated Discharge # (Limit Set)	Discharge Description	Parameter Code	Parameter Name	Symbol	Quality Value	Limit Type	Units	Freq. of	2000	Monitoring Period Start Date	Monitoring Period End Date	DMR Due Date
NMR050013	Los Alamos National Laboratory	022	AA	AA1	022-11	11- Fabricated Metal Products, except Coating	01104 1 0	Aluminum, total recoverable [as Al]	<=	1010	Maximum	ug/L	1/60	Gr	10/1/2019	11/30/2019	1/31/2020
NMR050013	Los Alamos National Laboratory	022	AA	AA1	022-11	11- Fabricated Metal Products, except Coating	01045 1 0	Iron, total [as Fe]	<=	1000	Maximum	ug/L	1/60	Gr	10/1/2019		1/31/2020
NMR050013	Los Alamos National Laboratory	022	AA	AA1	022-11	11- Fabricated Metal Products, except Coating	51450 1 0	Nitrite Plus Nitrate Total	<=	0.68	Maximum	mg/L	1/60	Gr	10/1/2019		1/31/2020
NMR050013	Los Alamos National Laboratory	022	AA	AA1	022-11	11- Fabricated Metal Products, except Coating	01090 1 0	Zinc, dissolved [as Zn]	<=	99	Maximum	ug/L	1/60	Gr	10/1/2019		
NMR050013	Los Alamos National Laboratory	022	Р	P1	022-IW	IW - Impaired Water	01104 1 0	Aluminum, total recoverable [as Al]	<=	1010	Maximum	ug/L	1/YR	Gr	4/1/2019	11/30/2019	1/31/2020
NMR050013	Los Alamos National Laboratory	022	P	P1	022-IW	IW - Impaired Water	01040 1 0	Copper, dissolved [as Cu]	<=	7	Maximum	ug/L	1/YR	Gr	4/1/2019	11/30/2019	1/31/2020
NMR050013	Los Alamos National Laboratory	022	P	P1	022-IW	IW - Impaired Water	39516 1 0	Polychlorinated biphenyls [PCBs]	<=	0.2	Maximum	ug/L	1/YR	Gr	4/1/2019	11/30/2019	1/31/2020
NMR050013	Los Alamos National Laboratory	022	Þ	P1	022-IW	IW Impaired Water	00010-1-0	Temperature, water deg. centigrade	4=	24	Maximum	deg €	1/YR	Gr	4/1/2019	11/30/2019	1/31/2020
NMR050013	Los Alamos National Laboratory	026	P	P1	026-IW	IW - Impaired Water	01104 1 0	Aluminum, total recoverable [as Al]	<=	1010	Maximum	ug/L	1/YR	Gr	4/1/2019	11/30/2019	1/31/2020
NMR050013	Los Alamos National Laboratory	026	Р	P1	026-IW	IW - Impaired Water	01040 1 0	Copper, dissolved [as Cu]	<=	7	Maximum	ug/L	1/YR	Gr	4/1/2019	11/30/2019	1/31/2020
NMR050013	Los Alamos National Laboratory	026	Р	P1	026-IW	IW - Impaired Water	39516 1 0	Polychlorinated biphenyls [PCBs]	<=	0.2	Maximum	ug/L	1/YR	Gr	4/1/2019	11/30/2019	1/31/2020
NMR050013	Los Alamos National Laboratory	026	P	P1	026 IW	IW Impaired Water	00010 1 0	Temperature, water deg. centigrade	4=	24	Maximum	deg C	1/YR	Gr	4/1/2019	11/30/2019	1/31/2020
										1100						1 = = = = =	
NMR050013	Los Alamos National Laboratory	029	N	N2	029-IW	IW - Impaired Water	01104 1 0	Aluminum, total recoverable [as AI]	<=	1010	Maximum	ug/L	1/YR	Gr	4/1/2019	11/30/2019	1/31/2020
NMR050013	Los Alamos National Laboratory	029	N	N2	029-IW	IW - Impaired Water	01040 1 0	Copper, dissolved [as Cu]	<=	7	Maximum	ug/L	1/YR	Gr	4/1/2019	11/30/2019	1/31/2020
NMR050013	Los Alamos National Laboratory	029	N	N2	029-IW	IW - Impaired Water	39516 1 0	Polychlorinated biphenyls [PCBs]	<=	0.2	Maximum	ug/L	1/YR	Gr	4/1/2019	11/30/2019	1/31/2020
NMR050013	Los Alamos National Laboratory	029	N	N2	029 IW	IW Impaired Water	00010 1 0	Temperature, water deg. centigrade	4=	24	Maximum	deg C	1/YR	Gr	4/1/2019	11/30/2019	1/31/2020
												-					
NMR050013	Los Alamos National Laboratory	031	P	P1	031-IW	IW - Impaired Water	51931 1 0	Adjusted Gross Alpha	<=		Maximum	pCi/L	1/YR	Gr	4/1/2019	11/30/2019	1/31/2020
NMR050013	Los Alamos National Laboratory	031	Р	P1	031-IW	IW - Impaired Water	01040 1 0	Copper, dissolved [as Cu]	<=		Maximum	ug/L	1/YR	Gr	4/1/2019	11/30/2019	1/31/2020
NMR050013	Los Alamos National Laboratory	031	P	P1	031-IW	IW - Impaired Water	71900 1 0	Mercury, total [as Hg]	<=		Maximum	ug/L	1/YR	Gr	4/1/2019	11/30/2019	1/31/2020
NMR050013	Los Alamos National Laboratory	031	P	P1	031-IW	IW - Impaired Water	39516 1 0	Polychlorinated biphenyls [PCBs]	<=	0.2	Maximum	ug/L	1/YR	Gr	4/1/2019	11/30/2019	1/31/2020
NMR050013	Los Alamos National Laboratory	032	Р	P1	032-IW	IW - Impaired Water	01104 1 0	Aluminum, total recoverable [as Al]	<b>&lt;=</b>	1010	Maximum	ug/L	1/YR	Gr	4/1/2019	11/30/2019	1/31/2020
NMR050013	Los Alamos National Laboratory	032	р	P1	032-IW	IW - Impaired Water	01040 1 0	Copper, dissolved [as Cu]	<=	7	Maximum	ug/L	1/YR	Gr	4/1/2019	11/30/2019	1/31/2020
NMR050013	Los Alamos National Laboratory	032	р	P1	032-IW	IW - Impaired Water	3951610	Polychlorinated biphenyls [PCBs]	<=	0.2	Maximum	ug/L	1/YR	Gr	4/1/2019	11/30/2019	1/31/2020
NMR050013	Los Alamos National Laboratory	032	Þ	P1	032 IW	IW Impaired Water	00010-1-0	Temperature, water deg. centigrade	4=	24	Maximum	deg C	1/YR	Gf	4/1/2019	11/30/2019	1/31/2020
NMR050013	Los Alamos National Laboratory	036	р	P1	036-IW	IW Impaired Water	01104 1 0	Aluminum, total recoverable (as Al)	<b>4=</b>	1010	Maximum	ug/L	1/YR	Gr	4/1/2019	11/30/2019	1/31/2020
NMR050013	Los Alamos National Laboratory	036	Ð	P1	036-IW	IW - Impaired Water	01040 1 0	Copper, dissolved [as Cu]	<b>4=</b>	7	Maximum	ug/L	1/YR	GF	4/1/2019	11/30/2019	1/31/2020
NMR050013	Los Alamos National Laboratory	036	Þ	P1	036 IW	IW Impaired Water	39516-1-0	Polychlorinated biphenyls [PCBs]	<b>&lt;=</b>	0.2	Maximum	ug/L	1/YR	Gf	4/1/2019	11/30/2019	1/31/2020
NMR050013	Los Alamos National Laboratory	036	b	P1	036-IW	IW—Impaired Water	00010 1 0	Temperature, water deg. centigrade	<b>&lt;=</b>	24	Maximum	deg C	1/YR	Gr	4/1/2019	11/30/2019	1/31/2020
NMR050013	Los Alamos National Laboratory	037	р	P1	037-IW	IW - Impaired Water	01104 1 0	Aluminum, total recoverable [as Al]	<=	1010	Maximum	ug/L	1/YR	Gr	4/1/2019	11/30/2019	1/31/2020
NMR050013	Los Alamos National Laboratory	037	P	P1	037-IW	IW - Impaired Water	01040 1 0	Copper, dissolved [as Cu]	<=	7	Maximum	ug/L	1/YR	Gr	4/1/2019	11/30/2019	1/31/2020
NMR050013	Los Alamos National Laboratory	037	Р	P1	037-IW	IW - Impaired Water	39516 1 0	Polychlorinated biphenyls [PCBs]	<=	0.2	Maximum	ug/L	1/YR	Gr	4/1/2019	11/30/2019	1/31/2020
NMR050013	Los Alamos National Laboratory	039	р	P1	039-IW	IW - Impaired Water	01104 1 0	Aluminum, total recoverable [as Al]	<=	1010	Maximum	ug/L	1/YR	Gr	4/1/2019	11/30/2019	1/31/2020
NMR050013	Los Alamos National Laboratory	039	Р	P1	039-IW	IW - Impaired Water	01040 1 0	Copper, dissolved [as Cu]	<=	7	Maximum	ug/L	1/YR	Gr	4/1/2019	11/30/2019	1/31/2020
NMR050013	Los Alamos National Laboratory	039	Р	P1	039-IW	IW - Impaired Water	39516 1 0	Polychlorinated biphenyls [PCBs]	<=	0.2	Maximum	ug/L	1/YR	Gr	4/1/2019	11/30/2019	1/31/2020
NMR050013	Los Alamos National Laboratory	039	P	P1	039-IW	IW Impaired Water	00010-1-0	Temperature, water deg. centigrade	<b>&lt;=</b>	24	Maximum	deg-C	1/YR	GF	4/1/2019	11/30/2019	1/31/2020
NMR050013	Los Alamos National Laboratory	042	P	P1	042-IW	IW - Impaired Water	01104 1 0	Aluminum, total recoverable [as Al]	<=	1010	Maximum	ug/L	1/YR	Gr	4/1/2019	11/30/2019	1/31/2020
NMR050013	Los Alamos National Laboratory	042	P	P1	042-IW	IW - Impaired Water	01040 1 0	Copper, dissolved [as Cu]	<=		Maximum	ug/L	1/YR	Gr	4/1/2019	11/30/2019	1/31/2020
NMR050013	Los Alamos National Laboratory	042	P	P1	042-IW	IW - Impaired Water	39516 1 0	Polychlorinated biphenyls [PCBs]	<=	0.2	Maximum	ug/L	1/YR	Gr	4/1/2019	11/30/2019	1/31/2020
NMR050013	Los Alamos National Laboratory	042	р	P1	042-IW	IW—Impaired-Water	00010-1-0	Temperature, water deg. centigrade	<b>4</b> =	24	Maximum	deg-C	1/YR	Gr	4/1/2019	11/30/2019	1/31/2020
NMR050013	Los Alamos National Laboratory	043	D	D1	043-D1	D1 - Asphalt Paving and Roofing Materials and Lubricant Manufacturing	00530 1 0	Solids, total suspended	<=	100	Maximum	mg/L	1/60	Gr	4/1/2019	5/31/2019	7/31/2019
NMR050013	Los Alamos National Laboratory	043	D	D1	043-D1	D1 - Asphalt Paving and Roofing Materials and Lubricant Manufacturing	00530 1 0	Solids, total suspended	<b>&lt;=</b>	100	Maximum	mg/L	1/60	Gr	6/1/2019	7/31/2019	9/30/2019
	assertation in the state of the		11.0	11 120 1	+	D1 - Asphalt Paving and Roofing Materials and						1	( = 1	Lbl			To series S
NIMPOSOO13	Los Alamos National Laboratory	043	D	D1	043-D1	Lubricant Manufacturing	00530 1 0	Solids, total suspended	<=	100	Maximum	mg/L	1/60	Gr	8/1/2019	9/30/2019	11/30/2019

											6.4.900 NMAC [N						
Permit ID	Facility	Permitted Feature	Sector(s)	Subsector	Consolidated Discharge # (Limit Set)	Discharge Description	Parameter Code	Parameter Name	Symbol	Quality Value	Limit Type	Units		12.22	Monitoring Period Start Date	Monitoring Period End Date	DMR Due
, cimic io		1	1			D1 - Asphalt Paving and Roofing Materials and			1			17.7				F. 70 M.	
VMR050013	Los Alamos National Laboratory	043	D	D1	043-D1	Lubricant Manufacturing	00530 1 0	Solids, total suspended	<=	100	Maximum	mg/L	1/60	Gr	10/1/2019	11/30/2019	1/31/202
						1D - Asphalt Paving and Roofing Materials and					4 4					7 7	7000
NMR050013	Los Alamos National Laboratory	043	D	D1	043-1D	Lubricant Manufacturing	00556 1 0	Oil & Grease	<=	10	30-Day Average	mg/L	1/YR	Gr	4/1/2019	11/30/2019	1/31/202
				9 / .	T. W	1D - Asphalt Paving and Roofing Materials and					The second	HLES	75.7	100			Service .
NMR050013	Los Alamos National Laboratory	043	D	D1	043-1D	Lubricant Manufacturing	00556 1 0	Oil & Grease	<=	15	Dally Maximum	mg/L	1/YR	Gr	4/1/2019	11/30/2019	1/31/202
				1 500	06/2/5	1D – Asphalt Paving and Roofing Materials and	Section 19	3.	1000			15.0	A1.6	6.3	A 40 00 to 1.4	San	Saw Saw Sa
NMR050013	Los Alamos National Laboratory	043	D	D1	043-1D	Lubricant Manufacturing	00400 1 0	PH	>=	6	Minimum	SU	1/YR	Gr	4/1/2019	11/30/2019	1/31/202
	The second of the second of the second	1.3.5		54	252.52	1D - Asphalt Paving and Roofing Materials and	204204.0	100	1000			600	4.00	- 2	4 (1) (2004.0	44 /20 /2042	a Ina Iana
NMR050013	Los Alamos National Laboratory	043	D	D1	043-1D	Lubricant Manufacturing	00400 1 0	pH	<=	9	Maximum	SU	1/YR	Gr	4/1/2019	11/30/2019	1/31/202
					047.40	1D - Asphalt Paving and Roofing Materials and	00530 1 0	Callide total auranadad		15	20 Day Average		1700	· ·	n/1/2010	27/20/2020	1/21/202
NMR050013	Los Alamos National Laboratory	043	D	D1	043-1D	Lubricant Manufacturing  1D - Asphalt Paving and Roofing Materials and	00530 1 0	Solids, total suspended	<=	15	30-Day Average	mg/L	1/YR	Gr	4/1/2019	11/30/2019	1/31/202
	Correct Research of Caledon	040		D1	042.10	[100] [120]	00530 1 0	Solids, total suspended	<=	22	Dally Maximum	mali	1/YR	Gr	4/1/2010	11/30/2019	1/31/202
NMR050013	Los Alamos National Laboratory	043	D	D1	043-1D 043-IW	Lubricant Manufacturing IW - Impaired Water	51931 1 0	Adjusted Gross Alpha	<= <=	-	Maximum	mg/L pCi/L	1/YR	Gr	4/1/2019 4/1/2019	11/30/2019	1/31/202
NMR050013	Los Alamos National Laboratory	043	D	D1 D1	043-IW	IW - Impaired Water	01040 1 0	Copper, dissolved [as Cu]	<=		Maximum	ug/L	1/YR	Gr	4/1/2019	11/30/2019	1/31/202
NMR050013	Los Alamos National Laboratory	043	D	D1	043-IW	IW - Impaired Water	39516 1 0	Polychlorinated biphenyls [PCBs]	<=		Maximum	ug/L	1/YR	Gr	4/1/2019	11/30/2019	1/31/202
NMR050013	Los Alamos National Laboratory	043	D	D1	043-IW	IW - Impaired Water	71900 1 0	Mercury, total [as Hg]	<=		Maximum	ug/L	1/YR	Gr	4/1/2019	11/30/2019	1/31/202
NMR050013	Los Alamos National Laboratory	043		- DI	043-100	TW Impunes Water	1130010	rectairy, total jos ng		0.77	Widalitiditi	- UB/ L	2/115	- 51	4/1/2015	11/50/2015	2/31/202
NMR050013	Los Alamos National Laboratory	074	A	A4	074-A4	A4 - Hardwood Dimension and Flooring Mills	81017 1 0	Chemical Oxygen Demand [COD]	<=	120	Maximum	mg/L	1/60	Gr	4/1/2019	5/31/2019	7/31/201
NMR050013	Los Alamos National Laboratory	074	A	A4	074-A4	A4 - Hardwood Dimension and Flooring Mills	00530 1 0	Solids, total suspended	<=		Maximum	mg/L	1/60	Gr	4/1/2019	5/31/2019	7/31/201
NMR050013	Los Alamos National Laboratory	074	A	A4	074-A4	A4 - Hardwood Dimension and Flooring Mills	81017 1 0	Chemical Oxygen Demand [COD]	<=		Maximum	mg/L	1/60	Gr	6/1/2019	7/31/2019	9/30/2019
NMR050013	Los Alamos National Laboratory	074	A	A4	074-A4	A4 - Hardwood Dimension and Flooring Mills	00530 1 0	Solids, total suspended	<=		Maximum	mg/L	1/60	Gr	6/1/2019	7/31/2019	9/30/2019
NMR050013	Los Alamos National Laboratory	074	A	A4	074-A4	A4 - Hardwood Dimension and Flooring Mills	81017 1 0	Chemical Oxygen Demand [COD]	<=		Maximum	mg/L	1/60	Gr	8/1/2019	9/30/2019	11/30/2019
NMR050013	Los Alamos National Laboratory	074	A	A4	074-A4	A4 - Hardwood Dimension and Flooring Mills	00530 1 0	Solids, total suspended	<=	100	Maximum	mg/L	1/60	Gr	8/1/2019	9/30/2019	11/30/2019
NMR050013	Los Alamos National Laboratory	074	A	A4	074-A4	A4 - Hardwood Dimension and Flooring Mills	81017 1 0	Chemical Oxygen Demand [COD]	<=		Maximum	mg/L	1/60	Gr	10/1/2019	11/30/2019	1/31/2020
NMR050013	Los Alamos National Laboratory	074	A	A4	074-A4	A4 - Hardwood Dimension and Flooring Mills	00530 1 0	Solids, total suspended	<=	100	Maximum	mg/L	1/60	Gr	10/1/2019	11/30/2019	1/31/2020
NMR050013	Los Alamos National Laboratory	074	A	A4	074-IW	IW - Impaired Water	01104 1 0	Aluminum, total recoverable (as Al)	<=	1010	Maximum	ug/L	1/YR	Gr	4/1/2019	11/30/2019	1/31/2020
NMR050013	Los Alamos National Laboratory	074	A	A4	074-IW	IW - Impaired Water	01040 1 0	Copper, dissolved [as Cu]	<=	7	Maximum	ug/L	1/YR	Gr	4/1/2019	11/30/2019	1/31/2020
NMR050013	Los Alamos National Laboratory	074	A	A4	074-IW	IW - Impaired Water	39516 1 0	Polychlorinated biphenyls [PCBs]	<=	0.2	Maximum	ug/L	1/YR	Gr	4/1/2019	11/30/2019	1/31/2020
NMR050013	Los Alamos National Laboratory	074	A	A4	074-IW	IW Impaired Water	00010 1 0	Temperature, water deg. centigrade	4=	24	Maximum	deg€	1/YR	Gf	4/1/2019	11/30/2019	1/31/2020
			THE RES	2 4			114			1							
NMR050013	Los Alamos National Laboratory	075	Р	P1	075-IW	IW - Impaired Water	01104 1 0	Aluminum, total recoverable [as Al]	<=	1010	Maximum	ug/L	1/YR	Gr	4/1/2019	11/30/2019	1/31/2020
NMR050013	Los Alamos National Laboratory	075	P	P1	075-IW	IW - Impaired Water	01040 1 0	Copper, dissolved [as Cu]	<=	7	Maximum	ug/L	1/YR	Gr	4/1/2019	11/30/2019	1/31/2020
NMR050013	Los Alamos National Laboratory	075	р	P1	075-IW	IW - Impaired Water	39516 1 0	Polychlorinated biphenyls [PCBs]	<=		Maximum	ug/L	1/YR	Gr	4/1/2019		1/31/2020
NMR050013	Los Alamos National Laboratory	075	P	P1	075-IW	IW - Impaired Water	00010-1-0	Temperature, water deg. centigrade	<==	24	Maximum	deg C	1/YR	Gr	4/1/2019	11/30/2019	1/31/2020
NMR050013	Los Alamos National Laboratory	076	AA	AA1	076-11	11- Fabricated Metal Products, except Coating	01104 1 0	Aluminum, total recoverable [as Al]	<=		Maximum	ug/L	1/60	Gr	4/1/2020	5/31/2020	7/31/2020
NMR050013	Los Alamos National Laboratory	076	AA	AA1	076-11	11- Fabricated Metal Products, except Coating	01045 1 0	Iron, total [as Fe]	<=		Maximum	ug/L	1/60	Gr	4/1/2020	5/31/2020	7/31/2020
NMR050013		076	AA	AA1	076-11	11- Fabricated Metal Products, except Coating	51450 1 0	Nitrite Plus Nitrate Total	<=		Maximum	mg/L	1/60	Gr	4/1/2020	5/31/2020	7/31/2020
NMR050013	Los Alamos National Laboratory	076	AA	AA1	076-11	11- Fabricated Metal Products, except Coating	01090 1 0	Zinc, dissolved [as Zn]	<=		Maximum	ug/L	1/60	Gr	4/1/2020	5/31/2020	7/31/2020
NMR050013	Los Alamos National Laboratory	076	AA	AA1	076-11	11- Fabricated Metal Products, except Coating	01104 1 0	Aluminum, total recoverable [as Al]	<=		Maximum	ug/L	1/60	Gr	6/1/2019	7/31/2019	9/30/2019
	Los Alamos National Laboratory	076	AA	AA1	076-11	11- Fabricated Metal Products, except Coating	01045 1 0	iron, total [as Fe]	<=		Maximum	ug/L	1/60	Gr	6/1/2019	7/31/2019	9/30/2019
	Los Alamos National Laboratory	076	AA	AA1	076-11	11- Fabricated Metal Products, except Coating	51450 1 0	Nitrite Plus Nitrate Total	<=		Maximum	mg/L	1/60	Gr	6/1/2019	7/31/2019	9/30/2019
NMR050013		076	AA	AA1	076-11	11- Fabricated Metal Products, except Coating	01090 1 0	Zinc, dissolved [as Zn]	<=		Maximum	ug/L	1/60	Gr	6/1/2019	7/31/2019	9/30/2019
	Los Alamos National Laboratory	076	AA	AA1	076-11	11- Fabricated Metal Products, except Coating	0110410	Aluminum, total recoverable [as Al]	<=		Maximum	ug/L	1/60	Gr	8/1/2019	9/30/2019	11/30/2019
	Los Alamos National Laboratory	076	AA	AA1	076-11	11- Fabricated Metal Products, except Coating	01045 1 0 51450 1 0	Iron, total [as Fe] Nitrite Plus Nitrate Total	<=		Maximum	ug/L	1/60	Gr	8/1/2019	9/30/2019	11/30/2019
	Los Alamos National Laboratory	076	AA	AA1	076-11	11- Fabricated Metal Products, except Coating 11- Fabricated Metal Products, except Coating	01090 1 0	Zinc, dissolved [as Zn]	<= <=		Maximum Maximum	mg/L	1/60	Gr	8/1/2019 8/1/2019	9/30/2019 9/30/2019	11/30/2019
NMR050013	Los Alamos National Laboratory	076	AA	AA1	076-11	11- Fabricated Metal Products, except Coating	0110410	Aluminum, total recoverable [as Al]	<= <=		Maximum	ug/L	1/60	Gr	10/1/2019	11/30/2019	1/31/2020
NMR050013		076	AA	AA1	076-11	11- Fabricated Metal Products, except Coating	0110410	Iron, total [as Fe]	<= <=		Maximum	ug/L	1/60	Gr Gr	10/1/2019		1/31/2020
NMR050013		076	AA	AA1	076-11 076-11	11- Fabricated Metal Products, except Coating	51450 1 0	Nitrite Plus Nitrate Total	<=		Maximum	mg/L	1/60	Gr	10/1/2019	11/30/2019	1/31/2020
NMR050013		076	AA	AA1	076-11	11- Fabricated Metal Products, except Coating	01090 1 0	Zinc, dissolved [as Zn]	<=		Maximum	ug/L	1/60	Gr	10/1/2019	11/30/2019	1/31/2020
NMR050013		076	AA	AA1	076-II	IW - Impaired Water	01104 1 0	Aluminum, total recoverable [as Al]	<=	-	Maximum	ug/L	1/YR	Gr	4/1/2019		1/31/2020
MINIKO20013	Los Alamos National Laboratory  Los Alamos National Laboratory	076	AA	AA1	076-IW	IW - Impaired Water	01040 1 0	Copper, dissolved [as Cu]	<=		Maximum	ug/L	1/YR	Gr		11/30/2019	1/31/2020

				ELG, Modified Benchmark, and Impaired the NM Water Quality Standards (20.6.4.90										[1] - [1] -					
Permit ID	Facility	Permitted Feature	Sector(s)	Subsector	Consolidated Discharge # (Limit Set)		Parameter Code	Parameter Name	Symbol	Quality Value	Limit Type	Units	Freq, of	100	Control of the second	Monitoring Period End Date	DMR Due Date		
100 TATA (100 A) A (100 A)	Los Alamos National Laboratory	076	AA	AA1	076-IW	IW - Impaired Water	39516 1 0	Polychlorinated biphenyls [PCBs]	<=	0.2	Maximum	ug/L	1/YR	Gr	4/1/2019	11/30/2019	1/31/2020		
	IOI and NetDMR are in BOLD.										-	-	-						
Additions to N	n NOI and NetDMR are indicated by	strikethrough										1							
Regular text in	ndicates no change to NOI or NetDM	IR.																	

### **ATTACHMENT 2: SWPPP AMENDMENTS**

Date	Plan Section	Reason for Amendment	Amendment
Jan	All	New MSGP Plan for new	New MSGP Plan for Triad,
2019		Laboratory Contract	LLC (replacing LANS LLC)
Jan 2020	All	Implementation of the new SWPPP template as required by EPC-CP-QP-2110, MSGP Stormwater Pollution Prevention Plan Preparation and Maintenance. Also included all inspections, assessments and reports required for the yearly	Inserted new template language to standardize all MSGP SWPPPs and inserted all required documentation for the yearly revision.
		update.	

# ATTACHMENT 3: CERTIFICATION OF NO UNAUTHORIZED STORMWATER DISCHARGES

NON-STORM WATER DISCHARGE

ASSESSMENT AND CERTIFICATION

Completed by: Leonard F. Sandoval

Title: Deployed Environmental Professional

Date: 1/15/2019

Date of Evaluation	Outfall Directly Observed During Test (Location)	Identify Potential Significant Sources of Non-Storm Water	Method Used to Test or Evaluate Discharge	Is Non-Storm Water Present?	How Often?	Describe Results from Test for Presence of Non-Storm Water Discharge
1/15/2019	Outfall 60-MRF-1 ID # 029	None	Visual evaluation of Outfall at concrete retention pond	No	NA	None

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 &

Name & Official Title: Russell Hore GL DESH-UTS

Signature: Respect to the State of the State of

Date Signed: 1/15/2019

### ATTACHMENT 4: DULY AUTHORIZED SIGNATORY MEMORANDUM



# Environmental Protection & Compliance Division

Los Alamos National Laboratory PO Box 1663, K490 Los Alamos, NM 87545 505-667-0666

Symbol: EPC-DO: 18-453

*LAUR*: 18-31574

DEC 1 1 2018

Ms. Anne L. Idsal, Regional Administrator U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200 Mail Code: 6RA Dallas, TX 75202-2733

Subject: Notification of Triad National Security, LLC, Signatory Officials and

**Authorized Representatives for NPDES Permits** 

Dear Ms. Idsal:

The purpose of this letter is to provide an update to the U. S. Environmental Protection Agency (EPA) Region 6 on the Triad National Security, LLC delegation of authority for signature of documents associated with the various Los Alamos National Laboratory (LANL) NPDES Permits, pursuant to 40 CFR 122.22(c). This letter supersedes and replaces the signatory authority letter dated March 14, 2018 (ADESH: 18-017).

The positions of Associate Laboratory Director of Environment, Safety, Health & Quality and Safeguards & Security (ESHQSS), and Division Leader of the Environmental Protection & Compliance Division (EPC-DO) are identified as Triad's primary signatory officials under 40 CFR 122.22(a) for certifying and signing permit applications (including Notice of Intents (NOIs)) required under the LANL NPDES Industrial Point Source Outfall Permit (Permit No. NM0028355), the NPDES Storm Water Construction General Permit, the NPDES Multi-Sector General Permit (Permit No. NMR050013), and the NPDES Pesticide General Permit (Permit No. NMG87B113).

The following positions are hereby designated as authorized representatives under 40 CFR 122.22(b) to sign reports, Storm Water Pollution Prevention Plans, Discharge Monitoring Reports, Pesticide Discharge Management Plans, and any other compliance documentation required by the permits:



EPC-DO: 18-453 Ms. Anne L. Idsal

### NPDES Industrial Point Source Outfall Permit (No. NM0028355)

- Positions listed as primary signatory officials above.
- Group Leader or Team Leaders within the Environmental Compliance Programs Group.
- Responsible Facility Operations Director (FOD).

### **NPDES Construction General Permit:**

- Positions listed as primary signatory officials above.
- Group Leader or Team Leaders within the Environmental Compliance Programs Group.
- Cognizant Project Manager, Construction Manager, or Subcontractor Technical Representative for the regulated construction activity.

### NPDES Multi-Sector General Permit (ID No. NMR053195)

- Positions listed as primary signatory officials above.
- Group Leader or Team Leaders within the 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, Operations Manager; or Deployed Environment, Safety, & Health Manager responsible for the overall operation of the regulated facility or activity.

### NPDES Pesticide General Permit (No. NM687A041)

- Positions listed as primary signatory officials above.
- Group Leader or Team Leaders within the Environmental Compliance Programs Group.

If you have questions, please contact me at (505) 667-7269 or at etorres@lanl.gov.

Sincerely,

Enrique Torres
Division Leader

Environmental Protection & Compliance Division

ET/TWL/MTS:jdm



Attachment(s): None.

Copy: Nancy Williams, USEPA, Region 6, williams.nancy@epa.gov, (E-File) Brent E. Larsen, USEPA, Region 6, Larsen.brent@epa.gov, (E-File) Robert Houston, USEPA, Region 6, Houston.robert@epa.gov, (E-File) Sarah Holcomb, NMED, sarah.holcomb@state.nm.us, (E-File) Karen E. Armijo, LASO-MA-LS, Karen.armijo@nnsa.doe.gov, (E-File) Jody Pugh, NA-LA, jody.pugh@nnsa.doe.gov, (E-File) Michael W. Hazen, ESHOSS, mhazen@lanl.gov, (E-File) William R. Mairson, ESHQSS, wrmairson@lanl.gov, (E-File) Enrique Torres, EPC-DO, etorres@lanl.gov, (E-File) Taunia Van Valkenburg, EPC-CP, tauniav@lanl.gov, (E-File) Michael T. Saladen, EPC-CP, saladen@lanl.gov, (E-File) Terrill W. Lemke, EPC-CP, tlemke@lanl.gov, (E-File) Tim Dolan, GC-ESH, tdolan@lanl.gov, (E-File) emla.docs@em.doe.gov, (E-File) locatesteam@lanl.gov, (E-File) epc-correspondence@lanl.gov, (E-File) adesh-records@lanl.gov, (E-File)



# ATTACHMENT 5: DISCHARGE MONITORING REPORTS

## DMR Copy of Record

Permit																							
Permit	#:	NMR050	0013		Permitt	ee:		TRIAD	NATION	AL SEC	CURITY	LLC		Facility	y:		LOS AL	AMOS	3 NATI	ONAI	LABORATO	RY	
Major: No		Permitt	Permittee Address:		PO BOX 1663 MS K490 LOS ALAMOS, NM 87545				Facility Location:				PO BOX 1663 LOS ALAMOS, NM 87545										
Permit		029 External	l Outfall		Dischar	rge:		029-IV	<b>V</b> ed Water					•									
Report	Dates & Status																						
		From 12	2/01/18 to 11/30/1	19	DMR D	ue Date:		01/31/	20					Status	:		NetDMF	l Valid	dated				
	derations for Form C																						
	based upon the altern			April 1 thro	ough Nove	mber 30.																	
Princip	oal Executive Officer																						
First N	ame:				Title:									Teleph	one:								
Last N	ame:													•									
No Da	ta Indicator (NODI)																						
Form I	NODI:																						
	Parameter		Monitoring Location	Season # P	Param. NODI				ty or Loadir	_						centratio				of Ex.	Frequency of A	nalysis	Sample Type
Code	Name						Qualifier 1	Value 1	Qualifier 2	Value 2	Units Qu	alifier 1 Valu	ue 1 Qu	ualifier 2 Va	lue 2 Qu		Value 3		nits				
<b>Y</b> 04046	Copper, dissolved [as Cu	1 1	1 - Effluent Gross	0	-	Sample Permit Reg.									<=		41.8 7.0 MAXIMUM		ug/L ug/L 1		01/YR - Annual 01/YR - Annual		GR - GRAB GR - GRAB
<b>1</b> 01040	Coppor, alcoorvou (ac ou	,	- Lindon Grood			Value NODI									-		7.0 MJ UMINIOM		ug/L I	Ì	on the familia		OIL OILLE
						Sample											816.0	28 -	ug/L	(	01/YR - Annual		GR - GRAB
01104	Aluminum, total recoverab	ble 1	1 - Effluent Gross	0	=	Permit Req.									<=		1010.0 MAXIMU	M 28 -	ug/L 0	(	01/YR - Annual		GR - GRAB
						Value NODI Sample									<		0.0351	28 -	ug/L	(	01/YR - Annual		GR - GRAB
39516	Polychlorinated biphenyls	[PCBs] 1	1 - Effluent Gross	0		Permit Req.									<=		0.2 MAXIMUM	_	ug/L 0		01/YR - Annual		GR - GRAB
						Value NODI																	
	ssion Note			0 1	F	<b>-</b> " "								11.76								_	
	ameter row does not o	contain a	any values for the	Sample no	or Emuent	rading, the	en none o	t the to	llowing fle	ias Will	be subr	nitted for t	nat rov	w: Units, i	Numbe	r of Exc	cursions, Freq	uency	of Ana	aiysis.	, and Sample	Type.	
East C	heck Errors																						
	Parameter		Monitori	ng Locatior	n		Field	d			Туре					Des	cription					Ackn	owledge
Code	Name		Monitori	ng Location			1 1010	ч			Type					<b>D</b> C3	onphon					AORII	omicage
01040	Copper, dissolved [a	ıs Cu]	1 - Effluent G	Fross	Quali	ity or Concen	tration Sar	mple Va	lue 3		Soft	The provi	ded sa	imple value	e is outs	ide the p	permit limit. (Er	ror Co	de: 1)			`	Yes
Comm	ents																						
	-19-32659. The impair			ceeded the	New Mexi	ico Water Q	uality Sta	ndard.	The impai	red wa	ter pollu	tant total A	Arocloi	r was not	detecte	ed in sto	ormwater disc	harge	from th	his ou	ıtfall therefore	annua	I
Attach	ments																						
No attach																							
Report	Last Saved By																						
TRIAD	NATIONAL SECURI	TY LLC																					
User:			les	lie@lanl.go	V																		
Name:				slie Dale																			
E-Mail:				lie@lanl.go																			
Date/T			202	20-01-09 0	9:00 (Tin	ne Zone: -06	6:00)																
Report	Last Signed By																						
User:				RRILLLEM																			
Name:			Tei	rrill Lemk	е																		
E-Mail:			tler	mke@lanl.g	gov																		
Date/T	me:		202	20-01-09 1	3:29 (Tin	ne Zone: -06	6:00)																

# **ATTACHMENT 6: ANNUAL REPORTS**



### **Environmental Protection & Compliance Division**

Compliance Programs Group PO Box 1663, K490 Los Alamos, New Mexico 87545 505-667-0666

Symbol: EPC-DO: 20-032 LAUR: 20-20880 Date: JAN 2 9 2020

Stormwater Notice Processing Center Mail Code 4203M, ATTN: 2015 MSGP Reports U.S. EPA 1200 Pennsylvania Avenue, NW Washington, DC 20460

Subject: National Pollutant Discharge Elimination System (NPDES) Permit Tracking

No. NMR050013, 2019 Multi-Sector General Permit (MSGP) Annual Report for

Los Alamos National Laboratory (LANL)

To Whom It May Concern:

Enclosed is the 2019 MSGP Annual Report (Attachment 1) submitted by Triad National Security, LLC (Triad) for Los Alamos National Laboratory as required by Part 7.5 of the MSGP.

EPA's Electronic Reporting Rule requires that the Annual Report be submitted using the NeT-MSGP program service on the EPA Central Data Exchange system. However, due to unique conditions related to LANL's monitoring requirements, LANL's NOI was not generated on NeT-MSGP, thus LANL is unable to submit the Annual Report electronically. Correspondence from Nasim Jahan (EPA Region 6) and Emily Hack (NPDES eReporting Help Desk) are included as Attachments 2 and 3, respectively.

Please contact Holly Wheeler at (505) 667-1312 or Terrill Lemke at (505) 665-2397 if you have questions.

Sincerely.

Terrill W. Lemke

Storm Water Team Leader

Du Ale

TWL/HLW:jdm



EPC-DO: 20-032

Stormwater Notice Processing Center

Attachment(s): Attachment 1 National Pollutant Discharge Elimination System (NPDES) Permit Tracking No. NMR050013 Multi-Sector General Permit (MSGP) 2019 Annual Report

Attachment 2 Email correspondence from Nasim Jahan dated 9/26/2018 Attachment 3 Email correspondence from Emily Hack dated 10/26/2018

Copy: Nasim Jahan, USEPA, Region 6, jahan.nasim@epa.gov
Sarah Holcomb, NMED/SWQB, sarah.holcomb@state.nm.us
Karen E. Armijo, NA-LA, Karen.armijo@nnsa.doe.gov
Michael W. Hazen, ALDESHQSS, mhazen@lanl.gov
William R. Mairson, ALDESHQSS, wrmairson@lanl.gov
Enrique Torres, EWP, etorres@lanl.gov
Jennifer E. Payne, EPC-DO, jpayne@lanl.gov
Taunia Van Valkenburg, EPC-CP, tauniav@lanl.gov
Terrill W. Lemke, EPC-CP, tlemke@lanl.gov
Holly L. Wheeler, EPC-CP, hbenson@lanl.gov
Tim Dolan, GC-ESH, tdolan@lanl.gov
epccorrespondence@lanl.gov
adesh-records@lanl.gov



# **ATTACHMENT 1**

# National Pollutant Discharge Elimination System (NPDES) Permit Tracking No. NMR050013 Multi-Sector General Permit (MSGP) 2019 Annual Report

EPC-DO: 20-032

LA-UR-20-20880

JAN 2 9 2020

# National Pollutant Discharge Elimination System (NPDES) Permit Tracking No. NMR050013

# Multi-Sector General Permit (MSGP) 2019 Annual Report

1. A summary of routine inspection documentation from January 1, 2019 through December 31, 2019 required in Part 3.1.2.

Los Alamos National Laboratory (LANL), operated by Triad National Security, LLC (Triad), consists of 8 active industrial sites that operate under 6 different Sectors (A, D, N, O, P, and AA). Permit coverage became effective on November 1, 2018. All 8 active sites were inspected according the schedules identified in the site-specific Stormwater Pollution Prevention Plans (SWPPPs). The 37 sites that qualify for a conditional exclusion for no exposure were inspected between January 1, 2019 and December 31, 2019. A summary of inspections/evaluations and associated corrective actions are included in Table 1. An evaluation of analytical monitoring data and summary of results for the 2019 calendar year was conducted on 1/21/2020 and is included in Table 2.

**Table 1. Summary of Inspections and Associated Corrective Actions** 

Facility	Status	Inspections Conducted Between 1/1/2019 and 12/31/2019	Unauthorized Release or Discharge	Control Measures Needing Maintenance, Repairs, or Replacement or Installed Incorrectly	Control Measures Inadequate to Meet Non- Numeric Effluent Limitations	Incidents of Noncompliance (Effluent Limitation Guidelines Exceedances)	Incidents of Noncompliance [New Mexico Water Quality Standard (NM WQS) Exceedances]	Incidents of Noncompliance (Average Exceeds or is Mathematically Certain to Exceed Benchmark Value Modified to Reflect a NM WQS per 2015 MSGP Part 9.6.2.1)	Average Exceeds or is Mathematically Certain to Exceed Benchmark Value	Total Corrective Actions by Facility
TA-3-22 Power and Steam Plant	Active	12	1	13	10	-	5	-	3	32
TA-3-29 Indoor TSD	No Exposure	1	-		-	-		-		-
TA-3-29 Machine Shop	No Exposure	1	-	100		_	-	-		_
TA-3-30 Warehouse	No Exposure	1	2	101		-	-	-	-	2
TA-3-32 Metal Shop	No Exposure	1					-	4	-	-
TA-3-34 Metal Shop	No Exposure	1	-	-	-	-	-	1	2	
TA-3-38 Carpenter Shop	Active	12	4	1	3	_	-	+	-	4
TA-3-38 Metals Fabrication Shop	Active	12	2	8	5	-	2		2	19
TA-3-39 and 102 Metal Shop	No Exposure	1	1		1					2
TA-3-40, Room 1315 Machine Shop	No Exposure	1	- 14			_		_	_	-
TA-3-66 Sigma Facility	No Exposure	1	3		2	_		-	-	5
TA-3-2206 Warehouse	No Exposure	1	-	- E	1	_	1-	_		1
TA-9-28 Heavy Equipment Maintenance	No Exposure	1	1	-	-	_	-	_	_	1
TA-14-23 Burn Cage	No Exposure	1		1,000	-	-	-	_	_	
TA-15-185 Phermex	No Exposure	1	-	<u> </u>	-		-	-	_	
TA-15-313 Machine Shop	No Exposure	1	2					4	_	2
TA-22-52 Machine Shop	No Exposure	1	-	<u></u>		-	-	-	-	-
TA-33-39 Machine Shop	No Exposure	1	_	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	_	-	-	-	-	-

Facility	Status	Inspections Conducted Between 1/1/2019 and 12/31/2019	Unauthorized Release or Discharge	Control Measures Needing Maintenance, Repairs, or Replacement or Installed Incorrectly	Control Measures Inadequate to Meet Non- Numeric Effluent Limitations	Incidents of Noncompliance (Effluent Limitation Guidelines Exceedances)	Incidents of Noncompliance [New Mexico Water Quality Standard (NM WQS) Exceedances]	Incidents of Noncompliance (Average Exceeds or is Mathematically Certain to Exceed Benchmark Value Modified to Reflect a NM WQS per 2015 MSGP Part 9.6.2.1)	Average Exceeds or is Mathematically Certain to Exceed Benchmark Value	Total Corrective Actions by Facility
TA-33-113 Machine Shop	No Exposure	1	-	-	_	-	( <u>-</u> ) <del>(</del>		=	-
TA-35-2 Machine Shop	No Exposure	1				-	-	-	_	-
TA-35-125 Machine Shop	No Exposure	1	-	_	1	-	-	-	-	1
TA-46-31 Machine Shop	No Exposure	1	1	-	1	_	_	-	-	2
TA-46-77 Machine Shop	No Exposure	1	-		1		-	-	-	1
TA-48-8 Machine Shop	No Exposure	1	-	-	-		-	-	-	-
TA-50-54 Machine Shop	No Exposure	1	-	<del></del>	-	-	-		-	_
TA-50-69 WCRRF	No Exposure	1	-	-	-		-	-	345	_
TA-53-2 Machine Shop	No Exposure	1	-		1	<u> </u>	-	-	_	1
TA-53-16 Machine Shop	No Exposure	1	-	-	1	-	-	-		1
TA-53-26 Machine Shop	No Exposure	1	-	-	1	-		_	-	1
TA-54-38 Indoor TSD	No Exposure	1	-	_	1	T-1	-	-	-	-
TA-54 RANT	No Exposure	1	H-	-				_	-	-
TA-55-3 Metal Shop	No Exposure	1		-	1	-	-			1
TA-55-PF-4 Indoor TSD	No Exposure	1	-	_	-	<del></del>	_	-	-	-
TA-55-5 Warehouse	No Exposure	1	1	-		o-c			-	1
TA-55-268 Warehouse	No Exposure	1	( <del></del> -		<del></del>		-	. 4	-	_
TA-55-314 Warehouse	No Exposure	1	_	-	<del>-</del>			4	-	-
TA-55-355 TSD	No Exposure	1	1	_	<del></del>		= =	_	-	1
TA-55-432 Warehouse	No Exposure	1		-	<del></del>	1	-		_	_
TA-55 Outdoor TSD	No Exposure	1	7-5	-	<del></del> -	-		-	=	
TA-60 Asphalt Batch Plant	Active	12	4	1	3	2	-	_	T	10
TA-60 MRF	Active	12	2		9	_	1		-	12
TA-60 Roads and Grounds	Active	12	14	12	24		4	-	-	54
TA-60-1 Heavy Equipment Yard	Active	12	21	24	14		2	2	1	64
TA-60-2 Warehouse	Active	12	2	4	6	-	4	-	_	16
TA-63 Transuranic Waste Facility	No Exposure	1	2 <del></del> 1	-	-		4		-	_
Totals	45	133	58	63	85	2	18	2	6	234

TSD=Treatment, storage and disposal WCRRF=Waste Characterization, Reduction, and Repackaging Facility PF = Plutonium Facility MRF=Material Recycling Facility

**Table 2. Summary of Monitoring Results** 

Permitted Facility Outfall		Monitoring Type	Pollutant(s)	Monitoring Status	Reason
TA-3-22 Power & Steam Plant	005	Impaired Waters	Total recoverable AI, dissolved Cu	Continued	The pollutant was detected at a concentration that exceeded the Water Quality Standard.
TA-3-22 Power & Steam Plant	005	Impaired Waters	Total Aroclor	Discontinued	Part 6.2.4.1. The pollutant of concern was not detected and not expected to be present in discharge.
TA-3-22 Power & Steam Plant	005	Quarterly Benchmark	Total Fe	Continued	The average concentration of fewer than four quarterly monitoring values is mathematically certain to exceed the benchmark.
TA-3-22 Power & Steam Plant	009	Impaired Waters	Total recoverable Al, dissolved Cu	Continued	The pollutant was detected at a concentration that exceeded the Water Quality Standard.
TA-3-22 Power & Steam Plant	009	Impaired Waters	Total Aroclor	Discontinued	Part 6.2.4.1. The pollutant of concern was not detected and not expected to be present in discharge.
TA-3-22 Power & Steam Plant	009	Quarterly Benchmark	Total Fe	Continued	The average concentration of fewer than four quarterly monitoring values is mathematically certain to exceed the benchmark.
TA-3-22 Power & Steam Plant	012	Impaired Waters	Dissolved Cu	Continued	The pollutant was detected at a concentration that exceeded the Water Quality Standard.
TA-3-22 Power & Steam Plant	012	Impaired Waters	Total recoverable Al, Total Aroclor	Continued	Insufficient volume collected to perform analysis.
TA-3-22 Power & Steam Plant	012	Quarterly Benchmark	Total Fe	Continued	Insufficient volume collected to perform analysis.
TA-3-38 Carpenter Shop	074	Impaired Waters	Total recoverable Al, Dissolved Cu	Continued	The pollutant was detected at a concentration below the Water Quality Standard.
TA-3-38 Carpenter Shop	074	Impaired Waters	Total Aroclor	Discontinued	Part 6.2.4.1. The pollutant of concern was not detected and not expected to be present in discharge.
TA-3-38 Carpenter Shop	073	Impaired Waters	COD, TSS	Discontinued	Per Part 6.2.1.2, the average of four quarterly monitoring values does not exceed the benchmark.
TA-3-38 Metals Fab Shop	002	Impaired Waters	Total recoverable Al, dissolved Cu, Total Aroclor	Discontinued	Due to physical site changes, outfall 002 was replaced by outfall 076 on May 1, 2019, therefore monitoring at outfall 002 is discontinued.
TA-3-38 Metals Fab Shop	002	Quarterly Benchmark	NO3+NO2-N, total recoverable Al, total Fe, dissolved Zn	Discontinued	Due to physical site changes, outfall 002 was replaced by outfall 076 on May 1, 2019, therefore monitoring at outfall 002 is discontinued.
TA-3-38 Metals Fab Shop	076	Impaired Waters	Total recoverable Al	Continued	The pollutant was detected at a concentration that exceeded the Water Quality Standard.
TA-3-38 Metals Fab Shop	076	Impaired Waters	Dissolved Cu	Continued	Dissolved Copper was monitored at outfall 002 prior to being replaced by this outfall. The pollutant was detected at a concentration that exceeded the Water Quality Standard.
TA-3-38 Metals Fab Shop	076	Impaired Waters	Total Aroclor	Discontinued	Part 6.2.4.1. The pollutant of concern was not detected and not expected to be present in discharge.
TA-3-38 Metals Fab Shop	076	Quarterly Benchmark	NO3+NO2-N	Continued	Fewer than four quarterly monitoring values have been collected, however the average does not exceed the benchmark.
TA-3-38 Metals Fab Shop	076	Quarterly Benchmark	Total recoverable Al, total Fe, dissolved Zn	Continued	The average concentration of fewer than four quarterly monitoring values is mathematically certain to exceed the benchmark. Per Part 9.6.2.1, the benchmarks for Al and Zn are modified to reflect the NM WQS.
TA-60 Asphalt Batch Plant	043	Effluent Limitations Guidelines	Oil and Grease	Continued	Monitoring is required annually. The pollutant was not detected.
TA-60 Asphalt Batch Plant	043	Effluent Limitations Guidelines	TSS, pH	Continued	Monitoring is required annually. The pollutant was detected at a concentration that exceeded the daily limit.
TA-60 Asphalt Batch Plant	043	Effluent Limitations Guidelines	TSS	Continued	Monitoring is required annually. The pollutant was detected at a concentration that exceeded the 30-day average limit.
TA-60 Asphalt Batch Plant	043	Impaired Waters	Dissolved Cu, Adjusted Gross Alpha	Continued	The pollutant was detected at a concentration below the Water Quality Standard.
TA-60 Asphalt Batch Plant	043	Impaired Waters	Total Aroclor, total Hg	Discontinued	Per Part 6.2.4.1, the pollutant of concern was not detected and not expected to be present in discharge
TA-60 Asphalt Batch Plant	043	Quarterly Benchmark	TSS	Continued	Fewer than four quarterly monitoring values have been collected, however the average does not exceed the benchmark.
TA-60 MRF	029	Impaired Waters	Dissolved Cu	Continued	The pollutant was detected at a concentration that exceeded the Water Quality Standard.
TA-60 MRF	029	Impaired Waters	Total recoverable Al	Continued	The pollutant was detected at a concentration below the Water Quality Standard.

Permitted Facility	Outfall	Monitoring Type	Pollutant(s)	Monitoring Status	Reason		
TA-60 MRF	029	Impaired Waters	Total Aroclor	Discontinued	Per Part 6.2.4.1, the pollutant of concern was not detected and not expected to be present in discharge.		
TA-60 Roads and Grounds	031	Impaired Waters	Dissolved Cu, Adjusted Gross Alpha	Continued	The pollutant was detected at a concentration below the Water Quality Standard.		
TA-60 Roads and Grounds	031	Impaired Waters	Total Aroclor, total Hg	Discontinued	Per Part 6.2.4.1, the pollutant of concern was not detected and not expected to be present in discharge		
TA-60 Roads and Grounds	032	Impaired Waters	Total recoverable Al	Continued	The pollutant was detected at a concentration that exceeded the Water Quality Standard.		
TA-60 Roads and Grounds	032	Impaired Waters	Dissolved Cu	Continued	The pollutant was detected at a concentration below the Water Quality Standard.		
TA-60 Roads and Grounds	032	Impaired Waters	Total Aroclor	Discontinued	Per Part 6.2.4.1, the pollutant of concern was not detected and not expected to be present in discharge.		
TA-60 Roads and Grounds	037	Impaired Waters	Total recoverable Al	Continued	The pollutant was detected at a concentration that exceeded the Water Quality Standard.		
TA-60 Roads and Grounds	037	Impaired Waters	Dissolved Cu	Continued	The pollutant was detected at a concentration below the Water Quality Standard.		
TA-60 Roads and Grounds	037	Impaired Waters	Total Aroclor	Discontinued	Per Part 6.2.4.1, the pollutant of concern was not detected and not expected to be present in discharge.		
TA-60 Roads and Grounds	039	Impaired Waters	Dissolved Cu	Continued	The pollutant was detected at a concentration that exceeded the Water Quality Standard.		
TA-60 Roads and Grounds	039	Impaired Waters	Total Aroclor, total recoverable Al	Continued	Insufficient volume collected to perform analysis.		
TA-60 Roads and Grounds	042	Impaired Waters	Total recoverable Al	Continued	The pollutant was detected at a concentration that exceeded the Water Quality Standard.		
TA-60 Roads and Grounds	042	Impaired Waters	Dissolved Cu	Continued	The pollutant was detected at a concentration below the Water Quality Standard.		
TA-60 Roads and Grounds	042	Impaired Waters	Total Aroclor	Discontinued	Per Part 6.2.4.1, the pollutant of concern was not detected and not expected to be present in discharge.		
TA-60-1 Heavy Equipment Yard	022	Impaired Waters	Total recoverable Al, dissolved Cu	Continued	The pollutant was detected at a concentration that exceeded the Water Quality Standard.		
TA-60-1 Heavy Equipment Yard	022	Impaired Waters	Total Aroclor	Discontinued	Per Part 6.2.4.1, the pollutant of concern was not detected and not expected to be present in discharge.		
TA-60-1 Heavy Equipment Yard	022	Quarterly Benchmark	NO3+NO2-N, total recoverable Al, total Fe, dissolved Zn	Continued	The average concentration of fewer than four quarterly monitoring values is mathematically certain to exceed the benchmark. Per Part 9.6.2.1, the benchmarks for Al and Zn are modified to reflect the NM WQS.		
TA-60-2 Warehouse	026	Impaired Waters	Total recoverable Al, dissolved Cu	Continued	The pollutant was detected at a concentration that exceeded the Water Quality Standard.		
TA-60-2 Warehouse	026	Impaired Waters	Total Aroclor	Discontinued	Per Part 6.2.4.1, the pollutant of concern was not detected and not expected to be present in discharge.		
TA-60-2 Warehouse	075	Impaired Waters	Total recoverable AI, dissolved Cu	Continued	The pollutant was detected at a concentration that exceeded the Water Quality Standard.		
TA-60-2 Warehouse	075	Impaired Waters	Total Aroclor	Discontinued	Per Part 6.2.4.1, the pollutant of concern was not detected and not expected to be present in discharge.		

Al=Aluminum Cu=Copper

COD=Chemical Oxygen Demand

Fe=Iron

NO3+NO2-N=Nitrate-Nitrite as Nitrogen

Hg=Mercury

TSS=Total Suspended Solids

Zn=Zinc

NM WQS= New Mexico Water Quality Standard

MRF=Material Recycling Facility

Attachment 1 LA-UR-20-20880

2. A summary of the past year's quarterly visual assessment documentation (see Part 3.2.2)

A total of 112 visual assessments were completed at 30 different outfalls. Evidence of an oil sheen was observed in two samples: Outfall 002 on 4/23/2019 and and Outfall 074 on 05/10/2019. No other evidence of pollutants were observed.

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, your rationale for why you believe no further reductions are achievable.

#### N/A

4. A summary of your past year's corrective action documentation (See Part 4.4). If corrective action is not yet completed at the time of submission of your annual report, you must describe the status of any outstanding corrective actions. 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 Table 1 for a summary of corrective action documentation, which specifies the frequency of each of the following by site: (1) unauthorized release or discharge, (2) control measures needing maintenance, repair or replacement, and (3) control measures that were inadequate to meet the non-numeric effluent limitations. There are no corrective actions not yet completed at the time of annual report submission.

Regarding incidents of noncompliance, 18 monitored constituents from different outfalls exceeded an individual New Mexico Water Quality Standard (NM WQS), 2 monitored quarterly benchmark constituent value exceedances occurred where the benchmark value was modified to reflect a NM WQS per Section 9.6.2.1, and 2 effluent limitation guideline constituent value exceedances occurred as shown in Table 2. Corrective actions to address these exceedances have been completed.

# **ATTACHMENT 2**

# Email correspondence from Nasim Jahan dated 9/26/2018

EPC-DO: 20-032

LA-UR-20-20880

From: Lemke, Terrill W

To: Dolan, Timothy Aloysius; Dale, Leslie J; Wheeler, Holly Lynn

Subject: FW: Request for LANL Paper MSGP NOI Waiver
Date: Wednesday, September 26, 2018 4:15:53 PM

FYI

Terrill Lemke, PE, CPESC, CISEC Environmental Compliance Programs Los Alamos National Laboratory Los Alamos, NM

Office: 505-665-2397 Cell: 505-699-0725

From: Jahan, Nasim < Jahan. Nasim@epa.gov>
Sent: Wednesday, September 26, 2018 2:43 PM

To: Lemke, Terrill W <tlemke@lanl.gov>

Cc: Emily Gorman <emily@avanticorporation.com>
Subject: RE: Request for LANL Paper MSGP NOI Waiver

Dear Mr. Terrill:

EPA, Region 6 is approving your request for paper submission as the facility is unable to submit the NOI online. Please mail the hardcopies to the following address:

#### For Regular U.S. Mail Delivery:

Stormwater Notice Processing Center
Mail Code 4203M, ATTN: 2015 MSGP Signature Agreement
U.S. EPA
1200 Pennsylvania Avenue, NW
Washington, DC 20460

#### For Overnight/Express U.S. Mail Delivery:

Stormwater Notice Processing Center
William Jefferson Clinton East Building – Room 7420
ATTN: 2015 MSGP Signature Agreement
U.S. EPA
1201 Constitution Avenue, NW
Washington, DC 20004
Thank you,

# Nasim Jahan

Environmental Engineer Permits and Technical Section (6WQ-PP) EPA Region 6 Water Quality Protection Division 1445 Ross Avenue, Ste. 1200 Dallas, TX 75202-2733 Phone: 214.665.7522 Fax: 214.665.2191

- 1. Part 9.6.2 of the 2015 MSGP, Permit Conditions for the State of New Mexico, requires that benchmark values be modified to reflect New Mexico water quality standards for facilities in New Mexico, based on benchmark values from the Standards for Interstate and Intrastate Surface Waters (20.6.4.900 New Mexico Administrative Code [NMAC]). These modified benchmark values are not recognized by NeT-MSGP and populated in NetDMR.
- 2. The 2018-2020 State of New Mexico Clean Water Act §303(d)/ §305(b) Integrated Report requires monitoring of impaired waters pollutants not available for selection in NeT-MSGP (e.g., Adjusted Gross Alpha and Temperature).
- 3. 20.6.4.900 NMAC requires monitoring of certain modified benchmark and impaired waters metals pollutants as dissolved species, which are not available for selection in NeT-MSGP. Currently, only total metals species may be assigned in NeT-MSGP.
- 4. Due to extended frozen conditions during the winter and a semi-arid climate, Triad will implement an alternative 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 alternate monitoring schedule does not coincide with the default four (4) three-month quarters listed in Part 6.1.7 of the 2015 MSGP and NeT-MSGP does not allow input of an

alternate monitoring schedule. Accordingly, annual impaired waters and Effluent Limitation Guideline monitoring will be conducted between April 1 and November 30 of each year.

April 1 through May 31 June 1 through July 31 August 1 through September 30 October 1 through November 30

These system limitations directly result in inaccurate pollutants, limits, monitoring periods and DMR due dates being populated in NetDMR.

EPA Region 6 has recognized the challenges that the outgoing operator (LANS) has identified with NeT-MSGP related to compliance with Part 9.6.2 of the 2015 MSGP, Permit Conditions for the State of New Mexico, and has been instrumental in helping LANS to resolve these issues. Therefore, per your verbal direction, we are requesting a waiver for Triad to submit a paper NOI in lieu of submitting an inaccurate and incomplete NOI in NeT-MSGP. Please advise at your earliest convenience if you concur with our submittal of a paper NOI, as we must submit by Oct 2.

We appreciate your assistance in helping us maintain compliance. If you have any questions, please contact me at (505) 665-2397.

Terrill

Terrill Lemke, PE, CPESC, CISEC Environmental Compliance Programs Los Alamos National Laboratory Los Alamos, NM Office: 505-665-2397

Cell: 505-699-0725

# **ATTACHMENT 3**

# Email correspondence from Emily Hack dated 10/26/2018

EPC-DO: 20-032

LA-UR-20-20880

D /	4.4.4
Date:	JAN 2 9 2020
Date.	3AN Z 3 ZUZII

From:

Emily Hack (Avanti) (EPA NeT Support)

Cc: Subject:

Jahan Nasim; Wheeler, Holly Lynn; Dale, Leslie J; Hazen, Michael W NMR050013 - Triad National Security LLC - MSGP Notice of Intent

Date:

Friday, October 26, 2018 11:13:07 AM

Attachments:

NMR050013 Triad Los Alamos National Laboratory 2015 MSGP NOI Acknowledgement.pdf Triad National Security LLC Los Alamos National Laboratory 10-02-2018.pdf

##- Please type your reply above this line -##

You are CC'ed on this support request (10066). Reply to this email to add a comment to the request.

### Emily Hack (Avanti) (EPA NeT Support)

Oct 26, 13:12 EDT

Good afternoon,

The paper Notice of Intent (NOI) submitted under EPA's Multi-Sector General Permit (MSGP) for Los Alamos National Laboratory under Triad National Security LLC has been processed by the EPA NPDES eReporting Help Desk. The facility was assigned NPDES ID NMR050013. Please, retain the attached acknowledgement letter for your records.

Due to the unique nature of the outfall sequence and monitoring requirements, EPA instructed that we enter the NOI directly into the back-end system. Therefore, the NOI will not be generated in the NeT MSGP program at this time. Attached is the NOI that we received. As I'm sure you are aware, for any changes to the NOI in the future, please submit them via paper as well.

Please, let me know if you have any questions.

Sincerely,

**Emily Hack** NPDES eReporting Help Desk Staffed by Avanti Corporation 1-877-227-8965 NPDESeReporting@epa.gov

This email is a service from EPA NeT Support. Delivered by Zendesk



# **Environmental Protection & Compliance Division**

Los Alamos National Laboratory PO Box 1663, K490 Los Alamos, NM 87545 505-667-0666

Symbol: EPC-DO: 19-029

*LAUR*: 19-20724

Date: JAN 3 0 2019

Stormwater Notice Processing Center Mail Code 4203M, ATTN: 2015 MSGP Reports U.S. EPA 1200 Pennsylvania Avenue, NW Washington, DC 20460

Subject: National Pollutant Discharge Elimination System (NPDES) Permit Tracking No. NMR050013, 2018 Multi-Sector General Permit (MSGP) Annual Report for Los Alamos National Laboratory (LANL)

To Whom It May Concern:

Enclosed is the 2018 MSGP Annual Report (Attachment 1) for LANL as required by Part 7.5 of the MSGP.

EPA's Electronic Reporting Rule requires that the Annual Report be submitted using the NeT-MSGP program service on the EPA Central Data Exchange system. However, due to unique conditions related to LANL's monitoring requirements, LANL's NOI was not generated on NeT-MSGP, thus LANL is unable to submit the Annual Report electronically. Correspondence from Nasim Jahan (EPA Region 6) and Emily Hack (NPDES eReporting Help Desk) are included as Attachments 2 and 3, respectively.

Please contact Holly Wheeler at (505) 667-1312 or Terrill Lemke at (505) 665-2397 if you have questions.

Very truly yours,

Terrill W. Lemke

Storm Water Team Leader

TWL/HLW:jdm

Attachment(s): Attachment 1 Annual Report for Stormwater Discharges Associated with Industrial Activity under the NPDES Multi-Sector General Permit Attachment 2 Email correspondence from Nasim Jahan dated 9/26/2018 Attachment 3 Email correspondence from Emily Hack dated 10/26/2018

Copy: Nasim Jahan, USEPA, Region 6, jahan.nasim@epa.gov, (E-File)
Sarah Holcomb, NMED, sarah.holcomb@state.nm.us, (E-File)
Karen E. Armijo, LASO-MA-LS, Karen.armijo@nnsa.doe.gov, (E-File)
Michael W. Hazen, ESHQSS, mhazen@lanl.gov, (E-File)
William R. Mairson, ESHQSS, wrmairson@lanl.gov, (E-File)
Enrique Torres, EPC-DO, etorres@lanl.gov, (E-File)
Taunia Van Valkenburg, EPC-CP, tauniav@lanl.gov, (E-File)
Terrill W. Lemke, EPC-CP, tlemke@lanl.gov, (E-File)
Holly L. Wheeler, EPC-CP, hbenson@lanl.gov, (E-File)
Tim Dolan, GC-ESH, tdolan@lanl.gov, (E-File)
emla.docs@em.doe.gov, (E-File)
locatestream@lanl.gov, (E-File)
epc-correspondence@lanl.gov, (E-File)
adesh-records@lanl.gov, (E-File)



# **ATTACHMENT 1**

# Annual Report for Stormwater Discharges Associated with Industrial Activity Under the NPDES Multi-Sector General Permit

EPC-DO: 19-029

LA-UR: 19-20724

Date:	JAN 3 0 2019	

NPDES FORM 6100-28



# United States Environmental Protection Agency Washington, DC 20460 Annual Report for Stormwater Discharges Associated with Industrial Activity under the NPDES the NPDES Multi-Sector General Permit

Form Approved, OMB No. 2040-0004

A. Approval to Use Paper Annual Report 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:
Date approval obtained:
"Note: You are required to obtain approval from the applicable EPA Regional Office prior to using this paper annual report form. If you have not obtained a waiver, you must file this form electronically using the NPDES eReporting Tool (NeT) at <a href="http://water.epa.gov/polwaste/npdes/stormwater/Stormwater-eNOI-System-for-EPAs-MultiSector-General-Permit.ctm">http://water.epa.gov/polwaste/npdes/stormwater/Stormwater-eNOI-System-for-EPAs-MultiSector-General-Permit.ctm</a>
B. Permit Information
1. NPDES ID: N M R 0 5 0 0 1 3
C. Facility Information
1. Facility Name: Los Alamos National Laboratory
2. Facility Phone: 5 0 5 - 6 6 5 - 2 3 9 7 Ext.
3. Facility Mailing Address:
Street: P 0 B 0 x 1 6 6 3 K 4 9 0
City: Los Alamos State: NM ZIP 87545-
County or Similar Government Subdivision: Los Alamos
4. Point of Contact:
First Name, Middle Initial, Last Name: Terrill   W Lemke
D. General Findings
1. Provide a summary of your past year's routine facility inspection documentation (see Part 3.1.2 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 delicers, provide a statement certifying that you do not use pavement delicers containing urea (e.g., "Urea was not used at Iname of airport) for pavement delicing in the past year and will also not be used in 2015." (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.)
Los Alamos National Laboratory (LANL), operated by Triad National Security, LLC (Triad), consists of 8 active industrial sites that operate under 7 different Sectors (A, D, F, N, O, P, and AA), 37 sites that qualify for a conditional exclusion for no exposure, and one inactive site. Permit coverage became effective on November 1, 2018. All 8 active sites were inspected according to the schedules identified in the site-specific Stormwater Pollution Prevention Plans (SWPPPs). The 37 no exposure sites and one inactive site were inspected between November 1, 2018 and January 9, 2019. A summary of inspections/evaluations and associated corrective actions are included in Table 1 (attached).

E. Certification I	Information									
designed to assur who manage the and belief, true, a	certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system lesigned 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	First Name, Middle Initial, Last Name: Terrill 1 1 W Lemke									
Title:	Storm Water Team Leader									
ignature: Date: 01/30/2019										
E-mail:	t 1 e m k e 3 1 a n 1 . g o v									

Table 1. Summary of Inspections and Associated Corrective Actions

Facility	Status	Inspections Conducted Between 11/1/2018 and 1/9/2019	Unauthorized Release or Discharge	Control Measures Needing Maintenance, Repair, or Replacement	Control Measures Inadequate to Meet Non-Numeric Effluent Limitations
TA-3-22 Power and Steam Plant	Active	2	1	3	2
TA-3-29 Indoor TSD	No Exposure	1	_		-
TA-3-29 Machine Shop	No Exposure	1	-	-	-
TA-3-30 Warehouse	No Exposure	1	1	-	2
TA-3-32 Metal Shop	No Exposure	1	-	_	1
TA-3-34-Metal Shop	No Exposure	1	-	_	
TA-3-38 Carpenter Shop	Active	2	=		-
TA-3-38 Metals Fabrication Shop	Active	2	_	_	2
TA-3-39 and 102 Metal Shop	No Exposure	1	1	-	2
TA-3-40, Room 1315 Machine Shop	No Exposure	1	=	-	1
TA-3-66 Sigma Facility	No Exposure	1	1	_	_
TA-3-2206 Warehouse	No Exposure	1	= =	_	-
TA-9-28 Heavy Equipment Maintenance	No Exposure	1	-	-	1
TA-14-23 Burn Cage	No Exposure	1	-		_
TA-15-185 Phermex	Inactive	1	_	_	_
TA-15-313 Machine Shop	No Exposure	1	-	_	_
TA-22-52 Machine Shop	No Exposure	1	-	_	1
TA-33-39 Machine Shop	No Exposure	1	-	_	1
TA-33-113 Machine Shop	No Exposure	1		_	1
TA-35-2 Machine Shop	No Exposure	1	-	_	_
TA-35-125 Machine Shop	No Exposure	1	-		
TA-35-213 Machine Shop	No Exposure	1	-	_	
TA-46-31 Machine Shop	No Exposure	1	-	_	1
TA-46-77	No Exposure	1	-	_	
TA-48-8 Machine Shop	No Exposure	1	-	_	_
TA-50-54 Machine Shop	No Exposure	1			_
TA-50-69 WCRRF	No Exposure	1	<u> </u>	<u> </u>	_
TA-53-2 Machine Shop	No Exposure	1	-	-	0 <del>-0</del> 0
TA-53-16/0726 Machine Shop	No Exposure	1	-	_	2
TA-53-26 Machine Shop	No Exposure	1	-	-	2
TA-54-38 Indoor TSD	No Exposure	1			
TA-54-38 Outdoor TSD	No Exposure	1	-	_	
TA-55-3 Metal Shop	No Exposure	1	_	-	=
TA-55-PF-4 Indoor TSD	No Exposure	1	_	-	_
TA-55-5 Warehouse	No Exposure	1	-	-	<u>-</u>
TA-55-268 Warehouse	No Exposure	1		-	_
TA-55-314 Warehouse	No Exposure	1	-		_
TA-55-355	No Exposure	1	-		_
TA-55-432	No Exposure	1		_	-

Facility	Status	Inspections Conducted Between 11/1/2018 and 1/9/2019	Unauthorized Release or Discharge	Control Measures Needing Maintenance, Repair, or Replacement	Control Measures Inadequate to Meet Non-Numeric Effluent Limitations
TA-55 Outdoor TSD	No Exposure	1	-	-	4
TA-60 Asphalt Batch Plant	Active	2	1	-	1
TA-60 MRF	Active	2	-	_	3
TA-60 Roads and Grounds	Active	2	3	1	3
TA-60-1 Heavy Equipment Yard	Active	2		_	10
TA-60-2 Warehouse	Active	2	1	1	1
TA-63 Transuranic Waste Facility	No Exposure	1	_	<u> </u>	_
Totals	46	54	9	5	37

TSD=Treatment, storage and disposal
WCRRF=Waste Characterization, Reduction, and Repackaging Facility
PF = Plutonium Facility
MRF=Material Recycling Facility

**Table 2. Summary of Outstanding Corrective Actions** 

Facility Description	Inspection Date	Inspection Type Description	Finding Description	Problem Description	Corrective Action Description	Completed	Date Corrective Action was Initiated	Expected Completion Date	Corrective Action Completion Date	Description of Noncompliance
TA-60-1 Heavy Equipment Yard	12/19/2018	Routine facility inspection	Control measure inadequate to meet non-numeric effluent limitations	Within the lower east yard at the TA-60-1 Heavy Equipment Yard, leftover ducting and straps were abandoned outside with no controls in place. Housekeeping issue.	Site representative contacted the Electrical Foreman, whom was believed to be responsible for the material on 12/20/2018. However, during a walk down on that date, it was confirmed that he was not responsible for the material. LANL was closed from 12/22/2018 through 1/03/2019. On 1/10/2019, the site representative contacted a member of the sheet metal workers to pick up the material. It was confirmed on 1/28/2019 that the material is under several feet of snow. Sheet metal workers agree to remove the material once it is accessible.	No	12/20/2018	02/28/2019	N/A	Inadequate documentatio and failure to meet permit time frames per requirements in Parts 4.3.1, 4.3.2, and 4.4.
TA-60-1 Heavy Equipment Yard	12/19/2018	Routine facility inspection	Control measure inadequate to meet non- numeric effluent limitations	East of the TA-60-1, in the southern part of the upper yard, several broken solar panels are being stored outside.	Salvage was contacted on 12/19/2018 and 1/15/2019 to determine if they could pick up the panels, but they did not respond. On 1/28/2019, the site representative contacted the Material Recycling Facility (MRF) to determine whether the solar panels could be sent to them. On 1/29/2018 the solar panels were taken to the MRF.	Yes	12/19/2018	N/A	1/29/2019	Inadequate documentation and failure to meet permit time frames per requirements in Parts 4.3.1, 4.3.2, and 4.4.
TA-60-1 Heavy Equipment Yard	12/19/2018	Routine facility inspection	Control measure inadequate to meet non- numeric effluent limitations	There are several pieces of metal for fabrication and old pieces of equipment that are rusting and not covered. Specific equipment and locations are as follows:	LANL was closed from 12/22/2018 through 1/03/2019. Starting on 12/26/2018, several snow events occurred. A walk down on 1/28/2019 determined the snow	No	Not documented.	1/31/2019	N/A	Inadequate documentation and failure to meet permit time frames per requirements in Parts 4.3.1, 4.3.2, and 4.4.

Facility Description	Inspection Date	Inspection Type Description	Finding Description	Problem Description	Corrective Action Description	Completed	Date Corrective Action was Initiated	Expected Completion Date	Corrective Action Completion Date	Description of Noncompliance
				Tail gate and apron in the lower east yard; a rusted metal beam at the same general location; and metal mesh, diamond steel and steel sheets in the central portion of the lower east yard.	melted enough to be place tarps on the identified equipment and metal by 1/31/2019.			-	Date	
TA-60-1 Heavy Equipment Yard	12/19/2018	Routine facility inspection	Control measure inadequate to meet non- numeric effluent limitations	On the east side of the TA-60-1, Heavy Equipment Yard, tires are being stockpiled outside with no stormwater controls in place.	Tires were transported to MRF where they will be covered, then transported to the Los Alamos County Landfill.	Yes	Not documented.	N/A	1/29/2019	Inadequate documentation and failure to meet permit time frames per requirements in Parts 4.3.1, 4.3.2, and 4.4.
TA-60-1 Heavy Equipment Yard	12/19/2018	Routine facility inspection	Control measure inadequate to meet non- numeric effluent limitations	At the far northwest corner of the TA-60-1 Heavy Equipment Yard, stormwater is sheet flowing off the asphalt private vehicle parking area and causing erosion to the soil between there and Maniac Road.	Site representative walked down the eroded area with personnel from Roads and Grounds (R&G) on 12/20/2018. R&G will regrade the area and stabilize it with asphalt millings until the area is paved later in the year. LANL was closed from 12/22/2018 through 1/03/2019. Starting on 12/26/2018, several snow events occurred. On 1/4/2019 the Excavation Permit was submitted and on 1/11/2019 the excavation review was completed. The R&G crew is waiting for utility line locates in the area before they can regrade and stabilize. Work is proposed to be completed by 2/28/2019.	No	12/20/2018	2/28/2019	N/A	Inadequate documentation per requirements in Parts 4.3.1, 4.3.2, and 4.4.
TA-60-1 Heavy Equipment Yard	12/19/2018	Routine facility inspection	Control measure inadequate to meet non- numeric effluent limitations	At several locations within the TA-60-1 Heavy Equipment Yard, either metal storage racks are not covered, the existing covers need to be replaced, or metal is	LANL was closed from 12/22/2018 through 1/03/2019. Starting on 12/26/2018, several snow events occurred. Tarps will be replaced, resituated or	No	Not documented.	1/31/2019	N/A	Inadequate documentation and failure to meet permit time frames per requirements in Parts 4.3.1, 4.3.2, and 4.4.

Facility Description	Inspection Date	Inspection Type Description	Finding Description	Problem Description	Corrective Action Description	Completed	Date Corrective Action was Initiated	Expected Completion Date	Corrective Action Completion Date	Description of Noncompliance
				stored near a rack on the ground and needs to be covered. Specific locations include: north of structure TA-60-330; blade storage area on the north side of the lower east yard; far east end of lower east yard; between trailers TA-60-008 and 009; and the west side of TA-60-1 (center area).	installed to cover materials by 1/31/2019.					
TA-60-1 Heavy Equipment Yard	12/19/2018	Routine facility inspection	Control measure inadequate to meet non- numeric effluent limitations	Steel, for fabrication of ladder racks, was stored outside west of TA-60-1 without being covered.	The steel was covered or removed on 12/21/2018.	Yes	Not documented.	N/A	12/21/2018	Inadequate documentation per requirements in Parts 4.3.1, 4.3.2, and 4.4.
TA-60-1 Heavy Equipment Yard	12/19/2018	Routine facility inspection	Control measure inadequate to meet non-numeric effluent limitations	Three roll-off bins were not covered. Two were located in the lower yard and one was in the paved area east of TA-60-1.	The roll-off bin containing metal for recycle was sent to MRF on 12/20/2018. A rental truck was being used at MRF because their regular truck was being repaired. The rental truck was unable to move the wood bin due to its weight. The recycle bin containing wood was taken to MRF on 1/29/2019. Roll-off bins containing tires were sent to MRF on 12/20/2018 and 1/29/2019. The new bin for tires was covered with a tarp on 1/29/2019.	Yes	Not documented.	N/A	1/29/2019	Inadequate documentation and failure to meet permit time frames per requirements in Parts 4.3.1, 4.3.2, and 4.4.
TA-60 Roads and Grounds	12/17/2018	Routine facility inspection	Control measure inadequate to meet non- numeric effluent limitations	A Hamm roller appears to be abandoned within the Sigma Mesa Staging Area at TA-60 Roads and Grounds east. Liquids have not been drained from the equipment.	A piece of construction equipment (Hamm roller) was identified to be leaking fluids. However a drip pan with spill pads and pillows was in place underneath the Hamm roller to help capture any drips at the time of inspection from the small leak. By 1/7/2019, approximately 20 or more	Yes	12/17/2018	N/A	1/26/2019	Inadequate documentation of requirements in Part 4.3.2.

Facility Description	Inspection Date	Inspection Type Description	Finding Description	Problem Description	Corrective Action Description	Completed	Date Corrective Action was Initiated	Expected Completion Date	Corrective Action Completion Date	Description of Noncompliance
					inches of leftover snow from multiple storms that dropped 3 feet of snow by 1/1/2019, impeded access to Hamm roller. On 1/18/2019, during the routine facility inspection, there was no new signs of leakage inside the drip pan underneath the Hamm roller. On 1/26/2019, the motor oil and hydraulic fluids were removed from the Hamm roller.					
TA-60 Asphalt Batch Plant	12/17/2018	Routine facility inspection	Unauthorized release or discharge	At the TA-60 Asphalt Batch Plant, the pump to the heating oil tank is leaking oil.	On 12/17/2018 a new pump was ordered from Honstein Oil & Distribution out of Santa Fe with a 20 day business lead time. On 12/18/2018, the Asphalt Batch Plant was shut down which turns the pump off and stops it from leaking. On 12/20/2018, the soil south of the tank and within the secondary containment basin was cleaned up and the affected area was sprayed with Micro-Blaze. During the routine facility inspection on 1/16/2019, it was determined that power to the Asphalt Batch Plant had not been restored and the pump to the heating oil was not leaking. The new replacement pump is now scheduled to arrive on 2/25/2019. The expected completion date for this corrective action is close of business on 2/28/2019.	No	12/17/2018	2/28/2019	N/A	Inadequate documentation of requirements in Part 4.3.2.

# **ATTACHMENT 2**

Email correspondence from Nasim Jahan dated 9/26/2018

EPC-DO: 19-029

LA-UR: 19-20724

From: Lemke, Terrill W

To: Dolan, Timothy Aloysius; Dale, Leslie J; Wheeler, Holly Lynn

Subject: FW: Request for LANL Paper MSGP NOI Waiver
Date: Wednesday, September 26, 2018 4:15:53 PM

#### FYI

Terrill Lemke, PE, CPESC, CISEC Environmental Compliance Programs Los Alamos National Laboratory Los Alamos, NM

Office: 505-665-2397 Cell: 505-699-0725

**From:** Jahan, Nasim < Jahan.Nasim@epa.gov> **Sent:** Wednesday, September 26, 2018 2:43 PM

To: Lemke, Terrill W <tlemke@lanl.gov>

**Cc:** Emily Gorman <emily@avanticorporation.com> **Subject:** RE: Request for LANL Paper MSGP NOI Waiver

Dear Mr. Terrill:

EPA, Region 6 is approving your request for paper submission as the facility is unable to submit the NOI online. Please mail the hardcopies to the following address:

#### For Regular U.S. Mail Delivery:

Stormwater Notice Processing Center
Mail Code 4203M, ATTN: 2015 MSGP Signature Agreement
U.S. EPA
1200 Pennsylvania Avenue, NW
Washington, DC 20460

#### For Overnight/Express U.S. Mail Delivery:

Stormwater Notice Processing Center
William Jefferson Clinton East Building – Room 7420
ATTN: 2015 MSGP Signature Agreement
U.S. EPA
1201 Constitution Avenue, NW
Washington, DC 20004
Thank you,

# Nasim Jahan

Environmental Engineer Permits and Technical Section (6WQ-PP) EPA Region 6 Water Quality Protection Division 1445 Ross Avenue, Ste. 1200 Dallas, TX 75202-2733 Phone: 214.665.7522 Fax: 214.665.2191

- 1. Part 9.6.2 of the 2015 MSGP, Permit Conditions for the State of New Mexico, requires that benchmark values be modified to reflect New Mexico water quality standards for facilities in New Mexico, based on benchmark values from the Standards for Interstate and Intrastate Surface Waters (20.6.4.900 New Mexico Administrative Code [NMAC]). These modified benchmark values are not recognized by NeT-MSGP and populated in NetDMR.
- 2. The 2018-2020 State of New Mexico Clean Water Act §303(d)/ §305(b) Integrated Report requires monitoring of impaired waters pollutants not available for selection in NeT-MSGP (e.g., Adjusted Gross Alpha and Temperature).
- 3. 20.6.4.900 NMAC requires monitoring of certain modified benchmark and impaired waters metals pollutants as dissolved species, which are not available for selection in NeT-MSGP. Currently, only total metals species may be assigned in NeT-MSGP.
- 4. Due to extended frozen conditions during the winter and a semi-arid climate, Triad will implement an alternative 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 alternate monitoring schedule does not coincide with the default four (4) three-month quarters listed in Part 6.1.7 of the 2015 MSGP and NeT-MSGP does not allow input of an

alternate monitoring schedule. Accordingly, annual impaired waters and Effluent Limitation Guideline monitoring will be conducted between April 1 and November 30 of each year.

April 1 through May 31 June 1 through July 31 August 1 through September 30 October 1 through November 30

These system limitations directly result in inaccurate pollutants, limits, monitoring periods and DMR due dates being populated in NetDMR.

EPA Region 6 has recognized the challenges that the outgoing operator (LANS) has identified with NeT-MSGP related to compliance with Part 9.6.2 of the 2015 MSGP, Permit Conditions for the State of New Mexico, and has been instrumental in helping LANS to resolve these issues. Therefore, per your verbal direction, we are requesting a waiver for Triad to submit a paper NOI in lieu of submitting an inaccurate and incomplete NOI in NeT-MSGP. Please advise at your earliest convenience if you concur with our submittal of a paper NOI, as we must submit by Oct 2.

We appreciate your assistance in helping us maintain compliance. If you have any questions, please contact me at (505) 665-2397.

Terrill

Terrill Lemke, PE, CPESC, CISEC Environmental Compliance Programs Los Alamos National Laboratory Los Alamos, NM Office: 505-665-2397

Cell: 505-699-0725

# **ATTACHMENT 3**

Email correspondence from Emily Hack dated 10/26/2018

EPC-DO: 19-029

LA-UR: 19-20724

From:

Emily Hack (Avanti) (EPA NeT Support)

Cc: Subject: Jahan Nasim; Wheeler, Holly Lynn; Dale, Leslie J; Hazen, Michael W NMR050013 - Triad National Security LLC - MSGP Notice of Intent

Date:

Friday, October 26, 2018 11:13:07 AM

Attachments:

NMR050013 Triad Los Alamos National Laboratory 2015 MSGP NOI Acknowledgement.pdf

Triad National Security LLC Los Alamos National Laboratory 10-02-2018.pdf

# - Please (yet zon rediv above the line at m

You are CC'ed on this support request (10066). Reply to this email to add a comment to the request.

### Emily Hack (Avanti) (EPA NeT Support)

Ø#+245, 13 12 EF6

Good afternoon,

The paper Notice of Intent (NOI) submitted under EPA's Multi-Sector General Permit (MSGP) for Los Alamos National Laboratory under Triad National Security LLC has been processed by the EPA NPDES eReporting Help Desk. The facility was assigned NPDES ID NMR050013. Please, retain the attached acknowledgement letter for your records.

Due to the unique nature of the outfall sequence and monitoring requirements, EPA instructed that we enter the NOI directly into the back-end system. Therefore, the NOI will not be generated in the NeT MSGP program at this time. Attached is the NOI that we received. As I'm sure you are aware, for any changes to the NOI in the future, please submit them via paper as well.

Please, let me know if you have any questions.

Sincerely,

Emily Hack
NPDES eReporting Help Desk
Staffed by Avanti Corporation
1-877-227-8965
NPDESeReporting@epa.gov

# ATTACHMENT 7: ROUTINE FACILITY INSPECTIONS

# Los Alamos National Lab - ADESH

#### Work Order MSGP-RI-63351

MSGP Routine Inspection Printed 11/7/2018 - 3:31 PM

<i>l</i> lainter	nance Details				
=	ted: 10/29/2018 10:35:50 AM  Target: 11/30/2018  Inspection (EPC-CP-Form-1020.1)  Target: 11/30/2018  Target: 11/30/2018  Inspection (EPC-CP-Form-1020.1)  Target: 11/30/2018  Inspection (EPC-CP-Form-1020.1)  Target: 11/30/2018  Inspection (EPC-CP-Form-1020.1)  Target: 11/30/2018  Inspection (EPC-CP-Form-1020.1)  Target: 11/30/2018  Inspection (EPC-CP-Form-1020.1)				
ast PM	1: 10/26/2018 11/9/2018 Time 260Ful high of 440F				
Project:	Nov. 2018 (P-MSGP-RI- 5346)				
Reason	: 2018 November Inspections				
Special	Instructions: NMR053195 :53 a.m.				
asks					
#	Description	leas.	No	N/A	Yes
	r Information				_
20	Describe the weather at time of inspection and document the temperature (F°).	_	工		_F_
Within t	the Facility Boundary				
,	Is the facility free of new discharges of pollutants that have occurred since the last				
40	inspection? If "Failed" describe.				F
50	If "No" has a CAR been previously initiated for this new discharge?		Г		厂
60	Is the facility free of discharge of pollutants at the time of inspection? If "No" describe.		Г	工	
70	Is the facility free of evidence of, or the potential for, pollutants entering the drainage system. If "No" describe.		_		/
descrip 90	Inspection (identify needed maintenance and repairs, failed control measures that need to not corrective actions in relevant task comment)  Monitored Outfall [029] Free of Evidence of Erosion? If "No", describe.  Monitored Outfall [029] Flow Dissipation Devices Operating Effectively? If "No",				_F_
100	describe.		-	Г	F
110	Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.		Г		
	Measures (identify needed maintenance and repairs, failed control measures that need tion of corrective actions in relevant task comments).	replacm	nent, c	ra	
130	Asphalt Berm [6000203040011] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		厂		<u>F</u>
140	Gravel Bags [6000203100008] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		П		_F_
150	Eco-Block [6000203110003] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		Б		_F_
160	Rock Channel/Swale [6000204030004] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		Г	厂	
170	Rip Rap [6000204060006] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060007] Control Measure is operating effectively? If "No" describe		Г		_F_
180	condition & need for Maintenance, Repair, or Replacement.  Base Course Swale [6000204100002] Control Measure is operating effectively? If "No"		Г_		<u> </u>
190	describe condition & need for Maintenance, Repair, or Replacement.  Rock Check Dam [6000206010005] Control Measure is operating effectively? If "No"		Г		
200	describe condition & need for Maintenance, Repair, or Replacement.  Trench Drain [6000209040001] Control Measure is operating effectively? If "No"		Г	工	

describe condition & need for Maintenance, Repair, or Replacement

Retention Pond [6000211010009] Control Measure is operating effectively? If "No"

210 220

Leonard	d Sandoval 11/1/2018 / 1				
Labor		g Hrs	ОТ Н	rs Oth	er H
abor					
470	additional control measures needed.			二	_F
	Are permit requirements satisfied with existing control measure(s)? If "No" describe				
	onal Control Measures				
450	Free of incidents of observed non-compliance not already identified above? If "No" describe.		_		_
Non-Co	ompliance				
430	Leaks and spills: controls adequate (appropriate, effective, and operating)? If "No" describe.		Г	F/	
420	Housekeeping (Industrial materials/residues/trash in contact with stormwater): controls adequate (appropriate, effective, and operating)? If "No" describe.				
410	Dust generation and vehicle tracking: controls adequate (appropriate, effective, and operating)? If "No" describe.		 	<u></u>	
400	Salt storage piles or pile containing salt: controls adequate (appropriate, effective, and operating)? If "No" describe.			_~	
390	Non-stormwater/illicit connections: controls adequate (appropriate, effective, and operating)? If "No" describe.			_ <u>~</u> _	
380	Locations and sources of run-on to the site: controls adequate (appropriate, effective, and operating)? If "No" describe.				
370	Erodible areas/construction: controls adequate (appropriate, effective, and operating)? If "No" describe.		Г	<u>-</u> -	· -
360	Waste handling and disposal areas: controls adequate (appropriate, effective, and operating)? If "No" describe.				
350	Machinery: controls adequate (appropriate, effective, and operating)? If "No" describe.				
340	Outdoor vehicle and equipment washing areas: controls adequate (appropriate, effective, and operating)? If "No" describe.			_~	
330	Fueling areas: controls adequate (appropriate, effective, and operating)? If "No" describe.				
320	Equipment operation and maintenance areas: controls adequate (appropriate, effective, and operating)? If "No" describe.		Г	<b>D</b> /	
310	Industrial processing and finished product storage areas: controls adequate (appropriate, effective, and operating)? If "No" describe.		_ [	_⊏∕	
300	Liquid tank storage/secondary containment: controls adequate (appropriate, effective, and operating)? If "No" describe.			_⊏∕	<u>_</u>
290	Product/chemical storage areas (raw material): controls adequate (appropriate, effective, and operating)? If "No" describe.			_P′	
280	Transfer areas for substances in bulk: controls adequate (appropriate, effective, and operating)? If "No" describe.			_F/	<u>_</u>
<b>270</b>	Material loading/unloading and storage areas: controls adequate (appropriate, effective, and operating)? If "No" describe.				<u>F</u>
Area/A	ctivity exposed to stormwater (identify needed mainteance or a description of corrective	action	s in rel	evant	task
250	EnviroSoxx w/ MetalLoxx [6000203200022] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		F		
240	EnviroSoxx w/ MetalLoxx [6000203200021] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		т.		
	Francis Community and the state of the state				

Report:
WO ID: Page of
Name/Z#: Lconod F. Sandala 114326  Signature (lead inspector): Lconod F. Land J. Date and Time: 11912018 8:35a.m.
Signature (lead inspector): Date and Time: 1/9/2018 8:35 a. w. "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, DESH Group Leader, EPC Group Leader)
Print name and title: Russell Store Gol DESK- UES
Signature: Reveall Ste Date: 12/12/2018  The 30-yard bins for shredded paper, Cardboard, of plastic/aluminum cans had Durnster Good Colors on Hen.  Durnster Good Colors on Hen inside the yard Loke Colored y tarps.  Bins with metal in them inside the yard Loke colored y tarps.  The Carcycle vetertion pand had ice in it.

## Los Alamos National Lab - ADESH

### Work Order MSGP-RI-63451

MSGP Routine Inspection Printed 12/17/2018 - 4:43 PM

Requested:	12/17/2018 4:33:38 PM	Target:	12/31/2018	MSGP Program	
Procedure:	MSGP Routine Facility Inspection (EPC-CP-Form- 1020.1)		Normal / Inspection Utilities and Infrastructure	品 RG121.9 ♣ TA-60 MRF	
Last PM:	10/26/2018 12/17/2	018	(.100	•	
Project:	Routine Facility Inspections Dec. 2018 (P-MSGP-RI- 5353)	Kemp. 33°F	Whigh of 45°F	Contact: Phone:	
Reason: 20	018 December Inspections	Wi	Ld-Calm		
			10:00 a.m.		

10:00 a.m.				
Description	Meas.	No	N/A	Yes
ner Information				
Describe the weather at time of inspection and document the temperature (F°).		П	Г	F
the Facility Boundary				
				,
inspection? If "Failed" describe.		Г		V
			7	工
				F
Is the facility free of evidence of, or the potential for, pollutants entering the drainage system. If "No" describe.		П	П	F/
iption of corrective actions in relevant task comment)	ed replac	ement,	or a	
		<u>. []</u>	厂	
Monitored Outfall [029] Flow Dissipation Devices Operating Effectively? If "No", describe.		П		F/
<b>Monitored Outfall [029]</b> Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.			Г	F/
ption of corrective actions in relevant task comments).	ed replac	ment, c	ora	
Asphalt Berm [6000203040011] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		П		F/
Gravel Bags [6000203100008] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		Г	П	<b>D</b>
Eco-Block [6000203110003] Control Measure is operating effectively? If "No" describe condition & need for Maintenance. Repair, or Replacement.		П	Г	
Rock Channel/Swale [6000204030004] Control Measure is operating effectively? If "No"		П	Г	
Rip Rap [6000204060006] Control Measure is operating effectively? If "No" describe		Г		_ <u>~</u> _
Rip Rap [6000204060007] Control Measure is operating effectively? If "No" describe		Г	Г	<u></u>
Base Course Swale [6000204100002] Control Measure is operating effectively? If "No"		П	Г	
Rock Check Dam [6000206010005] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		П	Г	
Trench Drain [6000209040001] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		Г	Г	
Retention Pond [6000211010009] Control Measure is operating effectively? If "No"		Г		
Drop Inlet with Floc logs [6000209030018] Control Measure is operating effectively? If			H	1
	Description  Describe the weather at time of inspection and document the temperature (F°).  In the Facility Boundary  Is the facility free of new discharges of pollutants that have occurred since the last inspection? If "Failed" describe.  If "No" has a CAR been previously initiated for this new discharge?  Is the facility free of discharge of pollutants at the time of inspection? If "No" describe.  Is the facility free of evidence of, or the potential for, pollutants entering the drainage system. If "No" describe.  It she facility free of evidence of, or the potential for, pollutants entering the drainage system. If "No" describe.  In Inspection (identify needed maintenance and repairs, failed control measures that ne iption of corrective actions in relevant task comment)  Monitored Outfall [029] Free of Evidence of Erosion? If "No", describe.  Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.  Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.  In Measures (identify needed maintenance and repairs, failed control measures that ne iption of corrective actions in relevant task comments).  Asphalt Berm [6000203404011] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Gravel Bags [6000203100008] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rock Channel/Swale [6000203400004] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060006] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060006] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rock Check Dam [60002041010002] Control Measure is operating effectively? If "No" descri	Description  Describe the weather at time of inspection and document the temperature (F°).  In the Facility Boundary  Is the facility free of new discharges of pollutants that have occurred since the last inspection? If "Failed" describe.  If "No" has a CAR been previously initiated for this new discharge?  Is the facility free of evidence of, or the potential for, pollutants entering the drainage system. If "No" describe.  Is the facility free of evidence of, or the potential for, pollutants entering the drainage system. If "No" describe.  Il inspection (identify needed maintenance and repairs, failed control measures that need replace prion of corrective actions in relevant task comment)  Monitored Outfall [029] Free of Evidence of Frosion? If "No", describe.  Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.  Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.  Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.  Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.  Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.  Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.  Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.  Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No" describe.  Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Eco-Block [6000203110003] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060006] Control Measure is operating effe	Description  Describe the weather at time of inspection and document the temperature (F°).  In the Facility Boundary  Is the facility free of new discharges of pollutants that have occurred since the last inspection? If "Falled" describe.  If "No" has a CAR been previously initiated for this new discharge?  Is the facility free of discharge of pollutants at the time of inspection? If "No" describe.  Is the facility free of evidence of, or the potential for, pollutants entering the drainage system. If "No" describe.  Is the facility free of evidence of, or the potential for, pollutants entering the drainage system. If "No" describe.  In Inspection (identify needed maintenance and repairs, failed control measures that need replacement, prition of corrective actions in relevant task comment)  Monitored Outfall [029] Free of Evidence of Erosion? If "No", describe.  Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.  Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.  In Measures (identify needed maintenance and repairs, failed control measures that need replacement, option of corrective actions in relevant task comments).  Asphalt Berm [6000203040011] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Gravel Bags [6000203100008] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rock Channel/Swale [600020400001] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060007] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060007] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rock Check Dam [600020400007] Control Measure is operating	Description  The Information Describe the weather at time of inspection and document the temperature (F°).  The Facility Boundary Is the facility free of new discharges of pollutants that have occurred since the last inspection? If "Falled" describe.  If "No" has a CAR been previously initiated for this new discharge?  Is the facility free of discharge of pollutants at the time of inspection? If "No" describe.  Is the facility free of discharge of pollutants at the time of inspection? If "No" describe.  Is the facility free of evidence of, or the potential for, pollutants entering the drainage system. If "No" describe.  Is the facility free of evidence of, or the potential for, pollutants entering the drainage system. If "No" describe.  Inspection (identify needed maintenance and repairs, failed control measures that need replacement, or a pition of corrective actions in relevant task comment)  Monitored Outfall [029] Free of Evidence of Erosion? If "No", describe.  Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.  Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.  In Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No" describe.  Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No" describe.  Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No" describe.  Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No" describe.  Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Figure 1 (1990) Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Figure 1 (1990) Free of Evidence of Pollutants in Discharg

240 " E 250 "	EnviroSoxx w/ MetalLoxx [6000203200021] Control in No" describe condition & need for Maintenance, Repart EnviroSoxx w/ MetalLoxx [6000203200022] Control in No" describe condition & need for Maintenance, Repart Repart No" describe condition & need for Maintenance,	ir, or Replacemer	it.		Б	Г [/
50 <u>"</u> .rea/Acti		Measure is onera				
						<u> </u>
,,,,,,,,	vity exposed to stormwater (identify needed maint	eance or a desc	ription of correcti	ve actions	in relev	ant task
70 a	Material loading/unloading and storage areas: controls and operating)? If "No" describe.	adequate (appro	priate, effective,	Lepux	-	
	Fransfer areas for substances in bulk: controls adequation operating)? If "No" describe.	te (appropriate, e	ffective, and		П	F
	Product/chemical storage areas (raw material): controls and operating)? If "No" describe.	s adequate (appr	opriate, effective,		г	F
	.iquid tank storage/secondary containment: controls ac and operating)? If "No" describe.	dequate (appropr	iate, effective,		Г	F
	ndustrial processing and finished product storage area effective, and operating)? If "No" describe.	as: controls adequ	uate (appropriate,		г	F/ F
	Equipment operation and maintenance areas: controls and operating)? If "No" describe.	adequate (appro	priate, effective,		П	P/ r
	Fueling areas: controls adequate (appropriate, effective describe.	e, and operating)'	? If "No"	_	П	PF
	Outdoor vehicle and equipment washing areas: control and operating)? If "No" describe.	s adequate (appr	opriate, effective,		Г	F/ r
50 N	Machinery: controls adequate (appropriate, effective, a	nd operating)? If	"No" describe.		Г	F F
V	Naste handling and disposal areas: controls adequate operating)? If "No" describe.				П	Б/ Г
	Frodible areas/construction: controls adequate (approp No" describe.	oriate, effective, a	nd operating)? If		Б	F/ F
	ocations and sources of run-on to the site: controls ac and operating)? If "No" describe.	dequate (appropri	ate, effective,		Г	F/ F
	Non-stormwater/illicit connections: controls adequate (apperating)? If "No" describe.	appropriate, effec	tive, and		Г	FF
	Salt storage piles or pile containing salt: controls adequipperating)? If "No" describe.	uate (appropriate	, effective, and		Б	FF
	Dust generation and vehicle tracking: controls adequat operating)? If "No" describe.	e (appropriate, et	ffective, and		_П	F/ F
	Housekeeping (Industrial materials/residues/trash in coadequate (appropriate, effective, and operating)? If "No		water): controls			<u>г</u> г
	eaks and spills: controls adequate (appropriate, effect describe.	tive, and operatin	g)? If "No"			F/ L
	ipliance Free of incidents of observed non-compliance not alreadescribe.	ady identified abo	ve? If "No"			г_ <i>Б</i>
ddition	al Control Measures					
	Are permit requirements satisfied with existing control additional control measures needed.	measure(s)? If "N	lo" describe			Г_Б⁄
bor						
abor.		Assigned	Work Date	Peg Hre	OT Hea	Other Hr
	Sandoval	12/17/2018 / 1	TOIR Date	reg ilis	01 1113	Cale His
			·		-	-
Vheeler,	Holly	12/17/2018 / 1	-	-	•	-

Report:	6 has teas an its cake that need to be
vegaved to metal sharings at the	e has tead and to cake that need to be
Shept up embed into the M	OCP tracking database as CAR# 1430.
entered into the MSGP tacking	y database as CAR#1431:
WO ID: Page	of Hall Uheeler from EPC-CP
Name/Z#: Leonard F. Sandahl 1143	helped perform the inspection which is considered an annual
Signature (lead inspector): Leonal F. Sandon	Date and Time: 12/11/2018 10:21 a.m.
"I confirm the information as recorded is true, accurate and complete."	

"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, DESH Group Leader, EPC Group Leader)

Signature: Russell Stone & DESH-UIS

Signature: Russell Stone & DESH-UIS

Signature: Russell Stone & Dest-UIS

Date: 1/7/2019

There is another 10 yard voll-off bin with metal shavings at the back of the voll-off bin of an the ground that need to be sught up entered into the MSGP tracking databased as CAR#1432.

## Los Alamos National Lab - ADESH

### Work Order MSGP-RI-63460

MSGP Routine Inspection Printed 1/15/2019 - 2:22 PM

	sted: 1/15/2019 2:09:16 PM       Target: 1/31/2019         lure: MSGP Routine Facility       Priority/Type: Normal / Inspection         Inspection (EPC-CP-Form-1020.1)       Department: Utilities and Infrastructure	9			
ast Pi rojec	VI: 12/17/2018 125/2013 Temp. 120 Ful high of 330 F				
easo	n: MSGP Routine Facility Inspection 9:00a.m.				
sks					
#	Description	Meas.	No	N/A	Yes
<b>Veat</b> h	er Information  Describe the weather at time of inspection and document the temperature (F°).		_		-/
<b>Vithi</b> r IO	Is the Facility Boundary  Is the facility free of new discharges of pollutants that have occurred since the last inspection? If "Failed" describe.		п	п	<b>5</b> /
50	If "No" has a CAR been previously initiated for this new discharge?		F		
0	Is the facility free of discharge of pollutants at the time of inspection? If "No" describe.			Г	<u></u>
0	Is the facility free of evidence of, or the potential for, pollutants entering the drainage system. If "No" describe.			П	[Z
	I Inspection (identify needed maintenance and repairs, failed control measures that need ption of corrective actions in relevant task comment)  Monitored Outfall [029] Free of Evidence of Erosion? If "No", describe.  Monitored Outfall [029] Flow Dissipation Devices Operating Effectively? If "No",		Г	П	
100	describe.				
			-	10/2	
110	Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.		П		
	Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.  DI Measures (identify needed maintenance and repairs, failed control measures that need	i replaci	ment, c	or a	<b> </b>
Contro lescri	Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe,  of Measures (identify needed maintenance and repairs, failed control measures that need ption of corrective actions in relevant task comments).  Asphalt Berm [6000203040011] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.	d replaci	ment, o	ra	F'
Control lescri	Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.  DI Measures (identify needed maintenance and repairs, failed control measures that need ption of corrective actions in relevant task comments).  Asphalt Berm [6000203040011] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Gravel Bags [6000203100008] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.	d replaci	ment, c	or a	F F
Controllescri	Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.  DI Measures (identify needed maintenance and repairs, failed control measures that need ption of corrective actions in relevant task comments).  Asphalt Berm [6000203040011] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Gravel Bags [6000203100008] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Eco-Block [6000203110003] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.	d replaci	ment, c	ra	E'   E'   E'   E'   E'   E'   E'   E'
Controllescri	Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.  Of Measures (identify needed maintenance and repairs, failed control measures that need ption of corrective actions in relevant task comments).  Asphalt Berm [6000203040011] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Gravel Bags [6000203100008] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Eco-Block [6000203110003] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rock Channel/Swale [6000204030004] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.	d replaci	ment, c	or a	
30 140 150	Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.  DI Measures (identify needed maintenance and repairs, failed control measures that need ption of corrective actions in relevant task comments).  Asphalt Berm [6000203040011] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Gravel Bags [6000203100008] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Eco-Block [6000203110003] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rock Channel/Swale [6000204030004] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060006] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.	d replaci	ment, c	F F F F F F F F F F F F F F F F F F F	
Control   130   140   150   160   17	Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.  Di Measures (identify needed maintenance and repairs, failed control measures that need ption of corrective actions in relevant task comments).  Asphalt Berm [6000203040011] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Gravel Bags [6000203100008] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Eco-Block [6000203110003] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rock Channel/Swale [6000204030004] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060006] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060007] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060007] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.	d replaci	ment, c	F F F F F F F F F F F F F F F F F F F	
Contr	Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.  DI Measures (identify needed maintenance and repairs, failed control measures that need ption of corrective actions in relevant task comments).  Asphalt Berm [6000203040011] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Gravel Bags [6000203100008] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Eco-Block [6000203110003] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rock Channel/Swale [6000204030004] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060006] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060007] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Base Course Swale [6000204100002] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.	d replaci	ment, c	F F F F F F F F F F F F F F F F F F F	
30   40   150   170   180	Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.  DI Measures (identify needed maintenance and repairs, failed control measures that need ption of corrective actions in relevant task comments).  Asphalt Berm [6000203040011] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Gravel Bags [6000203100008] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Eco-Block [6000203110003] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rock Channel/Swale [6000204030004] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060006] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060007] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Base Course Swale [6000204100002] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rock Check Dam [6000206010005] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.	d replaci	ment, c		
30   140   150   160   170   180   190   1	Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.  DI Measures (identify needed maintenance and repairs, failed control measures that need ption of corrective actions in relevant task comments).  Asphalt Berm [6000203040011] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Gravel Bags [6000203100008] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Eco-Block [6000203110003] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rock Channel/Swale [6000204030004] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060006] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060007] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Base Course Swale [6000204100002] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rock Check Dam [6000206010005] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Trench Drain [6000209040001] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.	d replaci	ment, c		
Control   Cont	Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.  DI Measures (identify needed maintenance and repairs, failed control measures that need ption of corrective actions in relevant task comments).  Asphalt Berm [6000203040011] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Gravel Bags [6000203100008] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Eco-Block [6000203110003] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rock Channel/Swale [6000204030004] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060006] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060007] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Base Course Swale [6000204100002] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rock Check Dam [6000206010005] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Trench Drain [6000209040001] Control Measure is operating effectively? If "No"	d replaci			

"No" describe condition & need for Maintenance, Repair, or Replacement.  EnviroSoxx w/ MetalLoxx [6000203200021] Control Measure is operating effectively?	14			
"No" describe condition & need for Maintenance, Repair, or Replacement.				
EnviroSoxx w/ MetalLoxx [6000203200022] Control Measure is operating effectively? "No" describe condition & need for Maintenance, Repair, or Replacement.	lf		П	[~
ctivity exposed to stormwater (identify needed mainteance or a description of corre	ctive actio	ns in rel	evant t	ask
Material loading/unloading and storage areas: controls adequate (appropriate, effective, and operating)? If "No" describe.		Г	П	<b>~</b>
Transfer areas for substances in bulk: controls adequate (appropriate, effective, and			/	
		- 1		
and operating)? If "No" describe.				П
Liquid tank storage/secondary containment: controls adequate (appropriate, effective, and operating)? If "No" describe.		ш	<b>[</b>	<b>′</b> п
effective, and operating)? If "No" describe.	,	Ţį.	<u>-</u>	
Equipment operation and maintenance areas: controls adequate (appropriate, effective, and operating)? If "No" describe.			F	
Fueling areas: controls adequate (appropriate, effective, and operating)? If "No" describe.		П	<b>E</b> /	_
	,		_ <u></u>	7
Machinery: controls adequate (appropriate, effective, and operating)? If "No" describe.			Г	F
Waste handling and disposal areas: controls adequate (appropriate, effective, and operating)? If "No" describe.			<b>-/</b>	´
			<u>~</u>	 
Locations and sources of run-on to the site: controls adequate (appropriate, effective, and operating)? If "No" describe.		П		П
Non-stormwater/illicit connections: controls adequate (appropriate, effective, and operating)? If "No" describe.			P	
operating)? If "No" describe.			P/	<u></u>
operating)? If "No" describe.		ட	_F_	
Housekeeping (Industrial materials/residues/trash in contact with stormwater): controls adequate (appropriate, effective, and operating)? If "No" describe.				<b>~</b>
Leaks and spills: controls adequate (appropriate, effective, and operating)? If "No" describe.			F/	<u>_</u>
ompliance				
Free of incidents of observed non-compliance not already identified above? If "No" describe.			п	<b>5</b> /
enal Control Measures				
Are permit requirements satisfied with existing control measure(s)? If "No" describe additional control measures needed.				_F_
		-		
Assigned Work Date	Reg Hrs	OT Hr	s Oth	er Hrs
d Sandoval 1/15/2019 / 1				
Report				
Report				
	"No" describe condition & need for Maintenance, Repair, or Replacement.  ctivity exposed to stormwater (identify needed mainteance or a description of corre int).  Material loading/unloading and storage areas: controls adequate (appropriate, effective, and operating)? If "No" describe.  Transfer areas for substances in bulk: controls adequate (appropriate, effective, and operating)? If "No" describe.  Product/chemical storage areas (raw material): controls adequate (appropriate, effective, and operating)? If "No" describe.  Product/chemical storage areas (raw material): controls adequate (appropriate, effective, and operating)? If "No" describe.  Industrial processing and finished product storage areas: controls adequate (appropriate, effective, and operating)? If "No" describe.  Equipment operation and maintenance areas: controls adequate (appropriate, effective, and operating)? If "No" describe.  Equipment operation and maintenance areas: controls adequate (appropriate, effective, and operating)? If "No" describe.  Equipment operations adequate (appropriate, effective, and operating)? If "No" describe.  Machinery: controls adequate (appropriate, effective, and operating)? If "No" describe.  Machinery: controls adequate (appropriate, effective, and operating)? If "No" describe.  Waste handling and disposal areas: controls adequate (appropriate, effective, and operating)? If "No" describe.  Locations and sources of run-on to the site: controls adequate (appropriate, effective, and operating)? If "No" describe.  Non-stormwater/illicit connections: controls adequate (appropriate, effective, and operating)? If "No" describe.  Non-stormwater/illicit connections: controls adequate (appropriate, effective, and operating)? If "No" describe.  Non-stormwater/illicit connections: controls adequate (appropriate, effective, and operating)? If "No" describe.  Non-stormwater/illicit connections: controls adequate (appropriate, effective, and operating)? If "No" describe.  Housekeeping (Industrial materials/residues/trash in	"No" describe condition & need for Maintenance, Repair, or Replacement.  ctivity exposed to stormwater (identify needed mainteance or a description of corrective actions).  Material loading/unloading and storage areas: controls adequate (appropriate, effective, and operating)? If "No" describe.  Product/chemical storage areas (raw material): controls adequate (appropriate, effective, and operating)? If "No" describe.  Product/chemical storage areas (raw material): controls adequate (appropriate, effective, and operating)? If "No" describe.  Liquid tank storage/secondary containment: controls adequate (appropriate, effective, and operating)? If "No" describe.  Liquid tank storage/secondary containment: controls adequate (appropriate, effective, and operating)? If "No" describe.  Liquid tank and maintenance areas: controls adequate (appropriate, effective, and operating)? If "No" describe.  Equipment operation and maintenance areas: controls adequate (appropriate, effective, and operating)? If "No" describe.  Outdoor vehicle and equipment washing areas: controls adequate (appropriate, effective, and operating)? If "No" describe.  Waste handling and disposal areas: controls adequate (appropriate, effective, and operating)? If "No" describe.  Waste handling and disposal areas: controls adequate (appropriate, effective, and operating)? If "No" describe.  Waste handling and disposal areas: controls adequate (appropriate, effective, and operating)? If "No" describe.  Locations and sources of run-on to the site: controls adequate (appropriate, effective, and operating)? If "No" describe.  Non-stormwater/illicit connections: controls adequate (appropriate, effective, and operating)? If "No" describe.  Dust generation and vehicle tracking: controls adequate (appropriate, effective, and operating)? If "No" describe.  Dust generation and vehicle tracking: controls adequate (appropriate, effective, and operating)? If "No" describe.  Leaks and spills: controls adequate (appropriate, effective, and operating)? If "No" describ	"No" describe condition & need for Maintenance, Repair, or Replacement.  ctivity exposed to stormwater (identify needed mainteance or a description of corrective actions in rel int).  Material loading/unloading and storage areas: controls adequate (appropriate, effective, and operating)? If "No" describe.  Transfer areas for substances in bulk: controls adequate (appropriate, effective, and operating)? If "No" describe.  Product/chemical storage areas (raw material): controls adequate (appropriate, effective, and operating)? If "No" describe.  Liquid tank storage/secondary containment: controls adequate (appropriate, effective, and operating)? If "No" describe.  Industrial processing and finished product storage areas: controls adequate (appropriate, effective, and operating)? If "No" describe.  Fueling areas: controls adequate (appropriate, effective, and operating)? If "No" describe.  Fueling areas: controls adequate (appropriate, effective, and operating)? If "No" describe.  Machinery: controls adequate (appropriate, effective, and operating)? If "No" describe.  Machinery: controls adequate (appropriate, effective, and operating)? If "No" describe.  Machinery: controls adequate (appropriate, effective, and operating)? If "No" describe.  Fueling and disposal areas: controls adequate (appropriate, effective, and operating)? If "No" describe.  Machinery: controls adequate (appropriate, effective, and operating)? If "No" describe.  Fuel operating If If No" describe.  Fuel operating	"No" describe condition & need for Maintenance, Repair, or Replacement.  Citivity exposed to stormwater (identify needed mainteance or a description of corrective actions in relevant timt).  Material loading/unloading and storage areas: controls adequate (appropriate, effective, and operating)? If "No" describe.  Transfer areas for substances in bulk: controls adequate (appropriate, effective, and operating)? If "No" describe.  Product/chemical storage areas (raw material): controls adequate (appropriate, effective, and operating)? If "No" describe.  Liquid tank storage/secondary containment: controls adequate (appropriate, effective, and operating)? If "No" describe.  Liquid tank storage/secondary containment: controls adequate (appropriate, effective, and operating)? If "No" describe.  Industrial processing and finished product storage areas: controls adequate (appropriate, effective, and operating)? If "No" describe.  Equipment operation and maintenance areas: controls adequate (appropriate, effective, and operating)? If "No" describe.  Cution vehicle and equipment washing areas: controls adequate (appropriate, effective, and operating)? If "No" describe.  Machinery: controls adequate (appropriate, effective, and operating)? If "No" describe.  Machinery: controls adequate (appropriate, effective, and operating)? If "No" describe.  Coditions and sources of run-on to the site: controls adequate (appropriate, effective, and operating)? If "No" describe.  Salt storage piles or pile containing salt: controls adequate (appropriate, effective, and operating)? If "No" describe.  Salt storage piles or pile containing salt: controls adequate (appropriate, effective, and operating)? If "No" describe.  Salt storage piles or pile containing salt: controls adequate (appropriate, effective, and operating)? If "No" describe.  Cutions and experiments adequate (appropriate, effective, and operating)? If "No" describe.  Cutions and experiments adequate (appropriate, effective, and operating)? If "No" describe.  Cutions and exp

) ID:	Page of	
merz#: Learnd F. Su	hal 114326	

"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, DESH Group Leader, EPC Group Leader)

Print name and title: Russell Stone GL DESH-UTS

Signature: Reveal Stone Date: 1/28/2019

## Los Alamos National Lab - ALDESHQSS

### Work Order MSGP-RI-63472

MSGP Routine Inspection Printed 2/12/2019 - 9:04 AM

lainte	nance Details	F	rinted 2	:/12/2019	9 - 9:04 AN
Proced Last Pi Project	Iure: MSGP Routine Facility Inspection (EPC-CP-Form- 1020.2)  M: 12/17/2018 2 21 2019	MSGP Program RG121.9 TA-60 MRF Contact:			
asks					
#	Description	Meas.	No	N/A	Yes
Weath	er Information				_
20	Describe the weather at time of inspection and document the temperature (F°).		工		_F_
Within	the Facility Boundary				
	Is the facility free of new discharges of pollutants that have occurred since the las	t			
40	inspection? If "Failed" describe.	4	$\Box$		
50	If "No" has a CAR been previously initiated for this new discharge?			F	
60	Is the facility free of discharge of pollutants at the time of inspection? If "No" description and the facility free of discharge of pollutants at the time of inspection?	ibe.			V
70	Is the facility free of evidence of, or the potential for, pollutants entering the draina	ge			_/
70	system. If "No" describe	7			
	Inspection (identify needed maintenance and repairs, failed control measures	that need replac	ement,	or a	
aescri <sub>l</sub> 90	ption of corrective actions in relevant task comment)		_	_	-/
90	Monitored Outfall [029] Free of Evidence of Erosion? If "No", describe.  Monitored Outfall [029] Flow Dissipation Devices Operating Effectively? If "No",				<u> </u>
100	describe.		П		
	Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Rec	eiving			
110	Water? If "No", describe.				
120	Monitored Outfall [029] Free of any unauthorized non-stormwater discharges? If describe.	"No"	_	_	_/
120	describe.				
	of Measures (identify needed maintenance and repairs, failed control measures	that need replac	ment, c	or a	
aescn	ption of corrective actions in relevant task comments). Asphalt Berm [6000203040011] Control Measure is operating effectively? If "No"	ı			
140	describe condition & need for Maintenance, Repair, or Replacement.		г	г	<b>c</b> /
	Gravel Bags [6000203100008] Control Measure is operating effectively? If "No"				_~_
150	describe condition & need for Maintenance, Repair, or Replacement.		$_{\perp}\Gamma_{\perp}$	工	_F_
100	Eco-Block [6000203110003] Control Measure is operating effectively? If "No" de	scribe		_	_/
160	condition & need for Maintenance, Repair, or Replacement.	N 15 HN 1 H		. <u> </u>	
170	Rock Channel/Swale [6000204030004] Control Measure is operating effectively describe condition & need for Maintenance, Repair, or Replacement.	/ IT "NO"		_	<b>-</b> /
-	Rip Rap [6000204060006] Control Measure is operating effectively? If "No" described and the second s	ribe			<u></u>
180	condition & need for Maintenance, Repair, or Replacement.	ARE .			_⊏∕
_	Rip Rap [6000204060007] Control Measure is operating effectively? If "No" description of the control of the con	ribe			
190	condition & need for Maintenance, Repair, or Replacement.		工	上	
200	<b>Base Course Swale [6000204100002]</b> Control Measure is operating effectively? describe condition & need for Maintenance, Repair, or Replacement.	It "No"		_	_/
	topialon a need for maintenance, repair, or replacement,				~

Rock Check Dam [6000206010005] Control Measure is operating effectively? If "No"

Trench Drain [6000209040001] Control Measure is operating effectively? If "No"

Retention Pond [6000211010009] Control Measure is operating effectively? If "No"

describe condition & need for Maintenance, Repair, or Replacement.

describe condition & need for Maintenance, Repair, or Replacement.

210

220

230

	describe condition & need for Maintenance, Repair, o	r Replacement.				
240	Drop Inlet with Floc logs [6000209030018] Control "No" describe condition & need for Maintenance, Rep	Measure is operating effectively? If air, or Replacement.			_	F/
250	EnviroSoxx w/ MetalLoxx [6000203200021] Control "No" describe condition & need for Maintenance, Rep	Measure is operating effectively? If air, or Replacement.		Б		F/
260	EnviroSoxx w/ MetalLoxx [6000203200022] Control "No" describe condition & need for Maintenance, Rep	Measure is operating effectively? If air, or Replacement.				F/
	ctivity exposed to stormwater (identify needed mair	nteance or a description of correc	tive action	s in rel	evant t	ask
comme	·	and an extended the second second				
280	Material loading/unloading and storage areas: control and operating)? If "No" describe.			上	工	_F/
290	Transfer areas for substances in bulk: controls adequoperating)? If "No" describe.			二		
300	Product/chemical storage areas (raw material): contro and operating)? If "No" describe.					
310	Liquid tank storage/secondary containment: controls a and operating)? If "No" describe.	adequate (appropriate, effective,			_ <del>_</del> _	<u></u>
320	Industrial processing and finished product storage are effective, and operating)? If "No" describe.	eas: controls adequate (appropriate,		Г	<b>~</b>	
330	Equipment operation and maintenance areas: control and operating)? If "No" describe.	s adequate (appropriate, effective,			F/	
340	Fueling areas: controls adequate (appropriate, effective describe.	ve, and operating)? If "No"				
350	Outdoor vehicle and equipment washing areas: control and operating)? If "No" describe.	ols adequate (appropriate, effective,				
360	Machinery: controls adequate (appropriate, effective,	and operating)? If "No" describe.				
370	Waste handling and disposal areas: controls adequate operating)? If "No" describe.					_ <u>~</u> _
380	Erodible areas/construction: controls adequate (appro	priate, effective, and operating)? If			<u>~</u>	
390	Locations and sources of run-on to the site: controls a and operating)? If "No" describe.	adequate (appropriate, effective,			<u>-</u>	<u></u>
100	Salt storage piles or pile containing salt: controls adec operating)? If "No" describe.	quate (appropriate, effective, and				
110	Dust generation and vehicle tracking: controls adequate operating)? If "No" describe.	ate (appropriate, effective, and		П	<u></u>	Г
120	Housekeeping (Industrial materials/residues/trash in cadequate (appropriate, effective, and operating)? If "N				П	
130	Leaks and spills: controls adequate (appropriate, effective describe.	ctive, and operating)? If "No"		Б		
lon-Co	ompliance					
150	Free of incidents of observed non-compliance not alredescribe.	eady identified above? If "No"				_F′
Additio	nal Control Measures					
170	Are permit requirements satisfied with existing control additional control measures needed.	measure(s)? If "No" describe				F/
_				-	_	
bor						
_abor		Assigned Work Date	Reg Hrs	OT Hr	s Oth	er Hrs
.eonard	d Sandoval	2/11/2019 / 1	-			
ıbor F	Report					
omple	eted:					
Report:						

to 10" of vecent some	Vericle on with	real Carred with a tare	
	915 2 115		
1-1741			
Legnard F. Sandaral	2/21/2019 10:	30 a.m.	
Signature / Name	Date	Signature / Name	Date
nfirm the information as recorde	d is true accurate and com	nlete	

"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 here are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations".

rint name and title:	Russell	Stone	GC	DESH	-uts	
Signature:	Zerall !	Ster		Date:_	2/25/2019	

Maintenance Details -

### Work Order MSGP-RI-63481

MSGP Routine Inspection Printed 2/26/2019 - 12:07 PM

	Sted: 2/26/2019 11:51:57 AM  Iure: MSGP Routine Facility Inspection (EPC-CP-Form-1020.2)  Target: 3/31/2019  ⇒ MSGP Programment: Utilities and Infrastructure  TA-60 MRF				
.ast P Projec	Routine Facility Inspections March 2019 (P-MSGP-RI- 5355)  Contact: Phone:  Contact: Phone:				
Reaso	1: 2019 March Inspections  Wind - Less Han Smph  8: 40 a.m.				
asks					
#	Description Me	as.	No	N/A	Yes
Neath	er Information				
20	Describe the weather at time of inspection and document the temperature (F°).				_F/
<b>Vithir</b>	the Facility Boundary				
	Is the facility free of new discharges of pollutants that have occurred since the last				
10	inspection? If "Failed" describe.		Г.	Г,	P
50	If "No" has a CAR been previously initiated for this new discharge?		<u>Б</u>		_드,
80	Is the facility free of discharge of pollutants at the time of inspection? If "No" describe.			- 3/1-	_F/
'0	Is the facility free of evidence of, or the potential for, pollutants entering the drainage system. If "No" describe.			г	<b>C</b> /
00	Monitored Outfall [029] Flow Dissipation Devices Operating Effectively? If "No", describe.		匚		_⊏∕
110	Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.		Г		<b>F</b> /
120	Monitored Outfall [029] Free of any unauthorized non-stormwater discharges? If "No" describe.		Г		_F/
	ol Measures (identify needed maintenance and repairs, failed control measures that need re ption of corrective actions in relevant task comments).	placm	ent, c	ra	
140	Applied Down (C000202040044) Control Magazine is apprehing affectively Of this				
150	Asphalt Berm [6000203040011] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		Г		
				_r _r	
160	describe condition & need for Maintenance, Repair, or Replacement.  Gravel Bags [6000203100008] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Eco-Block [6000203110003] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.				[ [ [
	describe condition & need for Maintenance, Repair, or Replacement.  Gravel Bags [6000203100008] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Eco-Block [6000203110003] Control Measure is operating effectively? If "No" describe				D/D/D/D/D/D/D/D/D/D/D/D/D/D/D/D/D/D/D/
170	describe condition & need for Maintenance, Repair, or Replacement.  Gravel Bags [6000203100008] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Eco-Block [6000203110003] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rock Channel/Swale [6000204030004] Control Measure is operating effectively? If "No"				
170 180	describe condition & need for Maintenance, Repair, or Replacement.  Gravel Bags [6000203100008] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Eco-Block [6000203110003] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rock Channel/Swale [6000204030004] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060006] Control Measure is operating effectively? If "No" describe				
160 170 180 190	describe condition & need for Maintenance, Repair, or Replacement.  Gravel Bags [6000203100008] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Eco-Block [6000203110003] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rock Channel/Swale [6000204030004] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060006] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060007] Control Measure is operating effectively? If "No" describe				
170 180 190	describe condition & need for Maintenance, Repair, or Replacement.  Gravel Bags [6000203100008] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Eco-Block [6000203110003] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rock Channel/Swale [6000204030004] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060006] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060007] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Base Course Swale [6000204100002] Control Measure is operating effectively? If "No"				
170 180 190	describe condition & need for Maintenance, Repair, or Replacement.  Gravel Bags [6000203100008] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Eco-Block [6000203110003] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement,  Rock Channel/Swale [6000204030004] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060006] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060007] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Base Course Swale [6000204100002] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rock Check Dam [6000206010005] Control Measure is operating effectively? If "No"				

	Drop Inlet with Floc logs [6000209030018] Control Measure is operating effectively? If		
240	"No" describe condition & need for Maintenance, Repair, or Replacement.	Б	<u> </u>
250	EnviroSoxx w/ MetalLoxx [6000203200021] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.	- T	ПБ
260	EnviroSoxx w/ MetalLoxx [6000203200022] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.	П	ПБ
\ #00/A	ctivity exposed to stormwater (identify needed mainteance or a description of correct	ivo actions in re	lovent took
omme		ive actions in re	ilevanit task
	Material loading/unloading and storage areas: controls adequate (appropriate, effective,		
280	and operating)? If "No" describe.		
290	Transfer areas for substances in bulk: controls adequate (appropriate, effective, and operating)? If "No" describe.		<u> </u>
200	Product/chemical storage areas (raw material): controls adequate (appropriate, effective,	_	_/_
300	and operating)? If "No" describe.  Liquid tank storage/secondary containment: controls adequate (appropriate, effective,		
310	and operating)? If "No" describe.		<u> </u>
320	Industrial processing and finished product storage areas: controls adequate (appropriate, effective, and operating)? If "No" describe.	Г	E L
200	Equipment operation and maintenance areas: controls adequate (appropriate, effective,		_/_
330	and operating)? If "No" describe.  Fueling areas: controls adequate (appropriate, effective, and operating)? If "No"	1	
340	describe.	П	
350	Outdoor vehicle and equipment washing areas: controls adequate (appropriate, effective, and operating)? If "No" describe.	_	_/ -
350 360	Machinery: controls adequate (appropriate, effective, and operating)? If "No" describe.		_ <u> -</u>  -
	Waste handling and disposal areas: controls adequate (appropriate, effective, and		
370	operating)? If "No" describe.		
380	Erodible areas/construction: controls adequate (appropriate, effective, and operating)? If "No" describe.		PI
390	Locations and sources of run-on to the site: controls adequate (appropriate, effective, and operating)? If "No" describe.		P
400	Salt storage piles or pile containing salt: controls adequate (appropriate, effective, and operating)? If "No" describe.	Г	FI
410	Dust generation and vehicle tracking: controls adequate (appropriate, effective, and operating)? If "No" describe.		г/ г
110	Housekeeping (Industrial materials/residues/trash in contact with stormwater): controls 2	charto	/
420	adequate (appropriate, effective, and operating)? If "No" describe.	of Report P	
430	Leaks and spills: controls adequate (appropriate, effective, and operating)? If "No" describe.	, <u> </u>	<u> </u>
Non-Co	mpliance		
450	Free of incidents of observed non-compliance not already identified above? If "No"	_	
450	describe.		
Additio	nal Control Measures		
470	Are permit requirements satisfied with existing control measure(s)? If "No" describe additional control measures needed.	_	
+70	additional control measures needed.		
abor			3 -
Labor	Assigned Work Date	Reg Hrs OT I	irs Other i
Leonard	Sandoval 2/26/2019 / 1		
abor R	Report		
Comple	stad:		
	TAME TO SERVICE TO SER		

Lind blown top in 1	Le Concet Ve	tention pand entered as	a harsteeping
Damaged metal Bollard	& Knocked dain	Stop Sign at the entains	AR# 1478.
Leaned F. Sandah	3/19/2019 9:150	1.m.	
Signature / Name I confirm the information as recorded	is true, accurate and con	Signature / Name nplete.	Date

"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".

Print name and title: Russell Store	UI DESH GL
Signature: Result Str	Date: 3/25/2019

**Maintenance Details** 

### Work Order MSGP-RI-63546

MSGP Routine Inspection Printed 4/9/2019 - 2:32 PM

Request	ed: 4/9/2019 2:07:07 PM Target: 4/30/2019 SGP				
Procedu	re: MSGP Routine Facility Priority/Type: Normal / Inspection 品 RG121				
	Inspection (EPC-CP-Form- Department: Utilities and Infrastructure ATA-60 I	MRF			
and DM	1020.2) 4/24/2019 Five 36°FUhish of 63°F				
ast PM:	O's 16. July Contrate				
Project:	Routine Facility Inspections April 2019 (P-MSGP-RI-				
	5361)				
	Dird-Super				
Reason:	MSGP Routine Facility Inspection				
ooko					
asks -					
#	Description	Meas.	No	N/A	Yes
	•				
Weathe	Information				
20	Describe the weather at time of inspection and document the temperature (F°).				
Within t	he Facility Boundary				
	Is the facility free of new discharges of pollutants that have occurred since the last				
40	inspection? If "Failed" describe.				F
50	If "No" has a CAR been previously initiated for this new discharge?			P/	
30	Is the facility free of discharge of pollutants at the time of inspection? If "No" describe.			F	E/
	Is the facility free of evidence of, or the potential for, pollutants entering the drainage				
70	system. If "No" describe.				
90	Monitored Outfall [029] Free of Evidence of Erosion? If "No", describe.  Monitored Outfall [029] Flow Dissipation Devices Operating Effectively? If "No",				
100	describe.		ــــــــــــــــــــــــــــــــــــــ	i	
110	Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.			Г	<u> [</u>
	Monitored Outfall [029] Free of any unauthorized non-stormwater discharges? If "No"		_	_	_/
120	describe.				
	Measures (identify needed maintenance and repairs, failed control measures that nee	d replaci	ment, c	or a	
descript	tion of corrective actions in relevant task comments).				
140	Asphalt Berm [6000203040011] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.			_	_/
140					
150	Gravel Bags [6000203100008] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.				<b>E</b> /
100	Eco-Block [6000203110003] Control Measure is operating effectively? If "No" describe				
160	condition & need for Maintenance, Repair, or Replacement.				<b>F</b> /
100	Rock Channel/Swale [6000204030004] Control Measure is operating effectively? If "No"				
170	describe condition & need for Maintenance, Repair, or Replacement.				
-	Rip Rap [6000204060006] Control Measure is operating effectively? If "No" describe				
180	condition & need for Maintenance, Repair, or Replacement.				F/
190	Rip Rap [6000204060007] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.			Г	
	Base Course Swale [6000204100002] Control Measure is operating effectively? If "No"			, (	
200	describe condition & need for Maintenance, Repair, or Replacement.				F/
	Rock Check Dam [6000206010005] Control Measure is operating effectively? If "No"				
210	describe condition & need for Maintenance, Repair, or Replacement.				_F/
	Trench Drain [6000209040001] Control Measure is operating effectively? If "No"				
220	describe condition & need for Maintenance, Repair, or Replacement.				P
230	Potentian Pand [6000211010009] Control Measure is operating effectively? If "No"				E/

	Report eted:				
<b>_abor</b> _eonar	d Sandoval  Assigned Work Date 4/1/2019 / 1	Reg Hrs	OT Hr	s Oth	er Hi
abor					
170	Are permit requirements satisfied with existing control measure(s)? If "No" describe additional control measures needed.		<u></u>	Б	
Additio	onal Control Measures				
<b>lon-C</b>	ompliance Free of incidents of observed non-compliance not already identified above? If "No" describe.				_F
130	Leaks and spills: controls adequate (appropriate, effective, and operating)? If "No" describe.			<u>_</u>	Г
120	Housekeeping (Industrial materials/residues/trash in contact with stormwater): controls adequate (appropriate, effective, and operating)? If "No" describe.			Г	F
10	Dust generation and vehicle tracking: controls adequate (appropriate, effective, and operating)? If "No" describe.			<b>F</b> /	<u></u>
100	Salt storage piles or pile containing salt: controls adequate (appropriate, effective, and operating)? If "No" describe.		Г	 F/	
390	Locations and sources of run-on to the site: controls adequate (appropriate, effective, and operating)? If "No" describe.			<u></u>	
380	Erodible areas/construction: controls adequate (appropriate, effective, and operating)? If "No" describe.			<u>-</u>	
370	Waste handling and disposal areas: controls adequate (appropriate, effective, and operating)? If "No" describe.				_ <u>~</u> _
50 60	and operating)? If "No" describe.  Machinery: controls adequate (appropriate, effective, and operating)? If "No" describe.		Ę	<u></u>	
40	Fueling areas: controls adequate (appropriate, effective, and operating)? If "No" describe.  Outdoor vehicle and equipment washing areas: controls adequate (appropriate, effective,			<b>P</b>	<u></u>
30	Equipment operation and maintenance areas: controls adequate (appropriate, effective, and operating)? If "No" describe.		ഥ	<u></u> F/	
320	Industrial processing and finished product storage areas: controls adequate (appropriate, effective, and operating)? If "No" describe.			<b>P</b>	
310	Liquid tank storage/secondary containment: controls adequate (appropriate, effective, and operating)? If "No" describe.			_F/	
300	Product/chemical storage areas (raw material): controls adequate (appropriate, effective, and operating)? If "No" describe.		Г	P	
290	Transfer areas for substances in bulk: controls adequate (appropriate, effective, and operating)? If "No" describe.		Б		
Area/A commo 280	activity exposed to stormwater (identify needed mainteance or a description of correction).  Material loading/unloading and storage areas: controls adequate (appropriate, effective, and operating)? If "No" describe.	ive actions	s in rele	evant t	ask
260	"No" describe condition & need for Maintenance, Repair, or Replacement.				
250	EnviroSoxx w/ MetalLoxx [6000203200021] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  EnviroSoxx w/ MetalLoxx [6000203200022] Control Measure is operating effectively? If				_⊏∕
40	"No" describe condition & need for Maintenance, Repair, or Replacement.		<del></del> _	- 1	

at. The MetalLoxx L	ith Enlivo-Sox L	141th at the canceled	charties pand
Jake also replaced.			
1 124 1			
Leaned F. Sandulal	4/24/2019 11:06	ım.	
Signature / Name	Date	Signature / Name	Date
nfirm the information as record	ed is true, accurate and com	nlete	

"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".

Print name and title: Russell Stone G	SL DOSH -UTS
Signature: Russell Stee Laven Armijo DOE Campliance of Pe Karen had questions regarding the	Date: 4/28/2019  amitting uso present during the inspection e variety release of recycled material fram

**Maintenance Details** 

### Work Order MSGP-63661

MSGP Monitoring Stations Printed 5/8/2019 - 11:35 AM

-	ted: 5/8/2019 11:30:29 AM Target: 5/31/2019	Program 1.9			
	Inspection (EPC-CP-Form- Department: Utilities and Infrastructure 🎄 TA-60				
4 584	1020.2) 5/K/2019 The SOFI high of 74°F				
ast PM: roject:	- 4/24/2019   1 /24/2019				
rojeci.	May 2019 (P-MSGP-RI-				
	Und Stoll mph				
eason:	5371) Wind Stolomph MSGP Routine Facility Inspection 8:07 a.m.				
	0 0 1 1				
asks					
м	Description				
#	Description	Meas.	No	N/A	Yes
	r Information				
20	Describe the weather at time of inspection and document the temperature (F°).		ഥ	工	<u>_</u> F_
Nithin t	the Facility Boundary				
	Is the facility free of new discharges of pollutants that have occurred since the last				
10	inspection? If "Failed" describe.			工	F
50	If "No" has a CAR been previously initiated for this new discharge?			_ [ _	Г
30	Is the facility free of discharge of pollutants at the time of inspection? If "No" describe.		_⊏_	匚	
70	Is the facility free of evidence of, or the potential for, pollutants entering the drainage system. If "No" describe.		_	_	
0	system, if No describe.				
lescrip	Inspection (identify needed maintenance and repairs, failed control measures that need tion of corrective actions in relevant task comment)  Monitored Outfall [029] Free of Evidence of Erosion? If "No", describe.				_F⁄
	tion of corrective actions in relevant task comment)			ога  Г	<u>_</u>
descript 90	tion of corrective actions in relevant task comment)  Monitored Outfall [029] Free of Evidence of Erosion? If "No", describe.  Monitored Outfall [029] Flow Dissipation Devices Operating Effectively? If "No",				\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
descript 90 100 110	tion of corrective actions in relevant task comment)  Monitored Outfall [029] Free of Evidence of Erosion? If "No", describe.  Monitored Outfall [029] Flow Dissipation Devices Operating Effectively? If "No", describe.  Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.  Monitored Outfall [029] Free of any unauthorized non-stormwater discharges? If "No"				F'  F'
descript 90 100 110	tion of corrective actions in relevant task comment)  Monitored Outfall [029] Free of Evidence of Erosion? If "No", describe.  Monitored Outfall [029] Flow Dissipation Devices Operating Effectively? If "No", describe.  Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.				F' F' F'
descript 90 100 110 120 Control	tion of corrective actions in relevant task comment)  Monitored Outfall [029] Free of Evidence of Erosion? If "No", describe.  Monitored Outfall [029] Flow Dissipation Devices Operating Effectively? If "No", describe.  Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.  Monitored Outfall [029] Free of any unauthorized non-stormwater discharges? If "No" describe.  Measures (identify needed maintenance and repairs, failed control measures that needed maintenance and repairs, failed control measures that needed maintenance and repairs.				F' F'
descript 90 100 110 120 Control	tion of corrective actions in relevant task comment)  Monitored Outfall [029] Free of Evidence of Erosion? If "No", describe.  Monitored Outfall [029] Flow Dissipation Devices Operating Effectively? If "No", describe.  Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.  Monitored Outfall [029] Free of any unauthorized non-stormwater discharges? If "No" describe.  Measures (identify needed maintenance and repairs, failed control measures that need to of corrective actions in relevant task comments).				F/ F/
descript  100  110  120  Control descript	tion of corrective actions in relevant task comment)  Monitored Outfall [029] Free of Evidence of Erosion? If "No", describe.  Monitored Outfall [029] Flow Dissipation Devices Operating Effectively? If "No", describe.  Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.  Monitored Outfall [029] Free of any unauthorized non-stormwater discharges? If "No" describe.  Measures (identify needed maintenance and repairs, failed control measures that needed maintenance and repairs, failed control measures that needed maintenance and repairs.		F.	Г Г Г га	
descript  100  110  120  Control descript	Monitored Outfall [029] Free of Evidence of Erosion? If "No", describe.  Monitored Outfall [029] Flow Dissipation Devices Operating Effectively? If "No", describe.  Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.  Monitored Outfall [029] Free of any unauthorized non-stormwater discharges? If "No" describe.  Measures (identify needed maintenance and repairs, failed control measures that need tion of corrective actions in relevant task comments).  Asphalt Berm [6000203040011] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Gravel Bags [6000203100008] Control Measure is operating effectively? If "No"			Г Г Г га	F'   F'   F'   F'   F'   F'   F'   F'
description 100 110 120 Control description	Monitored Outfall [029] Free of Evidence of Erosion? If "No", describe.  Monitored Outfall [029] Flow Dissipation Devices Operating Effectively? If "No", describe.  Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.  Monitored Outfall [029] Free of any unauthorized non-stormwater discharges? If "No" describe.  Monitored Outfall [029] Free of any unauthorized non-stormwater discharges? If "No" describe.  Measures (identify needed maintenance and repairs, failed control measures that need tion of corrective actions in relevant task comments).  Asphalt Berm [6000203040011] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Gravel Bags [6000203100008] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		F.	Г Г Г га	
descript 100 110 120 Control descript 140	Monitored Outfall [029] Free of Evidence of Erosion? If "No", describe.  Monitored Outfall [029] Flow Dissipation Devices Operating Effectively? If "No", describe.  Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.  Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.  Monitored Outfall [029] Free of any unauthorized non-stormwater discharges? If "No" describe.  Measures (identify needed maintenance and repairs, failed control measures that need tion of corrective actions in relevant task comments).  Asphalt Berm [6000203040011] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Gravel Bags [6000203100008] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Eco-Block [6000203110003] Control Measure is operating effectively? If "No" describe		F.	Г Г Г га	
descript 90 100 110 120 Control	Monitored Outfall [029] Free of Evidence of Erosion? If "No", describe.  Monitored Outfall [029] Flow Dissipation Devices Operating Effectively? If "No", describe.  Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.  Monitored Outfall [029] Free of any unauthorized non-stormwater discharges? If "No" describe.  Monitored Outfall [029] Free of any unauthorized non-stormwater discharges? If "No" describe.  Measures (identify needed maintenance and repairs, failed control measures that need tion of corrective actions in relevant task comments).  Asphalt Berm [6000203040011] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Gravel Bags [6000203100008] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Eco-Block [6000203110003] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		F.	Г Г Г га	
descript 100 110 120 Control descript 140 150	Monitored Outfall [029] Free of Evidence of Erosion? If "No", describe.  Monitored Outfall [029] Flow Dissipation Devices Operating Effectively? If "No", describe.  Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.  Monitored Outfall [029] Free of any unauthorized non-stormwater discharges? If "No" describe.  Monitored Outfall [029] Free of any unauthorized non-stormwater discharges? If "No" describe.  Measures (identify needed maintenance and repairs, failed control measures that need tion of corrective actions in relevant task comments).  Asphalt Berm [6000203040011] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Gravel Bags [6000203100008] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Eco-Block [6000203110003] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rock Channel/Swale [6000204030004] Control Measure is operating effectively? If "No"		F.	Г Г Г га	
descript 100 110 120 Control descript 140	Monitored Outfall [029] Free of Evidence of Erosion? If "No", describe.  Monitored Outfall [029] Flow Dissipation Devices Operating Effectively? If "No", describe.  Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.  Monitored Outfall [029] Free of any unauthorized non-stormwater discharges? If "No" describe.  Monitored Outfall [029] Free of any unauthorized non-stormwater discharges? If "No" describe.  Measures (identify needed maintenance and repairs, failed control measures that need tion of corrective actions in relevant task comments).  Asphalt Berm [6000203040011] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Gravel Bags [6000203100008] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Eco-Block [6000203110003] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rock Channel/Swale [6000204030004] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		F.	Г Г Г га	
descript 100 110 120 Control descript 140 150	Monitored Outfall [029] Free of Evidence of Erosion? If "No", describe.  Monitored Outfall [029] Flow Dissipation Devices Operating Effectively? If "No", describe.  Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.  Monitored Outfall [029] Free of any unauthorized non-stormwater discharges? If "No" describe.  Monitored Outfall [029] Free of any unauthorized non-stormwater discharges? If "No" describe.  Measures (identify needed maintenance and repairs, failed control measures that need tion of corrective actions in relevant task comments).  Asphalt Berm [6000203040011] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Gravel Bags [6000203100008] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Eco-Block [6000203110003] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rock Channel/Swale [6000204030004] Control Measure is operating effectively? If "No"		F.	Г Г Г га	
descript 100 110 120 Control descript 140 150	Monitored Outfall [029] Free of Evidence of Erosion? If "No", describe.  Monitored Outfall [029] Flow Dissipation Devices Operating Effectively? If "No", describe.  Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.  Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.  Monitored Outfall [029] Free of any unauthorized non-stormwater discharges? If "No" describe.  Measures (identify needed maintenance and repairs, failed control measures that neetion of corrective actions in relevant task comments).  Asphalt Berm [6000203040011] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Gravel Bags [6000203100008] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Eco-Block [6000203110003] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rock Channel/Swale [6000204030004] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060006] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060007] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		F.	Г Г Г га	
descript 100 110 120 Control descript 140 150	Monitored Outfall [029] Free of Evidence of Erosion? If "No", describe.  Monitored Outfall [029] Flow Dissipation Devices Operating Effectively? If "No", describe.  Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.  Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.  Monitored Outfall [029] Free of any unauthorized non-stormwater discharges? If "No" describe.  Measures (identify needed maintenance and repairs, failed control measures that neetion of corrective actions in relevant task comments).  Asphalt Berm [6000203040011] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Gravel Bags [6000203100008] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Eco-Block [6000203110003] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rock Channel/Swale [6000204030004] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060006] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060007] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		F.	Г Г Г га	
descript 100 110 120 Control 140 150 160 170	Monitored Outfall [029] Free of Evidence of Erosion? If "No", describe.  Monitored Outfall [029] Flow Dissipation Devices Operating Effectively? If "No", describe.  Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.  Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.  Monitored Outfall [029] Free of any unauthorized non-stormwater discharges? If "No" describe.  Measures (identify needed maintenance and repairs, failed control measures that need tion of corrective actions in relevant task comments).  Asphalt Berm [6000203040011] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Gravel Bags [6000203100008] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Eco-Block [6000203110003] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rock Channel/Swale [6000204030004] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060006] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060007] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060007] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		F.	Г Г Г га	
descript 100 110 120 Control descript 140 150 160 170 180	Monitored Outfall [029] Free of Evidence of Erosion? If "No", describe.  Monitored Outfall [029] Flow Dissipation Devices Operating Effectively? If "No", describe.  Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.  Monitored Outfall [029] Free of any unauthorized non-stormwater discharges? If "No" describe.  Monitored Outfall [029] Free of any unauthorized non-stormwater discharges? If "No" describe.  Measures (identify needed maintenance and repairs, failed control measures that need tion of corrective actions in relevant task comments).  Asphalt Berm [6000203040011] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Gravel Bags [6000203100008] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Eco-Block [6000203110003] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rock Channel/Swale [6000204030004] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060006] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060007] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Base Course Swale [6000204100002] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		F.	Г Г Г га	
descript 100 110 120 Control descript 140 150 170 180	Monitored Outfall [029] Free of Evidence of Erosion? If "No", describe.  Monitored Outfall [029] Flow Dissipation Devices Operating Effectively? If "No", describe.  Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.  Monitored Outfall [029] Free of any unauthorized non-stormwater discharges? If "No" describe.  Monitored Outfall [029] Free of any unauthorized non-stormwater discharges? If "No" describe.  Measures (identify needed maintenance and repairs, failed control measures that need to of corrective actions in relevant task comments).  Asphalt Berm [6000203040011] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Gravel Bags [6000203100008] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Eco-Block [6000203110003] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rock Channel/Swale [6000204030004] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060006] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060007] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060007] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rock Check Dam [600020610005] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		F.	Г Г Г га	
descript 100 110 120 Control 140 150 160 170 180	Monitored Outfall [029] Free of Evidence of Erosion? If "No", describe.  Monitored Outfall [029] Flow Dissipation Devices Operating Effectively? If "No", describe.  Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.  Monitored Outfall [029] Free of any unauthorized non-stormwater discharges? If "No" describe.  Monitored Outfall [029] Free of any unauthorized non-stormwater discharges? If "No" describe.  Measures (identify needed maintenance and repairs, failed control measures that need to of corrective actions in relevant task comments).  Asphalt Berm [6000203040011] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Gravel Bags [6000203100008] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Eco-Block [6000203110003] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rock Channel/Swale [6000204030004] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060006] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060007] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060007] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rock Check Dam [600020410002] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		F.	Г Г Г га	
descript 100 110 120 Control 140 150 160 170	Monitored Outfall [029] Free of Evidence of Erosion? If "No", describe.  Monitored Outfall [029] Flow Dissipation Devices Operating Effectively? If "No", describe.  Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.  Monitored Outfall [029] Free of any unauthorized non-stormwater discharges? If "No" describe.  Monitored Outfall [029] Free of any unauthorized non-stormwater discharges? If "No" describe.  Measures (identify needed maintenance and repairs, failed control measures that need to of corrective actions in relevant task comments).  Asphalt Berm [6000203040011] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Gravel Bags [6000203100008] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Eco-Block [6000203110003] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rock Channel/Swale [6000204030004] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060006] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060007] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060007] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rock Check Dam [600020610005] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		F.	Г Г Г га	

	describe condition & need for Maintenance, Repair, or Replacement.		
240	Drop Inlet with Floc logs [6000209030018] Control Measure is operating effectively? "No" describe condition & need for Maintenance, Repair, or Replacement.	If	ГГБ
250	EnviroSoxx w/ MetalLoxx [6000203200023] Control Measure is operating effectively "No" describe condition & need for Maintenance, Repair, or Replacement.	? If	
260	EnviroSoxx w/ MetalLoxx [6000203200024] Control Measure is operating effectively "No" describe condition & need for Maintenance, Repair, or Replacement.	? If	
Area/Ac	ctivity exposed to stormwater (identify needed mainteance or a description of cor	ective action	ns in relevant task
omme	•		
280	Material loading/unloading and storage areas: controls adequate (appropriate, effective and operating)? If "No" describe.	9,	
200	Transfer areas for substances in bulk: controls adequate (appropriate, effective, and	=-	
90	operating)? If "No" describe.		
800	Product/chemical storage areas (raw material): controls adequate (appropriate, effective and operating)? If "No" describe.	'e,	Г Б Г
10	Liquid tank storage/secondary containment: controls adequate (appropriate, effective, and operating)? If "No" describe.		
20	Industrial processing and finished product storage areas: controls adequate (appropria effective, and operating)? If "No" describe.	te,	
30	Equipment operation and maintenance areas: controls adequate (appropriate, effective and operating)? If "No" describe.	), 	ГРГ
40	Fueling areas: controls adequate (appropriate, effective, and operating)? If "No" describe.		<u> </u>
50	Outdoor vehicle and equipment washing areas: controls adequate (appropriate, effection and operating)? If "No" describe.	/e, 	<u>r p/r</u>
60	Machinery: controls adequate (appropriate, effective, and operating)? If "No" describe.		
70	Waste handling and disposal areas: controls adequate (appropriate, effective, and operating)? If "No" describe.		<u> </u>
80	Erodible areas/construction: controls adequate (appropriate, effective, and operating)?  "No" describe.	If	<u> </u>
90	Locations and sources of run-on to the site: controls adequate (appropriate, effective, and operating)? If "No" describe.		<u> </u>
00	Salt storage piles or pile containing salt: controls adequate (appropriate, effective, and operating)? If "No" describe.		<u> </u>
110	Dust generation and vehicle tracking: controls adequate (appropriate, effective, and operating)? If "No" describe.	0 ( )	_ F F _
20	Housekeeping (Industrial materials/residues/trash in contact with stormwater): controls adequate (appropriate, effective, and operating)? If "No" describe.	Now Repor	4 P C C
30	Leaks and spills: controls adequate (appropriate, effective, and operating)? If "No" describe.		<u>r</u> p/r
lon-Co	mpliance		
50	Free of incidents of observed non-compliance not already identified above? If "No"		/
JU	describe.		<u> </u>
Addition	nal Control Measures		
70	Are permit requirements satisfied with existing control measure(s)? If "No" describe additional control measures needed.		
70	additional control measures needed.		
bor			
_abor	Assigned Work Date	Reg Hrs	OT Hrs Other Hrs
	Sandoval		
bor R	leport		
comple	eted:		
Report:			

Jind blain Cord bard	Aplastic alme	not faceline of the face	ilit entre
nto the MOST tracking	a database as a r	asselveping 155HE of CAR	# 1525.
		)	
Seon F. St.			
Leanard F. Sandalal	5/16/2019 8:350		
Signature / Name	Date	Signature / Name	Date
nfirm the information as recorded	is true, accurate and con	nplete.	

"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".

Signature: Russell Ster Date: 5/20/2019

**Maintenance Details** 

### Work Order MSGP-RI-63721

MSGP Routine Inspection Printed 6/10/2019 - 12:48 PM

-	Sted: 6/10/2019 12:38:59 PM  Target: 6/28/2019  Gure: MSGP Routine Facility Inspection (EPC-CP-Form-1020.2)  M: 5/16/2019  Target: 6/28/2019  Priority/Type: Normal / Inspection Department: Utilities and Infrastructure  TA-60  Cautast	1.9			
rojec	t: Routine Facility Inspections June 2019 (P-MSGP-RI-			,	٥.
easo	n: 2019 June Inspections	ive in	Eas	ton	HIZ
	8:00 a.m.				
	₹·₩a·m.				
asks					
#	Description	Meas.	No	N/A	Yes
		IVICAS.	NO	IN/A	162
	er Information			_	_/
20	Describe the weather at time of inspection and document the temperature (F°).				
Vithir	the Facility Boundary				
10	Is the facility free of new discharges of pollutants that have occurred since the last inspection? If "Failed" describe.		_	_	_/
50	If "No" has a CAR been previously initiated for this new discharge?		+	+	+
80	Is the facility free of discharge of pollutants at the time of inspection? If "No" describe.				-
	Is the facility free of evidence of, or the potential for, pollutants entering the drainage				_,
0	system. If "No" describe.				_F/
0	Monitored Outfall [029] Free of Evidence of Erosion? If "No", describe.  Monitored Outfall [029] Flow Dissipation Devices Operating Effectively? If "No",		Г		
100	describe.		工		_F_
110	<b>Monitored Outfall [029]</b> Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.		П	П	E/
120	Monitored Outfall [029] Free of any unauthorized non-stormwater discharges? If "No" describe.				_ <u>-</u> _
	of Measures (identify needed maintenance and repairs, failed control measures that nee ption of corrective actions in relevant task comments).  Asphalt Berm [6000203040011] Control Measure is operating effectively? If "No"	ed replace	ment, c	or a	
40	describe condition & need for Maintenance, Repair, or Replacement.				<u>_F/</u>
150	Gravel Bags [6000203100008] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		厂	工	<u> [~</u>
60	Eco-Block [6000203110003] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		厂		_F/
70	Rock Channel/Swale [6000204030004] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		г	_	⊏∕
80	Rip Rap [6000204060006] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.			Г	
90	Rip Rap [6000204060007] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.				F/
200	Base Course Swale [6000204100002] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		Г		[/
210	Rock Check Dam [6000206010005] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.				_F/
20	Trench Drain [6000209040001] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		Г		
30	Retention Pond [6000211010009] Control Measure is operating effectively? If "No"				

	describe condition & need for Maintenance, Repair, or Replacement.		
240	Drop Inlet with Floc logs [6000209030018] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		Г Б/
250	EnviroSoxx w/ MetalLoxx [6000203200023] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		
260	EnviroSoxx w/ MetalLoxx [6000203200024] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		
Area/A	activity exposed to stormwater (identify needed mainteance or a description of corrective a	ctions in rele	vant task
comme	•		
280	Material loading/unloading and storage areas: controls adequate (appropriate, effective, and operating)? If "No" describe.		
290	Transfer areas for substances in bulk: controls adequate (appropriate, effective, and operating)? If "No" describe.		F/ I
300	Product/chemical storage areas (raw material): controls adequate (appropriate, effective, and operating)? If "No" describe.		F/ I
310	Liquid tank storage/secondary containment: controls adequate (appropriate, effective, and operating)? If "No" describe.		
320	Industrial processing and finished product storage areas: controls adequate (appropriate, effective, and operating)? If "No" describe.		F/ [
330	Equipment operation and maintenance areas: controls adequate (appropriate, effective, and operating)? If "No" describe.	Г	P D
340	Fueling areas: controls adequate (appropriate, effective, and operating)? If "No" describe.		F
350	Outdoor vehicle and equipment washing areas: controls adequate (appropriate, effective, and operating)? If "No" describe.		F C
360	Machinery: controls adequate (appropriate, effective, and operating)? If "No" describe.		
370	Waste handling and disposal areas: controls adequate (appropriate, effective, and operating)? If "No" describe.		
380	Erodible areas/construction: controls adequate (appropriate, effective, and operating)? If "No" describe.		F C
390	Locations and sources of run-on to the site: controls adequate (appropriate, effective, and operating)? If "No" describe.		F/ F
400	Salt storage piles or pile containing salt: controls adequate (appropriate, effective, and operating)? If "No" describe.		E/_F
410	Dust generation and vehicle tracking: controls adequate (appropriate, effective, and operating)? If "No" describe.		P/_C
420	Housekeeping (Industrial materials/residues/trash in contact with stormwater): controls adequate (appropriate, effective, and operating)? If "No" describe.		
430	Leaks and spills: controls adequate (appropriate, effective, and operating)? If "No" describe.		
Non-Co	ompliance		
450	Free of incidents of observed non-compliance not already identified above? If "No" describe.		
Additio	onal Control Measures		
470	Are permit requirements satisfied with existing control measure(s)? If "No" describe additional control measures needed.		
-			
abor-			
Labor	Work Date Reg	Hrs OT Hrs	Other Hrs
abor F	Report —		
Comple			
Report			

Leaned F. Sandaral	6/21/2019 8:26 a.m.		
Signature / Name onfirm the information as recorde	/ /Date d is true, accurate and complete	Signature / Name	Date

"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".

Print name and title: Russell Stone GL 855H UTS	
Signature: Date: D	30 grad motal for verycle bins earlie from Carring in Cartact

**Maintenance Details** 

### Work Order MSGP-RI-63832

MSGP Routine Inspection Printed 7/17/2019 - 1:17 PM

Proced	ure: MSGP Routine Facility Inspection (EPC-CP-Form- 1020.2)  Priority/Type: Normal / Inspection □ Utilities and Infrastructure  Utilities and Infrastructure  ↑ 74-60				
Last PN Project	1: 6/21/2019 11 2mg. 00 1				
Reason	i: MSGP Routine Facility Inspection  8:46 a.m.				
Tasks					
#	Description	Meas.	No	N/A	Yes
Weather 20	er Information  Describe the weather at time of inspection and document the temperature (F°).		Г	П	
Within	the Facility Boundary				
40	Is the facility free of new discharges of pollutants that have occurred since the last inspection? If "Failed" describe.		Г	Б	<b>F</b> /
50	If "No" has a CAR been previously initiated for this new discharge?			F	
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.			г	<u></u>
Outfall	Inspection (identify needed maintenance and repairs, failed control measures that need rep	lacement	or a desi	crintic	n of
correct	tive actions in relevant task comment)	,			
90	Monitored Outfall [029] Free of Evidence of Erosion? If "No", describe.				_F_
100	Monitored Outfall [029] Flow Dissipation Devices Operating Effectively? If "No", describe.			Г	_ [7
110	Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? "No", describe.	f 	_П_	Г	
120	Monitored Outfall [029] Free of any unauthorized non-stormwater discharges? If "No" describe.			Г	
Control correct	I Measures (identify needed maintenance and repairs, failed control measures that need repairs actions in relevant task comments).  Asphalt Berm [6000203040011] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.	lacment, c	r a desci	ription	of
150	Gravel Bags [6000203100008] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		Г	Г	<u></u>
160	Eco-Block [6000203110003] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		П		<u>~</u>
170	Rock Channel/Swale [6000204030004] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.				[-/
180	Rip Rap [6000204060006] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.				<u></u>
190	Rip Rap [6000204060007] Control Measure is operating effectively? If "No" describe condition 8 need for Maintenance, Repair, or Replacement.				<u> </u>
200	Base Course Swale [6000204100002] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.			Г_	F/
210	Rock Check Dam [6000206010005] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.			Г	<b>C</b> /
220	Trench Drain [6000209040001] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.				_F/
230	Retention Pond [6000211010009] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.	.,			<b>F</b> /
240	Drop Inlet with Floc logs [6000209030018] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.			П	<b>F</b>
250	EnviroSoxx w/ MetaiLoxx [6000203200023] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		Г	П	<b>F</b> /
260	EnviroSoxx w/ MetalLoxx [6000203200024] Control Measure is operating effectively? If "No"		П		F

ons in relevant task comment).
ГБГ
п г/ п
г 🗗 г
Г 🗹 Г
ГБГ
г <b>г</b> г
T F T
/
Reg Hrs OT Hrs Other Hrs
Regins Of the Other the
Date

"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".

Print name and title: Russell Stone Gol DOSH-UDS	
Signature:	
The 8 Dungotar Guad Cakes was delivered to the Material Recycling Facility	١.
From the 1A-3-5NBO Declares at the character publing metal damara 15 yard?	7
The 8 Dungoter Guad Cakes were delivered to the Material Recycling Facility from the TA-3-SM30 Waltance at the end of Tune.  The 8 Dungoter Guad Cakes were at the end of Tune.  The TA-3-SM30 Waltance at the end of Tune.  The TA-3-SM30 Waltance at the end of Tune.  Diving this inspection there was a backhoc pushing metal damage Kyard a Diving this inspection there was a backhoc pushing metal damage Kyard a Diving this inspection there was a backhoc pushing weady to be caked.  30 yeld metal for vecycle bins that were getting ready to be caked.	

**Maintenance Details** 

230

### Work Order MSGP-RI-63912

MSGP Routine Inspection Printed 8/13/2019 - 2:09 PM

Proced Last P Projec	NSGP Routine Facility Inspection (EPC-CP-Form- 1020.2) 7/19/2019 8 13 2019 TR-60  Routine Facility Inspections August 2019 (P-MSGP-RI- 5393)  Priority/Type: Normal / Inspection Department: Utilities and Infrastructure  Utilities and Infrastructure Contact: Phone:				
Reaso	n: 2019 August Inspections $\S: 2 \vdash a.m.$				
asks					
#	Description	Meas.	No	N/A	Yes
	er Information				
20	Describe the weather at time of inspection and document the temperature (F°).				<u> </u>
Withir	the Facility Boundary				
40	Is the facility free of new discharges of pollutants that have occurred since the last		_	_	-/
40	inspection? If "Failed" describe.	-			
50 50	If "No" has a CAR been previously initiated for this new discharge?		-	~	
30	Is the facility free of discharge of pollutants at the time of inspection? If "No" describe.  Is the facility free of evidence of, or the potential for, pollutants entering the drainage	_			
70	system. If "No" describe.		cП	г	E/
90 100	Monitored Outfall [029] Free of Evidence of Erosion? If "No", describe.  Monitored Outfall [029] Flow Dissipation Devices Operating Effectively? If "No", describe.			_ <u></u>	F/
110	Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.				E/
120	Monitored Outfall [029] Free of any unauthorized non-stormwater discharges? If "No" describe.			Г	F/
	ol Measures (identify needed maintenance and repairs, failed control measures that ne	ed replac	ment, d	or a	
<b>descr</b> i 140	ption of corrective actions in relevant task comments).  Asphalt Berm [6000203040011] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		-	_	-/
150	Gravel Bags [6000203100008] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		 	. <u></u>	<u> </u>
160	Eco-Block [6000203110003] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		Г	Г	<u>-</u>
170	Rock Channel/Swale [6000204030004] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.			Г	<u> </u>
180	Rip Rap [6000204060006] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.			Г	_F_
190	Rip Rap [6000204060007] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		л.	Г	
200	Base Course Swale [6000204100002] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		П	Г	_F_
210	Rock Check Dam [6000206010005] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.			П	
220	Trench Drain [6000209040001] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.			Ď.	E/

Retention Pond [6000211010009] Control Measure is operating effectively? If "No"

d Sandoval 8/15/2019 / 1				
Assigned Work Date rd Sandoval 8/13/2019 / 1	Reg Hrs	OT Hr	s Oth	ner Hi
additional control measures needed.		<u>Г</u>		
Are permit requirements satisfied with existing control measure(s)? If "No" describe				
describe.	_		Г.	_₽
ompliance Free of incidents of observed non-compliance not already identified above? If "No"				
describe.		<u></u>	<u>_</u> F⁄	
adequate (appropriate, effective, and operating)? If "No" describe.		<u> </u>		_F
operating)? If "No" describe.			<u> </u>	
operating)? If "No" describe.			<b>P</b>	上
and operating)? If "No" describe.				工
"No" describe.			_F/	
Erodible areas/construction: controls adequate (appropriate, effective, and operating)? If				_ <u></u> _
Waste handling and disposal areas: controls adequate (appropriate, effective, and				<u>_</u>
and operating)? If "No" describe.		工	P	Г
describe.		工	P	Г
and operating)? If "No" describe.		厂	P	Г
effective, and operating)? If "No" describe.		工	<b>F</b>	Г
and operating)? If "No" describe.  Industrial processing and finished product storage areas: controls adequate (appropriate.			F/	厂
and operating)? If "No" describe.  Liquid tank storage/secondary containment: controls adequate (appropriate, effective,			P	
operating)? If "No" describe.  Product/chemical storage areas (raw material): controls adequate (appropriate, effective,				
and operating)? If "No" describe.  Transfer areas for substances in bulk: controls adequate (appropriate, effective, and			Г	_ [~
ent).  Material loading/unloading and storage areas: controls adequate (appropriate, effective,	uve action.			
	tive action	E in reli		
EnviroSoxx w/ MetalLoxx [6000203200024] Control Measure is operating effectively? If	-			
EnviroSoxx w/ MetalLoxx [6000203200023] Control Measure is operating effectively? If				<u> </u>
	EnviroSoxx w/ Metail.oxx [6000203200023] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  EnviroSox w/ Metail.oxx [6000203200024] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Activity exposed to stormwater (identify needed mainteance or a description of correcent).  Material loading/unloading and storage areas: controls adequate (appropriate, effective, and operating)? If "No" describe.  Transfer areas for substances in bulk: controls adequate (appropriate, effective, and operating)? If "No" describe.  Product/chemical storage areas (raw material): controls adequate (appropriate, effective, and operating)? If "No" describe.  Liquid tank storage/secondary containment: controls adequate (appropriate, effective, and operating)? If "No" describe.  Industrial processing and finished product storage areas: controls adequate (appropriate, effective, and operating)? If "No" describe.  Equipment operation and maintenance areas: controls adequate (appropriate, effective, and operating)? If "No" describe.  Fueling areas: controls adequate (appropriate, effective, and operating)? If "No" describe.  Outdoor vehicle and equipment washing areas: controls adequate (appropriate, effective, and operating)? If "No" describe.  Machinery: controls adequate (appropriate, effective, and operating)? If "No" describe.  Waste handling and disposal areas: controls adequate (appropriate, effective, and operating)? If "No" describe.  Locations and sources of run-on to the site: controls adequate (appropriate, effective, and operating)? If "No" describe.  Locations and sources of run-on to the site: controls adequate (appropriate, effective, and operating)? If "No" describe.  Salt storage piles or pile containing salt: controls adequate (appropriate, effective, and operating)? If "No" describe.  Loaks and spills: controls adequate (appropriate, effective, and operating)? If "No" describe.  Leaks and s	EnviroSoxx w/ MetalLoxx [6000203200024] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  ctivity exposed to stornwater (identify needed mainteance or a description of corrective actions ont).  Material loading/unloading and storage areas: controls adequate (appropriate, effective, and operating)? If "No" describe.  Transfer areas for substances in bulk: controls adequate (appropriate, effective, and operating)? If "No" describe.  Product/chemical storage areas (raw material): controls adequate (appropriate, effective, and operating)? If "No" describe.  Liquid tank storage/secondary containment: controls adequate (appropriate, effective, and operating)? If "No" describe.  Industrial processing and finished product storage areas: controls adequate (appropriate, effective, and operating)? If "No" describe.  Equipment operation and maintenance areas: controls adequate (appropriate, effective, and operating)? If "No" describe.  Fueling areas: controls adequate (appropriate, effective, and operating)? If "No" describe.  Dutdoor vehicle and equipment washing areas: controls adequate (appropriate, effective, and operating)? If "No" describe.  Machinery: controls adequate (appropriate, effective, and operating)? If "No" describe.  Waste handling and disposal areas: controls adequate (appropriate, effective, and operating)? If "No" describe.  Erodible areas/construction: controls adequate (appropriate, effective, and operating)? If "No" describe.  Erodible areas/construction: controls adequate (appropriate, effective, and operating)? If "No" describe.  Bust generation and sources of run-on to the site: controls adequate (appropriate, effective, and operating)? If "No" describe.  Bust generation and vehicle tracking: controls adequate (appropriate, effective, and operating)? If "No" describe.  Bust generation and vehicle tracking: controls adequate (appropriate, effective, and operating)? If "No" describe.  Housekeeping (Industrial materials/residues/tra	EnviroSoxx wi MetalLoxx (50002320023) Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  EnviroSoxx wi MetalLoxx (500020320024) Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Citivity exposed to stormwater (identify needed mainteance or a description of corrective actions in referch).  Material loading/unloading and storage areas: controls adequate (appropriate, effective, and operating)? If "No" describe.  Transfer areas for substances in bulk: controls adequate (appropriate, effective, and operating)? If "No" describe.  Product/chemical storage areas (raw material): controls adequate (appropriate, effective, and operating)? If "No" describe.  Liquid tank storage/secondary containment: controls adequate (appropriate, effective, and operating)? If "No" describe.  Liquid tank storage/secondary containment: controls adequate (appropriate, effective, and operating)? If "No" describe.  Equipment operation and maintenance areas: controls adequate (appropriate, effective, and operating)? If "No" describe.  Equipment operation and maintenance areas: controls adequate (appropriate, effective, and operating)? If "No" describe.  Fuelling areas: controls adequate (appropriate, effective, and operating)? If "No" describe.  Coultdoor vehicle and equipment washing areas: controls adequate (appropriate, effective, and operating)? If "No" describe.  Fuelling areas: controls adequate (appropriate, effective, and operating)? If "No" describe.  Fuelling areas: controls adequate (appropriate, effective, and operating)? If "No" describe.  Fuelling areas: controls adequate (appropriate, effective, and operating)? If "No" describe.  Fuelling areas: controls adequate (appropriate, effective, and operating)? If "No" describe.  Salt storage piles or pile containing salt: controls adequate (appropriate, effective, and operating)? If "No" describe.  Salt storage piles or pile containing salt: controls a	EnviroSoxx w/ MetalLoxx (500023200023) Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.    Control Measure   Control Measure

Signature / Name  Date  Signature / Name  Onfirm the information as recorded is true, accurate and complete.	Date
CERTIFICATION STATEMENT	
rtify under penalty of law that this document and all attachments were prepared under my dividence with a system designed to assure that qualified personnel properly gathered and evaluded on my inquiry of the person or persons who manage the system, or those persons directly responses to the system.	ated the information submit

"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".

Print name and title: Russell Fore.	GL DESH-UES
Signature: Russell Stra	Date: 8/19/2019

### Work Order MSGP-RI-63948

MSGP Routine Inspection Printed 9/13/2019 - 3:29 PM

Mainten	ance Details				
Request	ed: 9/13/2019 3:21:17 PM Target: 9/30/2019 MSGP Pr	ogram			
	re: MSGP Routine Facility Inspection (EPC-CP-Form- 1020.2)  Priority/Type: Normal / Inspection Department: Utilities and Infrastructure  TA-60 MR				
Project:	Routine Facility Inspections September 2019 (P-MSGP-RI- 5401)  Contact: Phone: September 2019 (P-MSGP-RI- Suph				
Reason:	2019 September Inspections 8:05 a.m.				
Tasks					
#	Description	Meas.	No	N/A	Yes
Weather	r Information				
20	Describe the weather at time of inspection and document the temperature (F°).			厂	
Within t	he Facility Boundary				
40	Is the facility free of new discharges of pollutants that have occurred since the last inspection? If		_	_	-/
<u>40</u> 50	"Failed" describe.  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.	_	-		-/
00	Is the facility free of evidence of, or the potential for, pollutants entering the drainage system. If				
70	"No" describe.		шПш		<u> </u>
	nspection (identify needed maintenance and repairs, failed control measures that need replace ve actions in relevant task comment)	ement, c	or a des	criptio	n of
90	Monitored Outfall [029] Free of Evidence of Erosion? If "No", describe.				<b>F</b> /
100	Monitored Outfall [029] Flow Dissipation Devices Operating Effectively? If "No", describe.		Г	F	
110	Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.		П		<u></u>
120	Monitored Outfall [029] Free of any unauthorized non-stormwater discharges? If "No" describe.				<u></u>
	Measures (identify needed maintenance and repairs, failed control measures that need replace ve actions in relevant task comments).  Asphalt Berm [6000203040011] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.	ment, or	a desc	ription	of
150	Gravel Bags [6000203100008] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.			Г	E/
160	Eco-Block [6000203110003] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		Г	Г	E/
170	Rock Channel/Swale [6000204030004] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		Г	Г	<b>F</b>
180	Rip Rap [6000204060006] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		Г	П	<b>D</b>
	Rip Rap [6000204060007] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		Г	Г	1
200	Base Course Swale [6000204100002] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		Г	П	<b>F</b>
210	Rock Check Dam [6000206010005] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.			П	
	Trench Drain [6000209040001] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.				F
230	Retention Pond [6000211010009] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.			П	F/
240	Drop Inlet with Floc logs [6000209030018] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.				P
	EnviroSoxx w/ MetalLoxx [6000203200023] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.				F/

260	EnviroSoxx w/ MetalLoxx [6000203200024] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		Г	<b>F</b> /
Area/A	activity exposed to stormwater (identify needed mainteance or a description of corrective actions in Material loading/unloading and storage areas: controls adequate (appropriate, effective, and	relevant ta	sk con	ıment)
280	operating)? If "No" describe.			<b>F</b> /
290	Transfer areas for substances in bulk: controls adequate (appropriate, effective, and operating)? If "No" describe.			
300	Product/chemical storage areas (raw material): controls adequate (appropriate, effective, and operating)? If "No" describe.		_F/	
310	Liquid tank storage/secondary containment: controls adequate (appropriate, effective, and operating)? If "No" describe.		_F/	
320	Industrial processing and finished product storage areas: controls adequate (appropriate, effective, and operating)? If "No" describe.		_5⁄	
330	Equipment operation and maintenance areas: controls adequate (appropriate, effective, and operating)? If "No" describe.		_5⁄	<u></u>
340	Fueling areas: controls adequate (appropriate, effective, and operating)? If "No" describe.		<u>_</u>	
350	Outdoor vehicle and equipment washing areas: controls adequate (appropriate, effective, and operating)? If "No" describe.		<u></u> [/	
360	Machinery: controls adequate (appropriate, effective, and operating)? If "No" describe.			_5⁄
370	Waste handling and disposal areas: controls adequate (appropriate, effective, and operating)? If "No" describe.			
380	Erodible areas/construction: controls adequate (appropriate, effective, and operating)? If "No" describe.		_⊏∕	
390	Locations and sources of run-on to the site: controls adequate (appropriate, effective, and operating)? If "No" describe.		_⊏∕	
100	Salt storage piles or pile containing salt: controls adequate (appropriate, effective, and operating)? If "No" describe.		_F_	
110	Dust generation and vehicle tracking: controls adequate (appropriate, effective, and operating)? If  "No" describe.			
120	Housekeeping (Industrial materials/residues/trash in contact with stormwater): controls adequate (appropriate, effective, and operating)? If "No" describe.			F
430	Leaks and spills: controls adequate (appropriate, effective, and operating)? If "No" describe.			
Non-C	ompliance			
150	Free of incidents of observed non-compliance not already identified above? If "No" describe.			_5⁄
Additio	onal Control Measures  Are permit requirements satisfied with existing control measure(s)? If "No" describe additional			
470	control measures needed.			_⊏∕
abor				
_abor		Hrs OT Hi	rs Oth	ier Hrs
_eonar	d Sandoval 9/13/2019 / 1		-,	
abor F	Report			
Compl	eted:			
Report		CNE	ں لم	ith
	1 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
1	Signature (Name		D-4:	
confir	Signature / Name / Date Signature / Name		Date	

"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".

Print name and title:	Russel Fore	GL DESH-UIS	
Signature:	Run Ol Fer	Date: 5/30/2019	

**Maintenance Details** 

### Work Order MSGP-RI-64023

MSGP Routine Inspection Printed 10/14/2019 - 10:38 AM

•	d: 10/14/2019 10:34:58 AM  Target: 10/31/2019  ■ MSGP Routine Facility  Inspection (EPC-CP-Form-  Department: Utilities and Infrastructure  TA-60 M	9			
	1020.2)	I			
_ast PM: Project:	Routine Facility Inspections October 2019 (P-MSGP-RI- 5410)  Contact: Phone:	ρh			
Reason:	2019 October Inspections 8:28 a.m.				
asks					
# 1	Description	Meas.	No	N/A	Yes
Weather	Information				
20 [	Describe the weather at time of inspection and document the temperature (F°).				<u>_</u> [_
Within th	e Facility Boundary				
1	is the facility free of new discharges of pollutants that have occurred since the last inspection? If 'Failed' describe.		г	г	<b>E</b> /
50	If "No" has a CAR been previously initiated for this new discharge?		Г	7	F
	s the facility free of discharge of pollutants at the time of inspection? If "No" describe,		Г	Г	F
	s the facility free of evidence of, or the potential for, pollutants entering the drainage system. If				
70	'No" describe.				
correctiv	spection (identify needed maintenance and repairs, failed control measures that need rep e actions in relevant task comment) Monitored Outfall [029] Free of Evidence of Erosion? If "No", describe.	lacement,	orado	escripti	on of
	Monitored Outfall [029] Flow Dissipation Devices Operating Effectively? If "No", describe.				1/
	Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.				F/
	Monitored Outfall [029] Free of any unauthorized non-stormwater discharges? If "No" describe.			工	
Control N	Measures (identify needed maintenance and repairs, failed control measures that need rep	lacment,	or a de	scriptio	on of
	e actions in relevant task comments).				
140	Asphalt Berm [6000203040011] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.				
	Gravel Bags [6000203100008] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		_	г	Г/
	Eco-Block [6000203110003] Control Measure is operating effectively? If "No" describe				
	condition & need for Maintenance, Repair, or Replacement.				_ [ _
	Rock Channel/Swale [6000204030004] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.				
180 8	Rip Rap [6000204060006] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		Г	Г	
190 8	Rip Rap [6000204060007] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.				
200 (	Base Course Swale [6000204100002] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		Б		<u>_</u> F⁄
210 0	Rock Check Dam [6000206010005] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		Г		
220	Trench Drain [6000209040001] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		. Г.		_5⁄
230	Retention Pond [6000211010009] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		Г	Г	<u>_</u>
	Drop Inlet with Floc logs [6000209030018] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.				F
aen i	Environ State and the state of the control of the c				

_	describe condition a need for Maintenance, Repair, or Replacement.	
260	EnviroSoxx w/ MetalLoxx [6000203200024] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.	E E E/
Area/A	activity exposed to stormwater (identify needed mainteance or a description of corrective action	ons in relevant task
comme	,	
280	Material loading/unloading and storage areas: controls adequate (appropriate, effective, and operating)? If "No" describe.	
	Transfer areas for substances in bulk: controls adequate (appropriate, effective, and operating)?	
290	If "No" describe.	
300	Product/chemical storage areas (raw material): controls adequate (appropriate, effective, and operating)? If "No" describe.	
310	Liquid tank storage/secondary containment: controls adequate (appropriate, effective, and operating)? If "No" describe.	
320	Industrial processing and finished product storage areas: controls adequate (appropriate, effective, and operating)? If "No" describe.	
330	Equipment operation and maintenance areas: controls adequate (appropriate, effective, and operating)? If "No" describe.	г 🗸 г
340	Fueling areas: controls adequate (appropriate, effective, and operating)? If "No" describe.	
350	Outdoor vehicle and equipment washing areas: controls adequate (appropriate, effective, and operating)? If "No" describe.	
360	Machinery: controls adequate (appropriate, effective, and operating)? If "No" describe.	
370	Waste handling and disposal areas: controls adequate (appropriate, effective, and operating)? If "No" describe.	
380	Erodible areas/construction: controls adequate (appropriate, effective, and operating)? If "No" describe.	
	Locations and sources of run-on to the site: controls adequate (appropriate, effective, and	
390	operating)? If "No" describe.  Salt storage piles or pile containing salt: controls adequate (appropriate, effective, and	
400	operating)? If "No" describe.  Dust generation and vehicle tracking: controls adequate (appropriate, effective, and operating)?	
410	If "No" describe.  Housekeeping (Industrial materials/residues/trash in contact with stormwater): controls	
420	adequate (appropriate, effective, and operating)? If "No" describe.	
430	Leaks and spills: controls adequate (appropriate, effective, and operating)? If "No" describe.	
Non-Co	ompliance	
450	Free of incidents of observed non-compliance not already identified above? If "No" describe.	
Additio	onal Control Measures	
470	Are permit requirements satisfied with existing control measure(s)? If "No" describe additional	
470	control measures needed.	
-		
abor		
Labor	Assigned Work Date	Reg Hrs OT Hrs Other Hrs
	d Sandoval 10/14/2019 / 1	
ahar E	Report	
יוטעמ	<b>Nepolt</b>	
Comple	eted:	
Report		
Or	indicate the part of the form the control of	Liston mand , soci
Clas	and got it a varying trick. The Metalloto, Jattles, I E	2000-CALL LEVE
915	o replaced at the month of the Concrete retention pand t	antopot the diso
In	ets that discharge to the MSGP sampler.	
1		
	Signature / Name   Date   Signature / Name	Dete
confirr	m the information as recorded is true, accurate and complete.	Date

"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, DESH Group Leader, EPC Group Leader)

Print name and title: Revosell Stone GL DESTE-UES

Signature: Date: 10/21/2019

Date: 10/21/2019

Diving the inspection all of the metal for very cle bins assite was empty.

**Maintenance Details** 

### Work Order MSGP-RI-64097

MSGP Routine Inspection Printed 11/7/2019 - 11:03 AM

Reques	ted: 11/7/2019 10:58:22 AM Target: 11/30/2019 🔄 MSGF	Program			
Procedu	ure: MSGP Routine Facility Priority/Type: Normal / Inspection ♣ RG12				
	Inspection (EPC-CP-Form- Department: Utilities and Infrastructure TA-60	MRF			
Last PM	11/2/2/19 / 1/05				
Project:	O-minute.				
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	November 2019 (P-MSGP-				
	RI-5418) Jind-Less than 5 m	oh			
Reason	: 2019 November Inspections				
	9:06 a.m.				
Tasks -					
#	Description	Meas.	No	N/A	Yes
Weathe	er Information				
20	Describe the weather at time of inspection and document the temperature (F°).			П	E/
M/ithin t					
*******************	the Facility Boundary  Is the facility free of new discharges of pollutants that have occurred since the last				
40	inspection? If "Failed" describe.		П	_	F
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.				F/
	Is the facility free of evidence of, or the potential for, pollutants entering the drainage				
70	system. If "No" describe.				
Outfall	Inspection (identify needed maintenance and repairs, failed control measures that ne	ed replace	ement,	or a	
descrip	tion of corrective actions in relevant task comment)	•	,		
90	Monitored Outfall [029] Free of Evidence of Erosion? If "No", describe.				_F_
100	Monitored Outfall [029] Flow Dissipation Devices Operating Effectively? If "No", describe.				_F_
110	Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.				_F_
120	Monitored Outfall [029] Free of any unauthorized non-stormwater discharges? If "No"		_	_	_/
120	describe.				
Control	Measures (identify needed maintenance and repairs, failed control measures that needed	ed replace	nent, c	or a	
descrip	tion of corrective actions in relevant task comments).				
140	Asphalt Berm [6000203040011] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		PH.		_/
	Gravel Bags [6000203100008] Control Measure is operating effectively? If "No"				<u>~</u>
150	describe condition & need for Maintenance, Repair, or Replacement.			Г	₽/
	Eco-Block [6000203110003] Control Measure is operating effectively? If "No" describe				
160	condition & need for Maintenance, Repair, or Replacement.			$\Gamma$	_F_
170	Rock Channel/Swale [6000204030004] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		_		-/
170	Rip Rap [6000204060006] Control Measure is operating effectively? If "No" describe				
180	condition & need for Maintenance, Repair, or Replacement.			П	<b>E</b> /
	Rip Rap [6000204060007] Control Measure is operating effectively? If "No" describe				
190	condition & need for Maintenance, Repair, or Replacement.				_F_
	Base Course Swale [6000204100002] Control Measure is operating effectively? If "No"				
200	describe condition & need for Maintenance, Repair, or Replacement.		厂		_5_
210	Rock Check Dam [6000206010005] Control Measure is operating effectively? If "No"		_		_/
210	describe condition & need for Maintenance, Repair, or Replacement.				
220	<b>Trench Drain [6000209040001]</b> Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.				
230	Retention Pond [6000211010009] Control Measure is operating effectively? If "No"		一	-	<del></del>
	2 L				I

bor F	Report				
abor eonard	d Sandoval Assigned Work Date	Reg Hrs	OT Hr	s Oth	er Hı
bor					
70	additional control measures needed.		工		_⊏
dditio	onal Control Measures  Are permit requirements satisfied with existing control measure(s)? If "No" describe				
<b>on-C</b> o	ompliance Free of incidents of observed non-compliance not already identified above? If "No"describe		Į.		
30	describe.			_F⁄	
20	Housekeeping (Industrial materials/residues/trash in contact with stormwater): controls adequate (appropriate, effective, and operating)? If "No" describe.  Leaks and spills: controls adequate (appropriate, effective, and operating)? If "No"	x Repor	+5/	Г	上
10	Dust generation and vehicle tracking: controls adequate (appropriate, effective, and operating)? If "No" describe.	(-1	工	<u></u>	<u></u>
00	Salt storage piles or pile containing salt: controls adequate (appropriate, effective, and operating)? If "No" describe.		Г	_F_	
90	Locations and sources of run-on to the site: controls adequate (appropriate, effective, and operating)? If "No" describe.			_F/	<u></u>
80	Erodible areas/construction: controls adequate (appropriate, effective, and operating)? If "No" describe.		Г		<u></u>
70	Waste handling and disposal areas: controls adequate (appropriate, effective, and operating)? If "No" describe.			<u></u>	
50 50	and operating)? If "No" describe.  Machinery: controls adequate (appropriate, effective, and operating)? If "No" describe.			_ <u>F</u>	드
10	describe.  Outdoor vehicle and equipment washing areas: controls adequate (appropriate, effective,				上 ′ _
30	and operating)? If "No" describe.  Fueling areas: controls adequate (appropriate, effective, and operating)? If "No"				上 ′_
20	effective, and operating)? If "No" describe.  Equipment operation and maintenance areas: controls adequate (appropriate, effective,				工
10	and operating)? If "No" describe.  Industrial processing and finished product storage areas: controls adequate (appropriate,		_ <u></u> _		_ <u></u>
00	and operating)? If "No" describe.  Liquid tank storage/secondary containment: controls adequate (appropriate, effective,			_F/	
90	operating)? If "No" describe.  Product/chemical storage areas (raw material): controls adequate (appropriate, effective,				_ <u> </u> -
80	and operating)? If "No" describe.  Transfer areas for substances in bulk: controls adequate (appropriate, effective, and	_	<u></u>		_F
omme	Material loading/unloading and storage areas: controls adequate (appropriate, effective,	ve actions	s in rel	evant 1	ask
60	"No" describe condition & need for Maintenance, Repair, or Replacement.				_⊏
50	EnviroSoxx w/ MetalLoxx [6000203200025] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  EnviroSoxx w/ MetalLoxx [6000203200026] Control Measure is operating effectively? If				_⊏

some entared into the	MOGP Wacking	tenceline that is a har database as CAR# 1640.	
			2
- 1711			
Deared F. Sandalal	11/12/2019 9:30 a.		
Signature / Name nfirm the information as recorded	Date	Signature / Name	Date

#### **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, DESH Group Leader, EPC Group Leader)

Print name and title: Russell Fore GC	DESH-UZS
Signature: Russell For	Date: 11/13/2019

### Work Order MSGP-RI-64129

MSGP Routine Inspection Printed 12/10/2019 - 10:01 AM

Within the Facility Boundary  Is the facility free of new discharges of pollutants that have occurred since the last inspection? If "Failed" describe.  If "No" has a CAR been previously initiated for this new discharge?  Is the facility free of discharge of pollutants at the time of inspection? If "No" describe.  Is the facility free of discharge of pollutants at the time of inspection? If "No" describe.  Is the facility free of evidence of, or the potential for, pollutants entering the drainage system. If  No" describe.  Outfall Inspection (identify needed maintenance and repairs, failed control measures that need replacement, or a description of corrective actions in relevant task comment)  Monitored Outfall (029) Free of Evidence of Erosion? If "No", describe.  Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If  "No", describe.  Monitored Outfall [029] Free of any unauthorized non-stormwater discharges? If "No" describe.  Control Measures (identify needed maintenance and repairs, failed control measures that need replacement, or a description of corrective actions in relevant task comments).  Asphalt Berm [6000203040011] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Gravel Bags [600020310003] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Eco-Block [6000204060006] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060006] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060006] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060006] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rock Charnel (Maintenance,	Mainte	enance Details				
Weather Information  20 Describe the weather at time of inspection and document the temperature (F*).  Within the Facility Boundary  Is the facility fee of new discharges of pollutants that have occurred since the last inspection? If  Failed" describe.  11"No" has a CAR been previously initiated for this new discharge?  12" In "No" describe.  13" In "No" describe of discharge of pollutants at the time of inspection? If "No" describe.  14" No" describe.  15" Is the facility free of evidence of, or the potential for, pollutants entering the drainage system. If  16" No" describe.  17" No" describe.  18" No" describe.  19" No" describe.  19" No" describe.  10" Nonitored Outfall (1928) Free of Evidence of Erosion? If "No", describe.  10" Monitored Outfall (1929) Free of Evidence of Erosion? If "No", describe.  10" Monitored Outfall (1929) Free of Evidence of Evid	Proced Last P Projec	M: 11/12/2019 12 19 2019 Temp. 19°F Unigh of 57°F  t: Routine Facility Inspections December 2019 (P-MSGP-RI-5424)  Priority/Type: Normal / Inspection Department: Utilities and Infrastructure  Utilities and Infrastructure  Contact: Phone:	)			
Weather Information  20 Describe the weather at time of inspection and document the temperature (F*).  Within the Facility Boundary  Is the facility fee of new discharges of pollutants that have occurred since the last inspection? If  Failed" describe.  11"No" has a CAR been previously initiated for this new discharge?  12" In "No" describe.  13" In "No" describe of discharge of pollutants at the time of inspection? If "No" describe.  14" No" describe.  15" Is the facility free of evidence of, or the potential for, pollutants entering the drainage system. If  16" No" describe.  17" No" describe.  18" No" describe.  19" No" describe.  19" No" describe.  10" Nonitored Outfall (1928) Free of Evidence of Erosion? If "No", describe.  10" Monitored Outfall (1929) Free of Evidence of Erosion? If "No", describe.  10" Monitored Outfall (1929) Free of Evidence of Evid	'acko					
Weather Information  Describe the weather at time of inspection and document the temperature (F*).  Within the Facility Boundary  Is the facility free of new discharges of pollutants that have occurred since the last inspection? If  "Falled" describe.  If "No" has a CAR been previously initiated for this new discharge?  If "No" has a CAR been previously initiated for this new discharge?  If "No" has a CAR been previously initiated for this new discharge?  If "No" describe.  It is the facility free of discharge of pollutants at the time of inspection? If "No" describe.  Is the facility free of evidence of, or the potential for, pollutants entering the drainage system. If  "No" describe.  Outfall inspection (identify needed maintenance and repairs, failed control measures that need replacement, or a description of corrective actions in relevant task comment)  Monitored Outfall [029] Free of Evidence of Erosion? If "No", describe.  Monitored Outfall [029] 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 replacement, or a description of corrective actions in relevant task comments).  Asphalt Bern [5000203040011] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Gravel Bags [6000203110003] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [60002040600097] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [60002040600097] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [60002040600097] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rock Chaen Bags (60002041000097] Control Measure is operating effectively? If "No" describe c	asks					
Weather Information  Describe the weather at time of inspection and document the temperature (F*).  Within the Facility Boundary  Is the facility free of new discharges of pollutants that have occurred since the last inspection? If  "Falled" describe.  If "No" has a CAR been previously initiated for this new discharge?  If "No" has a CAR been previously initiated for this new discharge?  If "No" has a CAR been previously initiated for this new discharge?  If "No" describe.  It is the facility free of discharge of pollutants at the time of inspection? If "No" describe.  Is the facility free of evidence of, or the potential for, pollutants entering the drainage system. If  "No" describe.  Outfall inspection (identify needed maintenance and repairs, failed control measures that need replacement, or a description of corrective actions in relevant task comment)  Monitored Outfall [029] Free of Evidence of Erosion? If "No", describe.  Monitored Outfall [029] 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 replacement, or a description of corrective actions in relevant task comments).  Asphalt Bern [5000203040011] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Gravel Bags [6000203110003] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [60002040600097] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [60002040600097] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [60002040600097] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rock Chaen Bags (60002041000097] Control Measure is operating effectively? If "No" describe c	#	Description	Meas.	No	N/A	Yes
Within the Facility Boundary  Is the facility free of new discharges of pollutants that have occurred since the last inspection? If  "Falied" describe.  If "No" has a CAR been previously initiated for this new discharge?  If "No" has a CAR been previously initiated for this new discharge?  If "No" has a CAR been previously initiated for this new discharge?  Is the facility free of discharge of pollutants at the time of inspection? If "No" describe.  Is the facility free of evidence of, or the potential for, pollutants entering the drainage system. If  "No" describe.  Outfall Inspection (identify needed maintenance and repairs, failed control measures that need replacement, or a description of corrective actions in relevant task comment)  Monitored Outfall [029] Five of Evidence of Erosion? If "No", describe.  Monitored Outfall [029] Five 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 replacement, or a description of corrective actions in relevant task comments).  Control Measures (identify needed maintenance and repairs, failed control measures that need replacement, or a description of corrective actions in relevant task comments).  Condition & need for Maintenance, Repair, or Replacement.  Gravel Bags [6000203100003] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000203110003] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [600020460007] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060007] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Repair or Replacement.  Repair or Replacement.  Trench Orain [6000204060007] Control Measure is operating effectively? If "No" descri	Weath	er Information				
Within the Facility Boundary  Is the facility free of new discharges of pollutants that have occurred since the last inspection? If  "Falled" describe.  I "No" has a CAR been previously initiated for this new discharge?  Is the facility free of discharge of pollutants at the time of inspection? If "No" describe.  Is the facility free of discharge of pollutants at the time of inspection? If "No" describe.  Is the facility free of evidence of, or the potential for, pollutants entering the drainage system. If  No" describe.  Outfall inspection (identify needed maintenance and repairs, failed control measures that need replacement, or a description of corrective actions in relevant task comment).  Monitored Outfall [029] Free of Evidence of Erosion? If "No", describe.  Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If  No", describe.  Monitored Outfall [029] 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 replacement, or a description of corrective actions in relevant task comments).  Asphat Berm [8000203040011] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Gravel Bags [8000203110008] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rock Channel/Swale [8000203400004] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [8000203400000] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [8000203400000] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [8000204080007] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.	20				П	-
Is the facility free of new discharges of pollutants that have occurred since the last inspection? If "Falled" describe.  If "No" has a CAR been previously initiated for this new discharge?  If "No" has a CAR been previously initiated for this new discharge?  Is the facility free of discharge of pollutants at the time of inspection? If "No" describe.  Is the facility free of evidence of, or the potential for, pollutants entering the drainage system. If "No" describe occurred to describe.  Dutfall Inspection (identify needed maintenance and repairs, failed control measures that need replacement, or a description of corrective actions in relevant task comment)  Monitored Outfall [029] Free of Evidence of Erosion? If "No", describe.  Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.  Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.  Monitored Outfall [029] Free of any unauthorized non-stormwater discharges? If "No" describe.  Control Measures (identify needed maintenance and repairs, failed control measures that need replacement, or a description of corrective actions in relevant task comments).  Asphalt Berm [6000203040011] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Gravel Bags [6000203100003] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rock Channel/Swale [6000204030004] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [600020466006] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204660007] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rock Check Dam [6000206100007] Control Measure is operating effectively? If "No"						
Falled' describe.	vvitnii	·				
Is the facility free of discharge of pollutants at the time of inspection? If "No" describe.	40			. п	П	<b>~</b>
Is the facility free of evidence of, or the potential for, poliutants entering the drainage system. If "No" describe.    Page	50	If "No" has a CAR been previously initiated for this new discharge?			<u></u>	
Outfall Inspection (identify needed maintenance and repairs, failed control measures that need replacement, or a description of corrective actions in relevant task comment)  Monitored Outfall [029] Free of Evidence of Erosion? If "No", describe.  Monitored Outfall [029] Free of Evidence of Erosion? If "No", describe.  Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.  Monitored Outfall [029] 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 replacement, or a description of corrective actions in relevant task comments).  Asphalt Berm [6000203400011] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Gravel Bags [6000203100008] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Eco-Block [6000203110003] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rock Channel/Swale [6000204030004] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060006] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060007] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060007] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rock Check Dam [600020610005] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rock Check Dam [600020610005] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Retention Pond	60	Is the facility free of discharge of pollutants at the time of inspection? If "No" describe.				
Monitored Outfall [029] Free of Evidence of Erosion? If "No", describe.  Monitored Outfall [029] Free of Evidence of Erosion? If "No", describe.  Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.  Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.  Monitored Outfall [029] Free of any unauthorized non-stormwater discharges? 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).  Asphalt Berm [6000203040011] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Gravel Bags [6000203100008] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Eco-Block [6000203110003] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rock Channel/Swale [6000204030004] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060007] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060007] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rock Check Dam [6000204100002] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rock Check Dam [60002040001] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Trench Drain [6000209040001] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Retention Pond [6000211010009] Control Measure is operating effectively? If "No" describe	70				Г	F/
Monitored Outfall [029] Free of any unauthorized non-stormwater discharges? 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).  Asphalt Berm [600020340011] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Gravel Bags [6000203100008] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Eco-Block [6000203110003] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rock Channel/Swale [6000204030004] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060006] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060007] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Base Course Swale [6000204100002] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rock Check Dam [600020400005] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Trench Drain [6000209040001] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Retention Pond [600021010002] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Drop Inlet with Floc logs [600020930018] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If				<u>-/</u>
Control Measures (identify needed maintenance and repairs, failed control measures that need replacment, or a description of corrective actions in relevant task comments).  Asphalt Berm [6000203040011] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Gravel Bags [6000203100008] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Eco-Block [6000203110003] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rock Channel/Swale [6000204030004] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060006] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060007] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Base Course Swale [6000204100002] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rock Check Dam [6000206010005] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Trench Drain [6000209040001] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Trench Drain [6000210101009] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Drop Inlet with Floc logs [6000210101009] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Drop Inlet with Floc logs [6000209030018] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.	_			-	1	<u></u>
Asphalt Berm [6000203040011] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Gravel Bags [600020310003] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Eco-Block [6000203110003] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rock Channel/Swale [6000204030004] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060006] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060007] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060007] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rock Check Dam [60002040100002] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Trench Drain [6000209040001] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Trench Drain [6000209040001] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Retention Pond [6000211010009] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Drop Inlet with Floc logs [6000209030018] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.						
Asphalt Berm [6000203040011] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Gravel Bags [6000203100008] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Eco-Block [6000203110003] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rock Channel/Swale [6000204030004] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060006] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060007] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Base Course Swale [6000204100002] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rock Check Dam [6000204100002] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Trench Drain [6000209040001] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Trench Drain [6000209040001] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Retention Pond [6000211010009] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Drop Inlet with Floc logs [6000209030018] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.			cment, o	r a desc	ription	of
Gravel Bags [6000203100008] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Eco-Block [6000203110003] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rock Channel/Swale [6000204030004] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060006] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060007] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Base Course Swale [6000204100002] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rock Check Dam [6000206010005] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Trench Drain [6000209040001] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Retention Pond [6000211010009] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Retention Pond [6000211010009] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Drop Inlet with Floc logs [6000209030018] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.		Asphalt Berm [6000203040011] Control Measure is operating effectively? If "No" describe			. [7]	[_/
## Rock Channel/Swale [6000204030004] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.    Rip Rap [6000204060006] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.    Rip Rap [6000204060007] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.    Rip Rap [6000204060007] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.    Base Course Swale [6000204100002] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.    Rock Check Dam [6000206010005] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.    Trench Drain [6000209040001] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.    Retention Pond [6000211010009] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.    Drop Inlet with Floc logs [6000209030018] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.	150	Gravel Bags [6000203100008] Control Measure is operating effectively? If "No" describe		П	П	[Z
describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060006] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060007] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Base Course Swale [6000204100002] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rock Check Dam [6000206010005] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Trench Drain [6000209040001] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Retention Pond [6000211010009] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Retention Pond [6000211010009] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Drop Inlet with Floc logs [6000209030018] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.	160					
need for Maintenance, Repair, or Replacement.  Rip Rap [6000204060007] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Base Course Swale [6000204100002] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rock Check Dam [6000206010005] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Trench Drain [6000209040001] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Retention Pond [6000211010009] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Drop Inlet with Floc logs [6000209030018] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.	170	describe condition & need for Maintenance, Repair, or Replacement.				
need for Maintenance, Repair, or Replacement.  Base Course Swale [6000204100002] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Rock Check Dam [6000206010005] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Trench Drain [6000209040001] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Retention Pond [6000211010009] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Drop Inlet with Floc logs [6000209030018] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.	180	need for Maintenance, Repair, or Replacement.				
condition & need for Maintenance, Repair, or Replacement.  Rock Check Dam [6000206010005] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Trench Drain [6000209040001] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Retention Pond [6000211010009] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Drop Inlet with Floc logs [6000209030018] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.	190	need for Maintenance, Repair, or Replacement.				_ [/
condition & need for Maintenance, Repair, or Replacement.  Trench Drain [6000209040001] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Retention Pond [6000211010009] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Drop Inlet with Floc logs [6000209030018] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.	200	condition & need for Maintenance, Repair, or Replacement.				_5/
condition & need for Maintenance, Repair, or Replacement.  Retention Pond [6000211010009] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.  Drop Inlet with Floc logs [6000209030018] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.	210	condition & need for Maintenance, Repair, or Replacement.		П		
230 condition & need for Maintenance, Repair, or Replacement.  Drop Inlet with Floc logs [6000209030018] Control Measure is operating effectively? If "No"  describe condition & need for Maintenance, Repair, or Replacement.	220	condition & need for Maintenance, Repair, or Replacement.			厂	
describe condition & need for Maintenance, Repair, or Replacement.	230	condition & need for Maintenance, Repair, or Replacement.				
	240	describe condition & need for Maintenance, Repair, or Replacement.				<u> </u>

describe condition & need for Maintenance, Repair, or Replacement.

250

260	EnviroSoxx w/ MetalLoxx [6000203200026] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.	П	Γ	[ <del>-</del> ]
Area/A		in relevant ta	sk con	
280	Material loading/unloading and storage areas: controls adequate (appropriate, effective, and operating)? If "No" describe.	ŢŢ.	_Г_	
290	Transfer areas for substances in bulk: controls adequate (appropriate, effective, and operating)? If "No" describe.			
300	Product/chemical storage areas (raw material): controls adequate (appropriate, effective, and operating)? If "No" describe.		F/	П
310	Liquid tank storage/secondary containment: controls adequate (appropriate, effective, and operating)? If "No" describe.	Г	F/	
320	Industrial processing and finished product storage areas: controls adequate (appropriate, effective, and operating)? If "No" describe.	Г	<u> </u>	
330	Equipment operation and maintenance areas: controls adequate (appropriate, effective, and operating)? If "No" describe.			 1п
340	Fueling areas: controls adequate (appropriate, effective, and operating)? If "No" describe.		<u></u>	
350	Outdoor vehicle and equipment washing areas: controls adequate (appropriate, effective, and operating)? If "No" describe.			
360	Machinery: controls adequate (appropriate, effective, and operating)? If "No" describe.		F	
370	Waste handling and disposal areas: controls adequate (appropriate, effective, and operating)? If "No" describe.		- <u>-</u> -	
380	Erodible areas/construction: controls adequate (appropriate, effective, and operating)? If "No" describe.			, L
390	Locations and sources of run-on to the site: controls adequate (appropriate, effective, and operating)? If "No" describe.			
400	Salt storage piles or pile containing salt: controls adequate (appropriate, effective, and operating)? If "No" describe.		<u> </u>	
410	Dust generation and vehicle tracking: controls adequate (appropriate, effective, and operating)? If "No" describe.	<u> </u>	F/	
420	Housekeeping (Industrial materials/residues/trash in contact with stormwater): controls adequate (appropriate, effective, and operating)? If "No" describe.	Den At		
430	Leaks and spills: controls adequate (appropriate, effective, and operating)? If "No" describe.		<b>D</b>	
Non Co	ompliance			
450	Free of incidents of observed non-compliance not already identified above? If "No" describe.			F/
<b>Additio</b> 470	onal Control Measures  Are permit requirements satisfied with existing control measure(s)? If "No" describe additional control measures needed.			
770	Control measures needed.			
abor				
Labor	Assigned Work Date Re	g Hrs OT Hr	s Oth	er Hrs
Leonard	d Sandoval 12/10/2019 / 1			
abor R	Report	6 11		
Comple	eted: Holf Dheelar of Erc-ch hepen for inspection which is considered an annual	limped	ian.	
Report:	redded paper on the grand next to a Voll-off bin in the co	nterof	the	And
Koil	-off bin #6267 Cartaining metal for variety was missing proved into the MSSP facting allabors as CAR# 1682.	Aund	ito	abo
1	Signature / Name   Date   Signature / Name		Date	
confirm	n the information as recorded is true. accurate and complete.		Date	

"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, DESH Group Leader, EPC Group Leader)

Print name and title: Plus sell	Home GL DESH-UES	
0 00-		
Signature: Luxull Str.	Date: 1/6/2020	_

### Work Order MSGP-RI-64137

MSGP Routine Inspection Printed 1/7/2020 - 4:13 PM

Mainte	enance Details —	
Last P Projec		am
Tooks	<b>6.35 6.0</b>	
Tasks		
#	Description Meas	s. No N/A Yes
Weath	ner Information	
20	Describe the weather at time of inspection and document the temperature (F°).	
Withir	the Facility Boundary	
	Is the facility free of new discharges of pollutants that have occurred since the last	
40	inspection? If "Failed" describe.	
50 60	If "No" has a CAR been previously initiated for this new discharge?	
00	Is the facility free of discharge of pollutants at the time of inspection? If "No" describe.  Is the facility free of evidence of, or the potential for, pollutants entering the drainage	
70	system. If "No" describe.	
90	Monitored Outfall [029] Free of Evidence of Erosion? If "No", describe.  Monitored Outfall [029] Flow Dissipation Devices Operating Effectively? If "No", describe.	
110	Monitored Outfall [029] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe.	
120	Monitored Outfall [029] Free of any unauthorized non-stormwater discharges? If "No" describe.	
	ol Measures (identify needed maintenance and repairs, failed control measures that need repletion of corrective actions in relevant task comments).	lacment, or a
140	Asphalt Berm [6000203040011] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.	
150	Gravel Bags [6000203100008] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.	
160	Eco-Block [6000203110003] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.	
170	Rock Channel/Swale [6000204030004] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.	
180	Rip Rap [6000204060006] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.	
190	Rip Rap [6000204060007] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.	
200	Base Course Swale [6000204100002] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.	
210	Rock Check Dam [6000206010005] Control Measure is operating effectively? If "No"  describe condition & need for Maintenance, Repair, or Replacement.	
220	Trench Drain [6000209040001] Control Measure is operating effectively? If "No" describe condition & need for Maintenance, Repair, or Replacement.	
230	Retention Pond [6000211010009] Control Measure is operating effectively? If "No"	

280 an Tr. 290 op Pr. 300 an Lic 310 an 320 eff Ed. 330 an 360 Ma 350 an 360 Ma 370 op Er. 380 "N Lo 390 an Lo 410 op Ho 420 ad Le 430 de  Non-Comp Fr. 450 de  Additional Ar	ree of incidents of observed non-compliance not escribe.  I Control Measures re permit requirements satisfied with existing conditional control measures needed.	effective, and operating) of already identified above ontrol measure(s)? If "No	e? If "No" describe	T T	F Hrs
280 an Tr. 290 op Pr. 300 an Lic 310 an Inc 320 eff. 340 de 350 an 360 Mi 370 op Er. 380 "N Lo 390 an Sa 400 op Ho 420 ad Lee 430 de Non-Comp 450 de Additional Ar 470 ad Leonard Sa	perating)? If "No" describe.  ust generation and vehicle tracking: controls adperating)? If "No" describe.  ousekeeping (Industrial materials/residues/trasldequate (appropriate, effective, and operating)? eaks and spills: controls adequate (appropriate, escribe.  oliance  ree of incidents of observed non-compliance not escribe.  I Control Measures  re permit requirements satisfied with existing conditional control measures needed.	effective, and operating) of already identified above ontrol measure(s)? If "No"	e? If "No" describe	T T	F/
280 an Tr. 290 op 300 an Lic 310 an 320 eff 330 an 340 de 350 an 360 Ma 370 op 380 "N Lo 390 an Lo 390 an Lo 400 op 410 op Lo 420 ad Lo 430 de Mon-Comp Fr 450 de Mon-Comp Fr 450 de Additional Ar 470 ad	perating)? If "No" describe.  ust generation and vehicle tracking: controls adperating)? If "No" describe.  ousekeeping (Industrial materials/residues/trastdequate (appropriate, effective, and operating)?  eaks and spills: controls adequate (appropriate, escribe.  oliance  ree of incidents of observed non-compliance notescribe.  I Control Measures  re permit requirements satisfied with existing controls and controls are permit requirements.	effective, and operating)  or already identified above	e? If "No" describe		
280 an Tr. 290 op 300 an Lic 310 an 320 eff 330 an 340 de 350 an 360 Ma 370 op 380 "N Lo 390 an 400 op 410 op 410 op 420 ad 420 ad 430 de  Non-Comp Fr 450 de  Additional	perating)? If "No" describe.  ust generation and vehicle tracking: controls adperating)? If "No" describe.  ousekeeping (Industrial materials/residues/trastdequate (appropriate, effective, and operating)?  eaks and spills: controls adequate (appropriate, escribe.  oliance  ree of incidents of observed non-compliance notescribe.  I Control Measures  re permit requirements satisfied with existing controls and controls are permit requirements.	effective, and operating)  or already identified above	9? If "No"		
280 an Tr. 290 op 300 an Lic 310 an 320 eff 330 an 340 de 350 an 360 Ma 370 op 380 "N Lo 390 an 400 op 410 op 420 ad 420 ad 430 de 430 de 440 de 450 ad 450 Additional Ar	perating)? If "No" describe.  ust generation and vehicle tracking: controls adperating)? If "No" describe.  ousekeeping (Industrial materials/residues/trastdequate (appropriate, effective, and operating)?  eaks and spills: controls adequate (appropriate, escribe.  oliance  ree of incidents of observed non-compliance notescribe.  I Control Measures  re permit requirements satisfied with existing controls and controls are permit requirements.	effective, and operating)  or already identified above	9? If "No"		
Min   Min	perating)? If "No" describe.  ust generation and vehicle tracking: controls adperating)? If "No" describe.  ousekeeping (Industrial materials/residues/trasldequate (appropriate, effective, and operating)?  eaks and spills: controls adequate (appropriate, escribe.  pliance  ree of incidents of observed non-compliance no	P If "No" describe. effective, and operating)	? If "No"		
Mail	perating)? If "No" describe.  ust generation and vehicle tracking: controls adperating)? If "No" describe.  ousekeeping (Industrial materials/residues/trast dequate (appropriate, effective, and operating)? eaks and spills: controls adequate (appropriate, escribe.	If "No" describe.			<u>F′</u>
Min   Min	perating)? If "No" describe.  ust generation and vehicle tracking: controls adperating)? If "No" describe.  ousekeeping (Industrial materials/residues/trasldequate (appropriate, effective, and operating)?  eaks and spills: controls adequate (appropriate,	If "No" describe.			<b>F</b> ⁄
Mail	perating)? If "No" describe. ust generation and vehicle tracking: controls ad perating)? If "No" describe.	h in contact with stormwa	iter); controls		
omment).           80         an           Fr         90         op           Pr         00         an           Lic         ln         en           10         an         en           20         eff         en           30         an         en           40         de         op           50         an         en           70         op         en           80         "N         en           90         an         en           00         op         op	perating)? If "No" describe.	ioquate (appropriate, elle			Į.
Min   Min	all allegate and a second of the second of t			_ <u> </u>	Г
omment).           80         ar           Fr         90         op           10         ar         ln           20         ef         ef           30         ar         Fu           40         de         op           50         ar         ef           60         Ma         w           70         op         er           80         "N	ocations and sources of run-on to the site: contr nd operating)? If "No" describe.				
omment).           80         an           Tr         90         op           90         an         Lic           10         an         Lic           10         an         Ec           30         an         Fu           40         de         Ou           50         an         W           60         Mis           70         op	rodible areas/construction: controls adequate (a			L P	Γ
omment).           80         an           Fr         90         op           10         an         lin           20         ef         ef           30         an         Fu           40         de         Ou           50         an         an	/aste handling and disposal areas: controls ade perating)? If "No" describe.			_ F _ F	Г
Mail	nd operating)? If "No" describe. lachinery: controls adequate (appropriate, effec	tive, and operating)? If "N	lo" describe.		<b>~</b>
omment).  M: 80 ar 7r 90 op 00 ar Lic 10 ar 20 eff 30 an	escribe. utdoor vehicle and equipment washing areas: c			<u> </u>	<u></u>
omment).  M: 80 an Tr 90 op 00 an Lic 10 an In 20 eff	quipment operation and maintenance areas: co nd operating)? If "No" describe. ueling areas: controls adequate (appropriate, ef				П
omment).  80 an Tr 90 op Pr 00 an	floustrial processing and finished product storag ffective, and operating)? If "No" describe. quipment operation and maintenance areas: co			<u> </u>	Г
omment).  80 an  Tr. 90 op  Pr. 00 an	iquid tank storage/secondary containment: cont nd operating)? If "No" describe. idustrial processing and finished product storag			<u> </u>	Г.
omment). Ma 80 an Tr	roduct/chemical storage areas (raw material): c nd operating)? If "No" describe.			F	Г
omment). Ma	ransfer areas for substances in bulk: controls ac perating)? If "No" describe.	dequate (appropriate, effe	ective, and	ГР	П
POOLA -4:	vity exposed to stormwater (identify needed i. laterial loading/unloading and storage areas: cond operating)? If "No" describe.				sk F⁄
60 <u>"N</u>	No" describe condition & need for Maintenance,	Repair, or Replacement.			<u> </u>
250 "N	nviroSoxx w/ MetalLoxx [6000203200025] Co No" describe condition & need for Maintenance, nviroSoxx w/ MetalLoxx [6000203200026] Co	Repair, or Replacement.			F/
40 "N	rop Inlet with Floc logs [6000209030018] Con No" describe condition & need for Maintenance,	Repair, or Replacement.			F/

*Not: I	Te in car	vet vetent	ion pand.	4	v
	re / Name mation as recorded	Date	8:5러a. <u></u> and complete.	Signature / Name	Date
		CERTIFI	CATION STAT	TEMENT	
CERTIFICATION STATEMENT  certify under penalty of law that this document and all attachments were prepared under my direction or supervision in coordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted assed on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering aformation, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that here are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing tolations."					
Signatory must meet defin	nition in Section B.11.A,	eg. FOD, Ops Mgr, D	ESH Group Leader	; EPC Group Leader)	
rint name and title:_	Russell &	Stone Gol	DESH-4	t±S	

Signature: Date: 1/21/2020

### ATTACHMENT 8: QUARTERLY VISUAL ASSESSMENTS



Environmental Protection & **Compliance Division** 

Compliance Programs Group

To: Leonard Sandoval, DESH-UIS, K760

Thru: Terrill Lemke, EPC-CP, K490

From: Holly Wheeler, EPC-CP, K490  $\vee$  \(\lambda\)

Phone: 505-667-1312 Symbol: EPC-DO: 19-202

Date:

JUL 0 3 2019

Subject: National Pollutant Discharge Elimination System (NPDES) Permit Tracking No. NMR050013, Multi-Sector General Permit (MSGP) Quarterly Visual Assessment (QVA) Form for April and May of 2019 for the TA-60 Material Recycling **Facility** 

Please find attached the completed MSGP QVA form documenting a visual assessment performed during the first quarter of monitoring at the TA-60 Material Recycling Facility. Per Parts 3.2.2 and 5.5 of the 2015 MSGP, the signed certification statement and associated QVA form 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, Triad National Security, LLC (Triad) has designated the following MSGP monitoring quarters.

Quarter 1: April – May Quarter 2: June – July

Quarter 3: August – September Ouarter 4: October - November

The attached QVA form documents the following information required by Part 3.2.2 of the 2015 MSGP and was completed by a representative of Environmental Compliance Programs (EPC-CP).

- 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 EPC-CP Group Leader has signed the certification statement to meet the duly authorized signatory requirements for the QVA contained in Attachment 1.



EPC-DO: 19-202 Leonard Sandoval

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

2 Dw flo fation 7/3/19

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.

Facility Name	Sampling Station	Work Order#
TA-60 MRF	MSGP02901	MSGP-63609

TWL/HLW:jdm

Attachment(s): Attachment 1 Quarterly Visual Assessment Form, First Quarter, 2019 Monitoring Year



Page 3

EPC-DO: 19-202 Leonard Sandoval

Copy: Michael Hazen, ALDESHQSS, mhazen@lanl.gov, (E-File)
Terrill Lemke, EPC-CP, tlemke@lanl.gov, (E-File)
William Mairson, ALDESHQSS, wrmairson@lanl.gov, (E-File)
Russell Stone, DESH-UIS, rdstone@lanl.gov, (E-File)
Enrique Torres, EPC-DO, etorres@lanl.gov, (E-File)
Taunia Van Valkenburg, EPC-CP, tauniav@lanl.gov, (E-File)
Adesh-records@lanl.gov, (E-File)
epc-correspondence@lanl.gov, (E-File)



## **ATTACHMENT 1**

Quarterly Visual Assessment Form, First Quarter, 2019 Monitoring Year

EPC-DO: 19-202

Date: \_\_\_\_\_

**Maintenance Details** 

### Work Order MSGP-63609

MSGP Monitoring Stations Printed 5/21/2019 - 4:22 PM

eason:	4/1/2019 (P-MSGP-5366)  MSCR Overtesty Visual Assessment				
	MSGP Quarterly Visual Assessment Phone	<b>)</b> :			
asks					
# [	Description	Meas.	No	N/A	Yes
The resul	It of this VA applies to associated SIOs as defined in the SWPPP, where applicab	le.			
Sample in	nformation				
	Document the monitoring Period (e.g., Apr-May)	Apr-May			
	Document the Date/Time Discharge began in the "Reading" field of this line (using mm/dd/yy hh:mm format).	4/22/19 @ 23:46			1
	Document the Date/time sample collected in the "Reading" field of this line (using nm/dd/yy hh:mm format).	4/22/19 @ 23:46			10
	Document the Date/time sample visually assessed in the "Reading" field of this line using mm/dd/yy hh:mm format).	4/23/19 @ 10:48			
	Document the nature of discharge (e.g., rain, snowmelt). Document the TOTAL amoun in) in the "Reading" field of this line.	rain 0.74			10
	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide a reason.			П	13/
Paramete	ers				
					_
110 Is	s sample colorless? If "Failed", describe.	brown	136		
Is	s sample colorless? If "Failed", describe. s sample oderless? If "Failed", provide description (e.g. musty, sewage, sulfur, sour, solvent, petroleum/gas)	brown	IA	Г	
120 s	s sample oderless? If "Failed", provide description (e.g. musty, sewage, sulfur, sour, solvent, petroleum/gas)	slightly			TV.
	s sample oderless? If "Failed", provide description (e.g. musty, sewage, sulfur, sour, solvent, petroleum/gas) s sample clear? If "Failed", provide description (e.g., slightly cloudy, cloudy, opaque).		in in		TV.
	s sample oderless? If "Failed", provide description (e.g. musty, sewage, sulfur, sour, solvent, petroleum/gas)	slightly	ix ix		
120   15   130   15   140   C	s sample oderless? If "Failed", provide description (e.g. musty, sewage, sulfur, sour, solvent, petroleum/gas) s sample clear? If "Failed", provide description (e.g., slightly cloudy, cloudy, opaque). s sample free of floating solids? If "Failed", describe if raw or waste material(s) in the	slightly			
120   150	s sample oderless? If "Failed", provide description (e.g. musty, sewage, sulfur, sour, solvent, petroleum/gas) s sample clear? If "Failed", provide description (e.g., slightly cloudy, cloudy, opaque). s sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line.	slightly	<b>X</b>		
Is   120   S   130   Is   140   C   150   Is   160   Is	s sample oderless? If "Failed", provide description (e.g. musty, sewage, sulfur, sour, solvent, petroleum/gas) s sample clear? If "Failed", provide description (e.g., slightly cloudy, cloudy, opaque). s sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line. s sample free of settled solids? If "Failed", provide description (e.g., fine, course).	slightly			
	s sample oderless? If "Failed", provide description (e.g. musty, sewage, sulfur, sour, solvent, petroleum/gas)  s sample clear? If "Failed", provide description (e.g., slightly cloudy, cloudy, opaque). s sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line. s sample free of settled solids? If "Failed", provide description (e.g., fine, course). s sample free of suspended solids? If "Failed", provide description (e.g., fine, course). s sample foamless after gently shaking? If "Failed" describe foam color and location e.g., 'on the surface' or 'in the sample'). s sample devoid of an oil sheen? If "Failed", describe color and thickness (e.g. flecks,	slightly cloudy on the			
Is	s sample oderless? If "Failed", provide description (e.g. musty, sewage, sulfur, sour, solvent, petroleum/gas)  s sample clear? If "Failed", provide description (e.g., slightly cloudy, cloudy, opaque). s sample free of floating solids? If "Failed", describe if raw or waste material(s) in the comments of this line. s sample free of settled solids? If "Failed", provide description (e.g., fine, course). s sample free of suspended solids? If "Failed", provide description (e.g., fine, course). s sample foamless after gently shaking? If "Failed" describe foam color and location e.g., 'on the surface' or 'in the sample').	slightly cloudy on the			

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, DESH Group Leader, EPC Group Leader)
Print name and title: <u>Taunia Van Valkenburg, EPC-CP Ground</u>	up Leader
Signature: (See signature on file)	Date:



To: Leonard Sandoval, DESH-UIS, K760
Thru: Terrill Lemke, EPC-CP, K490
From: Holly Wheeler, EPC-CP, K490

Phone: 505-667-1312 Symbol: EPC-DO: 19-314

Date: SEP 0 3 2019

Subject: National Pollutant Discharge Elimination System (NPDES) Permit Tracking No. NMR050013, Multi-Sector General Permit (MSGP) Quarterly Visual Assessment (QVA) Form for June and July of 2019 for the TA-60 Material Recycling Facility

Please find the completed MSGP QVA form attached documenting a visual assessment performed during the second quarter of monitoring at the TA-60 Material Recycling Facility. Per Parts 3.2.2 and 5.5 of the 2015 MSGP, the signed certification statement and associated QVA form 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, Triad National Security, LLC (Triad) 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 form documents the following information required by Part 3.2.2 of the 2015 MSGP and was completed by a representative of Environmental Compliance Programs (EPC-CP).

- 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 EPC-CP Group Leader has signed the certification statement to meet the duly authorized signatory requirements for the QVA contained in Attachment 1.



EPC-DO: 19-314 Leonard Sandoval

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 Signatur

9 3 20 9 Date

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.

Facility Name	Sampling Station	Work Order #
TA-60 MRF	MSGP02901	MSGP-63790

TWL/HLW:jdm

Attachment(s): Attachment 1 Quarterly Visual Assessment Form, Second Quarter, 2019
Monitoring Year

Copy: Michael Hazen, ALDESHQSS, <a href="mailto:mhazen@lanl.gov">mhazen@lanl.gov</a>
William Mairson, ALDESHQSS, <a href="mailto:wrmairson@lanl.gov">wrmairson@lanl.gov</a>
Russell Stone, DESH-UIS, <a href="mailto:rdstone@lanl.gov">rdstone@lanl.gov</a>
Enrique Torres, EPC-DO, <a href="mailto:etorres@lanl.gov">etorres@lanl.gov</a>
Jennifer Payne, EPC-DO, <a href="mailto:jpayne@Lanl.gov">jpayne@Lanl.gov</a>

Taunia Van Valkenburg, EPC-CP, tauniav@lanl.gov

Terrill Lemke, EPC-CP, tlemke@lanl.gov

Adesh-records@lanl.gov epccorrespondence@lanl.gov



## **ATTACHMENT 1**

Quarterly Visual Assessment Form, Second Quarter, 2019 Monitoring Year

EPC-DO: 19-314

Date: SEP 0 3 2019

Maintenance Details

### Work Order MSGP-63790

MSGP Monitoring Stations Printed 8/2/2019 - 4:36 PM

		Hure: MSGP Quarterly Visual Assessment (EPC-CP-Form-Department: Utilities and Infrastructure Total Transformer)  Assessment (EPC-CP-Form-Department: Utilities and Infrastructure)				P Program 21.9 MRF ored Outfal	I (029)		
Last F	PM:	7/2/2019			MSGI	202901	1 (023)		
Projed	ct:	Visual Assessments 6/1/19 (P-MSGP-5378)							
Reasc	on: N	MSGP Quarterly Visual Assessm	nent		Contact: Phone:				
asks									
#	D	escription				Meas.	No	N/A	Yes
The r	esult	of this VA applies to associat	ed SIOs as defi	ned in the SWPPP, where a	pplicable.				
Samp	ole in	formation							
30		ocument the monitoring Period (				jun-july			1
40		ocument the Date/Time Discharg m/dd/yy hh:mm format).	ge began in the '	Reading" field of this line (us	sing	7/25/19 12:10			TV.
50	m	ocument the Date/time sample o m/dd/yy hh:mm format).				7/25/19 12:10			TV.
60	<u>(u</u>	ocument the Date/time sample v sing mm/dd/yy hh:mm format).				7/25/19 14:02			TV.
70	Document the nature of discharge (e.g., rain, snowmelt). Document the TOTAL amount (in) in the "Reading" field of this line.								10
30	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide a reason.								
Paran	neter	s							
110	Is	sample colorless? If "Failed", de	escribe.			brown	136		
120		sample oderless? If "Failed", pro lvent, petroleum/gas)	ovide description	(e.g. musty, sewage, sulfur,	sour,				
30	Is	sample clear? If "Failed", provid	e description (e.	g., slightly cloudy, cloudy, op	aque).	cloudy	1X	П	
40		sample free of floating solids? If mments of this line.	"Failed", descril	pe if raw or waste material(s)	in the				10
50	Is	sample free of settled solids? If	"Failed", provide	description (e.g., fine, cours	se).				TV.
60	Is	sample free of suspended solids	? If "Failed", pro	ovide description (e.g., fine, o	course).				1
70		sample foamless after gently sh g.,'on the surface' or 'in the sam		describe foam color and lo	cation				Tel .
80		sample devoid of an oil sheen? obs).	If "Failed", descr	ibe color and thickness (e.g.	flecks,				10
90	_ls	sample free of other obvious ind	licators of polluti	on? If "Failed", describe.					
·	leted	ort : 7/25/2019 2:02:00 PM arwin Shendo							
	1 /	signature / Name	7/31/2019 Date	Signatur	e / Name	-	_	Date	
onfi		e information as recorded is t			e / Naiile			Date	
		DO: 19-314		Attachment 1				1	

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, DESH Group Leader, EPC Group Leader)

Print name and title: Taunia Van Valkenburg, EPC-CP Group Leader

Signature: (See signature on file)

Date:

EPC-DO: 19-314 Attachment 1 2



memorandum

Environmental Protection & Compliance Division

Compliance Programs Group

To: Leonard Sandoval, DESH-UIS, K760
Thru: Terrill Lemke, EPC-CP, K490

From: Holly Wheeler, EPC-CP, K490

Phone: 505-667-1312 Symbol: EPC-DO: 19-381

Date: NOV 2 6 2019

Subject: National Pollutant Discharge Elimination System (NPDES) Permit Tracking No.

NMR050013, Multi-Sector General Permit (MSGP) Quarterly Visual Assessment

(QVA) Form for August and September of 2019 for the TA-60 Material

**Recycling Facility** 

Please find attached the completed MSGP QVA form documenting a visual assessment performed during the third quarter of monitoring at the TA-60 Material Recycling Facility. Per Parts 3.2.2 and 5.5 of the 2015 MSGP, the signed certification statement and associated QVA form 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, Triad National Security, LLC (Triad) 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 form documents the following information required by Part 3.2.2 of the 2015 MSGP and was completed by a representative of Environmental Compliance Programs (EPC-CP).

- 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 EPC-CP Group Leader has signed the certification statement to meet the duly authorized signatory requirements for the QVA contained in Attachment 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

11/25/19 Date

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.

Facility Name	Sampling Station	Work Order#
TA-60 MRF	MSGP02901	MSGP-63890

TWL/HLW:jdm

Attachment(s): Attachment 1 Quarterly Visual Assessment Form, Third Quarter, 2019 Monitoring Year

Copy: Michael Hazen, ALDESHQSS, mhazen@lanl.gov
William Mairson, ALDESHQSS, wrmairson@lanl.gov
Jennifer Payne, EPC-DO, jpayne@lanl.gov
Russell Stone, DESH-UIS, rdstone@lanl.gov
Enrique Torres, EPC-DO, etorres@lanl.gov
Taunia Van Valkenburg, EPC-CP, tauniav@lanl.gov
epccorrespondence@lanl.gov
adesh-records@lanl.gov



## **ATTACHMENT 1**

Quarterly Visual Assessment Form, Third Quarter, 2019 Monitoring Year

EPC-DO: 19-381

Date:	NOV A C 9040
Dail.	NOV 2 6 2019

**Maintenance Details** 

EPC-DO: 19-381

### Work Order MSGP-63890

MSGP Monitoring Stations Printed 8/21/2019 - 9:10 AM

_				♣ TA-60 ♣ Monito ♣ MSGF	ored Outfal						
	: MSGP Quarterly Visual Assessm		Project: Visual Assessments 8/1/19 (P-MSGP-5390)								
isks		ent		Contact: Phone:							
#	Description				Meas.	No	N/A	Yes			
The res	sult of this VA applies to associate	d SIOs as defi	ned in the SWPPP, where a	pplicable.							
	information	2 17 507 0						-			
30	Document the monitoring Period (e				aug-sept	$\Box$		14			
10	Document the Date/Time Discharg mm/dd/yy hh:mm format).				8/6/19 16:19			TV.			
50	Document the Date/time sample comm/dd/yy hh:mm format).	ollected in the "F	Reading" field of this line (us	ng 	8/6/19 16:19						
30	Document the Date/time sample vi (using mm/dd/yy hh:mm format).	sually assessed	in the "Reading" field of this	line	8/8/19 10:21			TV.			
0	Document the nature of discharge (e.g., rain, snowmelt). Document the TOTAL amount										
	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide a										
30	Sample collected in first 30 minute reason.	s of discharge?	If "Failed" or unknown, provi	de a		П	П	W			
	reason.	s of discharge?	If "Failed" or unknown, provi	de a 		П	П	V			
Parame	reason.		If "Failed" or unknown, provi	de a 	brown			IV.			
Parame 110	reason.  Is sample colorless? If "Failed", de Is sample oderless? If "Failed", pro	scribe.			brown	T IX		W.			
Parame 110	reason.  ters  Is sample colorless? If "Failed", de	scribe.			musty	IX IX					
Parame 110 20	reason.  Is sample colorless? If "Failed", de Is sample oderless? If "Failed", pro	scribe. vide description	(e.g. musty, sewage, sulfur,	sour,							
Parame 10 20 30	reason.  Is sample colorless? If "Failed", de Is sample oderless? If "Failed", pro solvent, petroleum/gas)	scribe. vide description e description (e.	(e.g. musty, sewage, sulfur,	sour,	musty slightly	M M					
Parametrian 10 20 30 40	Is sample colorless? If "Failed", de solvent, petroleum/gas)  Is sample clear? If "Failed", provide sample clear? If "Failed", provide sample free of floating solids? If	scribe. vide description e description (e. "Failed", describ	g., slightly cloudy, cloudy, op	sour, aque). in the	musty slightly						
Parametrian 10 20 30 40 50	Is sample colorless? If "Failed", de Is sample oderless? If "Failed", prosolvent, petroleum/gas)  Is sample clear? If "Failed", provide Is sample free of floating solids? If comments of this line.	scribe. vide description e description (e. "Failed", describ	e.g. musty, sewage, sulfur, g., slightly cloudy, cloudy, op the if raw or waste material(s) description (e.g., fine, cours	sour, aque). in the	musty slightly						
30 Paramet 110 120 130 140 150 160	Is sample colorless? If "Failed", de Is sample oderless? If "Failed", prosolvent, petroleum/gas)  Is sample clear? If "Failed", provide Is sample free of floating solids? If comments of this line.  Is sample free of settled solids? If "	scribe.  vide description e description (e. "Failed", describ Failed", provide ? If "Failed", pro	g., slightly cloudy, cloudy, op be if raw or waste material(s) description (e.g., fine, cours ovide description (e.g., fine, c	sour, aque). in the se).	musty slightly						
Parametrian (10) 120 130 140 150 160 160 160 170 170 170 170 170 170 170 170 170 17	Is sample colorless? If "Failed", de Is sample oderless? If "Failed", prosolvent, petroleum/gas)  Is sample clear? If "Failed", provide Is sample free of floating solids? If comments of this line.  Is sample free of settled solids? If Is sample free of suspended solids Is sample foamless after gently sha	scribe. vide description e description (e. "Failed", descrik Failed", provide ? If "Failed", pro	g., slightly cloudy, cloudy, op be if raw or waste material(s) description (e.g., fine, cours ovide description (e.g., fine, c	sour, aque). in the se). course).	musty slightly						

Attachment 1

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, DESH Group Leader, EPC Group Leader)

Print name and title: Taunia Van Valkenburg, EPC-CP Group Leader

Signature: (See signature on file)

Date:



memorandum

Environmental Protection & Compliance Division

Compliance Programs Group

To: Leonard Sandoval, DESH-UIS, K760

Thru: Terrill Lemke, EPC-DO, K490

From: Holly Wheeler, EPC-CP, K490

Phone: 505-667-1312 Symbol: EPC-DO: 19-458

Date:

JAN 1 0 2020

Subject: National Pollutant Discharge Elimination System (NPDES) Permit Tracking No. NMR050013, Multi-Sector General Permit (MSGP) Quarterly Visual Assessment (QVA) Form for October and November of 2019 for the TA-60 Material Recycling Facility

Please find attached the completed MSGP QVA form documenting a visual assessment performed during the fourth quarter of monitoring at the TA-60 Material Recycling Facility. Per Parts 3.2.2 and 5.5 of the 2015 MSGP, the signed certification statement and associated QVA form 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, Triad National Security, LLC (Triad) 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 form documents the following information required by Part 3.2.2 of the 2015 MSGP and was completed by a representative of Environmental Compliance Programs (EPC-CP).

- 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 EPC-CP Group Leader has signed the certification statement to meet the duly authorized signatory requirements for the QVA contained in Attachment 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.

<u>Taunia Van Valkenburg, EPC-CP Group Leader</u> Los Alamos National Laboratory

Manager Signature

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.

Facility Name	Sampling Station	Work Order #
TA-60 MRF	MSGP02901	MSGP-64001

TWL/HLW:jdm

Attachment(s): Attachment 1 Quarterly Visual Assessment Form, Fourth Quarter, 2019
Monitoring Year

Copy: Michael Hazen, ALDESHQSS, mhazen@lanl.gov
William Mairson, ALDESHQSS, wrmairson@lanl.gov
Enrique Torres, EWP, etorres@lanl.gov
Jennifer Payne, EPC-DO, jpayne@lanl.gov
Russell Stone, DESH-UIS, rdstone@lanl.gov
Taunia Van Valkenburg, EPC-CP, tauniav@lanl.gov
Terrill Lemke, EPC-CP, tlemke@lanl.gov

epccorresondence@lanl.gov adesh-records@lanl.gov



## **ATTACHMENT 1**

Quarterly Visual Assessment Form, Fourth Quarter, 2019 Monitoring Year

EPC-DO: 19-458

Date: JAN 1 0 2020	
--------------------	--

**Maintenance Details** 

### Work Order MSGP-64001

MSGP Monitoring Stations Printed 10/28/2019 - 2:30 PM

10/4/2019 Visual Assessments 10/1/19 (P-MSGP-5407) SGP Quarterly Visual Assessme	ent			SGP Program 6121.9 -60 MRF nitored Outfall (029)								
(P-MSGP-5407)	ent		IN NISGP	02901	(020)							
SGP Quarterly Visual Assessmo	ent		Control									
			Contact: Phone:									
scription				Meas.	No	N/A	Yes					
of this VA applies to associate	d SIOs as defir	ned in the SWPPP, where a	pplicable.									
ormation												
	e.g., Apr-May)			oct-nov	1	and the same of th	10					
		Reading" field of this line (u	sing	10/4/19 04:57	П							
cument the Date/time sample co n/dd/yy hh:mm format).	ollected in the "R	leading" field of this line (us	ng	10/4/19 04:57								
n/dd/yy hh:mm format).				10/4/19 10:11			V					
Document the nature of discharge (e.g., rain, snowmelt). Document the TOTAL amount (in) in the "Reading" field of this line.												
•	s of discharge?	Sample collected in first 30 minutes of discharge? If "Failed" or unknown, provide a reason.										
						-						
ample colorless? If "Failed", de	scribe.			brown	DE.							
ample colorless? If "Failed", de: ample oderless? If "Failed", pro /ent, petroleum/gas)		(e.g. musty, sewage, sulfur	sour,		in the second							
ample oderless? If "Failed", pro /ent, petroleum/gas)	vide description		-	slightly	<b>X</b>							
ample oderless? If "Failed", pro /ent, petroleum/gas) ample clear? If "Failed", provide ample free of floating solids? If	vide description e description (e.ç	g., slightly cloudy, cloudy, or	aque).		is .							
ample oderless? If "Failed", pro /ent, petroleum/gas) ample clear? If "Failed", provide	vide description e description (e.g	g., slightly cloudy, cloudy, or e if raw or waste material(s	aque).	slightly								
ample oderless? If "Failed", pro /ent, petroleum/gas) ample clear? If "Failed", provide ample free of floating solids? If nments of this line.	vide description e description (e.g "Failed", describ	g., slightly cloudy, cloudy, or e if raw or waste material(s description (e.g., fine, cours	aque). in the	slightly	iš .							
ample oderless? If "Failed", provent, petroleum/gas)  ample clear? If "Failed", provide ample free of floating solids? If ments of this line.  ample free of settled solids? If "ample free of suspended solids ample foamless after gently shand on the surface' or 'in the same	vide description e description (e.g "Failed", describ Failed", provide ? If "Failed", pro	g., slightly cloudy, cloudy, or e if raw or waste material(s description (e.g., fine, cours vide description (e.g., fine,	aque). in the	slightly cloudy								
ample oderless? If "Failed", pro yent, petroleum/gas)  ample clear? If "Failed", provide ample free of floating solids? If ments of this line.  ample free of settled solids? If " ample free of suspended solids ample foamless after gently sha	vide description e description (e.g "Failed", describ Failed", provide ? If "Failed", pro aking? If "Failed"	g., slightly cloudy, cloudy, or e if raw or waste material(s description (e.g., fine, cours vide description (e.g., fine, of describe foam color and lo	aque).  in the  se).  course).  cation	slightly								
	rmation sument the monitoring Period (estimated prior the Date/Time Discharg (dd/yy hh:mm format). sument the Date/time sample of (dd/yy hh:mm format). sument the Date/time sample vi/dd/yy hh:mm format). sument the Date/time sample vi/dd/yy hh:mm format). sument the nature of discharge in the "Reading" field of this lineapple collected in first 30 minutes	f this VA applies to associated SIOs as defiring remation sument the monitoring Period (e.g., Apr-May) sument the Date/Time Discharge began in the "laddyy hh:mm format).  Summent the Date/time sample collected in the "Raddyy hh:mm format).  Summent the Date/time sample visually assessed (dd/yy hh:mm format).  Summent the nature of discharge (e.g., rain, snow in the "Reading" field of this line.  Inple collected in first 30 minutes of discharge? I	f this VA applies to associated SIOs as defined in the SWPPP, where a rmation sument the monitoring Period (e.g., Apr-May) sument the Date/Time Discharge began in the "Reading" field of this line (usi/dd/yy hh:mm format).  Summent the Date/time sample collected in the "Reading" field of this line (usi/dd/yy hh:mm format).  Summent the Date/time sample visually assessed in the "Reading" field of this //dd/yy hh:mm format).  Summent the nature of discharge (e.g., rain, snowmelt). Document the TOTAL in the "Reading" field of this line.  Inple collected in first 30 minutes of discharge? If "Failed" or unknown, provi	f this VA applies to associated SIOs as defined in the SWPPP, where applicable.  rmation  sument the monitoring Period (e.g., Apr-May)  sument the Date/Time Discharge began in the "Reading" field of this line (using /dd/yy hh:mm format).  sument the Date/time sample collected in the "Reading" field of this line (using /dd/yy hh:mm format).  sument the Date/time sample visually assessed in the "Reading" field of this line (using /dd/yy hh:mm format).  sument the nature of discharge (e.g., rain, snowmelt). Document the TOTAL amount in the "Reading" field of this line.  supple collected in first 30 minutes of discharge? If "Failed" or unknown, provide a	f this VA applies to associated SIOs as defined in the SWPPP, where applicable.  rmation  sument the monitoring Period (e.g., Apr-May)  cument the Date/Time Discharge began in the "Reading" field of this line (using /dd/yy hh:mm format).  cument the Date/time sample collected in the "Reading" field of this line (using /dd/yy hh:mm format).  cument the Date/time sample visually assessed in the "Reading" field of this line (using /dd/yy hh:mm format).  cument the Date/time sample visually assessed in the "Reading" field of this line (using /dd/yy hh:mm format).  cument the nature of discharge (e.g., rain, snowmelt). Document the TOTAL amount in the "Reading" field of this line.  rain .49	f this VA applies to associated SIOs as defined in the SWPPP, where applicable.  rmation  sument the monitoring Period (e.g., Apr-May)  cument the Date/Time Discharge began in the "Reading" field of this line (using /dd/yy hh:mm format).  cument the Date/time sample collected in the "Reading" field of this line (using /dd/yy hh:mm format).  cument the Date/time sample visually assessed in the "Reading" field of this line (using /dd/yy hh:mm format).  cument the Date/time sample visually assessed in the "Reading" field of this line (using /dd/yy hh:mm format).  cument the nature of discharge (e.g., rain, snowmelt). Document the TOTAL amount in the "Reading" field of this line.  current the nature of discharge (e.g., rain, snowmelt). Document the TOTAL amount in the "Reading" field of this line.  current the nature of discharge (e.g., rain, snowmelt). Document the TOTAL amount in the "Reading" field of this line.  current the nature of discharge (e.g., rain, snowmelt). Document the TOTAL amount in the "Reading" field of this line.	f this VA applies to associated SIOs as defined in the SWPPP, where applicable.  rmation  sument the monitoring Period (e.g., Apr-May)  cument the Date/Time Discharge began in the "Reading" field of this line (using od:57 od/4/19 od:57 od/4/19 od:57 od/4/19 od:57 od/4/19 od/4/19 od/57 od/4/19 od/57 od/4/19 od/57 od/4/19 od/57 od/4/19 od/4/19 od/57 od/4/19					

(	CEI	RΊ	М	F	I	$\Gamma$	A	Л	Г	ľ	П	I	V	[ :	S	Г	Δ	'n	L.	R	1	١	1	ŀ	6.	١	ľ	Г

"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".

Date:

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

Print name and title: Taunia Van Valkenburg, EPC-CP Group Leader

Signature: (See signature on file)

EPC\_DO: 19-458 Attachment 1

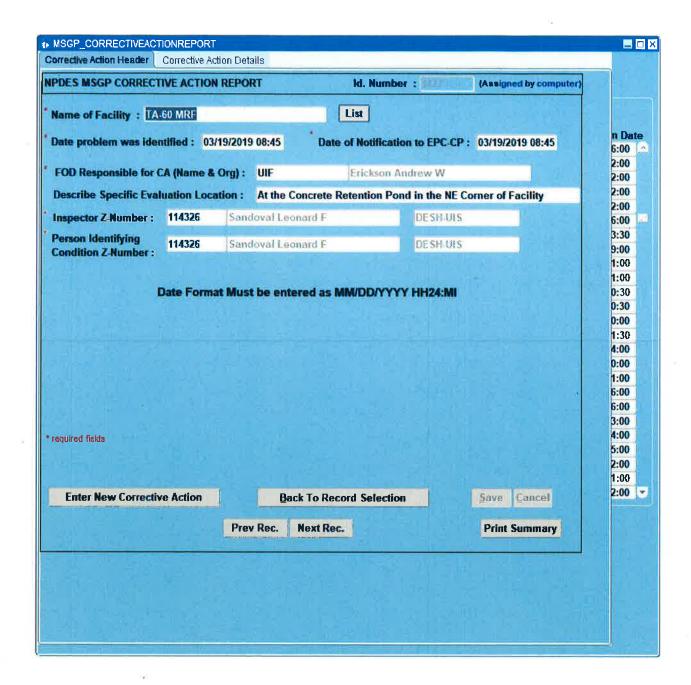
2

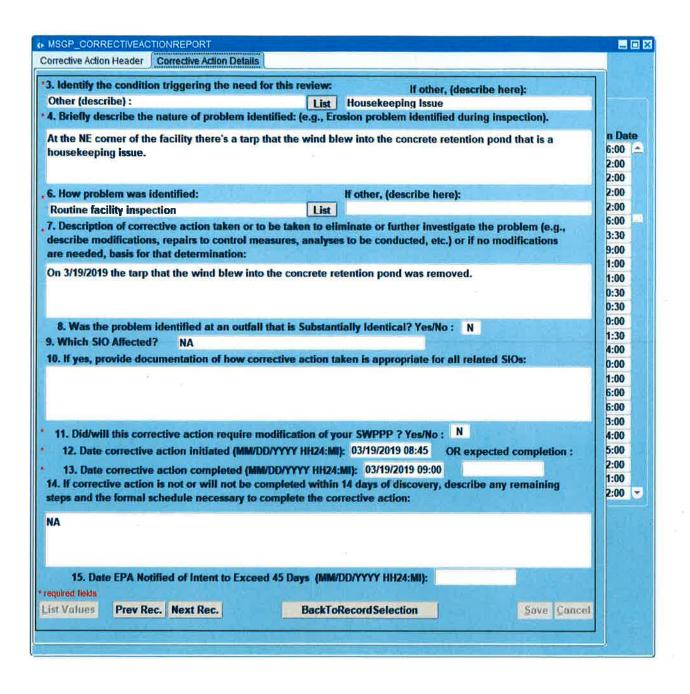
# ATTACHMENT 9: CORRECTIVE ACTION DOCUMENTATION AND CERTIFICATION

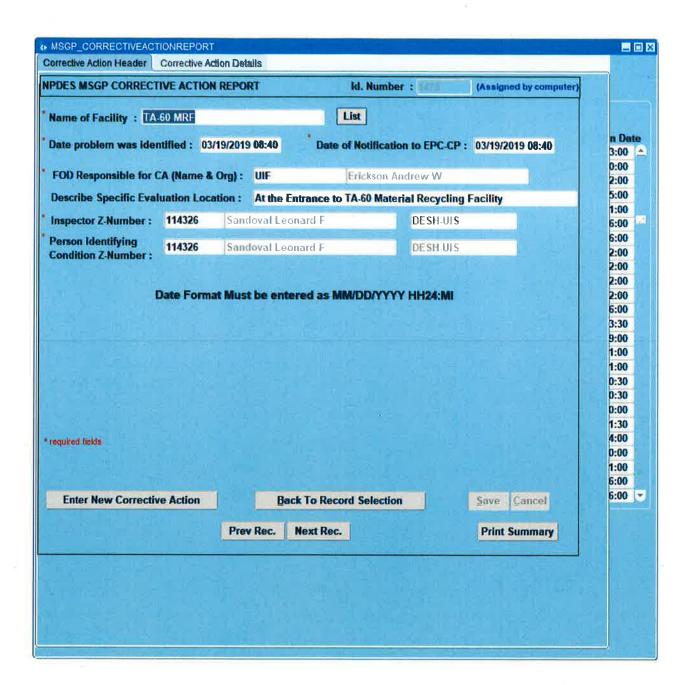
### **CERTIFICATION FOR CORRECTIVE ACTIONS**

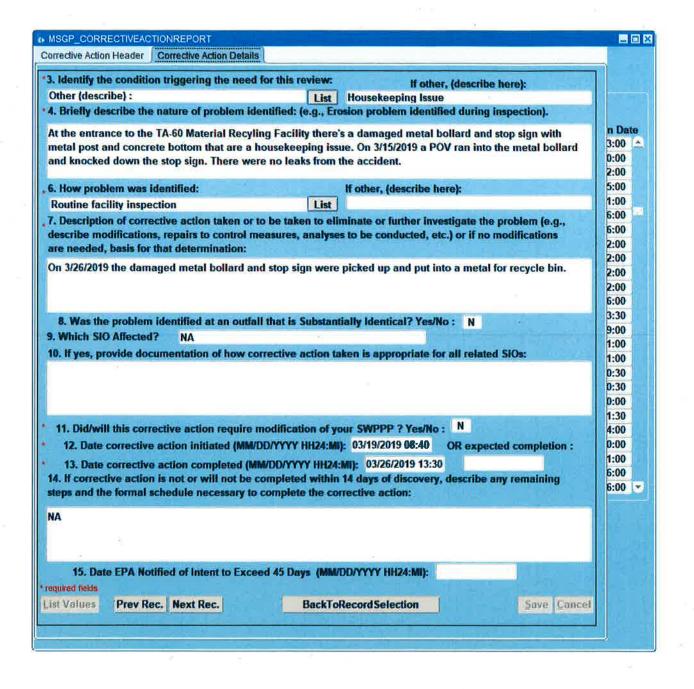
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information contained therein. Based on my inquiry of the person or persons 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.

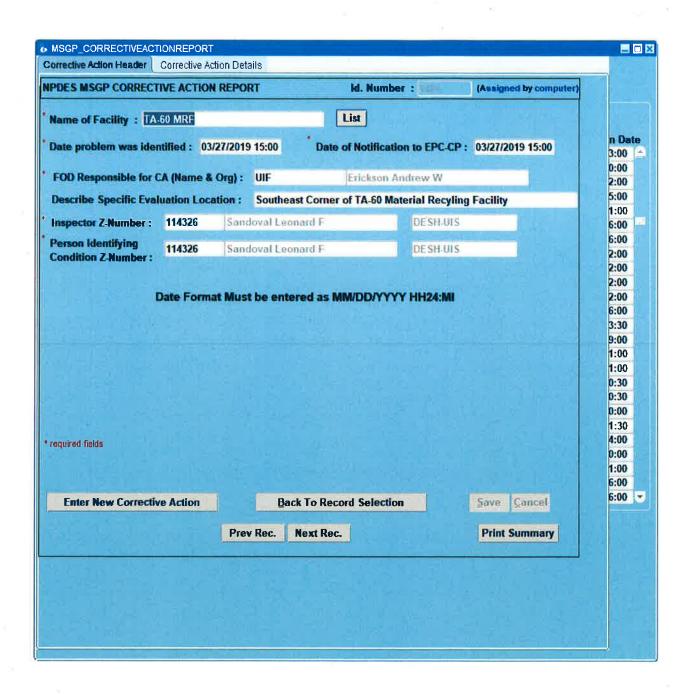
Printed Name: Rosell Stone	Title: ESH Mar 4 DESH-UIS
Signature: Musual Fer	Date:



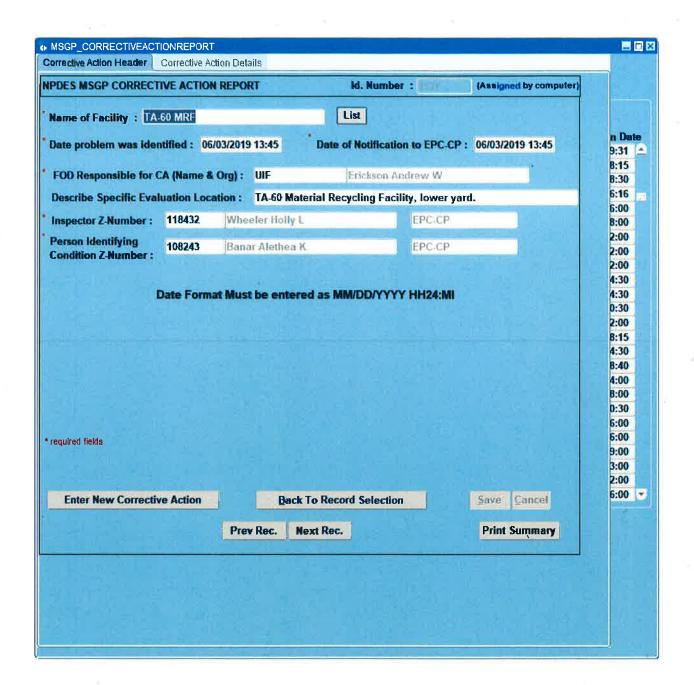


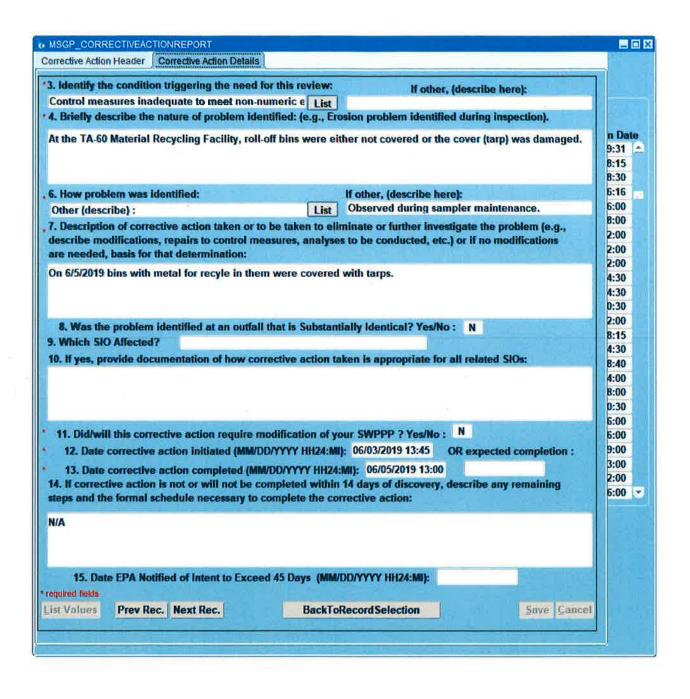


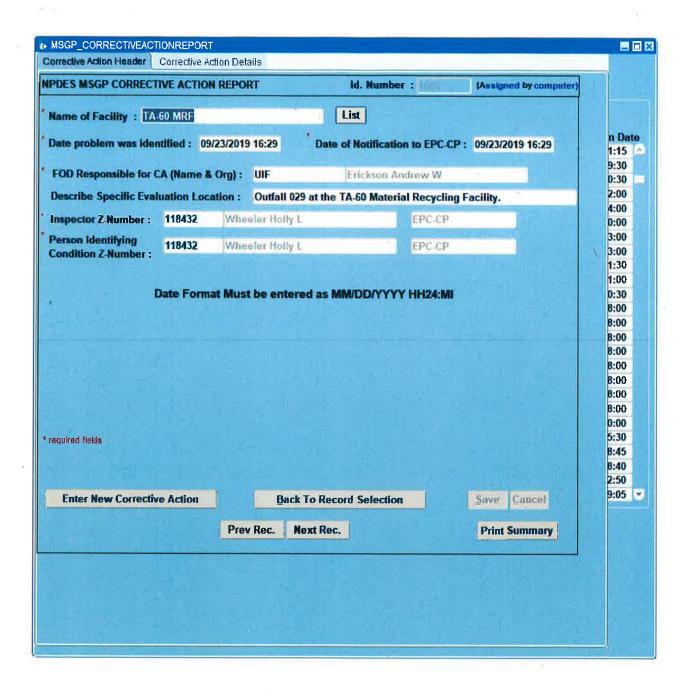


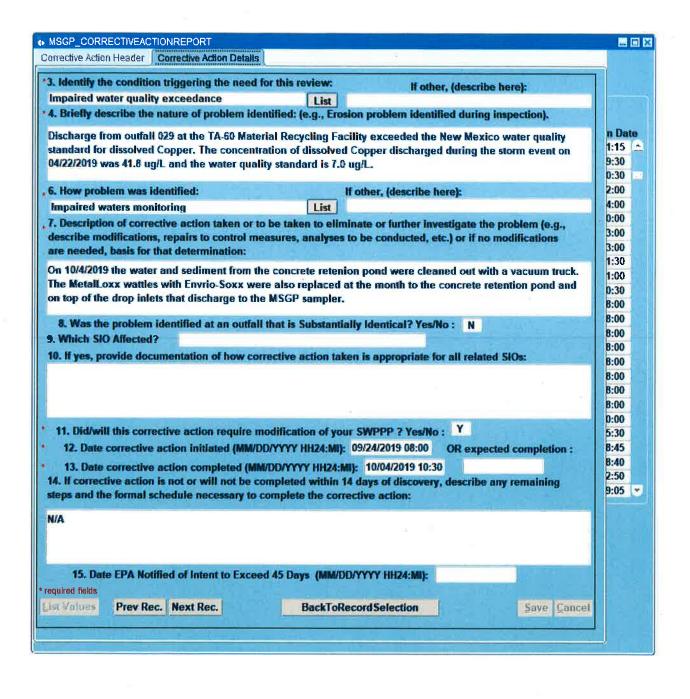


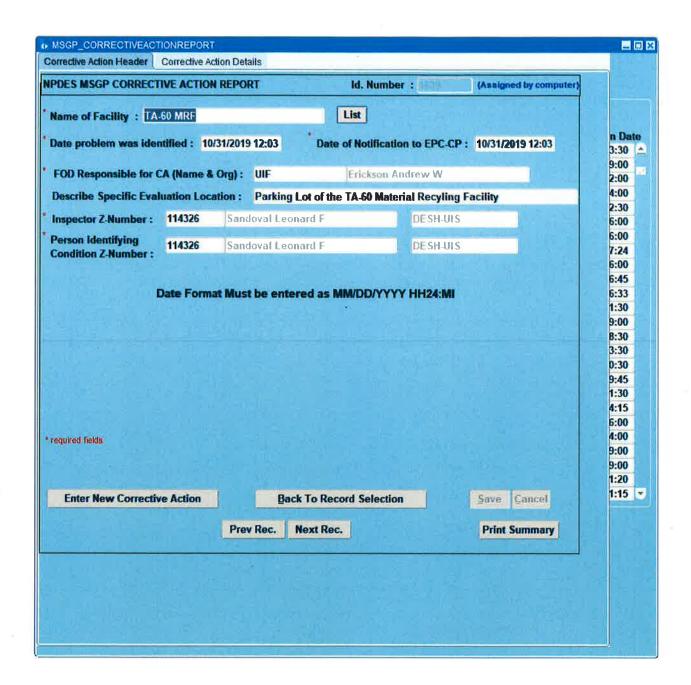
		-
rrective Action Header   Corrective Action Deta	lails (	
. Identify the condition triggering the ne	ii outer, (uescribe nere).	
Jnauthorized release or discharge	List	
. Briefly describe the nature of problem	identified: (e.g., Erosion problem identified during inspection).	
gallons of a water/oily mixture. Emergen	ncy Operations and HAZMMAT responded and used absorbent pads an up effort. The final clean up of the affected area and metal roll off	00 . :00 .
i. How problem was identified:	If other, (describe here):	:00
Other (describe) :	List Least Hotel Hotel for receive bill	:00
	or to be taken to eliminate or further investigate the problem (e.g., if measures, analyses to be conducted, etc.) or if no modifications :	00:00:00:00:00:00:00:00:00:00:00:00:00:
pallons of a water/oily mixture. Emergen and micro-blaze as part of the initial clea ain was completed by Poads and Ground	a metal for recycle bin from TA-35-2 delivered to the MRF spilled 4 ncy Operations and HAZMMAT responded and used absorbent pads an up effort. The final clean up of the affected area and metal roll off de on 3/29/2019	:00 :00 :00 :00
	Ittall that is Substantially Identical? Yes/No: N	:00
Which SłO Affected? NA     If yes, provide documentation of how	v corrective action taken is appropriate for all related SIOs:  1: 0:	:00 :00 :30 :30 :00
12. Date corrective action initiated (MI 13. Date corrective action completed 4. If corrective action is not or will not be	re modification of your SWPPP ? Yes/No : N  IM/DD/YYYY HH24:MI): 03/27/2019 15:00 OR expected completion : 0:  (MM/DD/YYYY HH24:MI): 03/29/2019 11:00 1:  be completed within 14 days of discovery, describe any remaining	:30 :00 :00 :00 :00
15. Date EPA Notified of Intent to Executed fields  St Values Prev Rec. Next Rec.	kceed 45 Days (MM/DD/YYYY HH24:MI):  BackToRecord Selection Save Cancel	

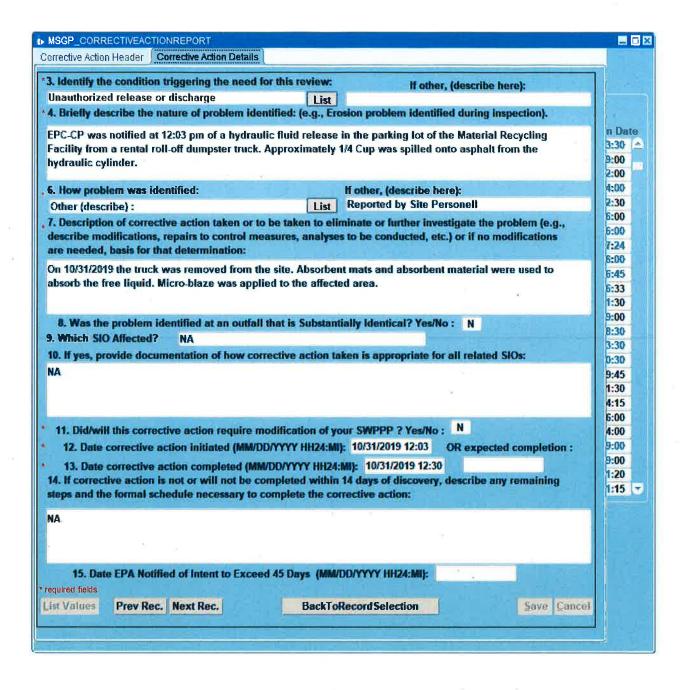


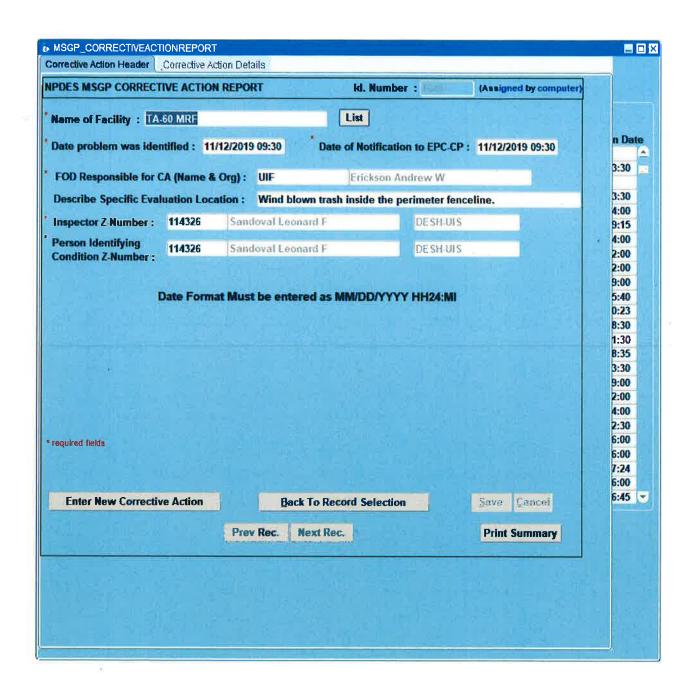


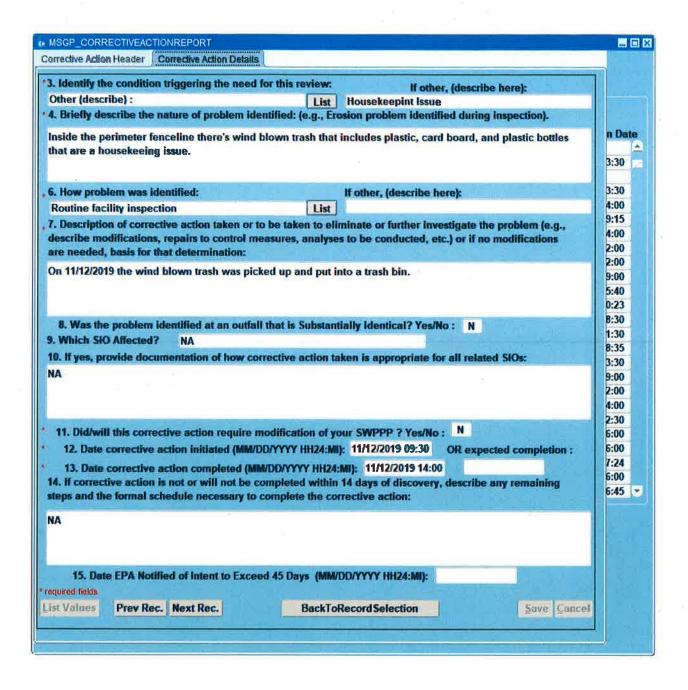


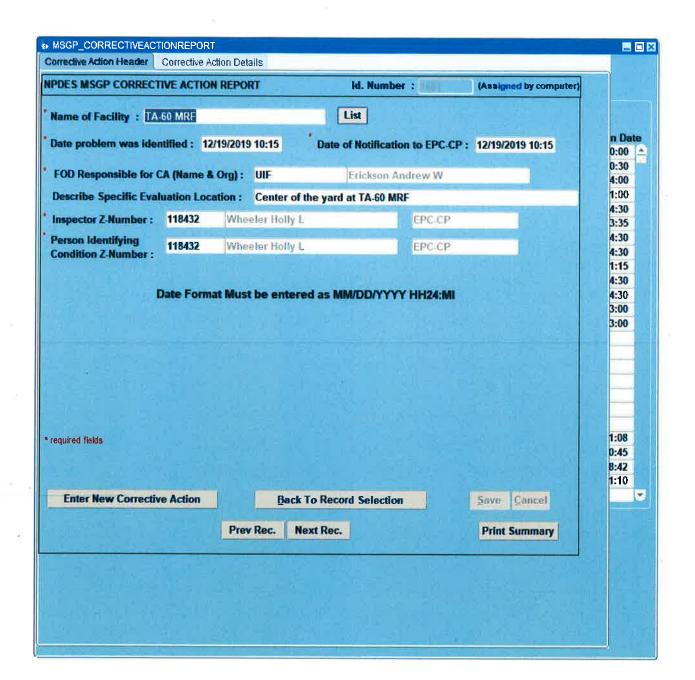


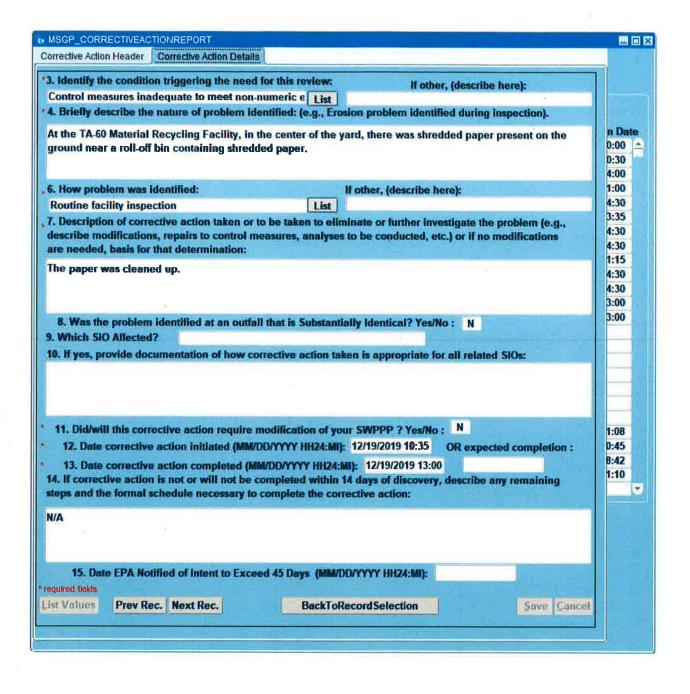


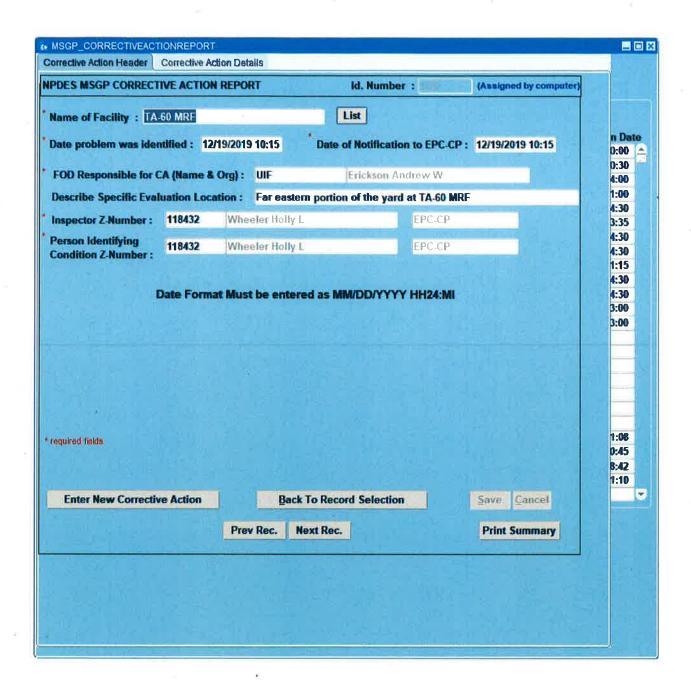


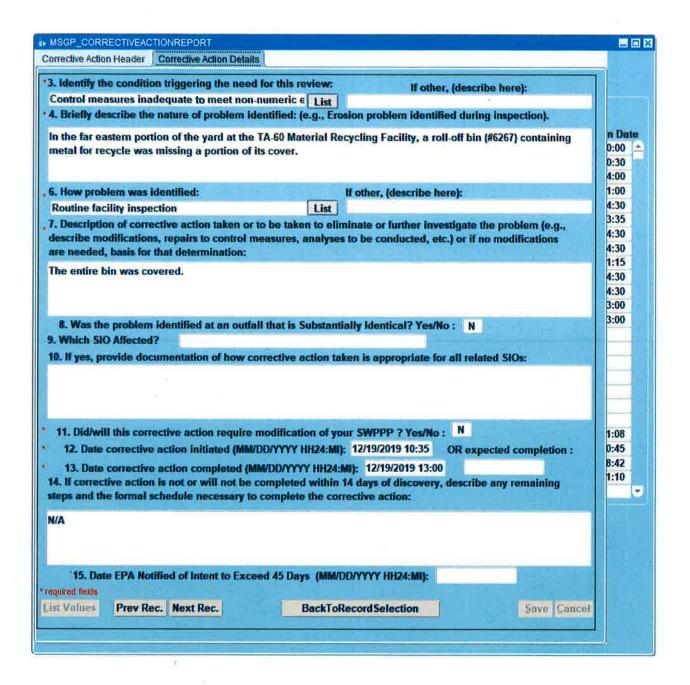








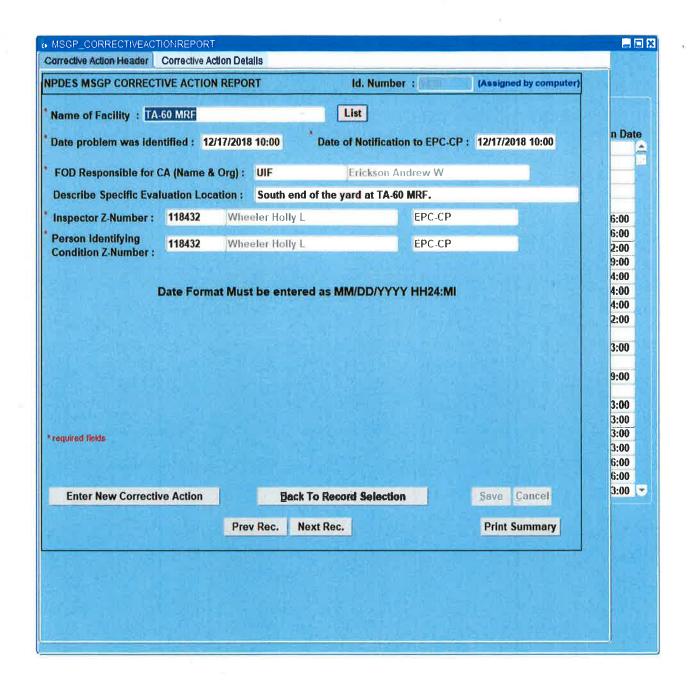


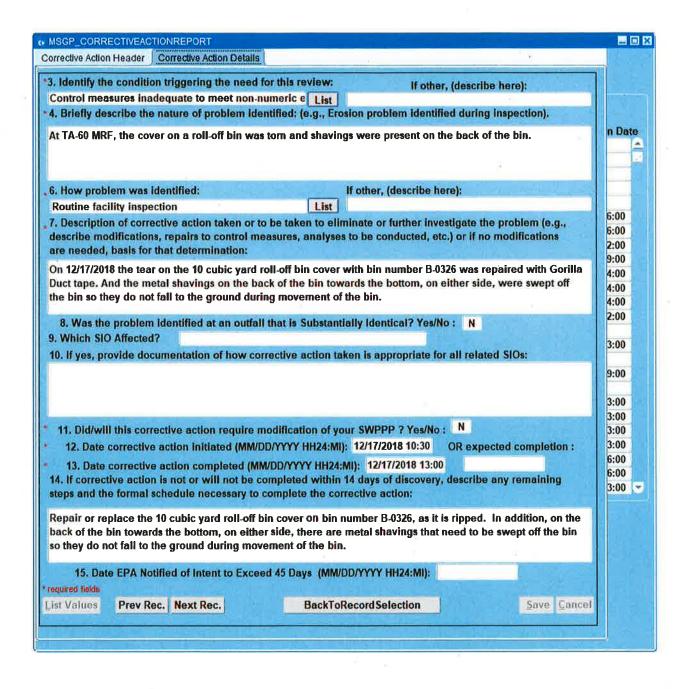


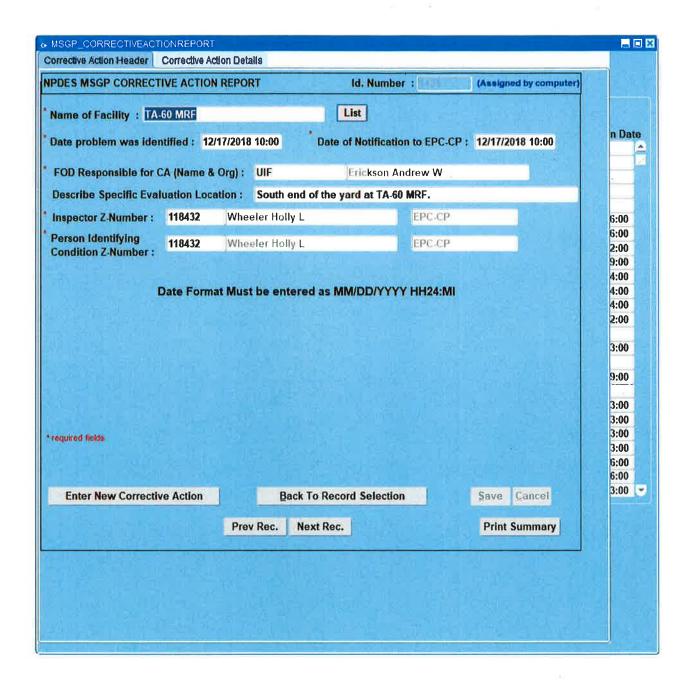
#### **CERTIFICATION FOR CORRECTIVE ACTIONS**

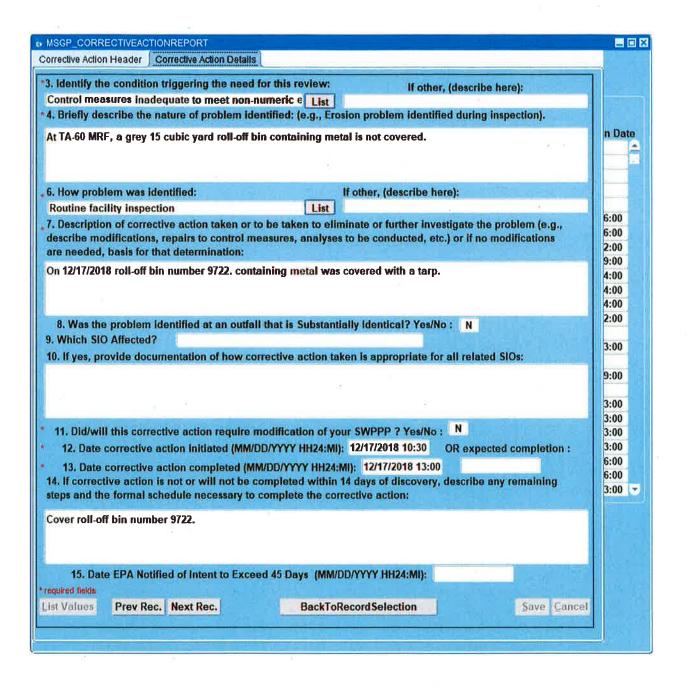
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information contained therein. Based on my inquiry of the person or persons 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.

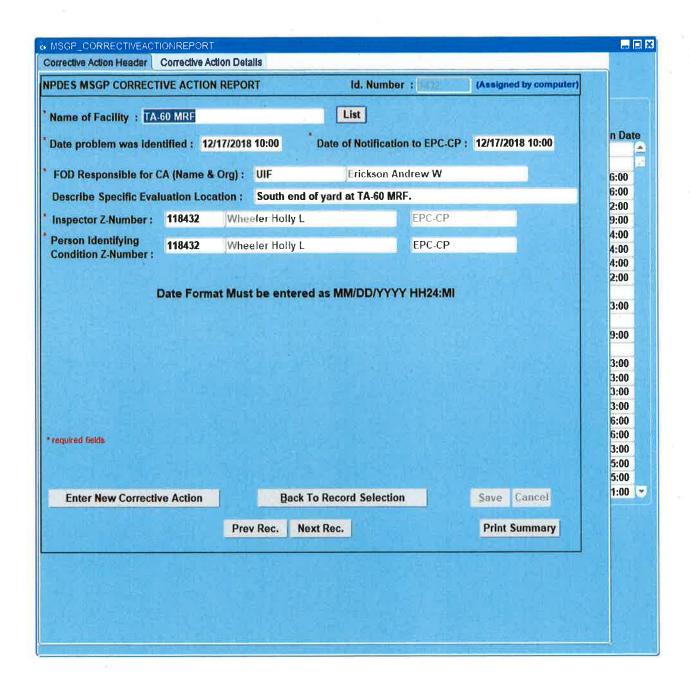
Printed Name: Russell Stone	Title: GC DESH-UIS
Signature: Ruce Il	Date:

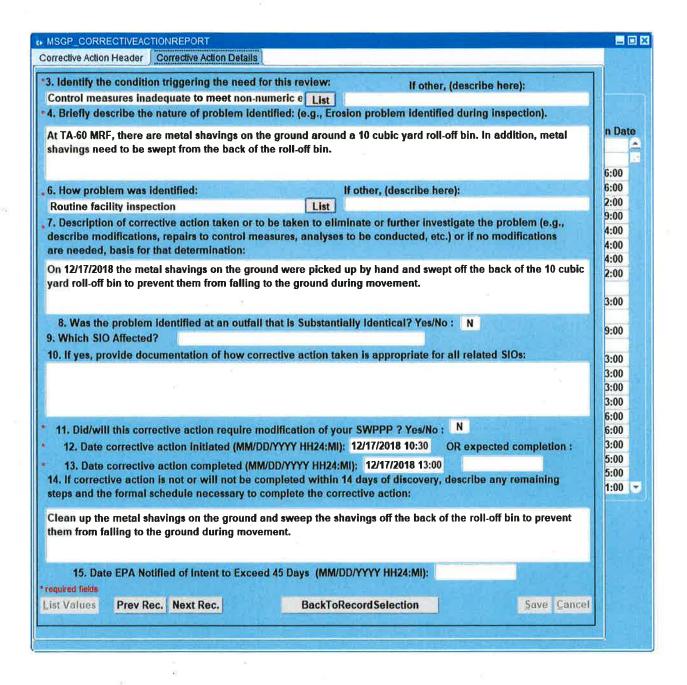












#### **ATTACHMENT 10: SCHEDULED MAINTENANCE LOG**

#### **SCHEDULED MAINTENANCE LOG**

#### **Control Measure or**

Date	<b>Equipment Description</b>	Action Taken/Comments	<b>Action Taken By</b>
4/22/2019	Concrete Retention Pond	Sediment and water were cleaned out	Jack Caldwell 116986
4/22/2019	Concrete Retention Pond and Drop Inlets	MetalLoxx with Enviro-Soxx Wattles were replaced	Jack Caldwell 116986
4/22/2019	Drop Inlets	Floc Logs were replaced	Jack Caldwell 116986
10/4/2019	Concrete Retention Pond	Sediment and water were cleaned out	Jack Caldwell 116986
10/4/2019	Concrete Retention Pond and Drop Inlets	MetalLoxx with Enviro-Soxx Wattles were replaced	Jack Caldwell 116986
10/4/2019	Drop Inlets	Floc Logs were replaced	Jack Caldwell 116986

Page 1 of 1

#### **ATTACHMENT 11: TRAINING DOCUMENTATION**



# New Mexico Water Quality Control Commission Compliance

Spills and Unplanned Releases Legacy Equipment – Lesson's Learned



## **Presentation Overview**

- Environmental Reporting Requirements
- Who to Contact in the Event of a Release
- Ways to Prevent Spills
- NPDES MSGP Requirements
- Legacy Equipment Lessons Learned
- Questions





# Spills- Unplanned Releases to the Environment

- Water Quality investigates and evaluates spills throughout LANL to determine if external reporting is required to comply with State and Federal Regulations
  - NMWQCC Regulations, Clean Water Act, CERCLA, EPCRA





## Spills- Unplanned Releases to the Environment

- Corrective actions need to be taken for all spills that occur
- There is not a de minimis volume of spilled material that does not need to be addressed







# Who to Contact in the Event of a Spill

- Notify Supervisor of Spill Occurrence
- Notify the Roads and Grounds Deployed Environmental Professional
  - Leonard Sandoval
- Notify Water Quality Spills Pager 664-7722
- Notify Emergency Operations in the event of an emergency 667-6211







# **Spill Prevention and Minimization**

- Plan work to eliminate avoidable spills
- Use secondary containment to prevent releases to the environment
- Ensure preventive maintenance on equipment is completed
- Know where spill kits are located and how to use contents
- Know who to contact in the event of a release





Slide 6



# NPDES Multi-Sector General Permit (MSGP) Requirements

- Drain fluids from equipment and vehicles that will be decommissioned, and, for any equipment and vehicles that will remain unused for extended periods of time, inspect at least monthly for leaks.
  - At LANL-"an extended period of time" is considered to be 6 months.







# Legacy Equipment Sheep's Foot Compactor-Lesson's Learned

- Compactor discovered on Sigma Mesa-slated to be salvaged
- Diesel was identified to be leaking from equipment
- Initially thought to be empty
  - Actually filled with over 900 gallons of diesel/water







# Legacy Equipment Sheep's Foot Compactor-Lesson's Learned Continued

- Diesel filled compactor presented significant environmental compliance and safety concern
  - SPCC, NMWQCC, Site Safety
- Notify your management and environmental resources to investigate any unknown equipment or equipment suspected to contain potential water contaminants to mitigate safety and environmental issues







# **Questions?**







### Meeting Sign-In Sheet

Roads & Grounds Safety Meeting SWPP Traming

Facilitator: Dana Parrett, Brian I Cona Leonard San Meeting Date: Monday, October 29, 2018

Place/Room: TA-60 Bldg 250

Name	Z#	Signature
Victor Bystes	244917	J. J. S. S.
John Valdez	193103	- Fileles
James Cosper	323005	gang 8
James Osborn	175405	James De Som
Boyen Voight	320601	Bat
Thomas mork	326925	Meno WA
Konald Louds	205934	4.
Jan Antone	320 599	In fatou
Raymond BACA	202778	Haymond Soca
BETTY Monthya	18/675	Betty Montoya
DENNIS Garain	319111	Demi Garris
Jesse Garris	24/499	June Garan
Desiree Luja	237616	Besuise (2/m)
Demadette Lopez	174810 (	Bornadelle Trus
Eleazar Molina,	204566	Cleanar Maline
Maio Accurlera	836804	1
Ada Drake	228300	ME
Nicole Fresquez	145982	Mille for
Derrick Nunez	296647	David Nung
Bernle AncholeTa	131464	151

## Meeting Sign-In Sheet

Roads & Grounds Safety Meeting SUPPP Training

Meeting Date: Monday, October 29, 2018

Facilitator: Dana Parrett, Bran Icona Leonard Sandoval

Place/Room: TA-60 Bldg 250

Name	Z#	Signature
Dominguez Juan	163502	Juan Caming
Northan Serrano	230568	Morato
Anthony Mass	305377	Golf Bles
Anthony Salazar	31/020	Alfaly 1
Adrian Trujillo	304295	Al- Chiff
Alexander Trijillo	307018	the set
Francisco Injillo	217518	for the
Esteban Madrid	305378	Ett Male O
Loseph Garcia	323220	Joseph & Dun
Simone Frequez	25/828	
Peter DeHaynero	315451	Poter Wity
Nolan Sanchez	3472	Notan Sanche
Liguel Caro	189745	Niguel Card
Kevin B Martinez	322719	Kenin Manin
Joe Walker	723181	Lord War
Patricia Lopez	169389	Pertura In
Mark A. Lopez	219923	Mayl a. Day
Louis Charon	321819	Fromming C Charon
ack Caldwell	116986	Jus Calland

### Meeting Sign-In Sheet

Roads & Grounds Safety Meeting SWPP Training Meeting Date: Monday, October 29, 2018

Facilitator: Dana Parrett, Brian I Cona Place/Room: TA-60 Bldg 250
Leonard Sandoval

Name	Z#	Signature
Dana Parrott	170040	LA .
DAVIE! M. ABeyA	184462	D-/11 116
Gary R Medina	137563	May & Meden
GARY GONZARS	390385	Jony III
ADAM ChACO	329863	Allax
Chris Garcia	239219	Chris Caecia
MAROIN L. MARTINEZ	116424	Mm 1. Umt
Les lie Maley volds	10 6886	See
JUE BOIES	224950	JOE BUTE
Lawrence Garda	294694	
Steven Martinez	200540	Stist
Danny Equibel	146331	Dw Los
Levery Conzalos	170592	300
Cody L Garinger	304296	her Johns
TRAVIS Cours	215607	The seen
Randey Wartinez	294724	fant II
Isainh Maldando	297023	Siel Wahl
Anna M Chavez	306989	Analleman
pol Medina	154217	ga pe
/		

## Meeting Sign-In Sheet

Roads & Grounds Safety Meeting Meeting Date: Monday, October 29, 2018

Facilitator: Dana Parrett Place/Room: TA-60 Bldg 250

Name	Z#	Signature
Michael Martinz	094345	Ugchal Montan
Joseph Matinez	231521	Laugh 1
Learned F. Sandalay	114326	1 TIM
Duare Packers	119194	Whome Parker
Wette & Kalkeyes	237657	July Hallings
Benito Vicil	237258	An &
Affred Jaranto	292839	alle ferangelle.
Sandra Gunzgles	24366	Dandy Dunk
S. S.		
	Э	

## Meeting Sign-In Sheet

Roads & Grounds Safety Meeting SWPP Training

Facilitator: Dana Parrett, Brian Icona

Meeting Date: Monday, October 29, 2018

Place/Room:

TA-60 Bldg 250

Ge chard		
Name	Z#	Signature
Christia Chayez	320833	(10) 8
BORY M-luller	241759	95-18151
Daniel Mas	311184	- Dengton
Dalian Matgoz	326075	
gunlle De	312040	000
FIM. Mg	314173	How Mis
( ) / -	3/5453	Jun Paul Gonzales
1 / 0		To The Controls

## Meeting Sign-In Sheet Roads & Grounds Safety Meeting Meeting Date: Monday, October 29, 2018 Facilitator: Dana Parrett Place/Room: TA-60 Bldg 250

Name	Z#	Signature
Silvian U Tucka	096056	She
	7555	200
		+

#### ATTACHMENT 12: MSGP (OR ACTIVE URL)

A copy of the 2015 MSGP is kept on file with the SWPPP in hard copy.

The active URL for the permit is: https://www.epa.gov/npdes/final-2015-msgp-documents

## ATTACHMENT 13: THREATENED AND ENDANGERED SPECIES HABITAT MANAGEMENT PLAN FOR LOS ALAMOS NATIONAL LABORATORY

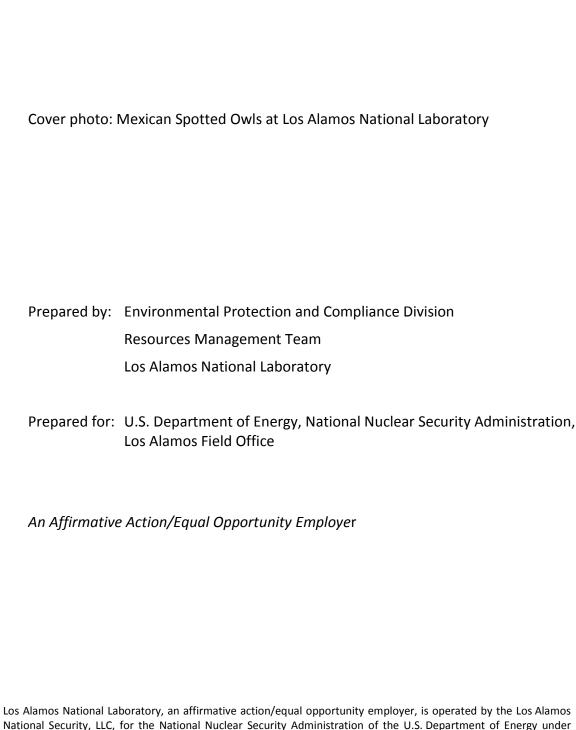
Approved for public release; distribution is unlimited.

October2017

# Threatened and Endangered Species Habitat Management Plan for Los Alamos National Laboratory







Los Alamos National Laboratory, an affirmative action/equal opportunity employer, is operated by the Los Alamos National Security, LLC, for the National Nuclear Security Administration of the U.S. Department of Energy under contract DE-AC52-06NA25396. By acceptance of this article, the publisher recognizes that the U.S. Government retains a nonexclusive, royalty-free license to publish or reproduce the published form of this contribution, or to allow others to do so, for U.S. Government purposes. Los Alamos National Laboratory requests that the publisher identify this article as work performed under the auspices of the U.S. Department of Energy. Los Alamos National Laboratory strongly supports academic freedom and a researcher's right to publish; as an institution, however, the Laboratory does not endorse the viewpoint of a publication or guarantee its technical correctness.

### Contents

Ac	cronyms and Terms	vi
I.	Threatened and Endangered Species Habitat Management Plan General Overview	1
	1.0 Introduction	
	2.0 Role of Site Plans in the HMP	
	3.0 Description of Areas of Environmental Interest	
	3.1 Definition and Role of Developed Areas in AEI Management	
	3.2 General Description of Buffer Areas and Allowable Buffer Area Development	
	3.3 Emergency Actions	
	4.0 Implementation of Site Plans	
	4.1 Roles and Responsibilities	
	4.2 If an Activity Does Not Meet Site Plan Guidelines	
	4.3 Dissemination of Information	4
	5.0 Changes in the HMP since Implementation	4
	6.0 Data Management	5
II.	Area of Environmental Interest Site Plan for the Mexican Spotted Owl	5
	1.0 Species Description—Mexican Spotted Owl	5
	1.1 Status	5
	1.2 General Biology	5
	1.3 Threats	6
	2.0 Impact of Human Activities	6
	2.1 Introduction	6
	2.2 Impacts on Habitat Quality	6
	2.2.1 Development	6
	2.2.2 Ecological Risk	7
	2.2.3 Disturbance	7
	2.2.3.1 Pedestrians and Vehicles	7
	2.2.3.2 Aircraft	
	2.2.3.3 Explosives	
	2.2.3.4 Other Sources of Noise	
	3.0 AEI General Description for Mexican Spotted Owl	
	3.1 Method for Identifying a Mexican Spotted Owl AEI	
	3.2 Location and Number of Mexican Spotted Owl AEIs	
	4.0 AEI Management	
	4.1 Overview	
	4.2 Definition and Role of Occupancy in AEI Management	12
	4.3 Introduction to AEI Management Guidelines	
	4.4 Definition of and Restrictions on Habitat Alterations	
	4.4.1 Definition of Habitat Alterations	13
	4.4.2 Fuels Management Practices to Reduce Wildfire Risk	13
	4.4.3 Utility Corridors	

#### Threatened and Endangered Species Habitat Management Plan

4.4.4 Restrictions on Habitat Alterations	14
4.5 Definition of and Restrictions on Disturbance Activities	15
4.5.1 Definitions of Disturbance Activities	15
4.5.2 Activity Table	17
4.6 Protective Measures	17
5.0 Levels of Development in AEI Core and Buffers	18
5.1 Allowable Habitat Alteration in the Buffer Areas	
III. Area of Environmental Interest Site Plan for the Southwestern Willow Flyca	tcher 19
1.0 Species Description—Southwestern Willow Flycatcher	
1.1 Status	
1.2 General Biology	
1.3 Threats	
2.0 Impact of Human Activities	20
2.1 Introduction	
2.2 Impacts on Habitat Quality	21
2.2.1 Development	21
2.2.2 Ecological Risk	21
2.2.2.1 Ecorisk Assessment	21
2.2.3 Disturbance	22
2.2.3.1 Pedestrians and Vehicles	22
2.2.3.2 Aircraft	
2.2.3.3 Explosives	
2.2.3.4 Other Sources of Noise	
2.2.3.5 Artificially Produced Light	
3.1 Method for Identifying the Southwestern Willow Flycatcher AEI	
3.2 Location of the Southwestern Willow Flycatcher AEI	
4.0 AEI Management	
4.1 Overview	
4.2 Definition and Role of Occupancy in AEI Management	
4.3 Introduction to AEI Management Guidelines	
4.4 Definition of and Restrictions on Habitat Alterations	
4.4.1 Definition of Habitat Alterations	
4.4.2 Fuels Management Practices to Reduce Wildfire Risk	
4.4.3 Utility Corridors	
4.4.4 Restrictions on Habitat Alterations	
4.5 Definition of and Restrictions on Disturbance Activities	
4.5.1 Definition of Disturbance Activities	
4.5.2 Activity Table	
4.5.2 Activity Table	
5.0 Southwestern Willow Flycatcher AEI Description	
5.1 Pajarito Canyon Southwestern Willow Flycatcher AEI	
LI TAIATHO CAUVOILAOHHIWENETH WILLOW FIVEAICHELATH	/ ^

#### Threatened and Endangered Species Habitat Management Plan

	5.1.1 Allowable Habitat Alteration in the Buffer Area	28
IV. Area	of Environmental Interest Site Plan for the Jemez Mountains Salamander	28
1.0	Species Description—Jemez Mountains Salamander	28
1.1	Status	28
1.2	General Biology	28
1.3	Threats	29
2.0	Impact of Human Activities	29
2.1	Introduction	29
2.2	Impacts on Habitat Quality	29
	2.2.1 Development	29
	2.2.2 Pedestrians and Vehicles	29
	2.2.3 Severe Wildland Fire and Wildfire Suppression	30
2.3	Impacts on Individual Salamanders	30
	2.3.1 Disease	30
	2.3.2 Destruction of Individual Salamanders	30
3.0	AEI General Description for the Jemez Mountains Salamander	30
3.1	Method for Identifying a Jemez Mountains Salamander AEI	31
3.2	Location and Number of Jemez Mountains Salamander AEIs	32
4.0	AEI Management	32
4.1	Overview	32
4.2	Definition and Role of Occupancy in AEI Management	32
4.3	Definition and Role of Developed Areas in AEI Management	
4.4	General Description of Core and Buffer Areas and Allowable Area Development	
4.5	Emergency Actions	
4.6	Introduction to AEI Management Guidelines	
4.7	Definition of and Restrictions on Habitat Alterations	
	4.7.1 Definition of Habitat Alterations	
	4.7.2 Fuels Management Practices to Reduce Wildfire Risk	
	4.7.3 Utility Corridors	
	4.7.4 Restrictions on Habitat Alterations	34
Reference	s Cited	35
APPEND	IX	40
Figures		
Figure 1.	Process flowchart for determining site plan requirements	3
Figure A-1	. Most recent map of all AEIs at LANL	41
Table:		
Tables	Descriptions on Astinities in Hadesuland On 11 100 1 100 1 100 1 100	1.7
Table 1. Table 2.	Restrictions on Activities in Undeveloped Occupied Mexican Spotted Owl AEIs Restrictions on Activities in Undeveloped Occupied Southwestern Willow Flycatcher AEI	
Table 2.	The Percentage of each Food Type Found in Mexican Spotted Owl Food Remains at LANL.	
Table A-2.		
	, ,	

#### **ACRONYMS AND TERMS**

AEI area of environmental interest

Bd Batrachochytrium dendrobatidis (Chytrid Fungus)

DARHT Dual-Axis Radiographic Hydrodynamic Test (Facility)

dB decibel

dB(A) A-weighted decibel

dB(C) C-weighted decibel

DDT (dichloro-diphenyl-trichloroethane)

DOE U.S. Department of Energy

ESA Endangered Species Act of 1973

fc foot candles

Field Office U.S. Department of Energy Los Alamos Field Office

FR Federal Register

GIS geographic information system

HMP Threatened and Endangered Species Habitat Management Plan

HVAC heating, ventilation, and air conditioning

LANL Los Alamos National Laboratory

LANS Los Alamos National Security, LLC

NEPA National Environmental Policy Act of 1969

PCBs polychlorinated biphenyls

TNT trinitrotoluene(2,4,6-)

USFWS U.S. Fish and Wildlife Service

## I. THREATENED AND ENDANGERED SPECIES HABITAT MANAGEMENT PLAN GENERAL OVERVIEW

#### 1.0 Introduction

Los Alamos National Laboratory's (LANL) Threatened and Endangered Species Habitat Management Plan (HMP) fulfills a commitment made to the U.S. Department of Energy (DOE) in the "Final Environmental Impact Statement for the Dual-Axis Radiographic Hydrodynamic Test Facility Mitigation Action Plan" (DOE 1996). The HMP received concurrence from the U.S. Fish and Wildlife Service (USFWS) in 1999 (USFWS consultation numbers 2-22-98-I-336 and 2-22-95-I-108). This 2017 update retains the management guidelines from the 1999 HMP for listed species, and updates some descriptive information.

#### 2.0 Role of Site Plans in the HMP

The purpose of the HMP is to provide a management strategy for Endangered Species Act (ESA) compliance through the protection of threatened and endangered species and their habitats on LANL property. The HMP consists of site plans for federally listed threatened or endangered species with a moderate or high probability of occurring at LANL. The following federally listed threatened or endangered species currently have site plans at LANL: Mexican Spotted Owl (*Strix occidentalis lucida*), Southwestern Willow Flycatcher (*Empidonax trailii extimus*), and Jemez Mountains Salamander (*Plethodon neomexicanus*). Site plans provide guidance to ensure that LANL operations do not adversely affect threatened or endangered species or their habitats.

The Black-footed Ferret (*Mustela nigripes*) is federally listed as endangered. However, no sightings of Black-footed Ferrets have been reported in Los Alamos County for more than 50 years. In addition, no large prairie dog towns, prime habitat for Black-footed Ferrets, have been observed at LANL. Therefore, there is no site plan for this species.

The New Mexico Meadow Jumping Mouse (*Zapus hudsonius luteus*) and Yellow-billed Cuckoo (*Coccyzus americanus*) do not require a site plan because they do not have breeding habitat on LANL property. In Keller (2015), it was concluded that if any LANL work activities might affect habitat for these two species, those activities would be reviewed for impacts.

#### 3.0 Description of Areas of Environmental Interest

Suitable habitats for federally listed threatened and endangered species have been designated as areas of environmental interest (AEIs). AEIs are geographical units at LANL that are managed for the protection of federally listed species and consist of core habitat areas and buffer areas. The purpose of the core habitat is to protect areas essential for the existence of the specific threatened or endangered species. This includes the appropriate habitat type for breeding, prey availability, and micro-climate conditions. The purpose of buffer areas is to protect core areas from undue disturbance and habitat degradation.

Site plans identify restrictions on activities within the AEIs. The USFWS reviewed allowable activities and provided concurrence that these activities are not likely to adversely affect federally listed species. Activities discussed in site plans include day-to-day activities causing

disturbance (hereafter referred to as "disturbance activities"), such as access into an AEI, and long-term impacts, such as habitat alteration.

#### 3.1 Definition and Role of Developed Areas in AEI Management

Developed areas include all building structures, paved roads, improved gravel roads, paved and unpaved parking lots, and firing sites. The extent of developed areas in each AEI was determined using two methods. First, LANL geographic information system (GIS) analysts placed a 15-m (49-ft) border around all buildings and parking lots. For paved and improved gravel roads, the developed area was defined as the area to a roadside fence, if one exists within 9 m (30 ft) of the road, or 5 m (15 ft) on each side of the road if there is no fence within 9 m (30 ft). If an area of highly fragmented habitat was enclosed by roads, a security fence, or connected buildings, that area was also classified as developed. Developed areas at firing sites were defined as a circle with a 91-m (300-ft) radius from the most centrally located firing pad. Second, LANL GIS analysts overlaid scanned orthophotos onto a map of the Los Alamos area and digitized all areas that appeared developed. These two information sources were overlaid and combined, so that areas classified as developed by either method were considered developed in final maps and analyses. Some areas were confirmed by ground surveys, such as the firing sites.

Developed areas occur in the core and/or buffer of all AEIs. However, developed areas do not constitute suitable habitat for federally listed species. Current 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. For example, if light or noise from a new office building in a developed area were to raise levels in an undeveloped core area, those light and noise levels would be subject to the guidelines on habitat alterations.

## 3.2 General Description of Buffer Areas and Allowable Buffer Area Development

The purpose of buffer areas is to protect core areas from undue disturbance or habitat degradation. The current levels of development in buffer and core areas represent baseline conditions for this HMP. No further development is allowed in the core area under the guidelines of this HMP. A limited amount of development is allowed in buffer areas. Under the guidelines of this HMP, individual development projects are limited to 2 ha (5 ac) in size, including a 15-m (49-ft) developed-area border around structures and a 5-m (15-ft) developed-area border around paved and improved gravel roads. Projects greater than 2 ha (5 ac) in size require individual review for ESA compliance (see exceptions for fuels management activities and utility corridor maintenance). New development projects in AEI buffer areas must be reported to Los Alamos National Security, LLC (LANS) biologists for tracking (http://int.lanl.gov/environment/bio/controls/index.shtml).

#### 3.3 Emergency Actions

Managers may activate emergency actions if safety and/or property is immediately threatened by something occurring within an AEI (for example, wildfire, water line breakage, etc.). Contact a LANS biologist (<a href="http://int.lanl.gov/environment/bio/controls/index.shtml">http://int.lanl.gov/environment/bio/controls/index.shtml</a>), the Environmental Stewardship Group (505-665-8855), or the DOE Los Alamos Field Office (Field Office; 505-667-6819) as soon as possible. If the emergency occurs outside of regular business hours, contact

the Emergency Management Office (505-667-6211); this office will then communicate with the appropriate LANL and DOE Field Office personnel.

#### 4.0 Implementation of Site Plans

#### 4.1 Roles and Responsibilities

LANL's facility managers and operational staff are responsible for ensuring that activities are reviewed for compliance with all applicable site plans. Figure 1 illustrates the process for utilizing site plans. If activities follow approved guidance, there is no requirement for additional ESA regulatory compliance. However, additional National Environmental Policy Act (NEPA), cultural resources, wetlands, or other regulatory compliance actions may be required.

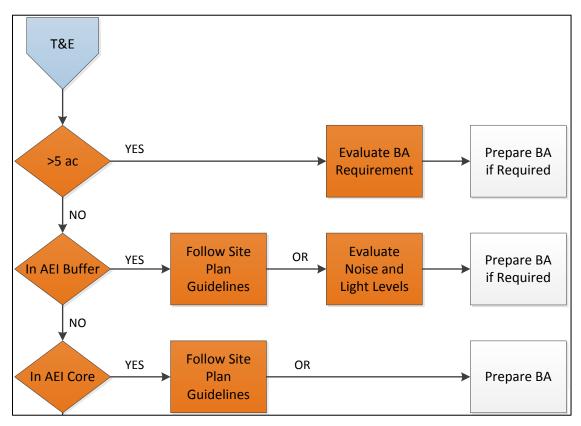


Figure 1. Process flowchart for determining site plan requirements

If an activity or project occurs outside of all LANL AEIs and will not impact habitat within an AEI, it does not have to be reviewed for ESA compliance unless it is a large project. Projects that are larger than 2 ha (5 ac) or cost more than \$5 million require an individual ESA compliance review, even if they are not located within an AEI.

LANL's facility managers are responsible for determining if operations within their geographic and/or programmatic area of responsibility comply with the guidelines in these site plans. Submission of a project into the integrated review tool for a new or modified project is required under Program Description 400 (LANL 2016) and allows managers to identify the requirements within their project area. Deployed environmental professionals and core LANS biologists are

available to support facility managers. If activities follow site plan guidelines, they do not require any additional ESA regulatory compliance action. However, NEPA, cultural resources, wetlands, or other regulatory compliance actions are not addressed in site plans and additional compliance actions may be required. It is the responsibility of the project leader or facility management staff to ensure that all requirements are satisfied. If you have questions, contact biological, cultural, NEPA, or other environmental subject matter experts. Contacts can be found at <a href="http://int.lanl.gov/environment/compliance/ier/index.shtml">http://int.lanl.gov/environment/compliance/ier/index.shtml</a>.

A single facility may have one or more AEIs within its boundary and the AEIs may be for different species. Some AEIs overlap. In areas where overlap occurs, project managers must follow the guidelines for AEIs of all involved species.

#### 4.2 If an Activity Does Not Meet Site Plan Guidelines

If a project reviewer determines that an activity or project cannot meet the guidelines in applicable site plans, LANS biologists evaluate that activity individually for compliance with the ESA. Results of the evaluation of potential impacts allow LANS biologists to make recommendations to the DOE Field Office Biological Resources Program Manager regarding the need for USFWS consultation. An evaluation may result in 1) a DOE Field Office determination that there is no effect and the activity can proceed, 2) a DOE Field Office suggestion for modifications of the action to avoid adverse effects so that it can proceed, or 3) a DOE Field Office decision to prepare a biological assessment for the activity and submit it to the USFWS for concurrence. Fieldwork and preparation of a biological assessment can take a few months with an additional 2 to 12 months for DOE Field Office review and then final USFWS concurrence.

#### 4.3 Dissemination of Information

Habitat locations of threatened and endangered species are not considered sensitive; however, it is in the best interest of threatened and endangered species to restrict specific knowledge about their locations.

#### 5.0 Changes in the HMP since Implementation

The HMP received concurrence from USFWS and was first implemented in 1999. Since that time, both the Peregrine Falcon (*Falco peregrinus*) and the Bald Eagle (*Haliaeetus leucocephalus*) have been delisted. Site plans for those species have been removed from LANL's HMP. Both species are protected at LANL under the Migratory Bird Treaty Act, and the Bald Eagle is also protected under the Bald and Golden Eagle Protection Act.

In 2005, the USFWS concurred with DOE's proposal for updated Mexican Spotted Owl habitat boundaries based on a revised analysis of Mexican Spotted Owl habitat quality within DOE property around LANL (USFWS consultation number 22420-2006-I-0010).

In 2012, the USFWS concurred with DOE's proposal to modify the habitat boundaries for the Los Alamos Canyon Mexican Spotted Owl AEI due to changes from the fire response activities after the Las Conchas wildfire (USFWS consultation number 02ENNM00-2012-IE-0088).

In 2013, the USFWS concurred with the DOE's new site plan for the Jemez Mountains Salamander and its addition to LANL's HMP (USFWS consultation number 02ENNM00-2014-I-0014).

In 2015, the USFWS concurred with the DOE's addition of the New Mexico Meadow Jumping Mouse and Yellow-billed Cuckoo to LANL's HMP (USFWS consultation number 02ENNM00-2015-I-0538).

In 2017, the USFWS concurred with DOE's proposal to modify the habitat boundaries for the lower section of Water Canyon Mexican Spotted Owl AEI due to habitat degradation resulting from long-term drought and fire effects (USFWS consultation number 02ENNM00-2017-I-0255).

#### 6.0 Data Management

The data used in the implementation of the HMP are stored in a geodatabase at LANL. The current map of all of the AEIs at LANL is in Figure A-1 in the appendix.

## II. AREA OF ENVIRONMENTAL INTEREST SITE PLAN FOR THE MEXICAN SPOTTED OWL

#### 1.0 Species Description—Mexican Spotted Owl

#### 1.1 Status

In 1993, the USFWS determined the Mexican Spotted Owl to be a threatened species under the authority of the ESA, as amended (58 Federal Register [FR] 14248). In 1995, the USFWS released its final recovery plan for the owl (USFWS 1995), which was revised in 2012 (USFWS 2012). The USFWS most recently designated critical habitat for Mexican Spotted Owl in 2004 (69 FR 53181).

#### 1.2 General Biology

The Mexican Spotted Owl is found in northern Arizona, southeastern Utah, and southwestern Colorado south through New Mexico, west Texas, and into Mexico. It is the only subspecies of Spotted Owl recognized in New Mexico (USFWS 1995).

The Mexican Spotted Owl generally inhabits mixed conifer and ponderosa pine- (*Pinus ponderosa*; Lawson & C. Lawson) Gambel oak (*Quercus gambelli*; Nutt.) forests in mountains and canyons. High canopy closure, high stand diversity, multilayered canopy resulting from an uneven-aged stand, large mature trees, downed logs, snags, and stand decadence as indicated by the presence of mistletoe are characteristics of Mexican Spotted Owl habitat. Some owls have been found in second-growth forests (i.e., younger forests that have been logged); however, these areas were found to contain characteristics typical of old-growth forests. Mexican Spotted Owls in the Jemez Mountains prefer cliff faces in canyons for their nest sites (Johnson and Johnson 1985). The recovery plan for the Mexican Spotted Owl recommends that mixed conifer and pine-oak woodland types on slopes greater than 40 percent be protected for the conservation of this owl.

A mated pair of adult Spotted Owls may use the same home range and general nesting areas throughout their lives. A pair of owls requires approximately 800 ha (1,976 ac) of suitable nesting and foraging habitat to ensure reproductive success. Incubation is carried out by the female. The incubation period is approximately 30 days and most eggs hatch by the end of May. Most owlets fledge in June, 34 to 36 days after hatching (USFWS 1995). The owlets are "semi-independent" by late August or early September, although juvenile begging calls have been heard as late as September 30. Young are fully independent by early October. The non-breeding season runs from September 1 through February 28. Although seasonal movements vary among owls, most adults remain within their summer home ranges throughout the year.

The diet of Mexican Spotted Owls nesting in canyons consists primarily of woodrats (*Neotoma* spp.) and deermice (*Peromyscus* spp.) with lesser amounts of rabbits, birds, reptiles, and arthropods (Willey 2013). The relative abundance of prey types in Mexican Spotted Owl pellets collected at LANL are listed in Table A-1 in the appendix. Ganey and Balda (1994) found core areas of individuals (i.e., where owls spent 60 percent of their time) averaged 134 ha (331 ac), and core areas for pairs averaged 160 ha (395 ac).

#### 1.3 Threats

The Mexican Spotted Owl was listed as threatened because of destruction and modification of habitat caused by timber harvest, wildfires, increased predation on owls associated with habitat fragmentation, and a lack of adequate protective regulations.

#### 2.0 Impact of Human Activities

#### 2.1 Introduction

The primary threats to Mexican Spotted Owls on LANL property are 1) impacts to habitat quality from LANL operations and 2) disturbance of nesting owls. This section provides a review and summary of scientific knowledge of the effects of various types of human activities on the Mexican Spotted Owl and provides an overview of the current levels of activities at LANL.

#### 2.2 Impacts on Habitat Quality

#### 2.2.1 Development

The type of habitat used by Mexican Spotted Owls, late seral stage forests with large trees, is usually not found in large quantities near developed areas or near areas that have had recent agricultural or forest product extraction land uses. Therefore, Mexican Spotted Owls are generally not found near developments. Whether it is the development or a lack of suitable habitat that discourages colonization of these areas by Mexican Spotted Owls is unknown.

Areas of LANL vary from remote, undeveloped areas to heavily developed and/or industrialized facilities. Most LANL facilities are situated atop mesas, primarily in the northern and western portion of the DOE property. LANL is bounded by developed residential, industrial, and retail areas along its northern boundary (the town of Los Alamos) and by residential and retail development along a portion of its eastern boundary (the town of White Rock). Three major paved roads traverse LANL from northeast to southwest. Sandia, Pajarito, and Los Alamos canyons have paved roads within AEIs, and several AEIs have dirt roads along at least a portion

of the canyon bottom. AEIs containing paved or dirt roads in the canyon bottoms have not been occupied at LANL (Hathcock et al. 2010).

#### 2.2.2 Ecological Risk

There is no specific information on the impact of chemicals on the Mexican Spotted Owl, although experience with other raptor species suggests that exposure to polychlorinated biphenyls (PCBs), dichloro-diphenyl-trichloroethane (DDT) and its derivatives, and other organophosphate or organochlorine pesticides would probably be harmful. Exposure to other chemicals could also be harmful (Cain 1988).

LANS subject matter experts completed three ecological risk assessments that included the Mexican Spotted Owl between 1997 and 2009. The ecological risk assessment process involves using computer modeling to assess potential effects to animals from chemicals of potential concern that have been detected in the environment. All of the following ecological risk assessments concluded that, on average, no appreciable impact is expected to Mexican Spotted Owls from chemicals of potential concern (Gallegos et al. 1997; Gonzales et al. 2004; Gonzales et al. 2009).

#### 2.2.3 Disturbance

#### 2.2.3.1 Pedestrians and Vehicles

Based on work with other raptors, LANS biologists assume that Mexican Spotted Owls would likely be disturbed by the approach of either pedestrians or vehicles. At an equal distance, pedestrians are frequently more disturbing to raptors than vehicles (Grubb and King 1991). Brown and Stevens (1997) reported that during surveys in Grand Canyon National Park, 22 times more Bald Eagles were found in canyon reaches with low human recreational use compared to reaches with moderate to high human recreational use. Human activity 100 m (328 ft) from Bald Eagle nests in Alaska caused clear and consistent changes in behavior of breeding eagles (Steidl and Anthony 2000).

Swarthout and Steidl (2001) found that both juvenile and adult roosting Mexican Spotted Owls were unlikely to alter their behavior in the presence of a single hiker at distances greater than 55 m (180 ft). Swarthout and Steidl (2003) concluded that cumulative effects of high levels of short-duration recreational hiking near Mexican Spotted Owl nests may be detrimental.

Many canyon bottoms and mesa tops at LANL have dirt roads traversing them. Most of these roads are gated; however, these roads are accessible to LANL employees and some of them are accessible to the public on foot or by bike. LANS biologists found that AEIs are occupied less often if there is recreational access into a canyon (Hathcock et al. 2010).

#### 2.2.3.2 Aircraft

Ground-based disturbances appear to impact raptor reproductive success more than aerial disturbances (Grubb and King 1991). Grubb and Bowerman (1997) concluded that an exclusion of aircraft within 600 m (1,968 ft) of Bald Eagle nest sites would limit Bald Eagle response frequency to 19 percent.

Delaney et al. (1999) found that for Mexican Spotted Owls, chainsaws consistently elicited higher response rates than helicopters at similar distances. Owl flush rates did not differ between nesting and non-nesting seasons. No owls flushed when noise stimuli (helicopter or chainsaws) were at distances greater than 105 m (344 ft). Distance was generally a better predictor of owl response to helicopter overflights than sound level.

LANL is restricted airspace and planes infrequently fly less than 609 m (2,000 ft) above ground level. The County of Los Alamos operates an airport along the northern edge of LANL. The airport is located on the southern rim of Pueblo Canyon. Most flights approach and depart to the east of the airport, over the Rio Grande.

#### 2.2.3.3 Explosives

There is currently no specific information available on the reaction of Mexican Spotted Owls to explosives detonation. Explosive blasts set off 120 to 140 m (393 to 459 ft) from active Prairie Falcon (*Falco mexicanus*) nests caused perched Prairie Falcons to flush from perches 79 percent of the time, and, in 26 percent of the cases, caused incubating Prairie Falcons to flush from nests. Measured sound levels at aerie entrances during blasts ranged from 129 to 141 decibel (dB) (Holthuijzen et al. 1990). Explosives blasting for dam construction 560 to 1,000 m (1,837 to 3,280 ft) from active Prairie Falcon nests caused a change in behavior 26 percent of the time, and birds flushed in 17 percent of all cases. No incubating birds flushed (Holthuijzen et al. 1990). Brown et al. (1999) found little activity change in roosting or nesting Bald Eagles and no population-level impacts from weapons detonations at the Aberdeen Proving Ground. Holthuijzen et al. (1990) found that a 167-g (5.89-oz) charge of Kinestik produced noise levels between 138 and 141 dB at 100 m (328 ft), and that a 500-g (17.6-oz) charge of trinitrotoluene(2,4,6-) (TNT) produced noise levels between 144 and 146 dB at 100 m (328 ft). A 20-kg (44-lb) charge of TNT produced noise levels that measured 163 dB at 100 m (328 ft) (Paakkonen 1991).

Measurements of noise levels during explosives testing were conducted at three locations at LANL using quantities of high explosives ranging from 4.5 to 67.5 kg (10 to 148 lb) of TNT during six shots. Noise levels increased during the test from a background level of 31 A-weighted decibel [dB(A)]<sup>1</sup> to a range between 64 and 71 dB(A) during shots at a distance of 1.8 km (1.1 mi). At a distance of 4.3 km (2.67 mi), noise levels rose from a background range of 35 to 64 dB(A) to a range of 60 to 63 dB(A) (Vigil 1995). At a distance of 6.7 km (4.16 mi), noise levels rose from a background range of 38 to 51 dB(A) to a range of 60 to 71 dB(A) (Burns 1995). LANS biologists estimated that the noise from a shot at the Dual-Axis Radiographic Hydrodynamic Test (DARHT) Facility would be 150 dB(A) at the source and 80 dB(A) at 400 m (1,312 ft) (Keller and Risberg 1995). LANS biologists found that Mexican Spotted Owl AEIs located within the explosives testing buffer area were occupied more frequently than AEIs in other locations (Hathcock et al. 2010). This is likely due to the strict access control in explosives areas that limit human activity and development in the canyon bottoms.

\_

<sup>&</sup>lt;sup>1</sup> Sound can be measured as decibels (dB), C-weighted dB [dB(C)], or A-weighted dB [dB(A)]. The dB(A) measurement best resembles the response of the human ear by filtering out lower and higher frequency sound not normally heard by the human ear.

#### 2.2.3.4 Other Sources of Noise

Major noise-producing activities at LANL include automobile and truck traffic and noise associated with office buildings, construction activities, a live-fire range, and explosives testing. Noise is also associated with aircraft traffic at the Los Alamos County airport. Construction and maintenance activities involved with operations at LANL are fairly common. In addition, implementation of the 2016 Compliance Order on Consent issued by the New Mexico Environmental Department has resulted in an increased frequency of drilling groundwater monitoring wells in protected habitat at LANL. Also, forest fuels management operations use chainsaws, chippers, and other noise-generating equipment. The 2010 National Pollutant Discharge Elimination System Individual Permit (EPA 2010) issued by the Environmental Protection Agency requires sediment control features such as berms and small rock check dams to be installed at various sites with stormwater runoff; these are sometimes installed in protected habitat. LANS biologists conducted a study of noise levels in canyons and found that the primary sources of noise exceeding 55 dB(A) were cars and trucks. Readings taken near flowing water were up to 11 dB(A) higher than readings taken elsewhere. The average dB(A) in canyons near paved roads ranged from 41 to 62, with maximum values ranging from 62 to 74. Away from paved roads 1.6 km (1 mi) or more, average dB(A) in canyons ranged from 37 to 50, with all but one average below 45. Maximum dB(A) away from paved roads ranged from 38 to 76, 76 dB(A) was measured during a thunder clap (Huchton et al. 1997).

In December 1997, LANS biologists conducted noise measurements at the Los Alamos County airport and in Bayo and Pueblo canyons, including the Los Alamos County Sewage Treatment Facility. Sound levels near the airport runway during the maximum use time (6:30 to 7:30 am) had background values averaging 54 dB(A). Noise during plane arrivals ranged from 47 to 63 dB(A). No measurements were collected during plane take-off. Sound measurements conducted in the bottoms of Pueblo and Bayo canyons ranged from 37 to 40 dB(A) in most areas of the canyon. At the sewage treatment facility parking lot during a working day, the average dB(A) during a 3-minute period was 46 (range 45 to 49). At the intersection of the road going into Pueblo Canyon with State Road 502, the average dB(A) during a 3-minute period was 60 (range 41 to 70).

LANS biologists conducted sound measurements at successive distances from an industrial area near a canyon rim, into the canyon, and to the opposite rim, using a C-weighted decibel (dB(C) scale (Keller and Foxx 1997). Measurements of noise levels using the dB(C) scale are greater than if measured using the dB(A) scale. The average background noise on the mesa was 65.8 dB(C) [with a range of 43–81 dB(C)]. The average background noise in the canyon bottom was 62.3 dB(C) [with a range of 54–78 dB(C)]. The average background noise at the bottom of the north-facing slope was 53.8 dB(C) [with a range of 48–64 dB(C)]. Measurements were taken mid-day.

LANS biologists measured sound levels from various pieces of construction equipment used at LANL project sites over 5-minute intervals at distances of 6 to 31 m (20 to 100 ft) (Knight and Vrooman 1999). Average values ranged from 58.5 to 80.9 dB(A). Peak values ranged from 75.7 to 155.4 dB(A). Additional data were collected by other LANL operators on specific pieces of construction equipment and on the Security Computer Complex construction site fence perimeter at Technical Area 3 before and during construction (Knight and Vrooman 1999). The average

noise level before construction began was 56.6 dB(A), and the average during construction was 82.1 dB(A).

LANS biologists conducted a series of sound measurements at LANL to investigate background noise levels around AEIs (Vrooman et al. 2000). Background noise levels were significantly higher in daytime than in nighttime. AEIs with greater than a 10 percent developed area in their buffers had significantly higher levels of background noise than undeveloped AEIs. The mean background sound level was 51.3 dB(A) in developed AEIs and 39.6 dB(A) in undeveloped AEIs. The LANL biological resources project review process uses the individual AEI background measurements from Vrooman et al. (2000) to screen project activities for increases more than 6 dB(A) above background.

LANS biologists took sound level measurements of heavy equipment use associated with concrete recycling on Sigma Mesa at LANL in 2004 (Hansen 2004). At this location, background noise levels at two different locations were 55.2 and 58.8 dB(A). Operation of a dump truck hauling and dumping concrete increased noise levels above background by a mean of 22.7 dB(A) at 30 m (98 ft) and 2.4 dB(A) at 80 m (262 ft). Additional sound level measurements were taken in the same general area on Sigma Mesa in 2005 as part of a biological assessment for the operation of an asphalt batch plant (Hansen 2005). Measurements were taken on the north rim of Mortandad Canyon (south of the asphalt batch plant at distances of approximately 30 to 122 m (100 to 400 ft), at the bottom of Mortandad Canyon approximately 183 to 244 m (600 to 800 ft) from the asphalt batch plant, and on the south rim of Mortandad Canyon approximately 305 m (1,000 ft) from the asphalt batch plant. Background noise levels at the various locations ranged from 41.1 to 48.7 dB(A). The only locations with increases greater than 3 dB(A) during operation of the asphalt batch plant were the locations on the north rim of Mortandad Canyon, within 122 m (400 ft) of the asphalt batch plant. Noise from the operation of the asphalt batch plant was not detected in the bottom of Mortandad Canyon or on the south rim.

LANS biologists took sound level measurements around the LANL Biosafety Level 3 laboratory with the heating, ventilation, and air conditioning (HVAC) system on and with it off (Hansen 2009). The area to the north of the Biosafety Level 3 laboratory is developed, the area to the south is not. Background noise levels north of the facility ranged from 53.6 to 57.6 dB(A). Background noise levels south of the facility ranged from 41.6 to 49.7 dB(A). Noise from the HVAC system was detected at 25 m (82 ft) from the facility on both sides, but was not detected at 81 m (266 ft) on the north side, or at 107 m (351 ft) on the south side.

Overall, these studies appear to show that areas adjacent to or within developed areas or paved roads are likely to have daytime average background noise levels between 45 and 63 dB(A). Less disturbed areas are likely to have average background noise levels between 37 and 50 dB(A).

#### 2.2.3.5 Artificially Produced Light

There is no information available on the effects of artificially produced light on Mexican Spotted Owls. Under the Los Alamos County Code, commercial site development plans are reviewed to ensure that lighting serves the intended use of the site while minimizing adverse impacts to adjacent residential property (Section 16-276). Section 16-276 of the County Code includes light source measurement limitations by zoning district. The code allows off-site light to be 0.5 foot candles (fc) in residential areas. By comparison, full moonlight measures 0.1 fc, and a crescent

moon was measured at 0.01 fc. Table A-2 in the appendix presents preliminary light measurements in fc.

Preliminary surveys were conducted for light levels within Los Alamos Canyon at the Omega Reactor (Keller and Foxx 1997). The Omega Reactor was brightly lit for purposes of security; therefore, total light intensity was greater than the average street lighting. Measurements were conducted at a light pole in an open parking lot at the reactor as the source. Trees did not obscure the area. Using the relationship of light intensity reducing as a square of the distance, calculations using the field data indicated that at 30 m (98 ft) from the source, the light levels would be equivalent or nearly equivalent to full moonlight.

#### 3.0 AEI General Description for Mexican Spotted Owl

An AEI consists of two areas—a core and a buffer. The core of the habitat is defined as suitable canyon habitat from rim to rim and 100 m (328 ft) out from the top of the canyon rim. The buffer area is 400 m (1,312 ft) wide extending outward from the edge of the core area. Although adult Mexican Spotted Owls may be found within their home range anytime throughout the year, the primary threat from disturbance to the owls is during the breeding season when owl pairs are tied to their nest sites. Therefore, management of disturbance in Mexican Spotted Owl AEIs is concentrated on the breeding season.

#### 3.1 Method for Identifying a Mexican Spotted Owl AEI

The original location of each Mexican Spotted Owl AEI was identified using a habitat model developed by Johnson (1998) that classified nesting and roosting habitat for Mexican Spotted Owls using topographic characteristics and vegetative diversity. LANS biologists compared the results from the Johnson (1998) model to a different model identifying slopes >40 percent in mixed conifer and ponderosa pine cover types at LANL. Areas identified from the Johnson (1998) model application to LANL that were over five contiguous 30 × 30 m (97 × 98 ft) pixels in size, were above 1,980 m (6,496 ft) in elevation, and that had mixed conifer or ponderosa pine forest cover, were considered suitable Mexican Spotted Owl habitat. Where suitable habitat was identified, AEI core area boundaries were established to include the canyons and 100 m (328 ft) outward from the canyon rims.

An updated Mexican Spotted Owl habitat model was developed and refined for application on LANL property following the Cerro Grande wildfire (Hathcock and Haarmann 2008). This model incorporated finer-scale vegetation characteristics into the Mexican Spotted Owl habitat quality assessment. This model was used to redelineate the boundaries of the Mexican Spotted Owl AEIs at LANL in 2005 following wildfire, drought, and a regional bark beetle outbreak (USFWS consultation number 22420-2006-I-0010).

The new core boundaries were delineated with an area approximately 0.4 km (0.25 mi) from the edge of the nearest suitable habitat, up and down canyon. Core boundaries were established along readily recognizable geologic features or anthropogenic features in the terrain wherever possible to facilitate the ease of identification of core boundaries when in the field.

#### 3.2 Location and Number of Mexican Spotted Owl AEIs

There are currently five Mexican Spotted Owl AEIs on LANL property, each encompassing one or more canyons. In general, the AEI cores are centered in canyons on the western side of LANL. The canyons with AEIs are Cañon de Valle, Water, Pajarito, Los Alamos, Sandia, Mortandad, and Three-Mile.

#### 4.0 AEI Management

#### 4.1 Overview

This AEI management section provides guidelines for LANL operations to reduce or eliminate the threats to Mexican Spotted Owls from 1) habitat alterations that reduce habitat quality and 2) disturbance of breeding or potentially breeding owls. Habitat alterations are considered for all AEIs and for both core and buffer areas. Disturbance activities to owls are considered only for occupied AEIs and only for impacts on core areas. Developed areas (see Part I, Section 3.1) that have ongoing baseline levels of activities and are not suitable habitat for Mexican Spotted Owls have different restrictions than undeveloped core or buffer areas. Therefore, the location of the disturbance activity within the AEI, the occupancy status of the AEI, and the type of activity all affect whether or not the activity is allowable. AEIs for different species may overlap, and an activity must meet the guidelines of all applicable site plans to be allowable.

#### 4.2 Definition and Role of Occupancy in AEI Management

Occupancy simply refers to whether or not an AEI is occupied during a species' period of sensitivity. For Mexican Spotted Owls, the primary concern is to protect the owls from disturbance during the breeding season. Because individuals may colonize suitable habitat, all Mexican Spotted Owl AEIs are treated as though they are occupied from March 1 through August 31 or until surveys show an AEI to be unoccupied. Mexican Spotted Owl surveys are conducted from late March through June. In general, surveys in areas with ongoing or proposed projects are completed by May 15. If a nest is located during surveys, then the AEI can be treated as unoccupied except for the area within a 400 m (1,312 ft) radius of the nest site. Because owls are not as sensitive to disturbance during the non-breeding season, Mexican Spotted Owl AEIs are treated as unoccupied from September 1 to February 28.

The occupancy status of an AEI affects what activities are allowable in the AEI. Although activities causing habitat alterations are restricted in all AEIs, disturbance activities are restricted only in occupied AEIs. The Activity Table (Table 1, Section 4.5.2) provides dates and levels of allowable disturbance activities within occupied Mexican Spotted Owl AEIs under the guidelines of this site plan. Contact a LANS biologist to find out the current occupancy status of an AEI (http://int.lanl.gov/environment/bio/controls/index.shtml).

#### 4.3 Introduction to AEI Management Guidelines

Sections 4.4 and 4.5 provide the guidelines for habitat alterations and allowable activities in AEI core and buffer areas. Section 4.4 describes what and where habitat alterations are allowed under the guidelines of this site plan. Section 4.5 describes what, when, and where disturbance activities are allowed in occupied AEIs under the guidelines of this site plan. If an activity does not meet the restrictions given in the guidelines, the activity must be individually reviewed for

ESA compliance. This site plan only provides guidelines for Mexican Spotted Owl AEIs. If an activity is desired in an area with overlapping AEIs, all applicable site plans must be consulted. AEI maps show the location of all AEIs in an area. Section 4.6 describes management practices that should be applied when working or considering work in an AEI. LANS biologists are available to answer questions and provide advice (http://int.lanl.gov/environment/bio/controls/index.shtml).

#### 4.4 Definition of and Restrictions on Habitat Alterations

#### 4.4.1 Definition of Habitat Alterations

Habitat alteration includes any action that alters the soil structure, vegetative components necessary to the species, prey quality and quantity, water quality, hydrology, or noise or light levels in undeveloped areas of an AEI. Long term means the alteration lasts for more than one year. For physical disturbances, in general, any activity that can be accomplished by one person with a hand tool is generally not considered habitat alteration; any activity that requires mechanized equipment on a landscape is habitat alteration. An actual activity may take place outside of the AEI and will be considered habitat alteration if consequences of the activity have effects inside the AEI core.

The habitat components most important to Mexican Spotted Owls include vegetative structure, food quality and quantity, and disturbance levels, including noise and light. The forest structure within a canyon designated as a Mexican Spotted Owl AEI is important because it provides roost sites and a suitable habitat for nesting and foraging. Trees along the canyon rim are used for foraging and territorial calling, and they shelter the canyon interior from light and noise disturbances.

A long-term change in light or noise levels within the undeveloped core of an AEI is considered to be a habitat alteration if it increases average noise levels by  $\geq 6$  dB(A) during any portion of the 24-hour day, or it increases average light levels by  $\geq 0.05$  fc at night. Changes in noise and light levels are measured at the core area boundary if the source is outside the core area, or at 10 m (33 ft) from the source if the source is inside the undeveloped core area. Impacts of changes in developed areas on undeveloped cores are measured at the developed area boundary if it is within the core, or at the core area boundary if the developed area is outside of the core.

#### 4.4.2 Fuels Management Practices to Reduce Wildfire Risk

The recovery plan for the Mexican Spotted Owl lists stand-replacing wildfires as a primary threat to their habitat and encourages land managers to reduce fuel levels and abate fire risks in ways compatible with owl presence on the landscape (USFWS 1995). Within undeveloped core areas, on slopes >40 percent, in the bottoms of steep canyons, and within 30 m (100 ft) of a canyon rim, thinning of trees <22 cm (9 in) diameter at breast height, treatment of fuels, and prescribed and natural prescribed fires are allowed. Exceptions allowing trees >22 cm (9 in) to be thinned within 30 m (100 ft) of buildings are granted to protect facilities. Large logs (>30 cm [11.8 in] midpoint diameter) and snags should be retained. Thinning within core areas not meeting the characteristics listed above, and in buffer areas, may include trees of any size to achieve 8 m (25 ft) spacing between tree crowns. However, clear cutting is not allowed in undeveloped core areas.

For health and safety reasons, any trees within 30 m (100 ft) of buildings, but outside a developed area, may be thinned to achieve 8 m (25 ft) spacing between crowns. Habitat alterations including thinning are not restricted in developed areas. However, LANS biologists encourage the retention of trees and snags along canyon rims if the rim is in a developed area. Because of the extreme fire danger associated with firing sites and the potential impact of a fire on Mexican Spotted Owl habitat, firing sites and burn areas are treated separately for the purposes of fuels management. Trees within 380 m (1,246 ft) of firing sites and burn areas in both core and buffer areas may be thinned to a 15 m (49 ft) spacing between trees everywhere except on slopes >40 percent or in the bottoms of steep canyons. Any tree over 22 cm (9 in) diameter at breast height within 380 m (1,246 ft) of a firing site may be delimbed to a height of 2 m (6 ft) to help prevent crown fires.

In historically occupied core areas, fuels treatment may not exceed 10 percent of the undeveloped core area and is not allowed within 400 m (1,312 ft) of nesting areas. In occupied core areas, forest management activities must take place during the nonbreeding season (September 1 to February 28) (USFWS 1995). Fuels management activities that are allowable in core areas must be reported to LANS biologists for tracking (http://int.lanl.gov/environment/bio/controls/index.shtml).

#### 4.4.3 Utility Corridors

Habitat alterations such as cutting down trees that threaten power lines are allowed within 8 m (26 ft) of either side of an existing utility line in all areas of an AEI (Trujillo and Racinez 1995). New utility lines and utility lines requiring clearance of a right-of-way greater than 16 m (52 ft) total must be individually reviewed for ESA compliance. Disturbance activities must follow the guidelines given in the Activities Table (Table 1, Section 4.5.2) for occupied AEIs.

#### 4.4.4 Restrictions on Habitat Alterations

Habitat alterations other than the fuels management practices and utility corridor maintenance described above are not allowed in undeveloped core areas under the guidelines of this site plan. If a project or activity is planned that would alter habitat in an undeveloped core area, it must be individually evaluated for ESA compliance. Habitat alterations in undeveloped buffer areas other than the fuels management activities and utility corridor maintenance described above are restricted to 2 ha (5 ac) in area per project and are subject to other restrictions including light and noise effects in the core (see Section 2.2.3). Projects in the buffer area over 2 ha (5 ac) in size will require individual ESA compliance review.

Habitat alterations in a buffer area other than the fuels management and utility corridor maintenance described above must be reported to LANS biologists for tracking (<a href="http://int.lanl.gov/environment/bio/controls/index.shtml">http://int.lanl.gov/environment/bio/controls/index.shtml</a>). There is a cumulative maximum area that can be developed in each AEI's buffer. Once that cumulative area is reached, all habitat alterations in a buffer will require individual ESA reviews for compliance.

#### 4.5 Definition of and Restrictions on Disturbance Activities

#### 4.5.1 Definitions of Disturbance Activities

LANS biologists considered six categories of activities that might cause disturbance in an AEI. Most of the categories were first identified in the document "Peregrine Falcon Habitat Management in the National Forests of New Mexico," prepared for the United States Forest Service (Johnson 1994). LANS biologists added explosives detonation, other light production, and other noise production to provide the most comprehensive list of activities possible, thereby reducing the need for individual review of activities for ESA compliance. The categories of activities are people, vehicles, aircraft, other light production, other noise production, and explosives detonation. LANS biologists defined low, medium, and high levels of impact for these activities except for explosives detonation. Activity levels for explosives detonation have been designed to follow the guidelines agreed upon by LANL, DOE, and USFWS in the DARHT biological assessment (Keller and Risberg 1995). Restrictions on explosives detonation are described in the definition of the activity, but are not included in the Activity Table (Table 1, Section 4.5.2). These six categories of activities are restricted only in AEIs that are classified as occupied.

**People**—includes any entry of people into an AEI on foot.

- Low impact is the presence of three or fewer people per project and duration of one day or less during a breeding season.
- Medium impact is the exceedance of either the number of people or the duration criteria.
- High impact is the exceedance of both the number of people and the duration criteria.

**Vehicles**—includes the entry of any two-axle highway vehicle, all-terrain vehicle, or motorized machinery into an AEI by any route other than a paved road or an improved gravel road.

- Low impact is the presence of two or fewer vehicles per project and duration of one day or less during a breeding season.
- Medium impact is the exceedance of either the number of vehicles or the duration criteria.
- High impact is the exceedance of both the number of vehicles and the duration criteria.

**Aircraft**—includes the operation of any aircraft below an elevation of 600 m (2,000 ft) above the highest ground level in the local vicinity.

- Low impact is the presence of one single-engine airplane and the duration of one day or less during a breeding season.
- Medium impact is the exceedance of either the number of aircraft or the duration criteria.
- High impact is the exceedance of both the number of aircraft and the duration criteria.

Any use of helicopters, jet airplanes, and propeller airplanes with two or more engines is classified as medium impact or above, depending on duration.

Other Light Production—includes any activity not previously listed that causes additional light to occur in an AEI core area. For example, plans for construction of a new building at the edge of a developed area may call for lighting at night to facilitate nighttime work that impacts an undeveloped core area.

- Low impact is the increase of light intensity by ≤0.05 fc and a duration of one night or less per project per breeding season.
- Medium impact is the exceedance of either the intensity or duration criteria.
- High impact is the exceedance of both the intensity and duration criteria.

Measurements for increases in light are taken at the AEI core area boundary closest to the light source if the source is outside the core and at 10 m (33 ft) from the source if the source is inside the core. Light measurements for developed areas are taken at the edge of the developed area if the developed area is within an AEI core or at the closest core boundary if the developed area is outside of an AEI core.

Other Noise Production—includes any activity not previously listed except for explosives detonation that causes additional noise to occur in an AEI. For example, operation of machinery creates noise.

- Low impact is increasing noise levels in an AEI core by 6 dB(A) or less for one day or less per project per breeding season.
- Medium impact is the exceedance of either the level or the duration criteria.
- High impact is the exceedance of both the level and the duration criteria.

Measurements for increases in noise are taken at the AEI core boundary closest to the noise source if the source is outside the core and at 10 m (33 ft) from the source if the source is inside the core. Noise measurements for developed areas are taken at the edge of the developed area if the developed area is within an AEI core or at the closest core boundary if the developed area is outside of an AEI core.

Explosives Detonation—includes the use of high explosives for any purpose. LANS biologists did not define low, medium, and high levels of this activity because of the difficulty of determining levels for a shot before actually doing the shot. For the purpose of explosives detonation near Mexican Spotted Owl AEIs, occupied habitat is defined as the area within 400 m (1,312 ft) of the current year's nest/roost sites or the previous year's nest site if a current site has not been identified. No explosives detonation will take place within 400 m (1,312 ft) of nest/roost sites in occupied habitat between March 1 and August 31. Explosives detonation at night at sites within 400 to 800 m (1,312 to 2,624 ft) of a nest site in occupied habitat is restricted to once a month from March 1 and August 31. There are no restrictions on daytime explosives testing between 400 and 800 m (1,312 to 2,624 ft). There are no restrictions between September 1 and February 28 or in unoccupied habitat. Explosives detonation adjacent to AEIs that have not previously been recorded by LANS biologists as occupied will have no restrictions unless surveys detect Mexican Spotted Owls. Explosives tests not allowed under the guidelines of this site plan must be individually reviewed for ESA compliance.

#### 4.5.2 Activity Table

The dates shown in the Activity Table (Table 1) are the dates between which the activity in the row is restricted under the guidelines of this site plan. All AEIs are considered occupied from March 1 to August 31 or until surveys show an AEI to be unoccupied. If owls are detected, AEIs are considered occupied until August 31 within 400 m (1,312 ft) of the nest site. Consult with LANS biologists to find out occupancy status of AEIs and what locations are within 400 m (1,312 ft) of nest sites (http://int.lanl.gov/environment/bio/controls/index.shtml).

Table 1. Restrictions on Activities in Undeveloped Occupied Mexican Spotted Owl AEIs

	<b>Levels of Impact</b>	Core	Buffer	
People	People			
	Low	No Restrictions*	No Restrictions	
	Medium	March 1 to August 31	No Restrictions	
	High	March 1 to August 31	No Restrictions	
Vehicles				
	Low	No Restrictions	No Restrictions	
	Medium	March 1 to August 31	No Restrictions	
	High	March 1 to August 31	No Restrictions	
Aircraft				
	Low	March 1 to August 31	No Restrictions	
	Medium	March 1 to August 31	March 1 to May 15	
	High	March 1 to August 31	March 1 to August 31	
Other Light Production				
	Low	March 1 to August 31	No Restrictions**	
	Medium	March 1 to August 31	No Restrictions**	
	High	March 1 to August 31	No Restrictions**	
Other Noise Production				
	Low	March 1 to August 31	No Restrictions**	
	Medium	March 1 to August 31	No Restrictions**	
	High	March 1 to August 31	No Restrictions**	
Explosives Detonation (see text in Section 4.5.1)				

<sup>\*</sup> Entry is restricted in core areas that are occupied within 400 m (1,312 ft) of the nest site from March 1 to August 31. If the current nest has not been located, entry is restricted within 400 m (1,312 ft) of the previous year's nest site.

#### 4.6 Protective Measures

This section provides a list of management practices to apply in Mexican Spotted Owl AEIs.

• Timing of projects must take into account that projects in core areas or projects that violate restrictions for occupied buffer areas must stop on February 28 each year until occupancy status of the AEI is determined.

<sup>\*\*</sup> Noise or light production in the buffer is restricted if the activity would violate core area restrictions on noise or light.

- Make every reasonable effort to reduce the noise from explosives testing within 800 m (2,624 ft) of occupied habitat. Methods to reduce noise could include contained shots, noise shields in the direction of AEI cores, etc. For night shots, every reasonable effort should be made to limit the amount of light directed into AEI core areas.
- Install signs on dirt roads and trails leading into AEIs labeling them as restricted access areas and provide a contact number for access restrictions.
- Keep disturbance and noise to a minimum.
- Avoid unnecessary disturbance to vegetation (e.g., excessive parking areas or equipment storage areas, off-road travel, materials storage areas, crossing of streams or washes).
- Avoid removal of vegetation along drainage systems and stream channels.
- Avoid all vegetation removals not absolutely necessary.
- Employ appropriate erosion and runoff controls to reduce soil loss. The controls must be put in place and periodically checked throughout the life of projects.
- Revegetate all exposed soils as soon as feasible after construction to minimize erosion.
- Focus development away from undeveloped areas on the western end of the Los Alamos Canyon AEI.

#### 5.0 Levels of Development in AEI Core and Buffers

#### 5.1 Allowable Habitat Alteration in the Buffer Areas

The following quantifications of development and guidance for allowable habitat alteration in buffer areas were published and consulted on in the 1999 version of the HMP. Most AEIs changed in dimensions during the 2005 redelineation of the habitats, and many have experienced additional development under past consultations. Many projects were reviewed and received USFWS concurrence between 1999 and 2017.

The current development status for each of the AEIs is at the end of each AEI description.

Cañon de Valle—In 1999, 16.3 ha (40.3 ac) of the core was developed and 52.2 ha (129 ac) of the buffer was developed. For this AEI, it was recommended that only an additional 25.30 ha (62.5 ac) of the AEI buffer be developed. The 1999 HMP stated that once this cap is reached or a large-scale project is proposed, additional consultation with USFWS would be required. By 2011, 28 ha (69.2 ac) of the core and 84 ha (207.5 ac) of the buffer was developed, with most of the changes due to consultations. The 2017 redelineation of the lower Water Canyon AEI resulted in another reduction of 69 ha (170 ac). The current size of this AEI is 277 ha (685 ac) of core and 524 ha (1295 ac) of buffer habitat. Of that, 21 ha (52 ac) of the current core is developed and 71 ha (176 ac) of the current buffer is developed.

**Pajarito**—In 1999, 6.7 ha (16.5 ac) of the core was developed and 75.1 ha (186.5 ac) of the buffer was developed. For this AEI, it was recommended that only an additional 35 ha (86.4 ac) of the buffer be developed. The 1999 HMP stated that once the cap is reached or a single large-scale project is proposed, additional consultation with the USFWS would be required. By 2011,

27 ha (66.7 ac) of the core and 89 ha (220 ac) of the buffer was developed, with most of the changes due to consultations. The current size of this AEI is 236 ha (585 ac) of core and 449 ha (1,111 ac) of buffer habitat. Of that, 27 ha (67 ac) of the current core is developed and 89 ha (220 ac) of the current buffer is developed.

Los Alamos—In 1999, 77.16 ha (190 ac) of the core was developed and 167.2 ha (413.1 ac) of the buffer was developed. Because this AEI is heavily developed, additional development was restricted to a few selected areas within the buffer. By 2011, 94 ha (232.2 ac) of the core and 181 ha (447.3 ac) of the buffer was developed, with most of the changes due to consultations. The current size of this AEI is 325 ha (805 ac) of core and 535 ha (1,323 ac) of buffer habitat. Of that, 64 ha (158 ac) of the current core is developed and 129 ha (319 ac) of the current buffer is developed.

Sandia-Mortandad—In 1999, 29 ha (71.7 ac) of the core was developed and 75.1 ha (185.6 ac) of the buffer was developed. For this AEI, LANS biologists recommended only an additional 38.1 ha (94.1 ac) of the buffer be developed before additional USFWS consultations take place. By 2011, 45 ha (111.2 ac) of the core and 83 ha (205.1 ac) of the buffer was developed, with most of the changes due to consultations. The current size of this AEI is 270 ha (669 ac) of core and 371 ha (918 ac) of buffer habitat. Of that, 44 ha (110 ac) of the current core is developed and 83 ha (206 ac) of the current buffer is developed.

Three Mile—In 1999, 3.8 ha (9.4 ac) of the core was developed and 21.5 ha (51.1 ac) of the buffer was developed. For this AEI, LANS biologists recommended only 64.3 ha (158.8 ac) additional area of buffer be developed before additional USFWS consultations take place. By 2011, 12 ha (29.6 ac) of the core and 37 ha (91.4 ac) of the buffer was developed, with most of the changes due to consultations. The current size of this AEI is 131 ha (325 ac) of core and 295 ha (730 ac) of buffer habitat. Of that, 11 ha (29 ac) of the current core is developed and 36 ha (91 ac) of the current buffer is developed.

## III. AREA OF ENVIRONMENTAL INTEREST SITE PLAN FOR THE SOUTHWESTERN WILLOW FLYCATCHER

#### 1.0 Species Description—Southwestern Willow Flycatcher

#### 1.1 Status

In 1995, the USFWS designated the Southwestern Willow Flycatcher as a federally endangered species (60 FR 10693). The USFWS most recently designated critical habitat for the Southwestern Willow Flycatcher in 2013 (78 FR 343). The most recent recovery plan for the Southwestern Willow Flycatcher was published in 2002 (USFWS 2002).

#### 1.2 General Biology

The Southwestern Willow Flycatcher is one of four subspecies of the Willow Flycatcher. The historic range of the Southwestern Willow Flycatcher included Arizona, California, Colorado, New Mexico, Texas, Utah, and Mexico. Currently, this flycatcher breeds in riparian habitats from southern California to Arizona and New Mexico, plus southern Colorado, Utah, Nevada,

and far western Texas. In winter it is found in southern Mexico, Central America, and northern South America (USFWS 2002).

Southwestern Willow Flycatchers are present in New Mexico from early May through mid-September and breed from late May through late July (Finch and Kelly 1999; USFWS 2002; Yong and Finch 1997). The flycatcher's nesting cycle is approximately 28 days. Three or four eggs are laid at one-day intervals, and incubation begins when the clutch is complete. The female incubates eggs for approximately 12 days, and the young fledge about 13 days after hatching. Southwestern Willow Flycatchers typically raise one brood per year (USFWS 2002). Because arrival dates vary, northbound migrant Willow Flycatchers (of all subspecies) pass through areas where Southwestern Willow Flycatchers have already begun nesting. Similarly, southbound migrants (of all subspecies) in late July and August may occur where Southwestern Willow Flycatchers are still breeding. Therefore, it is only during a short period of the breeding season (approximately June15 through July 20) that a Willow Flycatcher seen within Southwestern Willow Flycatcher range is probably of that subspecies (USFWS 2002).

The Southwestern Willow Flycatcher only nests along rivers, streams, and other wetlands. It is found in close association with dense stands of willows (*Salix* spp.), arrowweed (*Pluchea* spp.), buttonbush (*Cephalanthus* spp.), tamarisk (*Tamarix* spp.), Russian olive (*Eleagnus angustifolia* L.), and other riparian vegetation, often with a scattered overstory of cottonwood (*Populus* spp.) (USFWS 2002). The size of vegetation patches or habitat mosaics used by Southwestern Willow Flycatchers varies considerably and ranges from as small as 0.8 ha (1.9 ac) to several hundred hectares (Hatten and Paradzick 2003). The Southwestern Willow Flycatcher nests in thickets of trees and shrubs approximately 2 to 15 m (6 to 49 ft) tall, with a high percentage of canopy cover and dense foliage from 0 to 4 m (0 to 13 ft) above ground. Regardless of the plant species composition or height, occupied sites always have dense vegetation in the patch interior (Allison et al. 2003; USFWS 2002).

The Southwestern Willow Flycatcher is an insectivore. It forages within and occasionally above dense riparian vegetation, taking insects on the wing and gleaning them from foliage. The flycatcher's prey includes flies, bees, wasps, ants, beetles, moths, butterflies, grasshoppers, crickets, dragonflies, damselflies, and spiders (Durst et al. 2008; Wiesenborn and Heydon 2007).

#### 1.3 Threats

The current population of Southwestern Willow Flycatchers in the United States occupies an estimated 1,214 territories (Durst et al. 2006). The distribution of breeding groups is highly fragmented, with groups often separated by considerable distances. This subspecies has suffered declines attributed to extensive loss of its cottonwood-willow habitat and to poor productivity resulting from brood parasitism by Brown-headed Cowbirds (*Molothrus ater*) (USFWS 2002).

#### 2.0 Impact of Human Activities

#### 2.1 Introduction

The primary threats to the Southwestern Willow Flycatcher on LANL property are 1) impacts on habitat quality from LANL operations and 2) disturbance of nesting flycatchers. This section includes a review and summary of the known effects of various types of human activities to the

Southwestern Willow Flycatcher and an overview of the current levels of activities at LANL within species habitat.

#### 2.2 Impacts on Habitat Quality

#### 2.2.1 Development

Throughout the Southwest, riparian habitats are rare and tend to be small and separated by vast expanses of arid lands. The Southwestern Willow Flycatcher has experienced extensive habitat loss and modification resulting from urban and agricultural development, water diversion and impoundment, channelization of waterways, livestock grazing, off-road vehicle and other recreational uses, and hydrological changes resulting from these and other land uses (USFWS 2002). River and stream impoundments, groundwater pumping, and overuse of riparian areas have altered as much as 90 percent of the Southwestern Willow Flycatcher's habitat (USFWS 2002). Loss of cottonwood-willow riparian forests has had widespread impact on the distribution and abundance of bird species associated with that forest. Development may be tolerated if the habitat is left intact.

Because watercourses at LANL tend to be intermittent to ephemeral, riparian habitat is uncommon. There has been extensive degradation of the riparian zone along the Rio Grande caused by feral cattle grazing and flood control operations at Cochiti Lake. There are other riparian/wetland areas on LANL property associated with canyon bottoms, the most significant being the Pajarito wetlands in the lower end of Pajarito Canyon. A major paved road parallels the wetlands area in Pajarito Canyon.

#### 2.2.2 Ecological Risk

There is no specific information on the impact of chemicals on the Southwestern Willow Flycatcher.

#### 2.2.2.1 Ecorisk Assessment

LANS subject matter experts completed two ecological risk assessments between 1997 and 2009 that included the Southwestern Willow Flycatcher. The ecological risk assessment process involves using computer modeling to assess potential effects to animals from chemicals of potential concern that have been detected in the environment. The ecological risk assessments concluded that, in general, there is a small potential for effects to Southwestern Willow Flycatcher from chemicals of potential concern (Gonzales et al. 1998; Gonzales et al. 2009).

An ecotoxicological risk assessment for the Southwestern Willow Flycatcher, centered on the Pajarito wetlands, found that between 7 and 16 percent of 100 hypothetical nest sites examined had hazard indices >1.0 and <10.0, depending on the foraging scenario (Gonzales et al. 1998). This indicates a small potential for impacts from chemicals. The primary chemicals driving the risk scenario were pentachlorophenol, aluminum, radium-226, calcium, and thorium-228. Aluminum, radium, and thorium are naturally occurring substances in northern New Mexico.

#### 2.2.3 Disturbance

#### 2.2.3.1 Pedestrians and Vehicles

There is no specific information available on the reactions of Southwestern Willow Flycatchers to pedestrians and vehicles. The recovery plan for the Southwestern Willow Flycatcher recommends providing protected areas, reducing unpredictable activities, providing visual barriers, and reducing noise disturbance (USFWS 2002).

#### 2.2.3.2 Aircraft

There is no specific information available on the reaction of Southwestern Willow Flycatchers to aircraft.

LANL lies within restricted airspace and planes infrequently fly less than 609 m (2,000 ft) above ground level. The County of Los Alamos operates an airport along the northern edge of LANL. The airport is located on the southern rim of Pueblo Canyon. Most flights approach and depart to the east of the airport, over the Rio Grande.

#### 2.2.3.3 Explosives

There is no specific information available on the reaction of Southwestern Willow Flycatchers to explosives detonation. The Southwestern Willow Flycatcher AEI is not located close to any explosives testing sites at LANL.

#### 2.2.3.4 Other Sources of Noise

LANS biologists do not have good information on the effects of noise, including machinery operation, on Southwestern Willow Flycatchers. However, Southwestern Willow Flycatchers are probably not as sensitive to disturbance as some other threatened or endangered species (USFWS 2002). For a description of noise levels at LANL, see Part I, Section 2.2.3.

#### 2.2.3.5 Artificially Produced Light

There is no information available on the effects of artificially produced light on Southwestern Willow Flycatchers. Under the Los Alamos County Code, commercial site development plans are reviewed to ensure that lighting serves the intended use of the site while minimizing adverse impacts to adjacent residential property (Section 16-276). Section 16-276 of the County Code includes light source measurement limitations by zoning district. The code allows off-site light to be 0.5 fc in residential areas. By comparison, full moonlight measures 0.1 fc, and a crescent moon was measured at 0.01 fc.

#### 3.0 AEI General Description for the Southwestern Willow Flycatcher

The AEI consists of two types of areas—core and buffer. Core areas represent wetland areas with suitable vegetation for nesting, primarily dense willows. The buffer area is the area within 100 m (328 ft) of core areas. The Southwestern Willow Flycatcher AEI on LANL property consists of two separate core areas. For purposes of this site plan, both core areas and associated buffers are considered one AEI unit.

#### 3.1 Method for Identifying the Southwestern Willow Flycatcher AEI

The core areas were defined by the presence of riparian habitat and suitable wetland vegetation. These areas were identified in 1994 during a survey of wetlands at LANL and mapped using a global positioning system receiver. Wetlands without stands of dense willows at least 2 m (7 ft) tall and 30 m (98 ft) wide were not included in the AEI. The buffer area is the area within 100 m (328 ft) of the core areas.

#### 3.2 Location of the Southwestern Willow Flycatcher AEI

There is one Southwestern Willow Flycatcher AEI on LANL property. It is composed of two core areas with associated buffers. The AEI core areas are located in the bottom of Pajarito Canyon, on the eastern side of LANL adjacent to Pajarito Road and State Road 4.

#### 4.0 AEI Management

#### 4.1 Overview

This AEI management section provides guidelines for LANL operations to reduce or eliminate the threats to the Southwestern Willow Flycatcher from 1) habitat alterations that reduce habitat quality and 2) disturbance of breeding or potentially breeding flycatchers. Habitat alterations are considered for all AEIs and for both core and buffer areas. Disturbance activities to flycatchers are considered only for occupied AEIs and only for impacts on core areas. Developed areas (see Part I, Section 2.3) that have ongoing baseline levels of activities and are not suitable habitat for Southwestern Willow Flycatchers have different restrictions than undeveloped core or buffer areas. Therefore, the location of the disturbance activity within the AEI, the occupancy status of the AEI, and the type of activity all affect whether or not the activity is allowable. AEIs for different species may overlap, and an activity must meet the guidelines of all applicable site plans to be allowable. Protective measures are described as management practices that should be followed when working in AEIs.

#### 4.2 Definition and Role of Occupancy in AEI Management

Occupancy simply refers to whether or not an AEI is occupied during a species' period of sensitivity. For Southwestern Willow Flycatchers, LANS biologists are primarily concerned with protecting the birds from disturbance during the breeding season. Because individuals may colonize suitable habitat, the Southwestern Willow Flycatcher AEI is treated as though it is occupied from May 15 through September 15 or until surveys show an AEI to be unoccupied. Southwestern Willow Flycatcher surveys are conducted during May, June, and July. Because Southwestern Willow Flycatchers migrate south for the winter, the AEI is treated as unoccupied from September 16 to May 14.

The occupancy status of an AEI affects what activities are allowable in the AEI. Although activities causing habitat alterations are always restricted, disturbance activities are restricted only in occupied AEIs. The Activity Table (Table 2, Section 4.5.2) provides dates and levels of disturbance activities allowable in the occupied Southwestern Willow Flycatcher AEI under the guidelines of this site plan. The dates in Table 2 indicate the time period during which the activity is restricted. Contact a LANS biologist to find out the current occupancy status of an AEI (<a href="http://int.lanl.gov/environment/bio/controls/index.shtml">http://int.lanl.gov/environment/bio/controls/index.shtml</a>).

#### 4.3 Introduction to AEI Management Guidelines

Sections 4.4 and 4.5 provide the guidelines for habitat alterations and allowable activities in AEI core and buffer areas. The flowchart (see Figure 1) provides a quick reference that should be used to determine if a project or activity will affect an AEI and what sections of the site plan need to be consulted. The section on habitat alterations (Section 4.4) describes what and where habitat alterations are allowed under the guidelines of this site plan. The section and table on allowable activities (Section 4.5 and Table 2) describe what, when, and where disturbance activities are allowed in occupied AEIs under the guidelines of this site plan. If an activity does not meet the restrictions given in the guidelines, the activity must be individually reviewed for ESA compliance. This site plan only provides guidelines for the Southwestern Willow Flycatcher AEI. If an activity is desired in an area with overlapping AEIs, all applicable site plans must be consulted. Section 4.6 describes management practices that should be applied when working or considering work in an AEI. LANS biologists are available to help interpret site plans and answer questions (http://int.lanl.gov/environment/bio/controls/index.shtml).

#### 4.4 Definition of and Restrictions on Habitat Alterations

#### 4.4.1 Definition of Habitat Alterations

Habitat alteration includes any action that over the long term alters the soil structure, vegetative components necessary to the species, prey quality and quantity, water quality, hydrology, or noise or light levels in undeveloped areas of an AEI. Long term means the alteration lasts for more than one year. Habitat alteration includes any activity that removes vegetative components important to the Southwestern Willow Flycatcher (primarily trees and shrubs). An actual activity may take place outside of the AEI and will be considered habitat alteration if consequences of the activity have effects inside the AEI core.

The habitat components most important to flycatchers include vegetative structure, food quality and quantity, and disturbance levels, including noise and light. The thickets of certain trees and shrubs along wetlands are important because they provide roost sites and a suitable habitat for nesting and foraging.

#### 4.4.2 Fuels Management Practices to Reduce Wildfire Risk

Thinning within undeveloped buffer areas may include trees of any size to achieve 7.6 m (25 ft) spacing between tree crowns. However, clear cutting is not allowed in undeveloped buffer areas. No fuels management practices are allowed in core areas. Habitat alterations including thinning are not restricted in developed areas.

#### 4.4.3 Utility Corridors

Habitat alterations such as cutting down trees that threaten power lines are allowed within 8 m (26 ft) of either side of an existing utility line in all areas of an AEI (Trujillo and Racinez 1995). New utility lines and utility lines requiring clearance of a right-of-way greater than 16 m (52 ft) total must be individually reviewed for ESA compliance. Disturbance activities must follow the guidelines given in the Activities Table (Table 2, Section 4.5.2) for occupied AEIs.

#### 4.4.4 Restrictions on Habitat Alterations

Habitat alterations other than the utility corridor maintenance described above are not allowed in undeveloped core areas under the guidelines of this site plan. Habitat alteration in buffers is limited. If a project or activity is planned that would alter habitat in an undeveloped core area, it must be individually evaluated for ESA compliance. Habitat alterations in a buffer area other than fuels management activities or utility corridor maintenance must be reported to a LANS biologist for tracking (http://int.lanl.gov/environment/bio/controls/index.shtml).

#### 4.5 Definition of and Restrictions on Disturbance Activities

#### 4.5.1 Definition of Disturbance Activities

LANS biologists considered five categories of activities that might cause disturbance in an AEI. Most of the categories were first identified in the document "Peregrine Falcon Habitat Management in the National Forests of New Mexico" prepared for the United States Forest Service (Johnson 1994). Other light production and other noise production were included to provide the most comprehensive list of activities possible, reducing the need for individual review of activities for ESA compliance. The categories of activities are people, vehicles, aircraft, other light production, and other noise production. The impact of explosives detonation on this species is not considered here because there are no explosives testing sites within 2 km (1.25 mi) of potential nesting habitat. Low, medium, and high levels of impact for these activities are considered here. The following categories of activities are restricted only in AEIs that are classified as occupied.

**People**—includes any entry of people into an AEI on foot.

- Low impact is the presence of three or fewer people per project and duration of one day or less during a breeding season.
- Medium impact is the exceedance of either the number of people or the duration criteria.
- High impact is the exceedance of both the number of people and the duration criteria.

**Vehicles**—includes the entry of any two-axle highway vehicle, all-terrain vehicle, or motorized machinery into an AEI by any route other than a paved road or an improved gravel road.

- Low impact is the presence of two or fewer vehicles per project and duration of one day or less during a breeding season.
- Medium impact is the exceedance of either the number of vehicles or the duration criteria.
- High impact is the exceedance of both the number of vehicles and the duration criteria.

**Aircraft**—includes the operation of any aircraft below an elevation of 600 m (2,000 ft) above the highest ground level in the local vicinity.

- Low impact is the presence of one single-engine airplane and duration of one day or less during a breeding season.
- Medium impact is the exceedance of either the number of aircraft or the duration criteria.

• High impact is the exceedance of both the number of aircraft and the duration criteria.

Any use of helicopters, jet airplanes, and propeller airplanes with two or more engines is classified as medium impact or above, depending on duration.

Other Light Production—includes any activity not previously listed that causes additional light to occur in an AEI core area (e.g., plans for construction of a new building at the edge of a developed area may call for lighting at night to facilitate nighttime work that impacts an undeveloped core area).

- Low impact is the increase of light intensity by up to 0.05 fc and a duration of one night or less per project per breeding season.
- Medium impact is the exceedance of either the intensity or duration criteria.
- High impact is the exceedance of both the intensity and duration criteria.

Measurements for increases in light are taken at the AEI core area boundary closest to the light source if the source is outside the core, and at 10 m (33 ft) from the source if the source is inside the core. Light measurements for developed areas are taken at the edge of the developed area if the developed area is within an AEI core, or at the closest core boundary, if the developed area is outside of an AEI core.

Other Noise Production—includes any activity not previously listed except for explosives detonation that causes additional noise to occur in an AEI. For example, operation of machinery causes noise.

- Low impact is increasing noise levels in an AEI core by 6 dB(A) or less for one day or less per project per breeding season.
- Medium impact is the exceedance of either the level or the duration criteria.
- High impact is the exceedance of both the level and the duration criteria.

Measurements for increases in noise are taken at the AEI core boundary closest to the noise source if the source is outside the core, and at 10 m (33 ft) from the source if the source is inside the core. Noise measurements for developed areas are taken at the edge of the developed area if the developed area is within an AEI core, or at the closest core boundary if the developed area is outside of an AEI core.

### 4.5.2 Activity Table

The dates shown in the Activity Table (Table 2) are the dates between which the activity in the row is restricted under the guidelines of this site plan. Disturbance activities are of concern only when Southwestern Willow Flycatchers occupy an AEI. The AEI is always considered occupied between May 15 and September 15, or until surveys show the AEI to be unoccupied. The Southwestern Willow Flycatcher AEI is always considered unoccupied between September 16 and May 14, when flycatchers have migrated for the winter. For occupancy status of an AEI after completion of surveys, contact a LANS biologist (http://int.lanl.gov/environment/bio/controls/index.shtml).

Table 2. Restrictions on Activities in Undeveloped Occupied Southwestern Willow Flycatcher AEI

	<b>Levels of Impact</b>	Core	Buffer
People			
	Low	No Restrictions	No Restrictions
	Medium	May 15 to August 15	No Restrictions
	High	May 15 to September 15	No Restrictions
Vehicles			
	Low	May 15 to September 15	No Restrictions
	Medium	May 15 to September 15	No Restrictions
	High	May 15 to September 15	No Restrictions
Aircraft			
	Low	No Restrictions	No Restrictions
	Medium	May 15 to August 15	May 15 to August 15
	High	May 15 to September 15	May 15 to August 15
Other Light/Noise Production			
	Low	May 15 to September 15	No Restrictions*
	Medium	May 15 to September 15	No Restrictions*
	High	May 15 to September 15	No Restrictions*

<sup>\*</sup> Noise or light production in the buffer is restricted if the activity would violate core area restriction on noise or light.

### 4.6 Protective Measures

This section provides a list of management practices to apply in the AEI.

- No wetland vegetation will be removed outside of developed areas.
- Employ appropriate erosion and runoff controls to reduce soil loss.
- Avoid unnecessary disturbance to vegetation (e.g., excessive parking areas or equipment storage areas, off-road travel, materials storage areas, crossing of streams or washes).
- Avoid removal of vegetation along drainage systems and stream channels.
- Avoid all vegetation removals not absolutely necessary.
- Appropriate erosion controls must be put in place and periodically checked throughout the life of any projects.
- Revegetate all exposed soils as soon as feasible after disturbance to minimize erosion.

### 5.0 Southwestern Willow Flycatcher AEI Description

### 5.1 Pajarito Canyon Southwestern Willow Flycatcher AEI

### 5.1.1 Allowable Habitat Alteration in the Buffer Area

Since the purpose of the buffer area is to help maintain the core area as suitable Southwestern Willow Flycatcher habitat, habitat alteration in the buffer area will be extremely limited. There are two areas in which restrictions on habitat alteration are relaxed.

- 1. The mesa top of Mesita del Buey. This mesa top can be developed as long as restrictions on impacts to the core area are met.
- 2. Pajarito Road within the AEI. Mowing of upland vegetation is allowed up to 5 m (15 ft) from Pajarito Road, or to the fence, if the fence is within 9 m (30 ft). Vegetation must cover the roadsides to prevent sediment runoff, so mowed plants should be at least 5 cm (2 in) high. LANS biologists encourage the growth of willow throughout the AEI—even the area along Pajarito Road—to enhance habitat. If, within this area, it is absolutely necessary to remove new willow growth (i.e., to improve visibility for human safety), LANS biologists recommend that only willows at or above the level of the roadway surface be mowed.

# IV. AREA OF ENVIRONMENTAL INTEREST SITE PLAN FOR THE JEMEZ MOUNTAINS SALAMANDER

### 1.0 Species Description—Jemez Mountains Salamander

### 1.1 Status

The Jemez Mountains Salamander was listed in New Mexico as endangered under the Wildlife Conservation Act of New Mexico in 2006 (NMDGF 2006). In September 2012 the USFWS proposed the Jemez Mountains Salamander as endangered under the ESA (77 FR 56481) and the final listing as endangered was on September 10, 2013 (78 FR 55599).

### 1.2 General Biology

The Jemez Mountains Salamander is endemic to the Jemez Mountains of north-central New Mexico and is found in Los Alamos, Rio Arriba, and Sandoval counties (Stebbins and Riemer 1950). It is one of two endemic plethodontid salamanders that occur in New Mexico. It occurs predominantly at elevations between 2,130 to 3,430 m (6,988 to 11,254 ft) in mixed-conifer forest with greater than 50 percent canopy cover consisting mainly of Douglas fir (*Pseudotsuga menziesii* [Mirb.] Franco), blue spruce (*Picea pungens* Engelm.), Engelmann spruce (*Picea engelmannii* Parry ex Engelm.), white fir (*Abies concolor* [Gord. & Glend.] Lindl. ex Hildebr.), limber pine (*Pinus flexilis* James), ponderosa pine, and quaking aspen (*Populus tremuloides* Michx.). The ground surface in forest areas has (a) moderate to high volumes of large fallen trees and other woody debris, especially coniferous logs at least 25 cm (10 in) in diameter, particularly Douglas fir, which are in contact with the soil in varying stages of decay from freshly fallen to nearly fully decomposed; or (b) structural features, such as rocks, bark, and

moss mats that provide the species with food and cover. Underground habitat in forest or meadow areas contains interstitial spaces provided by (a) igneous rock with fractures or loose rocky soils, (b) rotted tree root channels, or (c) burrows of rodents or large invertebrates (Degenhardt et al. 1996; 78 FR 9876).

Plethodontid salamanders, which lack both lungs and gills, breathe through the mucous membranes in their mouth and throat and through their moist skin. The Jemez Mountains Salamander is completely terrestrial and does not use standing surface water for any life stage (77 FR 56481). Present in its habitat year-round, the Jemez Mountains Salamander spends most of its life underground, but can be found on the surface when conditions are warm and wet, approximately July through October. During this time, the Jemez Mountains Salamander can be found under rocks, bark, and moss mats, and inside and under logs (Ramotnik 1986, Everett 2003). The Jemez Mountains Salamander eats invertebrates, including ants, mites, and beetles, and is thought to lay its eggs underground (78 FR 9876).

### 1.3 Threats

Principal threats to habitat include historical fire exclusion and suppression and severe wildland fires; forest composition and structure conversions; post-fire rehabilitation; forest and fire management; roads, trails, and habitat fragmentation; recreation; and disease (77 FR 56482).

### 2.0 Impact of Human Activities

### 2.1 Introduction

Primary threats to the Jemez Mountains Salamander on LANL property are impacts to habitat quality or destruction of individual salamanders caused by LANL or Los Alamos County operations. Forested LANL property is also subject to impacts from severe wildland fire and wildfire suppression.

### 2.2 Impacts on Habitat Quality

### 2.2.1 Development

Property at LANL varies from remote isolated land to heavily developed and/or industrialized. Most of the large developed areas at LANL are found on mesa tops, generally in the northern and western portion of LANL. The areas of Jemez Mountains Salamander habitat currently most impacted by development occur in Los Alamos Canyon. There is a secondary paved road (West Road) in the bottom of the canyon that exits the canyon on the north-facing slope through Jemez Mountains Salamander habitat. The canyon bottom also contains a recreational ice rink operated by Los Alamos County on an inholding owned by Los Alamos County. Development that reduces the occurrence of primary constituent elements of Jemez Mountains Salamander in core habitat would likely have a negative impact on the species.

### 2.2.2 Pedestrians and Vehicles

Many canyon bottoms and mesa tops at LANL have dirt roads traversing them. Most of these roads are gated; however, many of these roads are accessible to LANL employees and the public on foot or by bike. Some areas, such as Los Alamos Canyon, are frequently used by hikers and dog owners on active and historic trails that traverse the canyon, through Jemez Mountains

Salamander habitat in places. Maintenance of roads and trails in the habitat may have a negative impact on the species.

### 2.2.3 Severe Wildland Fire and Wildfire Suppression

Stand-replacing wildfires significantly change forest composition and structure, and reduce canopy cover. Even ground wildfires may reduce the volume of fallen logs and large woody debris. Large areas of historic Jemez Mountains Salamander habitat have been impacted by stand-replacing wildfires associated with current forest stocking conditions, drought, and high temperatures (77 FR 56482). Forested habitats on LANL property are also subject to severe wildland fires. To mitigate wildfire risks, some areas of LANL have been treated for fuels reduction and creation of fuel breaks both pre-emptively and during active wildfire suppression. Both wildfires and wildfire suppression activities can negatively impact the primary constituent elements of Jemez Mountains Salamander core habitat.

### 2.3 Impacts on Individual Salamanders

### 2.3.1 Disease

The amphibian pathogenic fungus *Batrachochytrium dendrobatidis* (Bd) was found in a wild-caught Jemez Mountains Salamander in 2003 (Cummer et al. 2005) on the east side of the species' range and again in another Jemez Mountains Salamander in 2010 on the west side of the species' range (77 FR 56482). Bd causes the disease chytridiomycosis, whereby the Bd fungus attacks keratin in amphibians. In adult amphibians, keratin primarily occurs in the skin. The symptoms of chytridiomycosis can include sloughing of skin, lethargy, morbidity, and death. Chytridiomycosis has been linked with worldwide amphibian declines, die-offs, and extinctions, possibly in association with climate change (Pounds et al. 2006). Chytridiomycosis may be a threat to the Jemez Mountains Salamander because this disease is a threat to many other species of amphibians and the pathogen has been detected in the Jemez Mountains Salamander (77 FR 56482).

As part of a cooperative study with the New Mexico Department of Game and Fish between 2007 and 2013, various amphibian species, including the canyon tree frog (*Hyla arenicolor*), western chorus frog (*Pseudacris triseriata*), Woodhouse's toad (*Anaxyrus woodhousii*), tiger salamander (*Ambystoma tigrinum*), and Jemez Mountains Salamander were tested for Bd infection at LANL. To date, all sampling has been negative for Bd infection (Fresquez et al. 2013).

### 2.3.2 Destruction of Individual Salamanders

During periods of the year when Jemez Mountains Salamanders are on the soil surface, when conditions are warm and wet (generally July to October), they are vulnerable to injury and mortality from soil-disturbing activities, including operation of heavy equipment in core habitat. They also are at risk to be found and collected by people.

### 3.0 AEI General Description for the Jemez Mountains Salamander

The AEI consists of two areas—a core area and a buffer area. The core habitat is defined as suitable habitat where the Jemez Mountains Salamander occurs or may occur at LANL. The core habitat consists of sections of north-facing slope that contain the required micro-habitat to

support Jemez Mountains Salamander. The buffer area is 100 m (328 ft) wide extending outward from the edge of the core area.

### 3.1 Method for Identifying a Jemez Mountains Salamander AEI

The first step in identifying potential Jemez Mountains Salamander AEIs at LANL was to use a GIS to model habitat. Early modeling efforts by Hathcock (2008) identified areas of potential habitat and that model was further refined. The following parameters were modeled in the GIS:

• Elevation: 2,150 m (7,000 ft) and above

• Slope: Greater than 20 degrees

• Aspect: north-facing +/- 20 degrees

• Land cover: Mixed conifer

• Land use: Undeveloped

• Modeled habitat is only selected if it is greater than five contiguous  $30 \times 30$  m (98 × 98 ft) pixels in size

Once this habitat layer was developed, a second layer was modeled that examined the level of shade in the habitat, also known as an illumination index. Since the Jemez Mountains Salamander needs cool moist conditions, an illumination index model would further highlight areas where this habitat type may occur or further reinforce the areas selected by the GIS modeling. The illumination index describes the amount and extent of solar radiation reaching the Earth's surface at a given point. This takes into account the topography that may cast shadows. The illumination model was developed using the 5 m (16 ft) resolution digital elevation model hillshade and using the Surface toolbox in ArcToolbox (Environmental Science Research Institute, Redlands, California) using the highest height of the sun on June 21 at 1:00 pm, altitude of 74.4 and Azimuth of 178.4, when the sun would be at its maximum height. These procedures were based on work done by Reilly et al. (2009).

Once this modeling was complete, LANS biologists performed field validation to verify the suitability of the modeled habitat. The goal was to verify that mixed conifer was still the dominant cover class in the selected area. The GIS analysis used data from a landcover map created by McKown et al. (2003). There have been changes in habitat from fire and extreme drought effects since this landcover map was published. Since LANL is on the extreme edge of Jemez Mountains Salamander lower elevational range, a key component in this part of its range is soil moisture content. During field validation, evidence of a moist mixed conifer habitat versus a dry mixed conifer habitat was noted. One of the key indicators used to delimit areas of moist versus dry mixed conifer during the field validation was the presence of white fir (Evans et al. 2011) combined with a high canopy cover.

Field validation of the model occurred in May 2013, or decisions were based on earlier field visits to the sites from other projects. Each field validation consisted of LANS biologists walking down all of the modeled habitat polygons to look for the presence of indictor features. If a polygon of modeled habitat contained white fir, indicating a moist wet conifer type habitat, a high canopy closure, and other signs of high habitat quality such as dead logs, moss, or other

areas that could be used as cover by the Jemez Mountains Salamander, then the polygon was marked for retention in the final core habitat. Polygons that did not contain the necessary habitat requirements were omitted.

After the field validation was complete, the final core habitat boundaries were hand digitized using ArcGIS (Environmental Science Research Institute, Redlands, California) by LANS biologists in and around the validated modeled polygon and areas between polygons, if appropriate. The final identified core habitat at LANL occurs on the north-facing slopes of canyons. Toward the rim of the canyon, the core boundaries end where the mixed conifer ends. In the canyon bottoms, the core boundary extends to the edge of the stream channel. The upstream and downstream core boundaries end where the mixed conifer ends. A buffer habitat was extended around the core to a distance of 100 m (328 ft) outward. The LANL Fenton Hill satellite facility in the Jemez Mountains off of New Mexico Highway 126 is on land leased to DOE by the Santa Fe National Forest. The entire footprint is considered to be developed core habitat for the Jemez Mountains Salamander, since proposed critical habitat is adjacent to the facility.

### 3.2 Location and Number of Jemez Mountains Salamander AEIs

The identified Jemez Mountains Salamander core habitats were grouped by canyon system into AEIs, which contain contiguous and noncontiguous habitat areas. The largest contiguous section of habitat at LANL is in Los Alamos Canyon. There are two noncontiguous areas of habitat in Two-mile Canyon, four in Pajarito Canyon, one contiguous area in Cañon de Valle, and the entire Fenton Hill footprint.

### 4.0 AEI Management

### 4.1 Overview

This AEI management section provides guidelines for LANL operations to reduce or eliminate the threats to the Jemez Mountains Salamander from habitat alterations that reduce habitat quality. Habitat alterations are considered for all AEIs and for both core and buffer areas. Developed areas that have ongoing baseline levels of activities and are not suitable habitat for Jemez Mountains Salamander have different restrictions than undeveloped core or buffer areas. AEIs for different species may overlap, and an activity must meet the guidelines of all applicable site plans to be allowable. Protective measures are described as management practices that should be followed when working in AEIs.

### 4.2 Definition and Role of Occupancy in AEI Management

Occupancy simply refers to whether or not an AEI is occupied by the Jemez Mountains Salamander. The Los Alamos Canyon AEI is known to be occupied based on past surveys. Surveys for the Jemez Mountains Salamander are known to have a very low detection rate for occupied areas, so at LANL, all AEIs are assumed to be occupied at all times. If needed, site-specific surveys will be conducted by federally permitted LANS biologists.

### 4.3 Definition and Role of Developed Areas in AEI Management

Developed areas include all building structures, paved roads, improved gravel roads, and paved and unpaved parking lots. The majority of Jemez Mountains Salamander core habitat is in

undeveloped areas, except for the satellite facility at Fenton Hill and a small amount of habitat in Los Alamos Canyon where West Road crosses the habitat. Generally, developed areas will not have restrictions; however, some of the undeveloped sections within the footprint of Fenton Hill may have restrictions because they may contain Jemez Mountains Salamanders when they move to the surface between July and October. Any project that occurs within developed core habitat will be evaluated by LANS biologists for ESA compliance.

# 4.4 General Description of Core and Buffer Areas and Allowable Area Development

The purpose of buffer areas is to protect core areas from habitat degradation. The current levels of development in buffer and core areas represent baseline conditions for this site plan. No further development is allowed in the core area under the guidelines of this site plan. Any development in a buffer area will be reviewed by LANS biologists to ensure that there are no impacts to the core habitat.

### 4.5 Emergency Actions

If safety and/or property are immediately threatened by something occurring within an AEI (for example, wildfire, water line breakage, etc.) please contact a LANS biologist (505-665-3366) as soon as possible. If the emergency occurs outside of regular business hours, contact the Emergency Management Office (505-667-6211). This office will then communicate with the appropriate LANS personnel.

### 4.6 Introduction to AEI Management Guidelines

Section 4.7 provides the guidelines for habitat alterations and allowable activities in AEI core and buffer areas. It describes what and where habitat alterations are allowed under the guidelines of this site plan. If an activity does not meet the restrictions given in the guidelines, the activity must be individually reviewed for ESA compliance. This site plan only provides guidelines for the Jemez Mountains Salamander AEIs. If an activity is desired in an area with overlapping AEIs, all applicable site plans must be consulted. AEI maps show the location of all AEIs in an area. LANS biologists are available to help interpret site plans and answer questions (http://int.lanl.gov/environment/bio/controls/index.shtml).

### 4.7 Definition of and Restrictions on Habitat Alterations

### 4.7.1 Definition of Habitat Alterations

Habitat alteration includes any action that alters the soil structure, vegetative components necessary to the species, water quality, or hydrology in undeveloped areas of an AEI. An actual activity may take place outside of the AEI and will be considered habitat alteration if consequences of the activity have effects inside the AEI core. Habitat alterations would also include soil pits for soil samples deeper than 15 cm (6 in) using either hand or mechanized augers. Any activity that might disturb the soil will need to be reviewed by LANS biologists.

The habitat components most important to the Jemez Mountains Salamander include soil structure and vegetative structure. The forest structure within an area designated as a Jemez Mountains Salamander AEI is important because it provides the necessary moist, cool microclimate.

### 4.7.2 Fuels Management Practices to Reduce Wildfire Risk

One of the primary threats to the Jemez Mountains Salamander is wildfire (77 FR 56482), but they also require habitat with a high canopy cover, which makes fuels reduction challenging. Within undeveloped core areas, thinning trees to a level of 80 percent canopy cover or higher is approved. Trees may not be thinned below 80 percent canopy cover without further ESA review by LANS biologists. Large logs on the ground should be left in place and not chipped. Understory thinning that does not reduce total canopy cover below 80 percent is permitted. Large trees that are felled should be left as large logs on the ground. Smaller trees and understory shrubs that may be thinned should be dispersed and left on-site to aid in soil moisture retention. Thinning activities should not occur during the rainy season between July to October (or when freezing temperatures begin, whichever comes first) when the Jemez Mountains Salamander is found on the surface.

In buffer areas, thinning of trees can occur to the current LANL-approved prescription level (LAAO 2000). LANS biologists are available to provide guidance and mark trees for thinning (http://int.lanl.gov/environment/bio/controls/index.shtml).

### 4.7.3 Utility Corridors

Habitat alterations such as cutting down trees that threaten power lines are allowed within 8 m (26 ft) of either side of an existing electrical utility line at LANL under existing guidelines and engineering controls (Hathcock 2013). This level is approved in all areas of an AEI. New utility lines and utility lines requiring clearance of a right-of-way greater than 16 m (52 ft) total in core habitat must be individually reviewed for ESA compliance.

### 4.7.4 Restrictions on Habitat Alterations

Habitat alterations other than the fuels management practices and utility corridor maintenance described above are not allowed in undeveloped core areas under the guidelines of this site plan. If a project or activity is planned that would alter habitat in an undeveloped core area, it must be individually evaluated for ESA compliance. Habitat alterations in buffer areas must be reviewed by LANS biologists to ensure that there are no impacts to core habitat.

### REFERENCES CITED

- Allison, L.J., C.E. Paradzick, J.W. Rourke, and T.D. McCarthey. 2003. A characterization of vegetation in nesting and non-nesting plots for southwestern willow flycatchers in central Arizona. In *Ecology and Conservation of the Willow Flycatcher* (eds) M.K. Sogge, B.E. Kus, S.J. Sferra & M.J. Whitfield. *Studies In Avian Biology*: Cooper Ornithological Society.
- Brown, B.T., G.S. Mills, C. Powels, W.A. Russell, G.D. Therres, and J.J. Pottie. 1999. The influence of weapons-testing noise on bald eagle behavior. *Journal of Raptor Research* 33:227–32.
- Brown, B.T. and L.E. Stevens. 1997. Winter bald eagle distribution is inversely correlated with human activity along the Colorado River, Arizona. *Journal of Raptor Research* 31:7–10.
- Burns, M.J. 1995. White Rock noise measurements during PHERMEX tests, 11 March 1995. Los Alamos National Laboratory Memorandum DX-DO:DARHT-95-31 and 35.
- Cain, B.W. 1988. The impact of environmental contaminants on Southwestern USA raptors. *Proceedings of the Southwest Raptor Management Symposium and Workshop* (ed) by R.L. Glinski, B.G. Pendleton, M.B. Moss, M.N. LeFranc Jr., B.A. Millsap & S.W. Hoffman, 348–54. Tucson, AZ, USA, May 21–24, 1986: National Wildlife Federation, Washington, D.C., USA.
- Cummer, M. R., D. E. Green, and E. M. O'Neill. 2005. Aquatic chytrid pathogen detected in terrestrial plethodontid salamander. *Herpetological Review* 36(3):248–249.
- Degenhardt, W.G., C.W. Painter, and A.H. Price. 1996. Amphibians and Reptiles of New Mexico. University of New Mexico Press, Albuquerque, New Mexico.
- Delaney, D.K., T.G. Grubb, P. Beier, L.L. Pater, and M.H. Reiser. 1999. Effects of helicopter noise on Mexican spotted owls. *Journal of Wildlife Management* 63:60–76.
- Department of Energy (DOE). 1996. Final Environmental Impact Statement for the Dual-Axis Radiographic Hydrodynamic Test Facility Mitigation Action Plan. DOE/EIS-0228.
- Durst, S.L., M.K. Sogge, H.C. English, S.O. Williams, B.E. Kus, and S.J. Sferra. 2006. Southwestern Willow Flycatcher breeding site and territory summary 2005. USGS Southwest Biological Science Center report to the U.S. Bureau of Reclamation.
- Durst, S.L., T.C. Theimer, E.H. Paxton, and M.K. Sogge. 2008. Age, habitat, and yearly variation in the diet of a generalist insectivore, the southwestern willow flycatcher. *Condor* 110:514–25.
- Environmental Protection Agency (EPA). 2010. National Pollutant Discharge Elimination System Storm Water Individual Permit number NM0030759.

- Evans, A.M., R.G. Everett, S.L. Stephens, and J.A. Youtz. 2011. Comprehensive Fuels Treatment Practices Guide for Mixed Conifer Forests: California, Central and Southern Rockies, and the Southwest. *Forest Guild* 106pp.
- Everett, E. 2003. Habitat Characterization and Environmental Influences of the Jemez Mountains Salamander (*Plethodon neomexicanus*). M.S. Thesis, New Mexico State University, Las Cruces, New Mexico, 55pp.
- Finch, D.M. and J.F. Kelly. 1999. Status and migration of the southwestern willow flycatcher in New Mexico. In *Rio Grande Ecosystems: Linking Land, Water, and People: Toward a Sustainable Future for the Middle Rio Grande Basin* (ed.) D.M. Finch, J.C. Whitney, J.F. Kelly & S.R. Loftin, 197–203, Albuquerque, New Mexico.
- Fresquez, P.R., C. Hathcock, D. Keller, and J. Fair. 2013. "Foodstuffs and Biota Monitoring," in the 2012 Annual Site Environmental Report 2012. Los Alamos National Laboratory report LA-UR-13-27065.
- Gallegos, A., G. Gonzales, K. Bennett, and L. Pratt. 1997. "Preliminary Risk Assessment of the Mexican Spotted Owl under a Spatially-weighted Foraging Regime at the Los Alamos National Laboratory." Los Alamos National Laboratory report LA-13259-MS.
- Ganey, J.L. and R.P. Balda. 1994. Habitat selection by Mexican spotted owls in northern Arizona. *Auk* 111:162–69.
- Gonzales, G.J., A.F. Gallegos, K.D. Bennett, M.A. Mullen, and T.S. Foxx. 1998. "Preliminary Risk Assessment of the Southwestern Willow Flycatcher (*Empidonax traillii extimus*) at the Los Alamos National Laboratory." Los Alamos National Laboratory report LA-13508-MS.
- Gonzales, G., R. Ryti, P. Newell, A. Gallegos, and S. Sherwood. 2004. "Modeled Ecological Risk to the Deer Mouse, Mexican Spotted Owl, and Western Bluebird at the Los Alamos National Laboratory using ECORSK.7." Los Alamos National Laboratory report LA-14118.
- Gonzales, G., P. Gallegos, A. Gallegos, and K. Bennett. 2009. "Site-wide Application of ECORSK.9 at the Los Alamos National Laboratory." Los Alamos National Laboratory report LA-UR-09-02833.
- Grubb, T.G. and R.M. King. 1991. Assessing human disturbance of breeding bald eagles with classification tree models. *Journal of Wildlife Management* 55:500–11.
- Grubb, T.G. and W.W. Bowerman. 1997. Variations in breeding bald eagle responses to jets, light planes, and helicopters. *Journal of Raptor Research* 31:213–22.
- Hansen, L.A. 2004. Sigma Mesa Construction Debris Recycling Project. Los Alamos National Laboratory Memorandum RRES/Ecol-04-0049.

- Hansen, L.A. 2005. "A Biological Assessment of the Potential Effects of the Operation of an Asphalt Batch Plant and a Rock Crusher at Sigma Mesa on Federally Listed Threatened and Endangered Species." Los Alamos National Laboratory report LA-CP-05-0293.
- Hansen, L.A. 2009. "Sound studies of the Biosafety Level 3 (BSL-3) Laboratory at TA-3, Building 1076." Los Alamos National Laboratory report LA-UR-09-05482.
- Hathcock, C. D. 2013. Email from C. D. Hathcock to S. Martinez on June 20, 2013, Los Alamos National Laboratory communication.
- Hathcock, C.D. and T.K. Haarmann. 2008. Development of a predictive model for habitat of the Mexican spotted owl in Northern New Mexico. *Southwestern Naturalist* 53:34–38.
- Hathcock, C.D., L.A. Hansen, and D.C. Keller. 2010. Occupancy of habitats by Mexican spotted owl in relation to explosives noise and recreational access at Los Alamos National Laboratory. *Western Birds* 41:102–06.
- Hatten, J.R. and C.E. Paradzick. 2003. A multiscaled model of southwestern willow flycatcher breeding habitat. *Journal of Wildlife Management* 67:774–88.
- Holthuijzen, A.M.A., W.G. Eastland, A.R. Ansell, M.N. Kochert, R.D. Williams, and L.S. Young. 1990. Effects of blasting on behavior and productivity of nesting prairie falcons. *Wildlife Society Bulletin* 18:270–81.
- Huchton, K., S.W. Koch, and R.J. Robinson. 1997. "An analysis of background noise in selected canyons of Los Alamos County." Los Alamos National Laboratory report LA-13372-MS.
- Johnson, J.A. and T.H. Johnson. 1985. "Timber type model of spotted owl habitat in northern New Mexico," New Mexico Department of Game and Fish report, Santa Fe, New Mexico.
- Johnson, T.H. 1994. "Peregrine falcon habitat management in the national forests of New Mexico." USDA Forest Service unpublished report.
- Johnson, T.H. 1998. "Topographic-Landsat model of suitable spotted owl habitat around Los Alamos National Laboratory." Los Alamos National Laboratory unpublished report.
- Keller, D.C. 2015. "Biological Assessment for the Addition of the Western Distinct Population Segment of the Yellow-billed Cuckoo and the New Mexico Meadow Jumping Mouse to the Los Alamos National Laboratory Habitat Management Plan." Los Alamos National Laboratory report LA-UR 15-23445.
- Keller, D.C. and D. Risberg. 1995. "Biological and floodplain/wetland assessment for the Dual-Axis Radiographic Hydrodynamics Test Facility (DARHT)." Los Alamos National Laboratory report LA-UR-95-647.

- Keller, D.C. and T.S. Foxx. 1997. "Biological assessment for threatened and endangered species at the DP Road Tract land transfer." Los Alamos National Laboratory unpublished report.
- Knight, J.L. and S.S. Vrooman. 1999. "A study of construction machinery noise levels at Los Alamos National Laboratory." Los Alamos National Laboratory report LA-UR-99-5740.
- Los Alamos Area Office (Department of Energy) (LAAO). 2000. "Environmental Assessment for the Wildfire Hazard Reduction and Forest Health Improvement Program at Los Alamos National Laboratory, Los Alamos, New Mexico." DOE-EA-1329.
- Los Alamos National Laboratory (LANL). 2016. "Environmental Protection. Los Alamos National Laboratory Program Description 400, Revision 2."
- McKown, B., S.W. Koch, R.G. Balice, and P. Neville. 2003. "Land Cover Classification Map for the Eastern Jemez Region." Los Alamos National Laboratory report LA-14029.
- New Mexico Department of Game and Fish (NMDGF), April 2006. Threatened and Endangered Species of New Mexico—2006 Draft Biennial Review and Recommendations. Authority: Wildlife Conservation Act (NMSA 17-2-37+B1 through 17-2-46, 1978).
- Paakkonen, R. 1991. Low-frequency noise impulses from explosions. *Journal of Low Frequency Noise & Vibration* 10:78–82.
- Pounds, J.A., M.R. Bustamante, L.A. Coloma, J.A. Consuegra, M.P.L. Fogden, P.N.Foter, E. La Marca, K.L. Masters, A. Merino-Viteri, R. Puschendorf, S.R. Ron, G.A. Sanchez-Azofeifa, C.J. Still, and B.E. Yound. 2006. Widespread amphibian extinctions from epidemic disease driven by global warming. *Nature* 439(7073):161-167.
- Ramotnik, C.A. 1986. "Status Report: *Plethodon neomexicanus* Jemez Mountains Salamander." U.S. Fish and Wildlife Service Report.
- Reilly, E.C., D. Clayton, R.S. Nauman, D.H. Olson, H.H. Welsh Jr, B. Devlin. 2009. Spatial Model of Optimal Habitat for the Siskiyou Mountains Salamander (*Plethodon stormi*) North of the Siskyou Crest. Chapter 2. In: Olson, D.H., D. Clayton, R.S. Nauman, and H.H. Welsh Jr (Editors). 2009. Conservation of the Siskiyou Mountains Salamander (*Plethodon stormi*). *Northwest Fauna* 6:1-73.
- Stebbins, R.C., and W.J. Riemer. 1950. A New Species of Plethodontid Salamander from the Jemez Mountains of New Mexico. *Copeia* 1950(2):73–80.
- Steidl, R.J. and R.G. Anthony. 2000. Experimental effects of human activity on breeding bald eagles. *Ecological Applications* 10:258–68.
- Swarthout, E.C.H. and R.J. Steidl. 2001. Flush responses of Mexican spotted owls to recreationists. *Journal of Wildlife Management* 65:312–17.

- Swarthout, E.C.H. and R.J. Steidl. 2003. Experimental effects of hiking on breeding Mexican spotted owls. *Conservation Biology* 17:307–15.
- Trujillo, C.T. and E. Racinez. 1995. Meeting notes on the 13.8-kV transmission line tree trimming. Los Alamos National Laboratory Memorandum FSS-8-95-114.
- U.S. Fish and Wildlife Service (USFWS). 1995. "Recovery plan for the Mexican spotted owl." Albuquerque, New Mexico.
- U.S. Fish and Wildlife Service (USFWS). 2002. "Southwestern willow flycatcher recovery plan." Albuquerque, New Mexico.
- U.S. Fish and Wildlife Service (USFWS). 2012. "Recovery plan for the Mexican Spotted Owl, First Revision." Albuquerque, New Mexico.
- Vigil, E.A. 1995. Noise measurements at State Road 4 and Bandelier turn-off at State Road 4 during PHERMEX test on March 11, 1995. Los Alamos National Laboratory Memorandum ESH-5:95-11825.
- Vrooman, S.S., S.W. Koch, and J.L. Knight. 2000. "Temporal and spatial variation in background noise levels at Los Alamos National Laboratory." Los Alamos National Laboratory report LA-13684-MS.
- Wiesenborn, W.D. and S.L. Heydon. 2007. Diets of breeding southwestern willow flycatchers in different habitats. *Wilson Journal of Ornithology* 119:547–57.
- Willey, D.W. 2013. Diet of Mexican Spotted Owls in Utah and Arizona. *The Wilson Journal of Ornithology* 125(4):775-781.
- Yong, W. and D.M. Finch. 1997. Migration of the willow flycatcher along the middle Rio Grande. *Wilson Bulletin* 109:253–68.

### **APPENDIX**

Table A-1. The Percentage of each Food Type Found in Mexican Spotted Owl Food Remains at LANL

Species	Relative Abundance
Neotoma spp.	26.22
Peromyscus spp.	10.22
Microtus spp.	4.44
Gophers	4.89
Bats	5.78
Chipmunks	0.89
Rabbits	12.89
Shrews	1.33
Small Mammal	1.33
Medium Mammal	1.78
Medium Bird	8.00
Small Bird	4.89
Nocturnal Birds	0.89
Reptiles	4.89
Arthropods	11.56

Table A-2. Preliminary Light Measurements in ftc for Mexican Spotted Owl Site Plan

		Distance from Source			
	Source (street light)	5 m	10 m	15 m	20 m
ftc	3.70	2.28	1.20	0.62	0.32

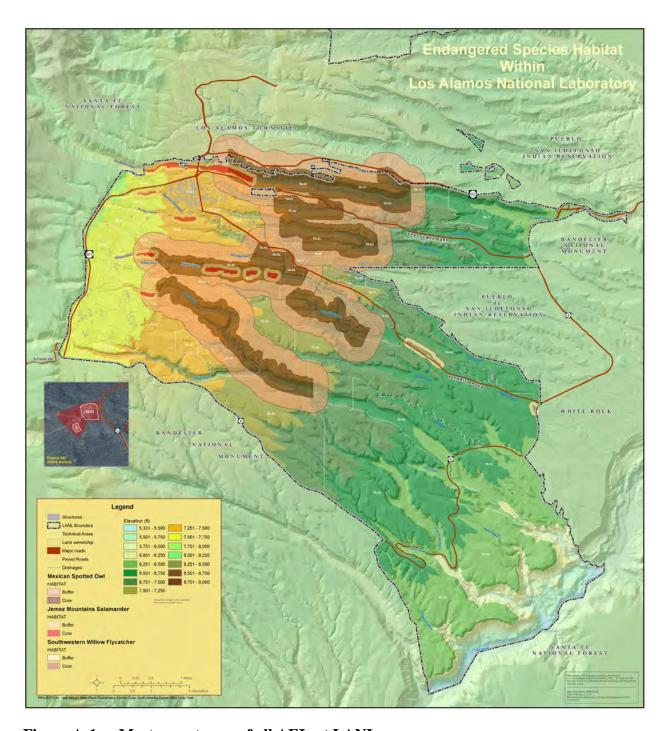


Figure A-1. Most recent map of all AEIs at LANL

### ATTACHMENT 14: MSGP IPAC TRUST RESOURCES REPORT

# **MSGP**

# IPaC Trust Resource Report

Generated July 27, 2015 07:29 PM MDT



US Fish & Wildlife Service

# **IPaC Trust Resource Report**



# **Project Description**

NAME

**MSGP** 

PROJECT CODE

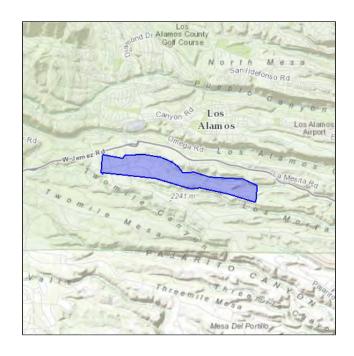
LXATM-TI5EJ-BAJEQ-3NC5E-SOGYTE

LOCATION

Los Alamos County, New Mexico

DESCRIPTION

Facilities that discharge to Sandia Canyon within TA-3 and TA-60. Industrial facilities subject to the MSGP. July, 2015.



### U.S. Fish & Wildlife Contact Information

Species in this report are managed by:

New Mexico Ecological Services Field Office 2105 Osuna Road Ne Albuquerque, NM 87113-1001 (505) 346-2525

# **Endangered Species**

Proposed, candidate, threatened, and endangered species that are managed by the Endangered Species Program and should be considered as part of an effect analysis for this project.

This unofficial species list is for informational purposes only and does not fulfill the requirements under Section 7 of the Endangered Species Act, which states that Federal agencies are required to "request of the Secretary of Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action." This requirement applies to projects which are conducted, permitted or licensed by any Federal agency.

A letter from the local office and a species list which fulfills this requirement can be obtained by returning to this project on the IPaC website and requesting an Official Species List from the regulatory documents section.

### **Amphibians**

### Jemez Mountains Salamander Plethodon neomexicanus

**Endangered** 

CRITICAL HABITAT

There is final critical habitat designated for this species.

https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=D019

### **Birds**

### Mexican Spotted Owl Strix occidentalis lucida

**Threatened** 

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B074

### Southwestern Willow Flycatcher Empidonax traillii extimus

**Endangered** 

CRITICAL HABITAT

There is final critical habitat designated for this species.

https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B094

### Yellow-billed Cuckoo Coccyzus americanus

**Threatened** 

CRITICAL HABITAT

There is **proposed** critical habitat designated for this species.

https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B06R

### **Mammals**

### New Mexico Meadow Jumping Mouse Zapus hudsonius luteus

**Endangered** 

CRITICAL HABITAT

There is **proposed** critical habitat designated for this species.

https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=A0BX

### **Critical Habitats**

Potential effects to critical habitat(s) within the project area must be analyzed along with the endangered species themselves.

There is no critical habitat within this project area

# Migratory Birds

Birds are protected by the <u>Migratory Bird Treaty Act</u> and the Bald and Golden Eagle Protection Act.

Any activity which results in the take of migratory birds or eagles is prohibited unless authorized by the U.S. Fish and Wildlife Service (1). There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured.

You are responsible for complying with the appropriate regulations for the protection of birds as part of this project. This involves analyzing potential impacts and implementing appropriate conservation measures for all project activities.

Bald Eagle Haliaeetus leucocephalus

Bird of conservation concern

Season: Wintering

https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B008

Bendire's Thrasher Toxostoma bendirei

Bird of conservation concern

Season: Breeding

Brewer's Sparrow Spizella breweri

Bird of conservation concern

Season: Migrating

https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0HA

**Brown-capped Rosy-finch** Leucosticte australis

Bird of conservation concern

Season: Wintering

Burrowing Owl Athene cunicularia

Bird of conservation concern

Season: Breeding

Cassin's Finch Carpodacus cassinii

Bird of conservation concern

Year-round

Flammulated Owl Otus flammeolus

Bird of conservation concern

Season: Breeding

https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0DK

Fox Sparrow Passerella iliaca

Bird of conservation concern

Season: Wintering

Golden Eagle Aquila chrysaetos

Bird of conservation concern

Year-round

https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0DV

Grace's Warbler Dendroica graciae

Bird of conservation concern

Season: Breeding

Juniper Titmouse Baeolophus ridgwayi

Bird of conservation concern

Year-round

Lewis's Woodpecker Melanerpes lewis

Bird of conservation concern

Year-round

Loggerhead Shrike Lanius Iudovicianus

Bird of conservation concern

Year-round

https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0FY

Mountain Plover Charadrius montanus

Bird of conservation concern

Season: Breeding

https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B078

Olive-sided Flycatcher Contopus cooperi

Bird of conservation concern

Season: Breeding

https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0AN

Peregrine Falcon Falco peregrinus

Bird of conservation concern

Season: Breeding

https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0FU

Pinyon Jay Gymnorhinus cyanocephalus

Bird of conservation concern

Year-round

Prairie Falcon Falco mexicanus

Bird of conservation concern

Year-round

https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0ER

Swainson's Hawk Buteo swainsoni

Bird of conservation concern

Season: Breeding

https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B070

Williamson's Sapsucker Sphyrapicus thyroideus

Bird of conservation concern

Season: Breeding

https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0FX

Willow Flycatcher Empidonax traillii

Bird of conservation concern

Season: Breeding

https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0F6

# Refuges

Any activity proposed on <u>National Wildlife Refuge</u> lands must undergo a 'Compatibility Determination' conducted by the Refuge. If your project overlaps or otherwise impacts a Refuge, please contact that Refuge to discuss the authorization process.

There are no refuges within this project area

### Wetlands

Impacts to <u>NWI wetlands</u> and other aquatic habitats from your project may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal Statutes.

Project proponents should discuss the relationship of these requirements to their project with the Regulatory Program of the appropriate <u>U.S. Army Corps of Engineers District</u>.

### **DATA LIMITATIONS**

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

### DATA EXCLUSIONS

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

### DATA PRECAUTIONS

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

There are no wetlands identified in this project area

### ATTACHMENT 15: ENV-CP-QAPP-MSGP

The EPC-CP Quality Assurance Project Plan is in the process of being replaced by EPC-CP-PIP-2101, *NPDES Multi-Sector General Permit*. The current document, ENV-CP-QAPP-MSGP R5, is included in the attachment and will be replaced in the hard copy of the SWPPP once the new document is completed.

# ENV-CP-QAPP-MSGP, R5 Effective Date: 11/04/2013 Next Review Date: 11/04/2015



**Environment, Safety, Health Directorate** 

**Environmental Protection Division – Compliance Programs Group** 

**Quality Assurance Project Plan** 

# Stormwater Multi-Sector General Permit for Industrial Activities Program

Reviewers:				
Organization:	Signature:	Date:		
ADESH-OIO, QA Specialist	Signature on File			
ative Classifier: 🔲 Un	classified 🛭 DUSA <u>ENVPRO</u>			
Organization:	Signature:	Date:		
ADESH-OIO	Signature on File			
Approval	Signatures:			
Organization:	Signature:	Date:		
ENV-CP	Signature on File			
Organization:	Signature:	Date:		
ENV-CP, Team Lead	Signature on File			
Organization:	Signature:	Date:		
ENV-CP, Group Leader	Signature on File			
	Organization: ADESH-OIO, QA Specialist  ative Classifier: Un Organization: ADESH-OIO  Approval 3  Organization: ENV-CP Organization: ENV-CP, Team Lead Organization:	ADESH-OIO, QA Specialist  Ative Classifier: Unclassified DUSA ENVPRO  Organization: Signature: ADESH-OIO Signature on File  Approval Signatures:  Organization: Signature: ENV-CP Signature on File  Organization: Signature on File  Organization: Signature on File  Organization: Signature: Signature on File  Organization: Signature: Signature: Signature on File  Organization: Signature on File  Organization: Signature on File		

### CONTROLLED DOCUMENT

This copy is uncontrolled. The controlled copy can be found on the ENV Division Web page.

Users are responsible for ensuring they work to the latest approved version.

Stormwater MSGP for Industrial Activities Program	No. ENV-CP-QAPP-MSGP, R5	Page 2 of 40
	Effective Date: 11/04/2013	

## **History of Revisions**

<b>Document Number</b> [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	06/03	New Document	
1	12/05	Annual review and revision	
2	07/07	Annual review, incorporated organizational restructure changes.	
3	07/09	Biennial Review and Revision	
4	07/09	Biennial Review and Revision	
5	10/13	Biennial Review and Revision. New format implemented.	

Effective Date: 11/04/2013

### **Table of Contents**

1.0	QUA	LITY PROGRAM	5
	1.1	Quality Program Purpose	5
	1.2	Organization	5
	1.3	Responsibilities	6
2.0	PERS	SONNEL DEVELOPMENT	6
	2.1	MSGP Curricula	6
	2.2	MSGP Inspector Qualifications	8
	2.3	MSGP SWPPP Preparer Qualifications	8
	5.4	MSGP Visual Assessor Qualifications	9
	5.5	Training Responsibilities	9
3.0	QUA	LITY IMPROVEMENT	10
	3.1	Corrective Actions within ENV-RCRA	10
	3.3	Quality Improvement Responsibilities	10
4.0	DOC	UMENT CONTROL/RECORDS MANAGEMENT	10
	4.1	Program Records	
	4.2	Program Records Responsibilities	11
	4.3	Electronic Media	
	4.4	Databases	12
	4.4	Implementation Responsibilities	13
5.0	PLAN	NING AND PERFORMING WORK	13
	5.1	Work Processes	14
	5.3	Work Performance	14
	5.4	StormWater Pollution Prevention Plan	14
	5.5	Inspections	16
	5.6	StormWater Monitoring	
	5.7	Discharge Monitoring Reports	
	5.8	Adverse Weather Conditions and Climates with Irregular Stormwater Runoff	
	5.9	Reporting and Recordkeeping	
	5.10	Best Management Practices	
	5.11	Information Management	
	5.12	Responding to Water Quality Exceedances	
	5.13	Instrumentation and Equipment	
6.0	DESI	GN	24
7.0	PRO	CUREMENT	25
8.0	INSP	ECTION AND ACCEPTANCE TESTING	26
9.0	MAN	AGEMENT ASSESSMENT	26
10.0		PENDENT ASSESSMENT	
11.0	ATT	ACHMENTS	27

Stormwater MSGP for Industrial Activities Program	No. ENV-CP-QAPP-MSGP, R5	Page 4 of 40
	Effective Date: 11/04/2013	

Attachment 1- MSGP Program Organization	28
Attachment 2 – Annual Reporting Form	29
Attachment 3 – Routine Inspection Form	35
Attachment 4 MSGP Facilities and Storm Water Monitored Outfalls Associated with Ir	ıdustrial
Activity 2011, Permit NMR05GB21	37
Attachment 5 – Pollutants Under Impaired Waters Monitoring	38
Attachment 6 – Analytes by Industrial Sector	39
Attachment 7 – References and Guidance Documents	40

Stormwater MSGP for Industrial Activities Program	No. ENV-CP-QAPP-MSGP, R5	Page 5 of 40
	Effective Date: 11/04/2013	

### 1.0 QUALITY PROGRAM

LANL will comply with the monitoring requirements as specified by the 2008 National Pollutant Discharge Elimination System (NPDES) Stormwater Multi-Sector General Permit for Industrial Activities. Compliance will be demonstrated through the successful implementation of this project plan and applicable procedures.

Los Alamos National Laboratory (the Laboratory) has established a comprehensive stormwater program for its industrial activities. Historically, the Laboratory operated under the NPDES Baseline General Permit and then under the NPDES 1995, 2000, and 2008 Multi-Sector General Permits. The Laboratory submitted its NOI for 2008 coverage in December 2008.

The 2008 MSGP was issued on September 22, 2008 and became effective on September 29, 2008.

The purpose of this project plan is to ensure compliance with the following:

- 2008 NPDES Multi-Sector General Permit (MSGP) and the Clean Water Act (CWA)
- DOE Order 450.1, *Environmental Protection Program*, and DOE Order 5400.5, *Radiation Protection of the Public and Environment*, which establish environmental protection program policies, requirements, and responsibilities

The Environmental Protection, Environmental Compliance Programs (ENV-CP) Water Quality Team has been tasked with overseeing institutional stormwater compliance related activities at the Laboratory.

### 1.1 QUALITY PROGRAM PURPOSE

This Quality Assurance Project Plan (QAPP) describes the policies and requirements that ensure MSGP activities are conducted in a consistent, agreed-upon manner.

This QA Project Plan describes the policies and requirements that ensure the MSGP processes are conducted in a consistent, agreed-upon manner. Drivers for the quality plan include:

- o DOE Order 414.1C, Quality Assurance
- o SD330, LANL Quality Assurance Program

This QA Project Plan (QAPP), including implementing procedures, is a sub-tier document to the SD330, *LANL Quality Assurance Program*. The following documents provide requirements to ensure that the MSGP Program is operated in accordance with established plans and procedures:

- SD330, LANL Quality Assurance Program
- QA Project Plan for the MSGP (this document)
- Implementing procedures

### 1.2 ORGANIZATION

ENV-CP is responsible for compliance oversight of the Laboratory's MSGP coverage. The Group is organized by teams under the line management direction of the Group Leader. Teams are crossfunctional and focus on specific Laboratory water quality responsibilities, deliverables, or

Stormwater MSGP for Industrial Activities Program	No. ENV-CP-QAPP-MSGP, R5	Page 6 of 40
	Effective Date: 11/04/2013	

products. Teams are guided by Team Leaders who have the responsibility to assure the program is completed and properly implemented.

The Team Leader coordinates the project and reports to the ENV-CP Group Leader. The Project Lead implements program oversight, coordinates contractor efforts (if there are any), and reports to the Team Leader. A QA Specialist is assigned to work for the Team Leader to provide quality assurance assistance, advice, and review. In addition, representatives from other groups may participate and contribute to this team as subject matter experts for project activities. The project organization is shown in Attachment 1.

Applicable regulatory drivers include the following:

- Clean Water Act (CWA)
- 2008 NPDES Multi-Sector General Permit (MSGP)
- DOE Order 450.1, Environmental Protection Program
- DOE Order 5400.5, Radiation Protection of Public and Environment
- P401, Procedure to Identify, Communicate, and Implement Environmental Requirements

### 1.3 RESPONSIBILITIES

The following table lists specific responsibilities:

Who	What
Group Leader	Assure that qualified staff complies with regulatory requirements associated with the MSGP.
Project Lead	Ensure that MSGP-related activities are performed in accordance with the requirements specified in this plan.
ENV-CP Staff	Perform MSGP-related activities as assigned by the Team Leader or Project Leader

### 2.0 PERSONNEL DEVELOPMENT

Qualified team members will be hired and trained as prescribed in ENV-DO-QP-115, *Personnel Training*. Minimum training requirements for ENV personnel are described in the ENV Division Qualification Standards. The LANL Human Resources Division maintains documentation of education qualification. Required MSGP qualifications and training plans are listed below.

### 2.1 MSGP CURRICULA

The MSGP Program requires personnel with the following training requirements:

### **MSGP** Inspectors

Curricula 10697 ENV-RCRA MSGP Inspector
Item 43337 ENV-CP-QAPP-MSGP
Item 54892 ENV-RCRA-QP-022 MSGP Stormwater Corrective Actions

Stormwater MSGF	for Industrial	Activities Program
-----------------	----------------	--------------------

No. ENV-CP-QAPP-MSGP, R5

Page 7 of 40

Effective Date: 11/04/2013

Item 42415 ENV-DO-QP-101 Environmental Reporting Requirements for Releases or Events

Item 42547 ENV-DO-QP-111 Reporting Environmental Releases to Pueblo Governments

Item 40708 ENV-DO-QP-108 Preparation of External Correspondence for Review and Approval

Item 43172 ENV-DO-QP-112 Coordinating Regulatory Inspections

Item 42891 ENV-DO-QP-113 Tracking Issues and Actions

Item 43805 ENV-DO-QP-114 Logbook Use and Control

Item 45777 ENV-DO-QP-100 General Field Safety

### Curricula 131 Field Worker Training Requirements

Item 43562 or 3583 or 16585 CPR/AED: LANL Workplace

Item 3574 or 13264 First Aid

### MSGP SWPPP Preparers

Curricula 7814 ENV-RCRA MSGP SWPPP Preparer

Item 43337 ENV-CP-QAPP-MSGP

Item 56593 ENV-RCRA-QP-044 Preparing Storm Water Discharge Monitoring Reports (MDMRs)

for the NPDES Multi-Sector General Permit

Item 40708 ENV-DO-QP-108 External Correspondence

Item 43172 ENV-DO-QP-112 Coordinating Regulatory Inspections

Item 42891 ENV-DO-QP-113 Tracking Issues and Actions

Item 43805 ENV-DO-QP-114 Logbook Use and Control

Item 45777 ENV-DO-QP-100 General Field Safety

### Curricula 51 ENV-RCRA Design Engineer

Item 44269, COE Review of LANL Produced Design Documents, AP-341-620

Item 44266, COE System Design Descriptions, AP-341-61

Item 44263, COE Engineering Drawings and Sketches, AP-341-608

Item 44261, COE Calculation, AP-341-605

Item 44258, COE Requirements and Criteria Document, AP-341-602

Item 44257, COE Functions & Requirements Document, AP-341-601

Item 43658, CORE Engineering Overview

Item 55428, COE Management Level Determination, AP-341-502

Item 54168, P342 Engineering Standards

Item 47029, COE LANL Review of Design by External Agencies, AP-341-622

Item 43666, Engineering Design Management

Item 43663, Engineering Technical Baseline

Item 44225, COE Evaluation of Vendor Information, AP-341-701

### MSGP Visual Assessors

### Curricula 10698 ENV-RCRA MSGP Visual Assessor

Item 43337 ENV-RCRA-QAPP-MSGP

Item 50493 ENV-RCRA-QP-064 MSGP Storm Water Visual Assessments

Item 42415 ENV-DO-QP-101 Environmental Reporting Requirements for Releases or Events

Item 42547 ENV-DO-QP-111 Reporting Environmental Releases to Pueblo Governments.

Item 40708 ENV-DO-QP-108 External Correspondence

Stormwater MSGP for Industrial Activities Program	No. ENV-CP-QAPP-MSGP, R5	Page 8 of 40
	Effective Date: 11/04/2013	

Item 43172 ENV-DO-QP-112 Coordinating Regulatory Inspections
Item 42891 ENV-DO-QP-113 Tracking Issues and Actions
Item 43805 ENV-DO-QP-114 Logbook Use and Control
Item 45777 ENV-DO-QP-100 General Field Safety

Curricula 131 Field Worker Training Requirements Item 43562 or 3583 or 16585 CPR/AED: LANL Workplace Item 3574 or 13264 First Aid

### 2.2 MSGP INSPECTOR QUALIFICATIONS

### **Inspections:**

- Post high school education or experience in engineering or environmental science or a related field; or industrial site field experience involving stormwater pollution prevention.
- 2 years experience of completing MSGP inspections or 1 year MSGP inspection experience with the Certified Inspector of Sediment and Erosion Control (CISEC) certification.
- 6 months knowledge of LANL facility operations.
- Demonstrated ability, as determined by the Multi-Sector General Permit Project Lead and/or Water Quality Team Leader, to successfully and effectively evaluate and identify the following at industrial sites:
  - o Conditions and activities that could impact stormwater quality at the facility.
  - o Inadequate or ineffective BMPs.
  - o Required modification or maintenance of existing BMPs.
  - o Locations requiring new or additional BMPs.
  - o Potential pollutant sources associated with the facility.
  - o Appropriate and correct site stabilization measures.
- Demonstrated ability, as determined by the Multi-Sector General Permit Project Lead and/or Water Quality Team Leader, to evaluate the compliance status of each industrial facility and document identified issues during an inspection.
- Demonstrated ability, as determined by the Multi-Sector General Permit Project Lead and/or Water Quality Team Leader, to properly and effectively complete inspection reports, including the ability to perform the following:
  - o Prepare reports in a clear, concise manner, identifying site conditions and issues.
  - o Write legibly and describe conditions clearly and accurately.
  - o Use proper spelling and grammar.
  - o Complete the MSGP Routine Inspection Report forms accurately.
  - o Accurately enter findings into the Corrective Actions Report database.
- Conduct inspections in a professional manner.
- Be a member of, or contractor supporting, ENV-RCRA or ENV Division.

### 2.3 MSGP SWPPP PREPARER QUALIFICATIONS

### **SWPPP** Preparation:

One of the 2 criteria below must be satisfied:

Stormwater MSGP for Industrial Activities Program	No. ENV-CP-QAPP-MSGP, R5	Page 9 of 40
	Effective Date: 11/04/2013	

- BS degree or experience in engineering, environmental science, or related field, with a
  background involving stormwater pollution prevention and regulatory compliance relating to
  MSGP sites and a 1 year minimum of LANL facility operations knowledge and 1 year
  experience of completing MSGP inspections; or
- Certified Professional in Erosion and Sediment Control (CPESC) or Professional Engineer (PE) with a demonstrated background in stormwater management, sediment and erosion control, and regulatory compliance.

### In addition to:

- Demonstrated ability, as determined by the Multi-Sector General Permit Project Lead and/or Water Quality Team Leader, to:
  - Prepare SWPPPs per LANL format and in compliance with NPDES MSGP requirements.
  - o Identify and specify appropriate BMPs and stabilization measures.
  - o Identify potential pollutant sources associated with the facility.
  - o Perform necessary calculations to meet regulatory requirements.
  - o Prepare a site map.
  - o Be a member of, or contractor supporting, ENV-CP or ENV Division.

### 5.4 MSGP VISUAL ASSESSOR QUALIFICATIONS

### Quarterly Visual Assessments:

- Education or experience in engineering, environmental science, or a related field; or industrial site field experience involving stormwater pollution prevention; and
- Completed ENV-RCRA training on how to collect and evaluate visual assessment; and
- Demonstrated ability, as determined by the Multi-Sector General Permit Program Lead and/or Water Quality Team Leader, to:
  - o Collect quarterly visual samples at the designated outfall.
  - o Complete the applicable portions of the MSGP Quarterly Visual Assessment Form.
  - Have working knowledge of the regulatory requirements in Section 4.2 of the MSGP.

### 5.5 TRAINING RESPONSIBILITIES

All personnel performing MSGP project-related work are required to obtain appropriate training prior to performing work governed by a procedure. Training for all project personnel will be performed and documented in accordance with ENV-DO-QP-115, *Personnel Training*.

The following table lists specific responsibilities regarding training requirements.

Who	What
Group Leader	Ensure project personnel meet all Laboratory training requirements.
Program Lead	Establish and document job descriptions for each position within the MSGP Project.
	Ensure all project personnel have the appropriate level of education,

Stormwater MSGP for Industrial Activities Program	No. ENV-CP-QAPP-MSGP, R5	Page 10 of 40
	Effective Date: 11/04/2013	

	experience, and training.
--	---------------------------

### 3.0 QUALITY IMPROVEMENT

The MSGP Project subscribes to the principles of problem prevention and continuous improvement. The Project Lead is committed to evaluating improvement opportunities identified by trending and reporting.

The Project Lead provides verbal and written updates, as needed, to the Team Leader and Group Leader to keep group management apprised of the focus of the MSGP Project activities and to address any shortcomings that may be identified.

### 3.1 CORRECTIVE ACTIONS WITHIN ENV-RCRA

Corrective actions for all ENV-RCRA programs and projects are initiated, tracked, corrected, and documented according to P330-6 *Nonconformance Reporting*, P322-4 *Laboratory Performance Feedback and Improvement Process*, SD330, Los Alamos National Laboratory Quality Assurance *Program*, and Division/Group procedures.

### 3.3 QUALITY IMPROVEMENT RESPONSIBILITIES

The following table lists specific responsibilities for quality improvement:

Who	What
Project Lead	Monitor program performance and ensure issues are corrected in a timely manner.
ENV-CP Staff	Identify opportunities for process improvement, health and safety enhancement, environmental protection, or other improvements of the program's operations.
	Discuss the identified opportunities with the Project Lead.  Ensure issues are reported and corrected in a timely manner.
	1

### 4.0 DOCUMENT CONTROL/RECORDS MANAGEMENT

The program lead, at least one reviewer, and the Group Leader will approve all revisions to this plan. Revisions to the plan will be provided to the QA Specialist. This plan will be reviewed and revised (if necessary) biennially.

This document will be controlled under the organization's document control system (ENV-DO-QP-106, *Document Control*). Controlled copies of ENV documents are located on the Internet: <a href="http://int.lanl.gov/orgs/env/rcra/qa.shtml">http://int.lanl.gov/orgs/env/rcra/qa.shtml</a>, all other copies are uncontrolled.

Procedures will be developed as necessary and in accordance with ENV-DO-QP-105, *Preparation, Review, and Approval of Procedures*.

Stormwater MSGP for Industrial Activities Program	No. ENV-CP-QAPP-MSGP, R5	Page 11 of 40
	Effective Date: 11/04/2013	

Phone calls, email, or fax communications will be documented and controlled if the content provides direction or results in decisions.

#### 4.1 PROGRAM RECORDS

The number, type, and detail of all records to be kept will provide sufficient information to allow an individual with equivalent education and training to verify or reconstruct the results. Implementing procedures specify the records, forms, logbook entries, or other information to be kept as documentation of the performance of the procedure.

Records to be kept in the ENV-CP records system include the following:

- Copy of the Multi-Sector General Permit
- Annual Site Compliance Evaluation reports
- Corrective Action Reports
- Reports and certifications required by MSGP
- Records of all data used to complete MSGP Notice of Intent
- Discharge Monitoring Reports

Records to be kept by the Deployed Environmental Professional assigned to the FOD in which the industrial facility resides includes the following:

- Copies of Stormwater Pollution Prevention Plans
- Reports and certifications required by MSGP
- Routine Inspection Forms
- Supporting analytical data reports including Visual Assessment Forms
- Corrective Action Reports
- Discharge Monitoring Reports
  - Annual Site Compliance Evaluation reports

All ENV-CP records will be maintained and available (after the deadline for submittal as given in applicable procedures) for auditing in the records center at ENV-CP (ENV-DO-QP-110, *Records Management*). Records will be archived in compliance with Laboratory and DOE requirements for records retention, storage, and management.

#### 4.2 PROGRAM RECORDS RESPONSIBILITIES

The following table lists specific responsibilities for program records management:

Who	What
Team Leader	Ensure QAPP meets minimum specifications for documentation and records of the SD330, Los Alamos National Laboratory Quality Assurance Program
Program Lead	Conduct annual review of records to ensure compliance with project requirements.

Stormwater MSGP for Industrial Activities Program	No. ENV-CP-QAPP-MSGP, R5	Page 12 of 40
	Effective Date: 11/04/2013	

#### 4.3 ELECTRONIC MEDIA

The project will utilize electronic means as necessary to maintain data and perform calculations on these data. Electronic means will not however replace paper copies. All records that must be maintained to meet the requirements of the Permit will be kept in hard copy as the official record.

#### 4.4 DATABASES

Analytical data will be maintained in the LANL Water Quality Database (WQDB). Security, verification, and validation of data are maintained in accordance with LANL procedures.

<u>Security</u> -- ENV data will be maintained electronically in a secure manner and will be protected from loss by being maintained as part of an official dataset that is backed up at least weekly.

<u>Verification of data</u> -- All ENV data, either electronic or hardcopy must undergo a verification and validation process that includes the following:

#### Verification

- Paper deliverables match electronic data that are stored in an official dataset. Paper deliverables include:
  - chain of custody for sample data
  - field log, if applicable, for sample data
  - data packages for analytical data
  - documentation packages for supporting data (e.g., geographic information system)
- All hand-entered data have been verified by a person other than the individual performing the entry
- Electronic uploads of data (e.g., electronic data deliverables) have been spot checked (at least 10%) to ensure the upload performed as expected
- Hard copy supporting information (e.g., data packages, chains of custody, validation reports, etc.) is evaluated for completeness, archived, and available for audit

<u>Validation</u> --analytical data validation is the responsibility of the EP Directorate. The process will include the following:

- Validate that sample and quality assurance/quality control data and information meet contract specifications
- Assign validation flags, as appropriate
- Identify the analytical supplier
- Identify the analytical method

<u>Verification of calculations</u> -- A person other than the person who generated the query will review for accuracy all compliance related calculations performed in a database through queries. This review will be documented and forwarded to the appropriate record series.

Stormwater MSGP for Industrial Activities Program	No. ENV-CP-QAPP-MSGP, R5	Page 13 of 40
	Effective Date: 11/04/2013	

#### **Spreadsheets:**

<u>Backups</u> -- All spreadsheets used to hold data and generate reports to be used in demonstrating compliance will be maintained in a secure location. The preferred location is on the Group server. Spreadsheets will be backed up at least weekly.

<u>Verification of data</u> -- All compliance-related data uploaded into a spreadsheet will be verified to be accurate against the original paper copy. Data that are uploaded through electronic means will undergo a 10% verification. Data that are uploaded through manual means will undergo a 100% verification. Someone other than the data entry person must perform the 100% review. This review will be documented and forwarded to the appropriate record series.

<u>Verification of calculations</u> -- A person other than the person who generated the spreadsheet will review for accuracy all compliance-related calculations performed in a spreadsheet. This review will be documented and forwarded to the appropriate record series. Modifications to the function of these spreadsheets will also be verified in this manner.

<u>Software control</u> -- The integrity of spreadsheets will be ensured by limiting access to these spreadsheets to only trained, authorized personnel. Additionally, at least once per year, the function of the spreadsheets will be verified by hand calculations. Documentation of this review will be forwarded to the appropriate record series.

#### 4.4 IMPLEMENTATION RESPONSIBILITIES

The following table lists specific responsibilities:

Who	What
Program Lead	Regularly assess data integrity methods used by MSGP personnel.

#### 5.0 PLANNING AND PERFORMING WORK

Work conducted under this program ensures compliance with the 2008 Multi-Sector General Permit; the Clean Water Act; and DOE Orders 450.1, *Environmental Protection Program*, and 5400.5, *Radiation Protection of the Public and Environment*.

Work that contributes to achieving the quality specifications of the MSGP deliverables will be planned and documented as described in this document and implementing procedures.

Work will be performed according to applicable plans and implementing procedures. The team leader will provide first line supervision of personnel assigned to project tasks to ensure work is performed to achieve project quality specifications. Before changing a work process that affects the project quality specifications, the team leader will ensure the same level of planning and review as used in the initial project planning steps.

Stormwater MSGP for Industrial Activities Program	No. ENV-CP-QAPP-MSGP, R5	Page 14 of 40
	Effective Date: 11/04/2013	

#### 5.1 WORK PROCESSES

All work should be regarded as a process. Each process consists of a series of actions and is planned and carried out by qualified workers using specified work processes and equipment under administrative, technical, and environmental controls established by management to achieve an end result. Workers are the best resource of contributing ideas for improving work processes and will be involved in work process design, process evaluation, and providing the feedback necessary for improvement.

All work is planned and performed using the principles of Integrated Safety Management and in compliance with P300, *Integrated Work Management for Work Activities*.

#### 5.3 WORK PERFORMANCE

Management should ensure that the following are clearly identified and conveyed to workers prior to beginning work:

- customer and data requirements for the work and final product;
- acceptance criteria applicable to work and final product;
- hazards associated with the work;
- technical standards applicable to work and final product; and
- safety, administrative, technical, and environmental controls to be employed during the work.

The work processes used to meet the regulatory requirements and the requirements of this plan can be divided as follows:

- Stormwater Pollution Prevention Plans (Multi-Sector General Permit Section 5.0)
- Inspections (Multi-Sector General Permit Section 4.0)
- Monitoring (Multi-Sector General Permit Section 6.0)
- Discharge Monitoring Reports (Multi-Sector General Permit Section 7.1 Reporting Monitoring Data to EPA)
- Best Management Practices (Multi-Sector General Permit Section 2.0 –Control Measures)
  - Reporting and Recordkeeping (Multi-Sector General Permit Section 7.0)

#### 5.4 STORMWATER POLLUTION PREVENTION PLAN

Stormwater Pollution Prevention Plan (SWPPP) development and implementation by the regulated industrial facility is required for MSGP compliance (refer to Section 8.0 of the 2008 MSGP for Sector-Specific Requirements for Industrial Activity and Appendix D, Sectors of Industrial Activity Covered by This Permit). The SWPPP is intended to document the selection, design, and installation of control measures. Additional documentation requirements are intended to document the implementation (including inspection, maintenance, monitoring, and corrective

Stormwater MSGP for Industrial Activities Program	No. ENV-CP-QAPP-MSGP, R5	Page 15 of 40
	Effective Date: 11/04/2013	

action) requirements identified in the 2008 MSGP permit. The SWPPP is a written assessment of potential sources of pollutants in stormwater runoff and control measures that will be implemented at the specific industrial facility to minimize the discharge of pollutants in runoff from the site. These control measures include site-specific Best Management Practices (BMPs), inspections, employee training, and reporting. The procedures detailed in the SWPPP must be implemented by the facility and updated as necessary, with a copy of the SWPPP kept on-site.

The SWPPP development process involves evaluating regulated industrial activities and requiring Facility Management support in implementation, improvement, and revision of the Plans.

#### 5.4.1 DISCHARGE MONITORING REPORTS

The Laboratory is required to submit analytical results of stormwater monitoring and to keep the results with the facility specific SWPPP. The Laboratory must certify and submit analytical monitoring results obtained from each facility specific sampling location (i.e., the sampling station located at the monitored outfalls) associated with industrial activity on a Discharge Monitoring Report (DMR) form or use it to report any of the following:

- no discharge for all outfalls for a specific monitoring period;
- the industrial facility status has changed to inactive and unstaffed;
- the facility status has changed to active; or
- no further pollutant reductions are achievable for all outfalls and for all pollutants (see Section 6.2.1.2 of the 2008 MSGP).

#### 5.4.2 ANNUAL SITE COMPLIANCE EVALUATION REPORT

The Laboratory is required to submit an annual report (Attachment 2) to the Environmental Protection Agency (EPA) that includes the findings from the comprehensive site inspection and any corrective action documentation. The documentation must include the following:

- identification of the condition triggering the need for corrective action review;
- date and description of the problem identified;
- summary of the corrective action taken or to be taken;
- notice of whether SWPPP modifications are required as a result of the discovery or corrective action:
- date corrective action was initiated; and
- date corrective action was completed or is expected to be completed.

The following table lists responsibilities:

Who	What
Project Lead	Ensure that SWPPP requirements are performed in accordance with the MSGP.

Stormwater MSGP for Industrial Activities Program	No. ENV-CP-QAPP-MSGP, R5	Page 16 of 40
	Effective Date: 11/04/2013	

Facility Management Support	Implement SWPPP requirements as recommended by the Project Lead.
ENV-CP Staff and Deployed Environmental Professionals (DEPs)	Assure SWPPP implementation as required by MSGP.
DEPs	Develop, modify, and update SWPPPs and assist facility personnel with SWPPP implementation.

#### 5.5 Inspections

The MSGP requires periodic inspection of industrial processes and maintenance of (BMPs) to assure effectiveness of control measures. The Laboratory has implemented a quarterly or monthly inspection process (depending on the industrial facility) to support this determination. A copy of the Routine Inspection Form is provided in Attachment 3.

#### 5.6 STORMWATER MONITORING

Benchmark stormwater monitoring is the required mechanism for determining the effectiveness of corrective actions and meeting the requirements of the MSGP. Refer to Attachment 4, *MSGP Facilities and Stormwater Monitored Outfalls Associated with Industrial Activity 2011*, for a list of Laboratory sites that have monitoring requirements. Laboratory management has made an investment in time and materials, in addition to a commitment to comply with the 2008 MSGP Permit. All stormwater monitoring is conducted by ENV-CRP personnel. The MSGP Project currently has a network of 23 monitoring stations. Considerations to be used for MSGP stormwater monitoring development decisions will include MSGP requirements, new state water quality standards, Administrative Authority requests, or new permit requirements. Stormwater monitoring will be conducted as specified in the MSGP.

Effluent Limitations stormwater monitoring is required for the following type of facility of LANL:

Regulated	Parameter	Effluent	Monitoring	Sample Type
Activity		Limit	Frequency	
Discharges from asphalt emulsion facilities	Total Suspended Solids	23.0 mg/L daily max. 15.0 mg/L, 30-day avg.	1/year	grab
	рН	6.0-9.0 s.u.	1/year	grab
	Oil and Grease	10.0 mg/L 30-day avg.	1/year	grab

Stormwater MSGP for Industrial Activities Program	No. ENV-CP-QAPP-MSGP, R5	Page 17 of 40
	Effective Date: 11/04/2013	

This determination was made in accordance with Section 1.1.2.4 of the MSGP. The TA-60 Asphalt Batch Plant meets the criteria for effluent limitations monitoring in this section. Exceedances of the effluent limits in this table require immediate action. In addition, if follow-up monitoring after corrective actions also exceeds an effluent limit guideline, an Exceedance Report for Numeric Effluent Limits must be submitted to EPA no later than 30 days after lab results have been received and verified.

Impaired Waters stormwater monitoring is required for discharges made to an impaired water. The canyons within and surrounding Los Alamos National Laboratory are declared as Impaired Waters by the New Mexico Environment Department. The pollutants vary from canyon to canyon and are listed in Attachment 5, *Pollutants Under Impaired Waters Monitoring*. The pollutants may be discontinued in subsequent annual monitoring if the concentration is below background levels in stormwater or if the constituent is not detected.

Visual assessments are also required by the MSGP and are an important tool for collecting information to determine the effectiveness of controls in preventing potential contaminants from migrating off Laboratory property. Accordingly, field personnel must conduct visual assessments for stormwater collected at the monitoring stations or discharged through substantially identical outfalls associated with industrial facilities located throughout the Laboratory. Information recorded will document all observations that are required by the MSGP (see ENV-RCRA-QP-064, *Multi-Sector General Permit Storm Water Visual Inspections*).

The Laboratory's MSGP permit requires stormwater quality monitoring to evaluate compliance with water quality standards and evaluation against benchmarks. Parameters sampled at the monitoring stations are selected based on permit requirements and the results of the previous year.

Four stormwater samples per year are required under the 2008 MSGP, but it is not necessary to collect them in consecutive quarters if climatic conditions that prevented quarterly collection are documented (see *Adverse Weather Conditions* in Section 6.1.5 of the MSGP). Sample locations are listed in Attachment 4, *MSGP Facilities and Stormwater Monitored Outfalls Associated with Industrial Activity 2011*, and collection will be conducted in accordance with LANL and NPDES Permit requirements and the current year MSGP Sampling and Analysis Plan.

Stormwater samples are used to demonstrate compliance with water quality standards and requirements to evaluate results against benchmark parameters (Attachments 5 and 6). Any persons involved in the preparation, retrieval, and analysis must maintain positive control of samples at all times until sample disposal. ENV-RCRA personnel will follow guidance in the Associate Directorate for Environmental Programs (ADEP) document ENV-WQH-QP-029, Creating and Maintaining a Chain of Custody, as well as, ENV-RCRA-QP-047, Inspecting Storm Water Runoff Samplers and Retrieving Samples, and ENV-RCRA-QP-048, Processing MSGP Storm Water Samples.

Stormwater MSGP for Industrial Activities Program	No. ENV-CP-QAPP-MSGP, R5	Page 18 of 40
	Effective Date: 11/04/2013	

#### Chain of custody is maintained during:

Activity	Responsibility
Sample collection and preparation	All persons (other than analytical personnel) performing sample preparation and collection will be trained to sample collection procedures and must adhere to the chain of custody requirements therein.
Analysis	Analytical laboratories performing sample analysis will maintain sufficient procedures to ensure positive control of samples as specified in the existing Statement of Work.
Storage/ disposal	Analytical laboratories will maintain retained samples and/or sample portions under chain of custody until reanalysis, or ultimate disposal.

The LANL Sample Management Office (SMO) will be the central point for all analytical laboratory selection, evaluations, sample submittal, and data return. The SMO will evaluate potential analytical laboratories, prepare analytical statements of work that include requirements, and arrange contracts with selected laboratories for analysis of all samples. The SMO will accept samples from field collection personnel, process the sample, ship the samples to the off-site analytical laboratories, and receive the data packages from the laboratories.

All analytical data will be received from analytical laboratories in electronic format and uploaded into a database. All received data will be checked for completeness and adherence to contract requirements. After uploading, all data will undergo verification and validation (V&V) for evidence of laboratory contamination, improper analytical method, and other analytical issues which could potentially affect data quality.

Field data collected by sample collection personnel will be verified and validated by the SMO when field personnel deliver samples to the SMO.

If significant V&V issues are identified, results will be forwarded to and discussed with the responsible project leads.

Data issues that result from procedural failures, personnel errors, or other failures to follow requirements will be documented as issues and corrected according to ENV-DO-QP-113, *Tracking Issues and Actions*.

The following table lists responsibilities:

Who	What
Project Lead	Ensure that all project monitoring requirements are performed in accordance with the MSGP.  Review and update the MSGP Sampling and Analysis Plan annually.

Stormwater MSGP for Industrial Activities Program	No. ENV-CP-QAPP-MSGP, R5	Page 19 of 40
	Effective Date: 11/04/2013	

	When complete, communicate findings to the team members for implementation. Make appropriate arrangements with the SMO to accept, process, and submit samples to an analytical laboratory for required analyses as specified in the SAP.
MSGP Water Quality Compliance Personnel	<ul> <li>Implement monitoring program as required by the MSGP Project Lead.</li> <li>Conduct stormwater sampling in accordance with the MSGP Sampling and Analysis Plan and applicable procedures.</li> <li>Ensure procedures for sample handling and control during sample preparation and retrieval are followed.</li> </ul>
Sample Management Office	<ul> <li>Develop Statements of Work (SOW) for all analytical laboratories that perform analytical work for the MSGP project in accordance with P840-1, Procurement Quality.</li> <li>Ensure analytical laboratories comply with the DOE's SOW. Conduct an annual audit of the laboratory to ensure compliance with the SOW.</li> <li>Approve Statements of Work for analytical laboratories that are contracted to analyze water samples.</li> <li>Approve analytical laboratories that are contracted to analyze water samples for regulatory compliance purposes.</li> <li>Accept samples and submit them to and approved analytical laboratory for analysis.</li> <li>Track progress of samples at the analytical laboratory and resolve issues with sample analysis.</li> <li>Receive data packages from the analytical laboratory and enter data into the database.</li> <li>Provide the MSGP Project Lead with monthly invoice updates.</li> <li>Perform V&amp;V of field data submitted and uploaded from forms when samples are submitted to the SMO.</li> </ul>
Operations Integration Office (OIO), Systems Integration (SI)	Perform V&V of data packages uploaded by the SMO or send data packages to a subcontractor company for independent V&V.

#### 5.7 DISCHARGE MONITORING REPORTS

The Laboratory is required to submit analytical results of stormwater monitoring and to keep the results with the specific SWPPP. The Laboratory must submit analytical monitoring results obtained from each monitoring station associated with industrial activity on a MSGP Discharge Monitoring Report (MDMR) form (one form must be submitted for each storm event from which, a sample was collected).

MDMRs shall be written in accordance with ENV-RCRA-QP-044, *Preparing Storm Water Discharge Monitoring Reports (MDMRs) for the NPDES Multi-Sector General Permit.*MDMRs shall be submitted to EPA within 30 calendar days of receiving validated

Stormwater MSGP for Industrial Activities Program	No. ENV-CP-QAPP-MSGP, R5	Page 20 of 40
	Effective Date: 11/04/2013	

analytical results. Refer to the DMR language under the SWPPP Section above for additional requirements.

Site analytical requirements are defined by the industrial activity in the MSGP permit. All MSGP analytes applicable to LANL are consistent with the requirements of 40 CFR Part 136, *Guidelines Establishing Test Procedures for the Analysis of Pollutants*.

Sample analytical requirements vary by site depending on the industrial activities performed at the site. Refer to Attachment 5 for a list of analytes by industrial sector. If an insufficient quantity of sample is available, then sample collection will be prioritized at that location for future events. Additional samples may be collected to meet permit requirements.

ENV-RCRA shall refer to the requirements of the 2008 Multi-Sector General Permit, and the most current MSGP Sampling and Analysis Plan to determine the priorities of required analyses.

The following table lists responsibilities:

Who	What
Project Lead	<ul> <li>Ensure implementing procedures for sample analyses are used.</li> <li>Ensure that MDMRs are submitted to EPA and NMED in accordance with the MSGP.</li> </ul>
MSGP Water Quality Compliance Personnel	Assure MDMRs are completed and certified as required by the MSGP and have received a full quality assurance review.

# 5.8 ADVERSE WEATHER CONDITIONS AND CLIMATES WITH IRREGULAR STORMWATER RUNOFF

Section 4.2.3 of the 2008 MSGP allows the industrial 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, such as local flooding, high winds, or electrical storms, 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.

Since LANL is located in an area where limited rainfall occurs during parts of the year (i.e., in a semi-arid climate) and has periods of freezing conditions, LANL has identified an alternative monitoring period of four quarters as follows for each calendar year.

April 1-May 31

Stormwater MSGP for Industrial Activities Program	No. ENV-CP-QAPP-MSGP, R5	Page 21 of 40
	Effective Date: 11/04/2013	

- June 1-July 31
- August 1-September 30
- October 1-November 30

The following table lists specific responsibilities.

Who	What
Project Lead	Ensure that the monitoring schedule is documented in facility specific SWPPPs and provided to EPA on the MDMRs.

#### 5.9 REPORTING AND RECORDKEEPING

All monitoring data shall be collected in accordance with the requirements specified in the 2008 MSGP. LANL will submit monitoring results to EPA within 30 days of receiving validated laboratory results. The address for submittal of monitoring results is as follows.

U.S. Environmental Protection Agency Office of Water, Water Permits Division Mail Code 4203M, ATTN: MSGP Reports 1200 Pennsylvania Avenue, NW Washington, D.C. 20460

LANL shall keep copies of the following documentation for a period of at least 3 years from the date that LANL's coverage under the MSGP expires or is terminated.

- SWPPP (including any modifications made during the term of the 2008 MSGP)
- Additional documentation requirements as identified in Section 5.4 of the MSGP
- All reports and certifications required by the MSGP
- Monitoring data
- Records of all data used to complete the NOI.

The following table lists specific responsibilities:

Who	What
Project Lead	Periodically audit MSGP records to ensure documentation of compliance is being retained.
Deployed Environmental Professionals	Retain records as required by the MSGP for industrial facilities located in their FOD.

Stormwater MSGP for Industrial Activities Program	No. ENV-CP-QAPP-MSGP, R5	Page 22 of 40
	Effective Date: 11/04/2013	

#### 5.10 BEST MANAGEMENT PRACTICES

It is critical that the Laboratory be able to effectively inspect and maintain the Best Management Practices that have been installed at various locations. Quarterly inspections must be completed and provided to the Project Lead for inclusion into the records system. In addition, the Project Leader conducts a Comprehensive Annual Site Inspection and writes a report to document the status of BMPs and other identified corrective actions. This report is sent to EPA each year. Laboratory management has made an investment in time and materials, in addition to a commitment to minimizing the potential migration of contaminants in stormwater. Report findings are evaluated and in conjunction with facility personnel, BMPs are modified, installed, or removed as necessary.

The following table lists responsibilities.

Who	What
Project Lead	Assist facility personnel and Deployed Environmental Professionals with implementation, inspection, and maintenance of BMPs at MSGP facilities.
Facility Management Support	<ul> <li>Coordinate with Project Lead and provide funding as needed to install, inspect, maintain and implement identified BMPs.</li> <li>Certify the corrective actions identified by the Project Lead and/or facility personnel (or their representatives) for their individual facilities in the Annual Report.</li> </ul>

#### 5.11 Information Management

The Water Quality Database is a database information system designed in part to support the information management (IM) needs of the Laboratory's MSGP. MSGP support includes stormwater discharge monitoring reporting, Geographic Information System (GIS) development, and other IM activities as needed.

The following table lists responsibilities:

Who	What
Project Lead	Coordinate with IM support personnel to meet regulatory requirements.

#### 5.12 RESPONDING TO WATER QUALITY EXCEEDANCES

The identification of a pollutant source(s) contributing to a water quality exceedance will be addressed through the creation of a corrective action that is entered into the Corrective Acton

Stormwater MSGP for Industrial Activities Program	No. ENV-CP-QAPP-MSGP, R5	Page 23 of 40
	Effective Date: 11/04/2013	

Report database in accordance with ENV-DO-QP-113, *Tracking Performance Feedback and Actions* and *ENV-RCRA-QP-022*, *MSGP Stormwater Corrective Actions*. Federal stormwater regulations implemented under the Laboratory's MSGP (40 CFR 122, EPA Administered Permit Programs: The National Pollutant Discharge Elimination System) require that corrective action be taken if exceedances of water quality standards or MSGP numeric effluent limits are identified. Corrective actions are typically accomplished by modifying, as appropriate, existing BMPs and SWPPPs.

When a water quality exceedance occurs, the Laboratory will submit the data on the required MDMRs, investigate the occurrence, and document corrective actions.

When an exceedance of the MSGP benchmark parameters is detected, the Project Lead will assure the analytical data is reviewed, notify appropriate SWPPP owners, and recommend and track corrective actions where required.

The following steps lead to corrective actions:

STEP	Action
1	Establish that an analytical result from a location is valid and has exceeded a standard or MSGP benchmark.
2	Evaluate and demonstrate that the analyte is of LANL origin, if possible.
3	Determine the source and assign responsibility for the corrective action.
4	Develop a corrective action plan.

The following table lists responsibilities:

Who	What
Project Lead	<ul> <li>Assure that analytical data is reviewed and accurate.</li> <li>Notify appropriate SWPPP owners, Laboratory management, and Deployed Environmental Professionals.</li> <li>Develop a corrective action plan.</li> <li>Follow up with corrective actions if required.</li> <li>Track corrective actions.</li> </ul>
Facility Management and DEP	Review analytical data with Project Lead and provide input into a possible corrective action necessary to improve water quality where needed.     Evaluate and improve BMPs in accordance with site conditions, industry standards, and manufacturer

	- C
Effective Date: 11/04/2013	

recommendations.	
------------------	--

#### 5.13 Instrumentation and Equipment

Compliance will be tracked by performing inspections of samplers and other associated equipment, inspecting BMPs, and conducting annual site compliance evaluations. Adequate records will be maintained to demonstrate the operating history of essential instrumentation and equipment.

LANL will properly operate and maintain all systems of monitoring and control and related appurtenances which are installed or used to achieve compliance with the MSGP and the SWPPP. Backup instrumentation and equipment will be timely deployed in the event of equipment failure.

Instrument calibration is essential for documenting the quality of data obtained with the instrument. All technical work that depends upon the accuracy of data will be performed using equipment for which the calibration status and limits of accuracy are known and controlled.

Field team personnel will calibrate and perform maintenance procedures on all monitoring and analytical field instruments to ensure accuracy of measurements and will maintain appropriate records of such activities. All field calibrations will be documented as prescribed by procedures or manufacturer's instructions.

The following table lists specific responsibilities.

Who	What
Project Lead	Ensure data are collected and equipment is operated and maintained in accordance with project requirements.
	Provide equipment maintenance and calibration specifications and ensure MSGP Water Quality Compliance Team personnel operate and conduct field activities in accordance with implementing procedures and specific work orders.

#### 6.0 DESIGN

Design activities will be conducted and reviewed in accordance with PD340, *Conduct of Engineering* and P341, *Engineering Process Manual*.

Design standards under this program include, but are not limited to temporary and permanent BMPs, corrective action measures, and stormwater monitoring support.

Design inputs will be specified and approved on a timely basis for making design decisions. Inputs will contain the level of detail required to permit the performance of design activities correctly.

Stormwater MSGP for Industrial Activities Program	No. ENV-CP-QAPP-MSGP, R5	Page 25 of 40
	Effective Date: 11/04/2013	

Formal design reviews, including design verifications and evaluation of design changes, will be conducted to ensure that the design input is correctly incorporated into the design output. Changes to design will undergo the same review as the original design.

Verification and validation of the adequacy of designs are conducted before relying on the performance of the design function. Verification and validation are conducted in accordance with implementing procedures.

The following table lists responsibilities.

Who	What
Project Lead	Provide input to the design process in accordance with appropriate standards, requirements, and implementing procedures.
	<ul> <li>Determine the qualifications required to perform a review of design documents.</li> </ul>
	<ul> <li>Identify a resource with skills, knowledge, ability, training, and certifications required to complete the review of the facility engineering design documents.</li> </ul>
	Communicate the results of the review to the requestor.
ENV-CP Staff	Review design documents and requests as assigned.
	Inform the Project Lead of concerns regarding the facility engineering designs.

#### 7.0 PROCUREMENT

Items and services required for this process are commercial grade in nature and no special procurement requirements or needs are necessary. All procurements will be made in accordance with P840-1, *Procurement Quality*. For items and all services for which special requirements are necessary, the Project Lead and project members will identify such items or services.

The following table lists responsibilities:

Who	What
Group Leader	Ensure all procurements are conducted in accordance with P840-1.
Project Lead	Recommend to Group Leader contracting items and services.  Develop acceptance criteria.
ENV-CP Staff	Identify potential suppliers of products or services necessary to complete work activities that must be procured from outside ENV-RCRA.

Stormwater MSGP for Industrial Activities Program	No. ENV-CP-QAPP-MSGP, R5	Page 26 of 40
	Effective Date: 11/04/2013	

#### 8.0 INSPECTION AND ACCEPTANCE TESTING

Any materials or services will be inspected and/or tested prior to acceptance for use in this project in accordance with P330-8, *Inspection and Test for Acceptance*. Most supplies used during performance of project activities are commercial grade in nature and require no special acceptance practices or procedures.

The following table lists responsibilities:

Who	What
Group Leader	Ensure procedures for inspection meet SD330, Los Alamos National Laboratory Quality Assurance Program requirements.
Project Lead	Verify that all materials and services meet acceptance criteria.
ENV-CP Staff	Follow established procedures for inspection and acceptance testing.

#### 9.0 MANAGEMENT ASSESSMENT

The ENV-CP Group conducts internal management assessments of projects and programs in accordance with the requirements in P328-3, *Management Assessment* and P328-4, *Management Observation and Verification*. Assessments of the program are documented and filed as records.

When violations of requirements are found during a management assessment, a nonconformance report is initiated in accordance with P330-6, *Nonconformance Reporting* for nonconforming items.

Nonconforming services or processes are tracked and documented in accordance with P322-4, *Issues and* 

The following table lists responsibilities:

Corrective Action Management.

Who	What
Group Leader	Ensure management self-assessments for the MSGP program are conducted as specified in implementing procedures.
Project Lead	Ensure program management self-assessments are conducted.

Stormwater MSGP for Industrial Activities Program	No. ENV-CP-QAPP-MSGP, R5	Page 27 of 40
	Effective Date: 11/04/2013	

#### 10.0 INDEPENDENT ASSESSMENT

Independent assessments are those assessments conducted by organizations external to ENV-RCRA. As required by the SD330, *Los Alamos National Laboratory Quality Assurance Program*, this program may be assessed by outside organizations in accordance with P328-2, *Independent Assessment*.

Periodically audits/assessments will be conducted, with input from the Project Lead identifying one or more areas of the project to be audited.

The following table lists responsibilities:

Who	What
Project Lead	Approve audit schedules.
	<ul> <li>Provide input to the QA Specialist as to the content of audit.</li> </ul>
	<ul> <li>Review audit reports for factual accuracy. Address all findings and implement corrective actions as appropriate.</li> </ul>
QA Specialist	Identify areas to be addressed during internal audits.
	<ul> <li>Contract with the Quality Management Group to perform annual internal audits.</li> </ul>
	<ul> <li>Review audit procedures to ensure they meet the requirements in this section.</li> </ul>
Team Members	Cooperate with auditors by providing information, data, etc.
	Implement corrective actions as directed by the Project Lead.

#### 11.0 ATTACHMENTS

Attachment 1- MSGP Program Organization

Attachment 2 – Annual Reporting Form

Attachment 3 – Routine Inspection Form

Attachment 4 – MSGP Facilities and Storm Water Monitored Outfalls Associated with Industrial Activity 2011, Permit NMR05GB21

Attachment 5 – Pollutants under Impaired Waters Monitoring

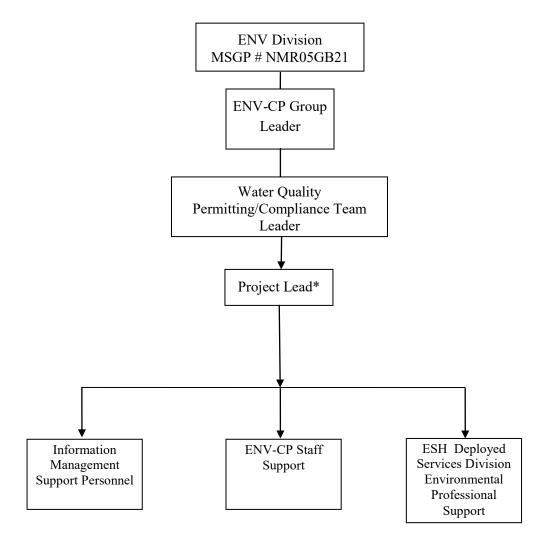
Attachment 6 – Analytes by Industrial Sector

Attachment 7 – References and Guidance Documents

Page 28 of 40

Effective Date: 11/04/2013

#### **ATTACHMENT 1- MSGP PROGRAM ORGANIZATION**



<sup>\*</sup>Project Lead acts as liaison and will work directly with Team Leaders for staff assignments.

Stormwater MSGP for Industrial Activities Program

No. ENV-CP-QAPP-MSGP, R5

Page 29 of 40

Effective Date: 11/04/2013

#### ATTACHMENT 2 – ANNUAL REPORTING FORM

NPDES Permit Tracking No.:
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: Title:
Additional Inspectors Name(s):
5. Contact Person: Title:
Phone:
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?  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 poliutants 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
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	y control measures în place:
Did you review stormwater monitoring data as part of this inspection to identify potential pollutant hot spots?	☐ NA, no monitoring performed
If YES, summarize the findings of that review and describe any additional inspection activities resulting from this review:	
Describe any evidence of pollutants entering the drainage system or discharging to surface waters, and the condition of and around dissipation measures to prevent scouring:	nd outfalls, including flow
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 sul authorization to discharge under this permit if this is your first annual report), including any corrective actions identified as a result inspection?  YES NO	bmission (or since you received t of this annual comprehensive site
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?	
IOTE: Complete the attached Corrective Action Form (Section D) for each condition identified, including any conditions identified a tormwater inspection.	as a result of this comprehensive

No. ENV-CP-QAPP-MSGP, R5

Effective Date: 11/04/2013

Page 30 of 40

Stormwater MSGP for Industrial Activities Program

Stormwater MSGP for Industrial Activities Program	No. ENV-CP-QAPP-MSGP, R5	Page 31 of 40
	Effective Date: 11/04/2013	

C. INDUSTRIAL ACTIVITY AREA SPECIFIC FINDINGS		
Complete one block for each industrial activity area where pollutants ma	y be expose	ed 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  Leaks or spills from industrial equipment, drums, tanks, and other:  Offsite tracking of industrial or waste materials from areas of no ex  Tracking or blowing of raw, final, or waste materials from areas of	into contact containers; posure to ex	with stormwater; posed areas; and
INDUSTRIAL ACTIVITY AREA:		
1. Brief Description:		
2. Are any control measures in need of maintenance or repair?	☐ YES	□ NO
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 probler Corrective Action Form)	ii. (Ally neo	assary corrective actions should be described on the attached
NDUSTRIAL ACTIVITY AREA:  1. Brief Description:		
	YES	□ NO
2. Are any control measures in need of maintenance or repair?	□ YES	□ NO
Brief Description:		
1. Brief Description:  2. Are any control measures in need of maintenance or repair?  3. Have any control measures failed and require replacement?	☐ YES	□ NO
2. Are any control measures in need of maintenance or repair? 3. Have any control measures failed and require replacement? 4. Are any additional/revised c necessary in this area?  If YES to any of these three questions, provide a description of the probler Corrective Action Form)	☐ YES	□ NO
2. Are any control measures in need of maintenance or repair? 3. Have any control measures failed and require replacement? 4. Are any additional/revised c necessary in this area?  If YES to any of these three questions, provide a description of the probler Corrective Action Form)	☐ YES	□ NO
2. Are any control measures in need of maintenance or repair? 3. Have any control measures failed and require replacement? 4. Are any additional/revised c necessary in this area?  If YES to any of these three questions, provide a description of the probler Corrective Action Form)  NDUSTRIAL ACTIVITY AREA:	☐ YES	□ NO
Brief Description:  Are any control measures in need of maintenance or repair?  Have any control measures failed and require replacement?  Are any additional/revised c necessary in this area?  If YES to any of these three questions, provide a description of the problem Corrective Action Form)	☐ YES☐ YES☐: (Any nec	□ NO □ NO essary corrective actions should be described on the attached
2. Are any control measures in need of maintenance or repair? 3. Have any control measures failed and require replacement? 4. Are any additional/revised c necessary in this area?  If YES to any of these three questions, provide a description of the probler Corrective Action Form)	☐ YES ☐ YES m: (Any nec	□ NO □ NO essary corrective actions should be described on the attached

Stormwater MSGP for Industrial Activities Program	No. ENV-CP-QAPP-MSGP, R5	Page 32 of 40
	Effective Date: 11/04/2013	

NPDES Permit Tracking No.:

		NOTE: Copy this page and attach additional pages as neces
INDUSTRIAL ACTIVITY AREA		
1. Brief Description:		
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
	f the problem:	(Any necessary corrective actions should be described on the attached
INDUSTRIAL ACTIVITY APPA		
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 Corrective Action Form)	f the problem:	(Any necessary corrective actions should be described on the attached
INDUSTRIAL ACTIVITY AREA		
1. Brief Description:		
Are any control measures in need of maintenance or repair?	☐ YES	□ NO
Have any control measures failed and require replacement?	☐ YES	□ NO
Are any additional/revised BMPs necessary in this area?	☐ YES	□ NO
		(Any necessary corrective actions should be described on the attached
Corrective Action Form)	тие рговет.	(Any necessary corrective actions should be described on the attached

Stormwater MSGP for Industrial Activities Program

No. ENV-CP-QAPP-MSGP, R5

Page 33 of 40

Effective Date: 11/04/2013

	NPDES Permit Tracking No
D. CORRECTIVE ACTIONS	
D. CORRECTIVE ACTIONS  Complete this page for each specific condition requiring a personting action as a various determinist that are a serious actions as a various determinist that are a serious actions as a various determinist that are a serious actions as a various determinist that are a serious actions as a various deterministic that are a serious actions as a various deterministic that are a serious actions as a various deterministic that are a serious actions as a various deterministic that are a serious actions as a various deterministic that are a serious actions as a various deterministic that are a serious actions as a serious deterministic that are a serious actions as a serious deterministic that are a serious actions as a serious deterministic that are a serious actions as a serious deterministic that are a serious actions as a serious deterministic that are a serious actions as a serious deterministic that are a serious deterministic than a serious deterministic that are a serious deterministic than a serious deterministic that are a serious deterministic than a serious determinist	
Complete this page for each specific condition requiring a corrective action or a review determining that no correpage for additional corrective actions or reviews.	rective action is needed. Copy this
Include both corrective actions that have been initiated or completed since the last annual report, and future corrective actidentified in this comprehensive stormwater inspection. Include an update on any outstanding corrective actions that had previous annual report.	ctions needed to address problems I not been completed at the time of your
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?	
d. 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	9
☐ Change in facility operations necessitated change in control measures	
Average benchmark value exceedance	
Other (describe):	
Briefly describe the nature of the problem identified:	
5. Date problem identified:	
. 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 mod measures, analyses to be conducted, etc.) or if no modifications are needed, basis for that determination:	difications or repairs to control
B. Did/will this corrective action require modification of your SWPPP? YES NO	
Date corrective action initiated:////	ittit
b. Date correction action completed:// completed:///	
11. If corrective action not yet completed, provide the status of corrective action at the time of the comprehensive site inspection (including timeframes associated with each step) necessary to complete corrective action:	ection and describe any remaining steps

	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 p your knowledge, you are in compliance with the permit?   YES   NO	ermit, and that, based upon the results of this inspection, to the best of
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 assure that qualified personnel properly gathered and evaluated the information submitted system, or those persons directly responsible for gathering the information, the information and complete. I am aware that there are significant penalties for submitting false informativitations.	Based on my inquiry of the person or persons who manage the submitted is, to the best of my knowledge and belief, true, accurate,
Authorized Representative Printed Name:	Title:
Signature:	Date Signed:

Stormwater MSGP for Industrial Activities Program

Page 34 of 40

No. ENV-CP-QAPP-MSGP, R5 Effective Date: 11/04/2013

Stormwater MSGP for Industrial Activities Program	No. ENV-CP-QAPP-MSGP, R5	Page 35 of 40
	Effective Date: 11/04/2013	

#### ATTACHMENT 3 – ROUTINE INSPECTION FORM

Name of Facility:				Resnons	ible FOD (Name & Organizatio	n)·
•						
Qualified Inspector(s):				Inspection type:   Quarterly   Other		Date of inspection (MM/DD/YYYY):
Others Present:						Time of inspection:
Weather: □ Clear □Cloudy □ F Temperature: ° F	Rain 🗖 S	leet □ Fog	, 🗆 s	now 🗖 l	ligh Winds  ☐ Other: Is Inspection Being Con	ducted During a Storm Water Discharge? □Yes □No
# Structural Control Measures   Location   Effectively   Main   Repa			Maint Repa	Need to ain (M), ir (R) or ce (RP)?	Corrective Action Needed ar failed control measures that ne	nd Notes (identify needed maintenance and repairs, or any eed replacement)
1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11.						
Were additional BMPs or Control Mea						
Were previously identified conditions	s corrected	before the ne	xt antic	ipated stor	m event? 🗆 Yes 🗆 No If No, o	describe reason:
Area/Activity (Areas of Industrial Materials or Activities Exposed to Storm Water)	Inspected ?	Controls Adequate?	Corre	ctive Actio	n Needed and Notes (List area	letter with comments below)
Material loading/unloading & storage areas     Equipment operations & maintenance areas     C. Fueling Areas     Outdoor vehicle & equipment washing areas     E. Waste Handling & disposal areas     F. Erodible areas / construction     G. Non-storm water / illicit connections						

Stormwater MSGP for Industrial Activities Program	No. ENV-CP-QAPP-MSGP, R5	Page 36 of 40
	Effective Date: 11/04/2013	

Н.	Salt storage piles or pile containing salt					
I.	Dust generation & vehicle tracking					
Are	<u> </u>	chedules and procedures bei	eing implemented at the facility? □ Yes □ No			
Were any Corrective Actions initiated or completed? □ Yes □ No Describe:						
Are	Are there any conditions requiring Corrective Action?   Yes  No If Yes, List Number of Corrective Actions Required   (Note – You need enter a Corrective Action in the MSGP Corrective Action Report database for each listed)					
		e Action in the MSGP Correct	ctive Action Report database for each listed)			
		e Action in the MSGP Correct	ctive Action Report database for each listed)			

Stormwater MSGP for Industrial Activities Program	No. ENV-CP-QAPP-MSGP, R5 Page 37 of 40		
	Effective Date: 11/04/2013		

# ATTACHMENT 4 -- MSGP FACILITIES AND STORM WATER MONITORED OUTFALLS ASSOCIATED WITH INDUSTRIAL ACTIVITY 2011, PERMIT NMR05GB21

Location	Permitted Facility	Operation	Activity	Sector	Monitored Outfall	• Canyon
TA-15-185	TA-15-185 PHERMEX	Vehicle Maintenance Shop	Vehicle Maintenance	Р	15-PHRMX- 1	• Water
TA-3-0034	TA-3-0034 Metal Shop	Fabricated Metals	Fabricated Metals	AA	3-MST-1	<ul> <li>Mortandad</li> </ul>
TA-3-22	TA-3-22 Power & Steam Plant	Power Plant	Steam Electric Power	0	3-PSP-1 3-PSP-5 3-PSP-8	<ul><li>Sandia</li><li></li></ul>
TA-3-38	TA-3-38 Metals Fab Shop	Metal Shop	Fabricated Metals	AA	3-MFS-1	• Sandia
TA-3-39	TA-3-39 & 102 Metal Shop	Metal Shop	Fabricated Metals	AA	3-TS-1	<ul> <li>Pajarito</li> </ul>
TA-3-66	TA-3-66 Sigma Complex	Sigma Foundry	Primary Metals	F	3-Sigma-6	• Sandia
TA-54	TA-54 Area G	Area G - South Side	TSD	K	54-G-1	<ul> <li>Pajarito</li> </ul>
TA-54	TA-54 Area G	Area G -North Side	TSD	К	54-G-2	<ul> <li>Canada del Buey</li> </ul>
TA-54	TA-54 Area G	Area G - South Side	TSD	K	54-G-3	<ul> <li>Pajarito</li> </ul>
TA-54	TA-54 Area G	Area G - South Side	TSD	K	54-G-4	<ul> <li>Pajarito</li> </ul>
TA-54	TA-54 Area L	Area L	TSD	К	54-L-1	<ul><li>Canada del Buey</li></ul>
TA-54-38	TA-54 RANT	RANT	TSD	К	54-RANT-1	<ul> <li>Canada del Buey</li> </ul>
TA-60	TA-60 Asphalt Batch Plant	Asphalt Batch Plant	Asphalt Paving	D	60-ABP-1	<ul> <li>Mortandad</li> </ul>
TA-60	TA-60 MRF	Materials Recycling Facility	Scrap Recycling	N	60-MRF-1	• Sandia
TA-60-250	TA-60 Roads and Grounds	Roads & Grounds Facility	Vehicle Maintenance & Storage	Р	60-RG-1	Mortandad
			-	Р	60-RG-3	<ul> <li>Sandia</li> </ul>
				Р	60-RG-8	<ul> <li>Sandia</li> </ul>
TA-60-1	TA-60-1 Heavy Equipment Yard	Motor pool	Vehicle Maintenance	Р	60-HEY-2	• Sandia
TA-60-2	TA-60-2 Warehouse	Motor pool	Vehicle Maintenance	Р	60-WH-1	• Sandia
TA-9-28	TA-9-28 Heavy Equipment Maintenance	Motor pool	Vehicle Maintenance	Р	9-HEM-1	<ul> <li>Pajarito</li> </ul>

Stormwater MSGP for Industrial Activities Program	No. ENV-CP-QAPP-MSGP, R5	Page 38 of 40
	Effective Date: 11/04/2013	

## ATTACHMENT 5 – POLLUTANTS UNDER IMPAIRED WATERS MONITORING

Permitted Facility	Monitored Outfall	Assessment Unit	Canyon	Pollutant
TA-54 Area G	54-G-2	NM-128.A_00	Canada del Buey (within LANL)	PCBs
TA-54 Area L	54-L-1			Aluminum
TA-54-RANT	54-RANT-1			Gross Alpha
TA-54 Area G	54-G-1	NM-128.A_08	Pajarito Canyon (within LANL	PCBs
TA-54 Area G	54-G-3		below Arroyo de la Delfe)	Aluminum
TA-54 Area G	54-G-4			Copper
				Gross Alpha
TA-15-185 PHERMEX	15-PHRMX-1	NM-128.A_13	Water Canyon (within LANL	PCBs
		_	below Area-A Canyon)	Aluminum
				Gross Alpha
TA-3-39 & 102 Metal Shop	3-TS-1	NM-128.A_15	Two Mile Canyon (Pajarito to	PCBs
			headwaters)	Aluminum
				Gross Alpha
TA-9-28 Heavy Equipment	9-HEM-1	NM-128.A_16	Arroyo de la Delfe (Pajarito	Aluminum
Maintenance			Canyon to headwaters)	Mercury
				Gross Alpha
TA-60 Asphalt Batch Plant	60-ABP-1	NM-9000.A_042	Mortandad Canyon (within	Aluminum
TA-3-0034 Metal Shop	3-MST-1		LANL)	Copper
TA-60 Roads and Grounds	60-RG-1			
				Gross Alpha
		NM-9000.A_047	Sandia Canyon (Sigma Canyon	PCBs
TA-3-38 Metals Fab Shop	3-MFS-1		to NPDES outfall 001)	Aluminum
TA-3-22 Power & Steam Plant	3-PSP-1			Copper
TA-3-22 Power & Steam Plant	3-PSP-5			Gross Alpha
TA-3-22 Power & Steam Plant	3-PSP-8			Mercury
TA-3-66 Sigma Complex	3-Sigma-6			
TA-60-1 Heavy Equipment Yard	60-HEY-2			
TA-60 MRF	60-MRF-1			
TA-60 Roads and Grounds	60-RG-3			
TA-60 Roads and Grounds	60-RG-8			
TA-60-2 Warehouse	60-WH-1			

Stormwater MSGP for Industrial Activities Program	No. ENV-CP-QAPP-MSGP, R5	Page 39 of 40
	Effective Date: 11/04/2013	

#### ATTACHMENT 6 - ANALYTES BY INDUSTRIAL SECTOR

Permitted Facility	Monitored Outfall	Sector	Activity	Analyte	Monitoring Requirement
TA-3-0034 Metal Shop	3-MST-1	AA	Fabricated Metals	Aluminum	Quarterly Benchmark Monitoring (QBM)
TA-3-38 Metals Fab Shop	3-MFS-1			Iron	QBM
TA-3-39 & 102 Metal Shop	3-TS-1			Nitrate plus Nitrite Nitrogen	QBM
				Zinc	QBM
TA-60 Asphalt Batch Plant	60-ABP-1	D	Asphalt Paving	Oil and Grease	Effluent Limitations Guidelines (ELG)
				рН	ELG
				Total Suspended Solids	QBM and ELG
TA-3-66 Sigma Complex	3-Sigma-6	F	Primary Metals	Copper	QBM
				Zinc	QBM
TA-54 Area G	54-G-1	K	Treatment, Storage or Disposal Facility (TSD)	Ammonia	QBM
TA-54 Area G	54-G-2			Arsenic	QBM
TA-54 Area G	54-G-3			Cadmium	QBM
TA-54 Area G	54-G-4			Chemical Oxygen Demand	QBM
TA-54 Area L	54-L-1			Cyanide	QBM
TA-54 RANT	54-RANT-1			Lead	QBM
				Magnesium	QBM
				Mercury	QBM
				Selenium	QBM
				Silver	QBM
TA-60 MRF	60-MRF-1	N	Scrap Recycling	Aluminum	QBM
				Chemical Oxygen Demand	QBM
				Copper	QBM
				Iron	QBM
				Lead	QBM
				Total Suspended Solids	QBM
				Zinc	QBM
TA-3-22 Power & Steam Plant	3-PSP-1	0	Steam Electric Power	Iron	QBM
	3-PSP-5				
	3-PSP-8				

Stormwater MSGP for Industrial Activities Program	No. ENV-CP-QAPP-MSGP, R5 Page 40 of 40		
	Effective Date: 11/04/2013		

#### ATTACHMENT 7 - REFERENCES AND GUIDANCE DOCUMENTS

- 40 CFR 122, EPA Administered Permit Programs
- 40 CFR 136, Guidelines Establishing Test Procedures for the Analysis of Pollutants.
- Clean Water Act, Title 33 U.S.C. 1251
- DOE O 414.1C, Quality Assurance
- DOE Order 450.1, Environmental Protection Program
- DOE Order 5400.5, Radiation Protection of Public and Environment
- EPA QA/G-4, Guidance for the Data Quality Objectives Process

#### **LANL Documents:**

- P322-4, Laboratory Performance, Feedback, and Improvement
- P328-3, Management Assessments
- P328-4, Management Observation and Verification
- P330-6, Nonconformance Reporting
- P330-8, Inspection and Test for Acceptance
- P340, Conduct of Engineering
- P341, Engineering Process Manual
- P401, Procedure to Identify, Communicate, and Implement Environmental Requirements
- P407, Water Quality
- P840-1, Procurement Quality

#### **ENV Documents:**

- ENV-DO-QP-105, Preparation, Review, and Approval of Procedures
- ENV-DO-QP-106, Document Control
- ENV-DO-QP-113, Tracking Performance Feedback and Actions
- ENV-DO-QP-115, Personnel Training
- ENV-CP-QP-022, MSGP Storm Water Corrective Actions
- ENV-CP-QP-044, Preparing Storm Water Discharge Monitoring Reports (MDNRs) for NPDES MSGP
- ENV-CP-QP-047, Inspecting Storm Water Runoff Samplers and Retrieving Samples
- ENV-CP-QP-048, Processing MSGP Storm Water Samples
- ENV-CP-QP-064, Multi-Sector General Permit Storm Water Visual Inspections
- ENV-WQH-QP-029, Creating and Maintaining a Chain of Custody
- Surface Water Monitoring Plan, October 2001, Rev. 0.0

## ATTACHMENT 16: EPC-CP-QP-023, MSGP ROUTINE FACILITY INSPECTIONS

EPC-CP-QP-023	Revision: <b>0</b>	Los Alamos
Effective Date: 05/17/2018	Next Review Date: 05/17/2021	NATIONAL LABORATORY

## **Environment, Safety, and Health Directorate**

# **Environmental Protection and Compliance Division – Compliance Programs**

# **Quality Procedure**

Name:

# **MSGP Routine Facility Inspections**

#### **Document Owner/Subject Matter Expert:**

Signature:

Organization:

Holly L. Wheeler	EPC-CP	Signature on File	5-10-18					
	Derivative Classifier: Unclassified or DUSA ENVPRO							
Name:	Organization:	Signature:	Date:					
Jacob Meadows	EPC-CP	Signature on File	5-15-18					
	Approval S	ignatures:						
Subject Matter Expert:	Organization:	Signature:	Date:					
Holly L. Wheeler	EPC-CP	Signature on File	5-10-18					
Responsible Line Manager:	Organization:	Signature:	Date:					
Terrill W. Lemke	EPC-CP, Team Leader	Signature on File	5-17-18					
Responsible Line Manager	Organization	Signature:	Date:					
Taunia S. Van Valkenburg	EPC-CP, Group Leader	Signature on File	5-17-18					

This copy is uncontrolled.

Date:

Users are responsible for ensuring they work to the latest approved version. To document a required read, Login to <u>UTrain</u>, and go to the Advanced Search.

MSGP Routine Facility Inspections	EPC-CP-QP-023	Page 2 of 20
	Revision: 0	Effective Date: 05/17/2018

#### **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]
EPC-CP-QP-023 R0	05/17/2018	New Document. Process formerly part of procedure ENV-RCRA-QP-022 R2, MSGP Corrective Actions.

# MSGP Routine Facility Inspections

Revision: 0 Page 3 of 20

Effective Date: 05/17/2018

#### **Table of Contents**

Quali	ty Pro	cedure	1
Revis	ion Hi	story	2
Table	of Co	ntents	3
1.0	Intro	duction	4
	1.1	Purpose	4
	1.2	Scope	4
	1.3	Applicability	4
2.0	Role	s and Responsibilities	4
	2.1	EPC-CP MSGP Stormwater Team	5
	2.2	Deployed Environmental Professionals	5
	2.3	EPC-CP Stormwater Permitting and Compliance Team Leader	ε
	2.4	EPC-CP Group Leader	6
	2.5	DESHS Manager	6
3.0	Prec	autions and Limitations	6
4.0	Prere	equisite Actions	7
	4.1	Planning and Coordination	7
	4.2	Tools and Equipment	7
5.0	MSG	P Routine Facility Inspections	7
	5.1	Conducting the Inspection	g
	5.2	Completing the Inspection Form in MC Express	11
	5.3	Completing the Inspection Form on Hardcopy	12
	5.4	Completing the Certification Statement	12
6.0	Trair	ing	13
7.0	Reco	rds	13
8.0	Defir	nitions and Acronyms	13
	8.1	Definitions	13
	8.2	Acronyms	14
9.0	Refe	rences	
10.0		chments	
Attac		t 1: Screenshot Example of EPC-CP-Form-1020, MSGP Routine Facility Inspection in MC Express	
		t 2: Crosswalk of EDC-CD-Earm-1020 MSGD Poutine Eggility Inspection to Hard Conv Format	

MSGP Routine Facility Inspections	EPC-CP-QP-023	Page 4 of 20
	Revision: 0	Effective Date: 05/17/2018

#### 1.0 INTRODUCTION

The National Pollutant Discharge Elimination System (NPDES) Multi-Sector General Permit (MSGP), also referred to as the permit, (Tracking Number NMR053195) contains specific environmental requirements for inspecting areas of Los Alamos National Laboratory (LANL) covered by the permit. This includes areas where industrial materials or activities are exposed to stormwater, areas identified as potential pollutant sources, areas were leaks and spills have occurred in the past three years, discharge points, and control measures used to comply with the effluent limits of the MSGP.

Los Alamos National Security, LLC (LANS) inspectors and facility personnel are required to perform routine facility inspections for industrial stormwater discharge on LANL areas covered by the MSGP at least quarterly and document observations. Conditions (as described by the MSGP) found during an inspection, requiring a corrective action(s), are managed through EPC-CP-QP-022, MSGP Corrective Actions.

#### 1.1 Purpose

Parts 3.1 and 3.1.2 of the MSGP contain specific requirements for conducting and documenting periodic industrial routine facility inspections. This procedure governs the activities of LANS personnel involved in conducting industrial routine facility inspections. It also contains information and specific steps to be used for identifying and documenting conditions in order to meet the permit requirements.

#### 1.2 Scope

Requirements set forth in this document apply to LANS personnel responsible for meeting the permit conditions on behalf of LANL industrial facilities covered by the MSGP. The MSGP requires periodic inspection of facilities and identification, documentation, and reporting of conditions, including those requiring corrective actions.

Inspections conducted under this procedure are 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 the inspection.)

#### 1.3 Applicability

This procedure applies to Environmental Protection and Compliance-Compliance Programs (EPC-CP) technical staff, Deployed Environmental Professionals (DEPs), and subcontractor personnel (as applicable) who conduct inspections and monitoring activities at MSGP regulated LANL facilities.

#### 2.0 ROLES AND RESPONSIBILITIES

Specific roles and responsibilities for implementation of requirements contained in the MSGP are provided below.

MSGP Routine Facility Inspections	EPC-CP-QP-023	Page 5 of 20
	Revision: 0	Effective Date: 05/17/2018

#### 2.1 EPC-CP MSGP Stormwater Team

EPC-CP MSGP Stormwater personnel are fully knowledgeable of the specific regulatory requirements identified in the MSGP and are responsible for the following:

- Implementing this procedure;
- Performing routine facility inspections the last month or quarter of the year at regulated sites [depending on inspection frequency identified in site-specific Stormwater Pollution Prevention Plans (SWPPPs)];
- Performing "no exposure" site inspections once a year to ensure conditions of the "no exposure" exclusion are met;
- Performing routine facility inspections at inactive sites once a year;
- Identifying issues requiring a corrective action during any of the above inspections or assessments;
- Determining a condition of non-compliance;
- Notifying managers, or legal counsel of non-compliances;
- Modifying the site-specific MSGP Routine Facility Inspection Form to add new Best Management Practices (BMPs) or decommission retired ones;
- Training personnel to use MC Express;
- Performing a quality review of routine facility inspections and "no exposure" site inspections submitted in Maintenance Connection (MC); and
- Assisting customers with issues associated with MC Express.

#### 2.2 Deployed Environmental Professionals

DEPs are responsible for the following.

- Implementing this procedure;
- Being educated (i.e., knowledgeable) of the requirements contained in site-specific SWPPPs within their assigned Facility Operations Directorate (FOD);
- Meeting qualification requirements identified in the Quality Assurance Project Plan EPC-CP-QAPP-MSGP, Stormwater Multi-Sector General Permit for Industrial Activities Program;
- Being trained on EPC-CP-QP-022, Multi-Sector General Permit (MSGP) Corrective Actions;
- Being trained on UTrain course number 53040, MSGP Routine Inspections OJT;
- Being familiar with industrial site and facility operations assigned to them so that they
  minimize sources of pollutants and pro-actively maintain controls to prevent issues that
  require corrective action;
- Performing routine facility inspections, either monthly or quarterly throughout the year at regulated sites within their FOD [depending on inspection frequency identified in site-

MSGP Routine Facility	EPC-CP-QP-023	Page 6 of 20
Inspections	Revision: 0	Effective Date: 05/17/2018

specific Stormwater Pollution Prevention Plans (SWPPPs)] and documenting results accurately;

- Acting as liaison between the FOD, Deployed Environment, Safety, and Health Services (DESHS) Manager and facility/operations personnel to ensure corrective actions are addressed appropriately by overseeing maintenance and/or installation of additional controls;
- Educating appropriate facility/operations personnel on the MSGP and site-specific SWPPPs so they successfully implement the conditions of the permit; and
- Notifying EPC-CP MSGP stormwater personnel when additional or substitute BMPs have been installed or old BMPs have been removed so the site-specific MSGP Routine Facility Inspection Form can be modified.

# 2.3 EPC-CP Stormwater Permitting and Compliance Team Leader

The EPC-CP Stormwater Permitting and Compliance Team Leader is responsible for compliance oversight relative to the MSGP. The Team Leader ensures adequate resources needed to implement the regulatory requirements identified in the MSGP are identified and environmental risks are assessed. The Team Leader will notify upper management of these required resources or environmental risks, as deemed necessary. In the event there is a dispute regarding the regulatory requirements contained in the MSGP, the Team Leader makes the final determination of the required action. The Team Leader notifies upper management of instances of non-compliance with the permit.

# 2.4 EPC-CP Group Leader

The EPC-CP Group Leader or designee is responsible for ensuring there are adequate resources to implement the regulatory requirements identified in the MSGP. The Group Leader or Team Lead also acts as the duly authorized signatory that certifies the Annual Report, MSGP Routine Facility Inspections, or "no exposure" site inspections conducted by EPC-CP personnel. The Group Leader notifies upper management of instances of non-compliance with the permit or other identified environmental risk.

# 2.5 DESHS Manager

The DESHS manager works with programmatic entities and the FOD to identify adequate resources for their industrial facilities to ensure permit requirements can be implemented. The DESHS Manager is responsible for the performance of DEPs under their management and to maintain trained and qualified DEPs. They also provide oversight by ensuring that industrial facilities complying with the MSGP and will notify upper management of instances of non-compliance with the permit or other identified environmental risk.

#### 3.0 PRECAUTIONS AND LIMITATIONS

The hazard rating for the activities described in this procedure is **LOW** and therefore, does not require an IWD.

MSGP Routine Facility	EPC-CP-QP-023	Page 7 of 20
Inspections	Revision: 0	Effective Date: 05/17/2018

Field 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).

# 4.0 PREREQUISITE ACTIONS

# 4.1 Planning and Coordination

- 1. Schedule work to be completed by the target date appearing on the inspection or as requested by the MSGP program lead if an inspection is not issued.
- Inform (e.g., by e-mail) facility contacts (as needed) of the schedule for facility 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 (as necessary).
- 3. Obtain any necessary additional paperwork before conducting this work, including SWPPPs and maps (as necessary).

# 4.2 Tools and Equipment

Ensure the following equipment is available.

- Sturdy hiking boots or steel toed shoes with soles that grip and other facility specific PPE as needed
- Cell phone (Only government cell phones are allowed in secure areas. See <a href="https://int.lanl.gov/policy/documents/P217.pdf">https://int.lanl.gov/policy/documents/P217.pdf</a> for requirements for using portable electronic devices on Laboratory property.)
- Copy of this procedure
- Copy of facility specific SWPPP and map(s) (as needed)
- Current electronic or paper inspection form EPC-CP-Form-1020, MSGP Routine Facility Inspection
- LANS issued tablet or notebook style computer with Safari web browser and Blackberry
   UEM™ app (see <a href="https://int.lanl.gov/policy/documents/P217.pdf">https://int.lanl.gov/policy/documents/P217.pdf</a> for requirements for using
   portable electronic devices on Laboratory property)
- Necessary access keys

#### 5.0 MSGP ROUTINE FACILITY INSPECTIONS

MSGP routine facility inspections are conducted by the DEP or other qualified facility personnel (as defined in the MSGP or as determined by MSGP program lead) during periods when the facility is in operation and during standard operating hours. The inspections are performed on the following facility areas:

• Areas where industrial materials or activities are exposed to stormwater;

MSGP Routine Facility	EPC-CP-QP-023	Page 8 of 20
Inspections	Revision: 0	Effective Date: 05/17/2018

- Areas identified in the SWPPP and those that are potential pollutant sources;
- Areas where spills and leaks have occurred in the past;
- Discharge points; and
- Control measures used to comply with the effluent limits contained in the MSGP.

Routine facility inspections are conducted at least quarterly; however, some facilities may conduct monthly inspections (as specified in the facility specific SWPPP). At least once each calendar year, the routine facility inspections must be conducted during a period when stormwater discharge (either rain or snow) is occurring. During the inspection you must look for the following:

- 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, 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 need replacement, maintenance or repair.

Conditions requiring corrective action identified during an inspection, monitoring, or other means must be entered into the MSGP Corrective Action Report database by the DEP(s), EPC-CP stormwater personnel and/or other qualified facility personnel (as defined in the MSGP or as determined by MSGP program lead). Follow the process in EPC-CP-QP-022, *MSGP Corrective Actions* to address issues found during an inspection.

If the industrial facility is inactive and unstaffed and there are no industrial materials or activities exposed to stormwater, routine inspections may not be required. A determination of whether a facility is inactive or unstaffed is made in coordination with stormwater personnel from EPC-CP as there are specific documentation and certification requirements that have to be met prior to discontinuing routine inspections. Such a facility is only required to conduct an annual site inspection.

If the industrial facility is eligible for a "no exposure" exclusion routine inspections are no longer required. A condition of "no exposure" exists when all industrial materials and activities are protected by a storm resistant shelter (e.g., moved to an indoor location) to prevent exposure to rain, snow, snowmelt, and/or runoff. A determination of whether a facility is eligible for "no exposure" status is made in coordination with stormwater personnel from EPC-CP as there are specific documentation and certification requirements that have to be met prior to discontinuing routine inspections. Such a facility is only required to conduct an annual site evaluation and recertification every five years.

MSGP Routine Facility	EPC-CP-QP-023	Page 9 of 20
Inspections	Revision: 0	Effective Date: 05/17/2018

# 5.1 Conducting the Inspection

See Attachment 1 for screen shot examples of EPC-CP-Form-1020, MSGP Routine Facility Inspection in MC Express. See Attachment 2 for a crosswalk of the inspection form in hard copy format.

Some terminology varies between the MC Express software and the Maintenance Connection desktop software. 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.

If the inspector needs space, additional comments can be entered in the "Labor Report" field (see Section 5.2) when the work order is updated to "Complete" status in MC Express. If completing a hard copy enter additional comments in the "Labor Report" field at the bottom of the form.

- 1. Use the Internet Explorer web browser on a tablet or similar portable computer and navigate to <a href="http://express.maintenanceconnection.com">http://express.maintenanceconnection.com</a>. Log into the MC Express application using your login credentials.
- 2. Open the inspection form for the location to be inspected and select "Tasks" to navigate to the Tasks page.

**Note:** Each item number listed in red font below corresponds to a numbered box on both screen shots (Attachment 1) and hard copy format (Attachment 2).

3. Item 1: Observe the weather at time of inspection. Describe the weather and record the temperature in the "Comments" field. Document this task is or is not completed by clicking the expand arrow located on the right side of the task line and changing the "Complete" or "Failed" line to "Yes".

#### **CAUTION**

Click the "Save" bar after entries for a task line have been completed and before proceeding to the next question. Failure to "Save" results in lost data entries.

- 4. Item 2: Observe and document the facility is free of **new** discharges of pollutants **since the last inspection** 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 new discharges and the specific location in the "Comments" field of the task line.
- 5. Item 3: If the response to Item 2 is "Complete" click the expand arrow located on the right side of this task line and change the "N/A" line to "Yes". If the response to Item 2 is "Failed" document any CAR previously initiated for the discharge by clicking the expand arrow located on the right side of the task line and changing the "Complete" or "Failed" line to "Yes".
- 6. Item 4: Observe and document the facility is free of discharges of pollutants at the time of inspection 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 pollutant discharge and the specific location in the "Comments" field of the task line.

MSGP Routine Facility	EPC-CP-QP-023	Page 10 of 20
Inspections	Revision: 0	Effective Date: 05/17/2018

- 7. Item 5: Observe and document the facility is free of evidence of pollutants entering the drainage system OR the potential for pollutants entering the drainage system 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 discharge or potential discharge and the specific location in the "Comments" field of the task line.
- 8. Item 6: Observe and document the outfall does not have any **new** evidence of erosion since the last inspection 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 erosion observed in the "Comments" field of the task line.
- 9. Item 7: Observe and document all flow dissipation devices are operating effectively and are not in need of repair 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 non-functional status of devices in the "Comments" field of the task line.
- 10. Item 8: Observe and document the outfall is free of evidence of pollutants in the discharge and/or the receiving water 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 pollutants observed in the "Comments" field of the task line.
- 11. If the location has more than one outfall, complete Steps 8 through 10 for each outfall shown on the work order.
- 12. Item 9: Observe and document each control measure is operating effectively 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 non-operational condition of the control measure (e.g., erosion, damage, etc.) and if the control measure needs maintenance, repair, or replacement in the "Comments" field of the task line.
- 13. If the location has more than one control measure complete Step 12 for each control measure shown on the work order.
- 14. Item 10: Observe and document each sector of NPDES specified industrial area/activity (e.g., metal fabrication; foundry operations; power generation; asphalt production; fabricating timber products; material recycling; warehouse and transportation activity; treatment and storage of hazardous waste) is inspected for exposure to stormwater by clicking the expand arrow located on the right side of the task line and changing the "Complete" or "Failed" line to "Yes".
  - Determine if the control measures associated with each industrial area/activity are appropriate for the activity, effectively controlling stormwater exposure, and operating. Describe any non-operational condition of the control(s) and needed maintenance or a description of corrective actions in the "Comments" field of the task line.
- 15. If the facility has more than one sector of NPDES specified industrial area/activity complete Step 14 for each industrial area/activity shown on the work order. If an industrial activity does not apply to the facility click the expand arrow located on the right side of the task line and change the "N/A" line to "Yes".

MSGP Routine Facility	EPC-CP-QP-023	Page 11 of 20
Inspections	Revision: 0	Effective Date: 05/17/2018

- 16. Item 11: Observe and document the facility is free of discharges of any non-compliance not documented elsewhere on the inspection form 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 additional incidences of non-compliance in the "Comments" field of the task line.
- 17. Item 12: Observe and document the facility meets the MSGP requirements with existing control measures by clicking the expand arrow located on the right side of the task line and changing the "Complete" to "Yes". If additional control measures are needed to comply with the Permit, clicking the expand arrow located on the right side of the task line and changing the "Failed" to "Yes" and describe the control measures in the "Comments" field of the task line.
- 18. When all task lines have been completed, make sure you have clicked the "Save" bar at the bottom of the page.
- 19. 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.

Always log out of MC Express when you have finished work OR if work is interrupted.

# 5.2 Completing the Inspection Form in MC Express

See Attachment 1 for screen shot examples of EPC-CP-Form-1020, MSGP Routine Facility Inspection in MC Express.

1. 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.

- 2. Item 13: 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 autopopulated are the date and time the on-site field inspection was completed (not the date/time the form was filled out).
  - 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.
- 3. Item 14: The inspector types 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 be documented in the "Labor Report Update" section.
- 4. 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.
- 5. **Item 15**: Capture an electronic signature by drawing with a finger on the tablet screen. The field inspector is certifying that the information submitted is "true, accurate, and complete" by electronically signing work order.

MSGP Routine Facility	EPC-CP-QP-023	Page 12 of 20
Inspections	Revision: 0	Effective Date: 05/17/2018

**Note:** If using MC Express on a desktop screen (not a tablet), the mouse is used to draw a signature.

- 6. Click on the "Save" bar at the bottom of the page to close the "Signature" field.
- 7. Click on the "Back" button located in the upper left hand corner to return to the "My Open Work Orders" page.
- 8. Once you have completed an inspection, click on the Menu button again, and then click the "Logout" bar. Close the browser. All work will be 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 interrupted.

# 5.3 Completing the Inspection Form on Hardcopy

See Attachment 2 for a crosswalk of EPC-CP-Form-1020, MSGP Routine Facility Inspection to hard copy format.

- Item 13: Write in the date and time the inspection was completed and not the date/time
  the form was filled out. If an inspection needs to be performed over multiple days, note
  the date and time the inspection began in the Labor Report field.
- 2. Item 14: The field inspector prints his/her name.
- 3. Item 15: The field inspector reviews the inspection form for accuracy and certify that the information submitted is "true, accurate, and complete" by signing his/her name and dating when the form was signed.

# 5.4 Completing the Certification Statement

Follow Steps 1 through 5 in this section if the inspection form was completed electronically (see Attachment 1). If the inspection form was completed on a hard copy form skip to Step 6.

- Using the Internet Explorer web browser on a desktop computer, navigate to
   <a href="http://www.maintenanceconnection.com">http://www.maintenanceconnection.com</a>. 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.
- 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" subtab.
- 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.

MSGP Routine Facility	EPC-CP-QP-023	Page 13 of 20
Inspections	Revision: 0	Effective Date: 05/17/2018

- 6. Item 16: Obtain a printed name and title, signature, and date on the certification statement. The routine facility inspection form must be certified with a signature from a manager that meets the definition of a signatory in MSGP Permit Section B.11.A (e.g., FOD, Operations Manager, DSESH Group Leader, EPC-CP Group Leader, EPC-CP Team Lead). The manager is certifying the information submitted is "true, accurate, and complete" by signing the form.
- 7. Attach the completed, signed, and certified inspection form to the facility SWPPP.

#### 6.0 TRAINING

The following personnel require training before implementing this procedure.

- DESHS Group and Team Leaders
- EPC-CP MSGP stormwater compliance personnel
- DEPs
- Other LANL or subcontract personnel identified as being required to conduct stormwater assessments as part of their job duties

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.

- EPC-CP QAPP-MSGP Quality Assurance Project Plan for the Stormwater Multi-Sector General Permit for Industrial Activities
- EPC-CP-QP-022, Multi-Sector General Permit (MSGP) Corrective Actions
- Training Course 53040, MSGP Routine Inspections OJT

#### 7.0 RECORDS

MSGP Routine Facility Inspection forms are signed and certified by individual facilities. These completed forms are maintained in the facility's SWPPP and managed by the facility's document management system. The MSGP team may obtain a copy for reference purposes.

# 8.0 DEFINITIONS AND ACRONYMS

See LANL Definition of Terms.

# 8.1 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).

MSGP Routine Facility	EPC-CP-QP-023	Page 14 of 20
Inspections	Revision: 0	Effective Date: 05/17/2018

**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.

# 8.2 Acronyms

See LANL Acronym Master List.

EPC-CP	Environmental Protection and Compliance – Compliance Programs
DEP	Deployed Environmental Professional
DESHS	Deployed Environment, Safety, and Health Services
IWD	Integrated Work Document
FOD	Facility Operations Director
LANL	Los Alamos National Laboratory
LANS	Los Alamos National Security, LLC
MC	Maintenance Connection
MC Express	Maintenance Connection Express
MSGP	Multi-Sector General Permit
NPDES	National Pollutant Discharge Elimination System
SWPPP	Stormwater Pollution Prevention Plan

### 9.0 REFERENCES

Federal Register, Final National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges from Industrial Activities. Federal Register: June 16, 2015, Volume 80, Number 115.

#### 10.0 ATTACHMENTS

**Attachment 1:** Screenshot Example of EPC-CP-Form-1020, MSGP Routine Facility Inspection in MC Express

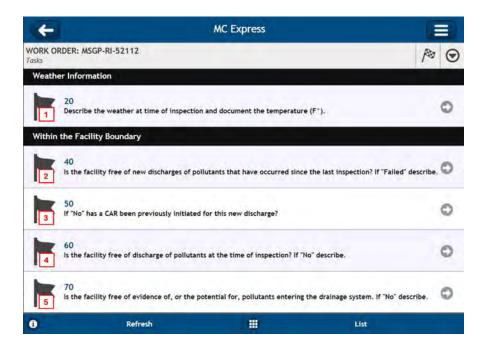
**Attachment 2:** Crosswalk of EPC-CP-Form-1020, MSGP Routine Facility Inspection to Hard Copy Format

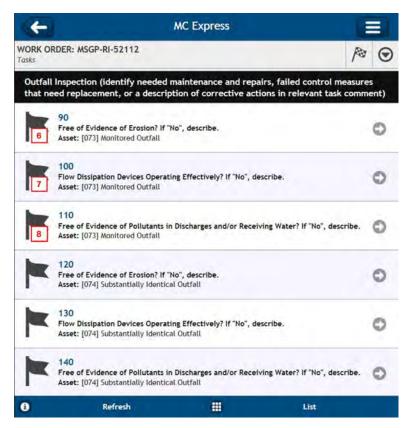
<b>MSGP</b>	Routine	<b>Facility</b>
Inspec	tions	-

EPC-CP-QP-023	Page 15 of 20
Revision: 0	Effective Date: 05/17/2018

# ATTACHMENT 1: SCREENSHOT EXAMPLE OF EPC-CP-FORM-1020, MSGP ROUTINE FACILITY INSPECTION IN MC EXPRESS

Page 1 of 3



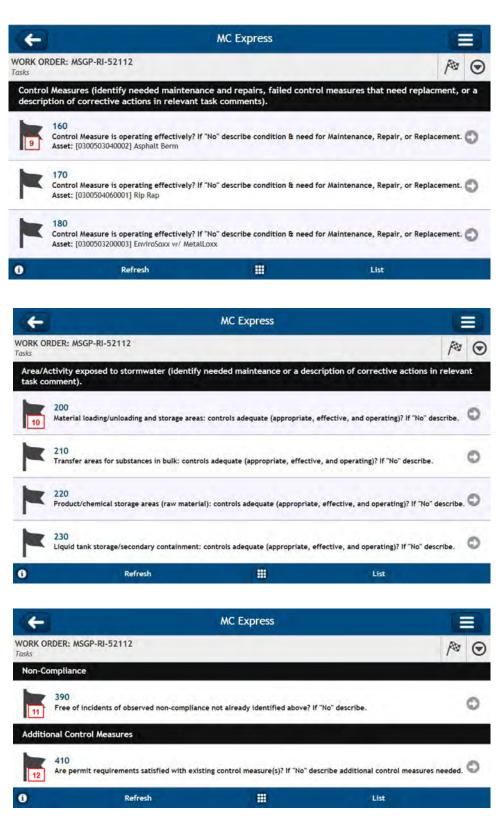


<b>MSGP</b>	Routine	<b>Facility</b>
Inspec	tions	•

EPC-CP-QP-023	Page 16 of 20
Revision: 0	Effective Date: 05/17/2018

# ATTACHMENT 1: SCREENSHOT EXAMPLE OF EPC-CP-FORM-1020, MSGP ROUTINE FACILITY INSPECTION IN MC EXPRESS (CONT.)

Page 2 of 3



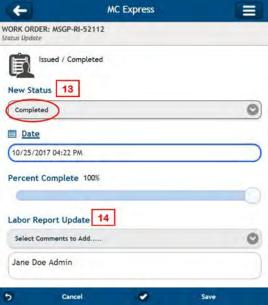
<b>MSGP</b> Routine	<b>Facility</b>
Inspections	_

EPC-CP-QP-023	Page 17 of 20
Revision: 0	Effective Date: 05/17/2018

# ATTACHMENT 1: SCREENSHOT EXAMPLE OF EPC-CP-FORM-1020, MSGP ROUTINE FACILITY INSPECTION IN MC EXPRESS (CONT.)

Page 3 of 3







# MSGP Routine Facility Inspections

EPC-CP-QP-023 Page 18 of 20

Revision: 0 Effective Date: 05/17/2018

# ATTACHMENT 2: CROSSWALK OF EPC-CP-FORM-1020, MSGP ROUTINE FACILITY INSPECTION TO HARD COPY FORMAT

Page 1 of 3

d utaliana a	National Lab - AD	ESH		VVork Or Printed 10/25/20	MSG	P Routin	e Insp
/laintenance D	Details						
Requested By: Taken By: Procedure:	Admin, Jane on 10/25/2014:03:00 PM Admin, Jane MSGP Routine Facility Inspection (EPC-CP- Form-1020.1)	17Target: Priority/T ype: Department.	12/31/2020 / Inspection Utilities and Infrastructure	MSGP Program  RG121.9  TA-3-38 Carpe  Contact: Admin, Phone: 685-1	nter Sho Jane	Þ	
Last PM:	N/A			Priorie. Goo-	e94		
	MPLE MSGP Routine Facili	ity Inspection					
Special Instructi		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
asks							
# Descri	A. C. C.			Meas	No	N/A	Yes
		spection and do	curnent the temperature (F°)		п	To.	
Within the Facil	ity Boundary		that have occurred since the	last	-		
40 inspec	tion? If "Failed" describe.	V 10 10 accounts		18.00		П	П
	o" has a CAR been previou		The second secon				
			time of inspection? If "No" de or, pollutants entering the dra			-Fi	
	m. If "No" describe.	or the potential in	or politicants entering the dia		П	П	Г
	on (identify needed mainter orrective actions in relevan		s, failed control measures th	at need replacement	or a		
	ored Outfall [073] Free of	100	sion? If "No", describe.		F	D	6
	ored Outfall [073] Flow Dis		s Operating Effectively? If "N	0",	П	п	п
		Evidence of Poll	utants in Discharges and/or F	Receiving	-		_
	? If "No", describe. antially Identical Outfall [07:	41 Free of Evi	dence of Erosion? If "No", de	scribe		+	+
Substa	antially Identical Outfall [07- describe.		nation Devices Operating Effe		Е	Б	-
Substantially Identical Outfall [074] Free of Evidence of Pollutants in Discharges and/or Receiving Water? If "No", describe			П	п	П		
	res (identify needed mainte orrective actions in relevan		rs, failed control measures th	at need replacment,	or a		
160 descri	be condition & need for Ma	intenance, Repa			П	Б	D
170 condit	ion & need for Maintenance	Repair, or Rep			Д	П	П
EnviroSoxx w/ MetalLoxx [0300503200003] Control Measure is operating effectively7 If  180 "No" describe condition & need for Maintenance, Repair, or Replacement.			п	Е	П		
comment).			teance or a description of co		evant tas	sk	
200 and or	perating)? If "No" describe.		ntrols adequate (appropriate,	2,52,5	Б	Б	
210 operat	ting)? If "No" describe.		equate (appropriate, effective ontrols adequate (appropriate		Е	П	П
	oerating)? If "No" describe.	raw material). Co	antions adequate (appropriate	ellective.	- 17		

# MSGP Routine Facility Inspections

EPC-CP-QP-023 Page 19 of 20

Revision: 0 Effective Date: 05/17/2018

# ATTACHMENT 2: CROSSWALK OF EPC-CP-FORM-1020, MSGP ROUTINE FACILITY INSPECTION TO HARD COPY FORMAT (CONT.)

Page 2 of 3

230	Liquid tank storage/secondary containment controls adequate (appropriate, effective, and operating)? If "No" describe	Б	D	J
240	Industrial processing and finished product storage areas: controls adequate (appropriate, effective, and operating)? If "No" describe.	П	E	Г
250	Equipment operation and maintenance areas: controls adequate (appropriate, effective, and operating)? If "No" describe.	T	П	Г
260	Fueling areas: controls adequate (appropriate, effective, and operating)? If "No" describe.	Е	П	Г
270	Outdoor vehicle and equipment washing areas: controls adequate (appropriate, effective, and operating)? If "No" describe.	П	П	Г
280	Machinery: controls adequate (appropriate, effective, and operating)? If "No" describe.		-D	Г
290	Waste handling and disposal areas: controls adequate (appropriate, effective, and operating)? If "No" describe.	П	П	Г
300	Erodible areas/construction: controls adequate (appropriate, effective, and operating)? If  "No" describe.	Г		Г
310	Locations and sources of run-on to the site: controls adequate (appropriate, effective, and operating)? If "No" describe.	П	E	Г
320	Non-stormwater/illicit connections: controls adequate (appropriate, effective, and operating)? If "No" describe.	п	Ď	Г
330	Salt storage piles or pile containing salt: controls adequate (appropriate, effective, and operating)? If "No" describe.	П	n	Г
340	Dust generation and vehicle tracking: controls adequate (appropriate, effective, and operating)? If "No" describe.	Г	П	T
350	Housekeeping (Industrial materials/residues/trash in contact with stormwater): controls adequate (appropriate, effective, and operating)? If "No" describe.		П	ı
360	Leaks and spills: controls adequate (appropriate, effective, and operating)? If "No" describe.	п	Ĥ	Г
370	Sector A [03005-] Wood processing, transport or treated wood storage areas: controls adequate (appropriate, effective, and operating)? If "No" describe.	п	п	Γ
Von-C	ompliance			
390	Free of incidents of observed non-compliance not already identified above? If "No" describe.		Б	I
Additio	nal Control Measures			
410	Are permit requirements satisfied with existing control measure(s)? If "No" describe additional control measures needed.	п	D	Г
ahor F	Report			
	The second secon			
Comple	eted: 10/25/2017 10:08:00 AM			
Report	Jane Doe Admin			
	fan D Ada n 10/25/2017			
confirm	Signature / Name Signature / Name n the information as recorded is true, accurate and complete		Date	
	II DIE INVINIENCH SE INVINEN IS UNE, SUCULOR SIN VOIDPICK.			

EPC-CP-Form-1020.1 03/2018

MSGP Routine Facility	EPC-CP-QP-023	Page 20 of 20
Inspections	Revision: 0	Effective Date: 05/17/2018

# ATTACHMENT 2: CROSSWALK OF EPC-CP-FORM-1020, MSGP ROUTINE FACILITY INSPECTION TO HARD COPY FORMAT (CONT.)

Page 3 of 3

#### 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:	
	- C-2
Signature:	Date:

EPC-CP-Form-1020.1 03/2018

# ATTACHMENT 17: EPC-CP-QP-022, MSGP CORRECTIVE ACTIONS

EPC-CP-QP-022	Revision: <b>3</b>
Effective Date: 12/20/2018	Next Review Date: 12/20/21



Environment, Safety, Health, and Quality, Safeguards and Security Directorate

Environmental Protection and Compliance Division – Compliance Programs

Quality Procedure

# **MSGP Corrective Actions**

# **Document Owner/Subject Matter Expert:**

Name:	Organization:	Signature:	Date:	
Holly Wheeler	EPC-CP	Signature on File	12-19-18	
Derivative Classifier:   Unclassified				
Name:	Organization:	Signature:	Date:	
Jacob Meadows	EPC-CP	Signature on File	12-19-18	

# **Approval Signatures:**

Subject Matter Expert:	Organization:	Signature:	Date:
Holly Wheeler	EPC-CP	Signature on File	12-19-18
Responsible Line Manager:	Organization:	Signature:	Date:
Terrill Lemke	EPC-CP Team Leader	Signature on File	12-20-18
Responsible Line Manager	Organization	Signature:	Date:
Taunia Van Valkenburg	EPC-CP Group Leader	Signature on File	12-20-18

This copy is uncontrolled.

Users are responsible for ensuring they work to the latest approved version. To document a required read, Login to <u>UTrain</u>, and go to the Advanced Search.

MSGP Corrective Actions	EPC-CP-QP-022	Page 2 of 31
	Revision: 3	Effective Date: 12/20/2018

# **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]
0	08/10	New Document.
1	11/10	Incorporated EPC-CP-QP-062 MSGP Routine Inspections into this document.
2	01/13	Biennial revision, new template implemented.
EPC-CP-QP-022 R3	12/202018	Revision to reflect new 2015 MSGP requirements. New procedure format was used and organizational changes made. This document replaces ENV-RCRA-QP-022, R2, which was split into EPC-CP-QP-023, R0, MSGP Industrial Stormwater Routine Facility Inspections, and EPC-CP-QP-022, R3, MSGP Corrective Actions.

# **MSGP Corrective Actions**

EPC-CP-QP-022 Page 3 of 31

Revision: 3 Effective Date: 12/20/2018

# **Table of Contents**

Revis	ion Hi	istory	2
Table	of Co	ontents	3
1.0	Intro	duction	5
	1.1	Purpose	5
	1.2	Scope	5
	1.3	Applicability	5
2.0	Prec	autions and Limitations	5
3.0	Prere	equisite Actions	6
	3.1	Planning and Coordination	6
	3.2	Tools and Equipment	6
4.0	Role	s and Responsibilities	6
	4.1.	EPC-CP MSGP Stormwater Personnel	
	4.2	Deployed Environmental Professionals	7
	4.3	EPC-CP Storm Water Team Leader	8
	4.4	EPC-CP Group Leader	8
	4.5	DESH Manager	8
	4.6	Facilities Operations Director	9
5.0	Proc	ess Description	9
	5.1	Identifying Conditions Requiring Corrective Actions	9
	5.2	Corrective Action Deadlines and Documentation	10
		5.2.1 Immediate Action	10
		5.2.2 Subsequent Action	11
		5.2.3 Corrective Action Documentation	11
	5.3	Effect of Corrective Action	
	5.4	Substantially Identical Outfalls	13
	5.5	Spills	13
	5.6	Allowable Non-Stormwater Discharges	13
	5.7	Entering a Condition Requiring Corrective Action	14
	5.8	Updating Corrective Actions	18
	5.9	Validation of Corrective Actions	
	5.10	Issues Management	19
	5.11	Notifications for New and Overdue Corrective Actions	19
6.0	Trair	ning	20
7.0	Reco	ords	20
8.0	Defir	nitions and Acronyms	21
	8.1	Definitions	21
	8.2	Acronyms	21
9.0	Refe	rences	22
10.0	Atta	chments	23
	Atta	chment 1 – Screenshot Example of CAR Database	24
	Atta	chment 2 – Lists of Limited Values in the CAR Database	27
	Atta	chment 3 – Example New Corrective Action Finding Notification	29

MSGP Corrective Actions	EPC-CP-QP-022	Page 4 of 31
	Revision: 3	Effective Date: 12/20/2018

Attachment 4 – Example Weekly Notification of Outstanding Corrective Action Findings	30
Attachment 5 – Example Outstanding Corrective Action Report	31

MSGP Corrective Actions	EPC-CP-QP-022	Page 5 of 31
WISGF Corrective Actions	Revision: 3	Effective Date: 12/20/2018

### 1.0 INTRODUCTION

The National Pollutant Discharge Elimination System (NPDES) Multi-Sector General Permit (MSGP) contains specific environmental requirements for identifying, implementing, documenting and reporting conditions requiring corrective actions. Laboratory personnel (the Deployed Environmental Professionals (DEPs) and Environmental Protection and Compliance Division — Compliance Programs (EPC-CP) Storm Water Team (also referred to as EPC-CP MSGP stormwater personnel) are required to perform routine facility inspections and document all conditions requiring corrective actions found on an inspection form (see EPC-CP-QP-023). Conditions requiring corrective actions can be identified during facility walk-downs, normal daily operations, and/or analytical data evaluations, and can be identified by facility personnel, the DEP or EPC-CP MSGP stormwater personnel.

# 1.1 Purpose

This procedure governs the activities of Laboratory personnel working at Los Alamos National Laboratory (LANL) involved in identifying, implementing, documenting and entering a condition requiring corrective action, including a permit limit exceedance, into the MSGP Corrective Action Report (CAR) Findings database or CAR database. Part 4.4 of the MSGP contains specific documentation requirements relative to corrective actions. This procedure satisfies these requirements.

# 1.2 Scope

Requirements set forth in this document apply to personnel responsible for meeting the permit conditions on behalf of LANL industrial sites covered by the MSGP. This permit requires periodic inspection of sites and identification, implementation, documentation, tracking and reporting of conditions requiring corrective actions.

# 1.3 Applicability

This procedure applies to the EPC-CP MSGP stormwater personnel and DEPs who conduct stormwater inspections and monitoring activities at permitted MSGP sites within LANL.

#### 2.0 PRECAUTIONS AND LIMITATIONS

- 2.1 The hazard level for field activities and office work described in this procedure is a **LOW hazard** rating and does not require an Integrated Work Document (IWD).
- 2.2 Inspections or walk-downs 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 open burning).

MSGP Corrective Actions	EPC-CP-QP-022	Page 6 of 31
Wisdr Corrective Actions	Revision: 3	Effective Date: 12/20/2018

### 3.0 PREREQUISITE ACTIONS

# 3.1 Planning and Coordination

DEPs and EPC-CP MSGP stormwater personnel require a CAR database user account (<a href="https://msgp-car.lanl.gov/forms/frmservlet?config=msgp-car">https://msgp-car.lanl.gov/forms/frmservlet?config=msgp-car</a>). Facility Operations Directors (FODs), Deployed Environment, Safety, and Health (DESH) Managers and Operations (Ops) Managers can request a read-access account by contacting the EPC-CP MSGP data administrator for access.

# 3.2 Tools and Equipment

Tools and equipment for documenting inspections and updating the CAR database include the following:

- LANS issued tablet or notebook style computer with Safari web browser and Blackberry
   UEM™app. (see <a href="https://int.lanl.gov/policy/documents/P217.pdf">https://int.lanl.gov/policy/documents/P217.pdf</a> for requirements on using portable electronic devices on Laboratory property), and
- Access to the CAR database.

Tools and equipment for field work associated with performing inspections and site walk-downs are listed below.

- Sturdy hiking boots or steel or composite toed shoes with soles that grip (some sites require steel or composite toed shoes).
- Safety glasses if required by site.
- Cell phone (only government cell phones with batteries removed are allowed in secure areas.) See <a href="https://int.lanl.gov/policy/documents/P217.pdf">https://int.lanl.gov/policy/documents/P217.pdf</a> for requirements on using portable electronic devices on Laboratory Property.)
- Copy of this procedure.
- Copy of facility specific Stormwater Pollution Prevention Plan (SWPPP) and map(s) (as needed).
- Necessary access.
- Stockpile of temporary stormwater controls (Best Management Practices [BMPs], e.g., inlet protection, absorbent pads for spills, gravel bags, S-Fence, wattles, etc.)

#### 4.0 ROLES AND RESPONSIBILITIES

Specific roles and responsibilities for implementation of requirements contained in the MSGP are provided below.

### 4.1 EPC-CP MSGP Stormwater Personnel

EPC-CP MSGP stormwater personnel will be fully knowledgeable of the specific regulatory requirements identified in the MSGP. Additional responsibilities are listed below.

MSGP Corrective Actions	EPC-CP-QP-022	Page 7 of 31
WISGF COTTECTIVE ACTIONS	Revision: 3	Effective Date: 12/20/2018

- Implement this procedure;
- Oversee the corrective action process;
- Identify conditions requiring corrective action during internal routine facility inspections, "no exposure" assessments, and/or facility walk-downs performed by them, or during evaluation of monitoring data when permit limits are exceeded;
- Perform a quality review of conditions requiring corrective action submitted in the CAR database;
- Notify managers and/or legal counsel of non-compliances;
- Assist DEPs and other customers with issues associated with the CAR database;
- Prepare and submit 45-day exceedance notification to Region 6, Environmental Protection Agency (EPA) containing information provided by the DEP;
- Prepare and submit the Annual Report summarizing all conditions requiring corrective action for the year in EPA's electronic NPDES eReporting tool (NeT);
- Prepare management requested metrics relative to conditions requiring corrective action;
- Provide information to the Issues Management Coordinator (IMC) for entering water quality exceedances and other permit violations into the Issues Management (IM) tool; and
- Train personnel to use the CAR database.

#### 4.2 Deployed Environmental Professionals

DEPs will be fully knowledgeable of the site-specific SWPPP for their assigned sites and corrective action requirements identified in the MSGP. In addition, they shall be appropriately trained to meet the job qualifications identified in the *Quality Assurance for Stormwater Multi-Sector General Permit for Industrial Activities Program* (ENV-CP-QAPP-MSGP) and shall be familiar with the regulatory requirements identified in the MSGP, demonstrated by achieving a satisfactory score on the *MSGP Routine Facility Inspections* on-the-job training course #53040. Further, they shall be familiar with facility operations and controls to minimize potential pollutant sources and proactively maintain controls in an attempt to prevent conditions that require corrective action.

The DEPs are responsible for implementing this procedure. They will identify conditions requiring corrective actions observed at their industrial sites and enter them into the CAR database. DEPs act as liaison between the FOD, DESH Manager and facility/operations personnel to ensure all corrective actions are addressed appropriately by overseeing maintenance and/or installation of additional controls, as needed. DEPs are responsible for ensuring corrective action(s) is completed per MSGP requirements and the corrective action timeline (see Sections 5.2.1 and 5.2.2 of this procedure). They will also provide timely updates to the CAR database for closure or update of corrective actions as they are implemented.

When permit limits are exceeded, DEPs are responsible for identifying the source and maintaining existing controls or implementing additional controls, as necessary, to prevent further exceedances.

MSGP Corrective Actions	EPC-CP-QP-022	Page 8 of 31
WISGF Corrective Actions	Revision: 3	Effective Date: 12/20/2018

If the DEP or EPC-CP MSGP stormwater personnel determine that additional controls are necessary, or that existing controls are insufficient and require replacement with a different type of control, the DEPs are responsible for the selection and oversight of proper installation of appropriate control measures per guidance provided in the <u>LANL Stormwater BMP Manual</u>.

DEPs will notify the EPC-CP MSGP data administrator or MSGP Program Lead of key personnel changes (FOD, DESH Manager, Ops Manager, DEP) to ensure automated CAR status notifications are distributed to the appropriate personnel.

#### **CAUTION**

# Failure to appropriately control pollutant discharges can result in fines and penalties.

Implementing the same control measure numerous times without an improvement in minimization of off-site pollutants is an indication that the control measure is not stringent enough to meet Technology-Based or Water Quality-Based effluent limits identified in the MSGP. Per the MSGP, documentation is required in the SWPPP that justified the selection, design, installation and implementation of a control measure to ensure effluent limits are met.

#### 4.3 EPC-CP Storm Water Team Leader

The EPC-CP Storm Water Team Leader (or team leader) is responsible for compliance oversight relative to the MSGP. The team leader will ensure resources needed to implement the regulatory requirements identified in the MSGP are identified and environmental risks are assessed. Upper management will be notified of these resources 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.

## 4.4 EPC-CP Group Leader

The EPC-CP Group Leader or designee is responsible for ensuring there are adequate resources to implement the regulatory requirements identified in the MSGP. The group leader also acts as the duly authorized signatory that certifies the Annual Report or Routine Facility Inspections conducted by EPC-CP personnel. The group leader will notify upper management of instances of non-compliance with the permit or other identified environmental risk.

### 4.5 DESH Manager

The DESH Manager shall work with programmatic entities and the FOD to identify resources for their industrial sites to ensure permit requirements can be implemented. The DESH Manager is responsible for the performance of DEPs under their management. They also provide oversight for ensuring that industrial sites are complying with the MSGP and are responsible for notifying upper management of instances of non-compliance with the permit or other identified environmental risk they become aware of.

MSGP Corrective Actions	EPC-CP-QP-022	Page 9 of 31
WISGF Corrective Actions	Revision: 3	Effective Date: 12/20/2018

# 4.6 Facilities Operations Director

The FOD provides organizational leadership to ensure that all facility and programmatic activities under their authority are performed in compliance with the MSGP. The FOD is also responsible for establishing an environmental compliance envelope. It is the FOD's responsibility to maintain trained and qualified DEPs and Waste Management Coordinators (WMCs) on staff.

#### 5.0 PROCESS DESCRIPTION

Requirements regarding corrective actions are described in Part 4 of the MSGP. These requirements and conditions are summarized in this section and directly correspond to data fields and lists of values available in the CAR database.

# 5.1 Identifying Conditions Requiring Corrective Actions

# **Deployed Environmental Professional (DEP)**

- [1] <u>IF</u> any of the following conditions are identified, <u>THEN</u> review and revise, as appropriate, the selection, design, installation, and implementation of control measures in the SWPPP to eliminate the condition and prevent recurrence in the future:
  - An unauthorized release or discharge (e.g., spill, leak, or discharge of nonstormwater not authorized by the MSGP [see Section 5.6 of this procedure for a description of allowable discharges]);
  - 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 MSGP;
  - It is observed during the routine facility inspection, facility walk-down, and/or the quarterly visual assessment 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 stormwater from the facility, or significantly increases the quantity of pollutants discharged;
  - 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;
  - If effluent limitation guidelines are exceeded at the Asphalt Batch Plant (Sector D); or
  - If impaired water quality standards are exceeded.

MSGP Corrective Actions	EPC-CP-QP-022	Page 10 of 31
WISGF Corrective Actions	Revision: 3	Effective Date: 12/20/2018

# **DEP and/or EPC-CP MSGP stormwater personnel**

[2] Enter all conditions requiring a corrective action into the EPC-CP MSGP CAR database.

# **DEP and/or Facility Personnel**

- [3] Take immediate action to mitigate the condition requiring a corrective action.
- [4] If needed, follow the permit timeline and process for individual corrective actions that require extensive maintenance.
- [5] Any person authorized to conduct work at LANL can identify a potential stormwater issue. If this occurs, they will:
  - [a] Contact the DEP or EPC-CP MSGP stormwater personnel.
  - [b] The DEP or EPC-CP MSGP stormwater personnel will determine if a condition exists that requires a corrective action.

#### 5.2 Corrective Action Deadlines and Documentation

Specific deadlines for taking corrective action and required documentation are provided in the subsections below.

#### 5.2.1 Immediate Action

# **DEP and/or Facility Personnel**

- [1] <u>IF</u> a condition exists that requires corrective action, as described in Section 5.1 [1], <u>THEN</u> take the following action immediately (on the same day the condition is found):
  - [a] All reasonable steps necessary to minimize or prevent the discharge of pollutants until a permanent solution is installed and made operational.
  - [b] Clean up any contaminated surfaces so that material will not discharge during subsequent storm events.
  - [c] Minimize or prevent the discharge of pollutants until a permanent solution (if necessary) is installed and made operational.
  - [d] Any corrective action resulting in a change to a stormwater control or procedure (documented in the SWPPP) requires modification of the SWPPP within 14 calendar days of completing corrective action work.

#### NOTE

For minor conditions, immediate action is often sufficient and no additional action is necessary.

[2] <u>IF</u> a condition is identified at a time in the work day when it is too late to initiate corrective action (i.e., 3:00 pm or later), <u>THEN</u>:

MSGP Corrective Actions	EPC-CP-QP-022	Page 11 of 31
	Revision: 3	Effective Date: 12/20/2018

- [a] Corrective action must begin no later than the following work day.
- [b] Implement the requirements identified in Section 5.2.1 [1] above.

#### **CAUTION**

Solely calling or e-mailing personnel requesting action to be taken is not considered taking immediate action. Entering a Facility Service Request (FSR) is appropriate if it formally starts the work process to address the condition. Temporary BMPs still need to be put in place to minimize or prevent off-site migration of pollutants, especially if a storm event is likely.

# 5.2.2 Subsequent Action

# **DEP and/or Facility Personnel**

[1] IF additional action is required,

### THEN:

- [a] Complete the corrective action (e.g., install a new or modified control and make it operational or complete the repair) before the next storm event or within 14 calendar days from the time of discovery.
- [b] Any corrective action resulting in a change to a stormwater control or procedure documented in the SWPPP requires modification of the SWPPP within 14 calendar days of completing corrective action work.
- [2] <u>IF</u> completion of the corrective action is <u>infeasible</u> within the 14-day timeframe, **THEN**:
  - [a] Document the reasoning in the database.
  - [b] Provide a schedule for completion of the corrective action in the database.

#### NOTE

Completion of the corrective action cannot exceed 45 days from the time of discovery without having to notify EPA. These time intervals are not grace periods, but are schedules considered reasonable for documenting finding(s) and for making repairs and improvements. They are included in the MSGP to ensure that the conditions prompting the need for these repairs and improvements are not allowed to persist indefinitely. In no instance will the corrective action remain open indefinitely (Part 4.3.2 of the MSGP).

### 5.2.3 Corrective Action Documentation

# **DEP and/or EPC-CP**

[1] Document existence of any of the conditions listed in Section 5.1 [1] of this procedure in the CAR database within 24 hours of becoming aware of such condition (or if identified late in the work day, by the following work day).

MSGP Corrective Actions	EPC-CP-QP-022	Page 12 of 31
WISGF Corrective Actions	Revision: 3	Effective Date: 12/20/2018

- [2] Include the following information in the documentation:
  - Description of the condition triggering the need for corrective action review. For any spills or leaks, include the following information:
    - a description of the incident including material, date/time, amount, location, and reason for spill;
    - o any leaks, spills or other releases that resulted in discharges of pollutants to waters of U.S., through stormwater or otherwise;
  - Date the condition was identified; and
  - Description of immediate actions taken (Part 4.3.1 of the MSGP) to minimize or prevent the discharge of pollutants. For any spills or leaks, include response actions, the date/time clean-up was completed, notifications made (if any), and staff involved. Also include any measures taken to prevent the reoccurrence of such releases (Part 2.1.2.4 of the MSGP).
- [3] Provide the dates when each corrective action was initiated and completed (or is expected to be completed).
  - [a] If applicable, document why it is infeasible to complete the necessary installations or repairs within the 14-day timeframe, and
  - [b] Document your schedule for installing the controls and making them operational as soon as practicable after the 14-day timeframe.
  - [c] <u>IF</u> EPA must be notified regarding an extension of the 45-day timeframe, **THEN** the DEP must document the rationale for an extension.

## **EPC-CP MSGP stormwater personnel**

[4] Prepare and submit 45-day exceedance notifications based on information entered into the CAR database by the DEPs.

# **DEP**

- [5] Ensure that the information in the CAR database is kept up-to-date, to include the following:
  - [a] a thorough description of the nature of the condition requiring corrective action,
  - [b] corrective action(s) taken and/or outstanding,
  - [c] the steps and schedule for completing a corrective action (if not completed within 14 days), and
  - [d] rationale for why the corrective action cannot be completed within 45-days.

#### 5.3 Effect of Corrective Action

When the condition requiring corrective action is a permit violation (e.g., non-compliance with an effluent limit or exceedance of a water quality standard), correcting it does not remove the original

MSGP Corrective Actions	EPC-CP-QP-022	Page 13 of 31
	Revision: 3	Effective Date: 12/20/2018

violation. Additionally, failing to take corrective action in accordance with Part 4 of the MSGP is an additional permit violation.

#### NOTE

The EPA will consider the appropriateness and promptness of corrective action in determining enforcement responses to permit violations (Part 4.5 of the MSGP).

# 5.4 Substantially Identical Outfalls

When the condition requiring corrective action is associated with an outfall that has been identified as a "substantially identical outfall" (see Parts 3.2.3 and 6.1.1 or the MSGP), a review will assess the need for corrective action for all related substantially identical outfalls. Any necessary changes to control measures that affect these other outfalls will be made before the next storm event if possible, or as soon as practicable following that storm event. Any condition requiring corrective action(s) will be addressed within the timeframes set forth in Part 4.3 of the MSGP (also see Section 5.2 of this procedure).

### 5.5 Spills

# **DEP and/or Facility Personnel**

- [1] Clean up all leaks or spills immediately and enter into the CAR database.
  - [a] If the spill is immediately cleaned up, and controls are implemented to prevent further leakage, the condition requiring corrective action can be closed.

# 5.6 Allowable Non-Stormwater Discharges

The following are allowable non-stormwater discharges authorized by the MSGP:

- Discharges from emergency/unplanned fire-fighting activities;
- Fire hydrant flushing;
- Potable water, including water line flushing;
- 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 fertilizer 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 wash waters do not come into contact with oil and grease deposits, sources of pollutants associated with industrial activities (see Part 5.2.3 of the MSGP), or any other toxic or hazardous materials, unless residues are first cleaned up using dry clean-up methods (e.g., applying absorbent

MSGP Corrective Actions	EPC-CP-QP-022	Page 14 of 31
	Revision: 3	Effective Date: 12/20/2018

material 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 of 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 or drains).

# 5.7 Entering a Condition Requiring Corrective Action

To enter a condition requiring corrective action into the CAR database, perform the steps in this section.

Enter clear, complete, and concise language. Correct grammar, punctuation, and spelling errors.

Select the appropriate value from each pull-down menu that applies to the condition requiring corrective action. This information will be used to populate a report that will be submitted to the EPA and is extracted from the database to populate automatic e-mail notifications to managers. Therefore, it is critical that all information entered into the CAR database is correct.

# **DEP or EPC-CP MSGP stormwater personnel**

- [1] Using internet explorer, access the CAR database at <a href="https://msgp-car.lanl.gov/forms/frmservlet?config=msgp">https://msgp-car.lanl.gov/forms/frmservlet?config=msgp</a> car.
- [2] From the main screen, click on "Enter New Corrective Action."
  - [a] Select the "Corrective Action Header" tab.
  - [b] Enter the following (refer to Attachment 1 for data entry screenshot cross reference to Item numbers in red listed below):
    - Item 1: Name of facility by clicking on the "List" tab and selecting a facility (refer to Attachment 2 for a list of available facilities).
    - Item 2: Date/Time problem was identified (mm/dd/yyyy hh:mm) (the inspection date or the date you first become aware of the issue).

There must be a space between the date (mm/dd/yyyy) and the time (hh:mm).

All dates and times will be entered as mm/dd/yyyy hh:mm in 24-hr (military time) format. Time is tracked to document whether immediate action was taken, whether the issue was documented within 24 hours, and the specific time interval before a corrective action is completed and closed (see Section 5.2 of

MSGP Corrective Actions	EPC-CP-QP-022	Page 15 of 31
	Revision: 3	Effective Date: 12/20/2018

this procedure for corrective action deadlines). Do not leave time as 00:00 (the system default) unless the action occurred at midnight.

- Item 3: Date/Time of Notification to EPC-CP (mm/dd/yyyy hh:mm) (the date the condition is entered into the CAR database or verbal or written notification is provided to the EPC-CP MSGP Program Lead. Conditions reported by verbal or written notification must still be entered into the CAR database.)
  - The existence of any of the conditions listed in Section 5.1 of this procedure must be documented in the CAR database within 24 hours of becoming aware of such condition (or if identified late in the work day, by the following work day).
- Item 4: FOD Responsible for CA (Name & Org) by clicking in the box. FOD designations (for example "STO") and the associated name list will pop up. Select the appropriate FOD.
  - Contact the EPC-CP MSGP Program Lead at 667-1312 or <a href="https://hbenson@lanl.gov">hbenson@lanl.gov</a> if the FOD name or organization is incorrect, so this can be corrected.
- Item 5: Describe Specific Evaluation Location (for example, "Northeast corner of Building TA-3-66.")
- Item 6: Inspector Z-Number by clicking in the box, which will populate with the Z number of the person who is logged into the database and performing entry. In most instances, the DEP will be identified as the inspector.
- Item 7: Person Identifying Condition Z-Number by clicking in the box, which will populate with the Z number of the person who is logged into the database and performing entry. If the person identifying the condition is someone other than the inspector, enter that person's Z-number.
  - Any person authorized to conduct work at LANL can identify a potential stormwater issue. If this occurs, they will contact the DEP or EPC-CP MSGP stormwater personnel who will determine if a condition exists that requires corrective action.
- Item 8: Status defaults to "A new corrective action" without making a selection. In the event a condition is entered that is determined to not require corrective action, this status can be changed to "Void" by clicking in the box and selecting from the Status list. The decision to assign a status of "Void" is at the discretion of EPC-CP MSGP stormwater personnel and reserved for EPC-CP use.
- Item 9: If the Status is changed to "Void," enter a clear rationale for voiding the record.
- Item 10: 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" meaning the form cannot be saved unless these fields are completed. For the purpose of fulfilling

MSGP Corrective Actions	EPC-CP-QP-022	Page 16 of 31
	Revision: 3	Effective Date: 12/20/2018

corrective action documentation requirements (see Section 5.2.3 of this procedure), all applicable fields are required fields.

The system will automatically assign a Corrective Action Report identification (ID) number and move to the "Corrective Action Details" tab.

- [c] Select the "Corrective Action Details" tab.
- [d] Enter the following:
  - Item 11: Identify the condition triggering the need for this review by clicking on the "List" button and selecting the appropriate condition or, if none of the available conditions fit the issue, selecting "Other" and entering a description of the condition (refer to Attachment 2 for a list of available conditions/finding descriptions).

These conditions are described in Section 5.1 of this procedure. Qualified personnel (EPC-CP MSGP stormwater personnel and DEPs) must be knowledgeable of these conditions and select the correct one when entering an issue. If there is uncertainty about which condition applies, refer to the definitions in Section 8.1 of this procedure or contact the MSGP Program Lead at 667-1312 or <a href="mailto:hbenson@lanl.gov">hbenson@lanl.gov</a> for clarification prior to selecting "Other."

- Item 12: If the condition in Item 11 is set to "Other," enter a description of the condition in this field.
- Item 13: 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 (e.g., at TA-60 Roads and Grounds).
  - Spills or other emergency conditions meeting the criteria for corrective action (identified in Parts 4.1 and 4.2 of the MSGP) will require documentation in the CAR database even though the condition was not identified during an inspection.
- Item 14: Enter how the problem was identified by clicking on the "List" button and selecting the appropriate option, or if none of the available options fit, selecting "Other."
- Item 15: If "Other" is selected for Item 14, enter a description of how the problem was identified in this field.
- Item 16: Enter a description of the condition requiring corrective action, or
  identify action to be taken to eliminate or further investigate the problem (e.g.,
  describe modifications or repairs to control measures, work conducted to
  address the condition or to be scheduled in the future, etc.,) or if no
  modifications are needed, the basis for that determination. Include relevant
  dates and facts when updating this field as the corrective action progresses.
- Item 17: Indicate whether the problem was identified at a Substantially Identical Outfall (see Section 5.4 of this procedure) by typing "Y" for yes and "N" for no.

<b>MSGP Correct</b>	tive Actions
---------------------	--------------

EPC-CP-QP-022	Page 17 of 31
Revision: 3	Effective Date: 12/20/2018

- Item 18: If the answer to Item 17 is "Y," enter the associated SIO(s) in this field. If the answer to Item 17 is "N," leave this field blank. SIOs are identified in the site-specific SWPPPs. For assistance with identifying SIOs contact the MSGP Program Lead.
- Item 19: If the answer to Item 17 is "Y," describe how the corrective action taken is appropriate for all SIOs (see Section 5.4 of this procedure), document any additional corrective action(s) needed for any of the SIOs, or document why no additional action is needed for the SIOs. If the answer to Item 17 is "N," leave this field blank.
- Item 20: Did/will the corrective action require modification to the SWPPP? Type in "Y" for yes and "N" for no (see Section 5.1 of this procedure for conditions that require SWPPP review and revision).
- Item 21: Date/Time Corrective Action was initiated (mm/dd/yyyy hh:mm).

The duration between the Date/Time problem was identified and Date/Time corrective action was initiated is used to determine whether "immediate action" was taken (see Section 5.2.1 of this procedure). Immediate action is a requirement of the MSGP and therefore, will be documented in accordance with permit requirements.

• Item 22: Date/Time corrective action was completed **OR** expected completion Date/Time (mm/dd/yyyy hh:mm).

If the corrective action has not been completed, enter an expected completion date and time. The system will not allow entry of a date in both locations.

The duration between the Date/Time Problem was Identified and Date/Time corrective action was completed <u>or</u> the Date/Time Problem was identified and expected completion Date/Time is used to determine whether "subsequent action" timeframes and documentation requirements were/are being met, and to forecast where a 45-day exceedance notification to EPA is required (see Section 5.2.3 of this procedure). When information is incorrect or not entered, the MSGP data administrator or Program Lead will contact the originator and request correction(s).

- Item 23: If the corrective action is not or will not be completed within 14 days, provide the status of the corrective action at the end of the 14 day timeframe, the rationale for why it is infeasible to complete the corrective action within 14 days, and describe any remaining steps (including timeframe/schedule associated with each step) necessary to complete the corrective action.
- Item 24: Date EPA notified of intent to exceed 45 Days (mm/dd/yyyy hh:mm) is to be completed by EPC-CP MSGP stormwater personnel to document submittal of notification letter.
- Item 25: Once all of the above information is entered correctly, click "Save" so the corrective action information is retained.

MSGP Corrective Actions	EPC-CP-QP-022	Page 18 of 31
	Revision: 3	Effective Date: 12/20/2018

[3] <u>IF</u> there are additional conditions to enter requiring corrective action, as described in Section 5.1 [1],

**THEN** perform these steps:

- [a] Return to the "Corrective Action Header" tab.
- [b] Click the "Enter New Corrective Action" button in the lower left hand corner of the screen.
- [c] Click "Back to Record Selection" to return to the list of saved conditions requiring corrective action on the initial screen (if desired).

# 5.8 Updating Corrective Actions

# **DEP or EPC-CP MSGP stormwater personnel**

- [1] Access the CAR database at <a href="https://msgp-car.lanl.gov/forms/frmservlet?config=msgp">https://msgp-car.lanl.gov/forms/frmservlet?config=msgp</a> car.
  - [a] On the main screen, scroll down to the corrective action number to be edited.
  - [b] Click "Edit."
- [2] Navigate to the desired field, and input the updated information. Most changes will occur relative to updating the status, schedule, and dates of corrective actions.
- [3] Click "Save" to save all changes to the information.

#### 5.9 Validation of Corrective Actions

#### **EPC-CP MSGP stormwater personnel**

- [1] Access the CAR database at <a href="https://msgp-car.lanl.gov/forms/frmservlet?config=msgp">https://msgp-car.lanl.gov/forms/frmservlet?config=msgp</a> car.
- [2] Ensure information entered into the CAR database is correct.
  - [a] Check all entered fields for a condition requiring corrective action to ensure that information is clear, correct, and concise.
  - [b] <u>IF</u> not, <u>THEN</u> notify the DEP of the information that needs to be changed.
  - [c] The DEP is responsible for ensuring all information is validated before generating the annual report.
- [3] <u>IF</u> the identified condition requiring corrective action is a repeat of a previous condition or if it is determined not to be a condition requiring corrective action,

#### THEN

- [a] Under "Status," select "Void."
- [b] The "Void" designation allows MSGP stormwater personnel to manually exclude this information in the annual report.

MSGP Corrective Actions	EPC-CP-QP-022	Page 19 of 31
	Revision: 3	Effective Date: 12/20/2018

# 5.10 Issues Management

EPC-CP MSGP stormwater personnel or DEPs use the IM tool as the institutional performance issues and tracking system for identified quality assurance (QA) affecting issues. A QA affecting issue includes, but is not limited to, the following conditions.

- Exceedance of a water quality standard.
- Exceedance of an effluent limitation (i.e., at the Asphalt Batch Plant).
- Repeat conditions requiring corrective actions or trends identified by EPC-CP MSGP stormwater personnel.
- Conditions requiring immediate action, where failure to take action would result in pollutants being released to waters of the state.
- Immediate non-compliance with the MSGP.
- Violations identified by the regulatory authority.

The MSGP Program Lead periodically evaluates a summary of open conditions requiring corrective actions in the CAR database. Using the above conditions, the MSGP Program Lead or DEP determines which corrective actions, if any, will be transferred into the IM tool.

# **DEP or EPC-CP MSGP stormwater personnel**

- [1] <u>IF</u> an issue needs to be entered into the IM tool, THEN send the following information to the EPC Division IMC for entry into the IM tool:
  - Organization responsible for the issue/problem;
  - A description of the nature of the condition identified and what needs to be done to address it;
  - Regulatory citation for the non-compliance;
  - Issues Responsible Manager (IRM);
  - Action, actionee, and due date for each issue; and
  - Whether the issue was identified internal or external to LANL.

# 5.11 Notifications for New and Overdue Corrective Actions

- [1] When a new condition requiring corrective action is entered into the CAR database, the FOD, Ops Manager, DESH Manager, inspector (usually the DEP) and EPC-CP MSGP stormwater personnel and managers are notified automatically by e-mail on the evening of the day the corrective action was entered.
- [2] Automated e-mail notifications will be sent during the corrective action process depending on the length of time it will take to close.
- [3] A notification will be sent out:

MSGP Corrective Actions	EPC-CP-QP-022	Page 20 of 31
	Revision: 3	Effective Date: 12/20/2018

- When a new corrective action is entered into the database (see Attachment 3);
   and
- Weekly notifications of outstanding (open) corrective actions (see Attachment 4).

Each notification contains a hyperlink to a web-based report containing a list of all open issues and timeline status where final corrective actions have not been completed (see Attachment 5) by the FOD. The report contains the FOD, Facility, unique Corrective Action identification number assigned by the CAR database, the person identifying the condition, the date the issue was identified, the date corrective action was initiated, the projected completion date, and a color-coded count (corresponding to the Corrective Action deadlines in Section 5.2 of this procedure) of the number of days to take action and the number of days the issue has been open, and the issue/problem description.

These notifications serve to apprise recipients of the status of open conditions requiring corrective actions and to provide sufficient time for MSGP stormwater personnel to provide documentation to EPA at the 45-day deadline. This will assist the FOD, DESH Managers, Ops Managers, and the DEPs with keeping track of conditions requiring corrective actions.

## 6.0 TRAINING

The following personnel require training before implementing this procedure:

- EPC-CP Group Leader and Team Leader;
- EPC-CP MSGP stormwater personnel;
- DEPs; and
- Other LANL or subcontract personnel identified as being required to conduct stormwater inspections, or other assessments and enter conditions requiring corrective actions into the CAR database as part of their job duties.

For EPC-CP MSGP stormwater personnel, the training method for this procedure is "self-study" (reading). DEPs shall achieve a satisfactory score on Training Course 53040, MSGP Routine Facility Inspections OJT. Other participating groups may require training documentation pursuant to local procedures.

Personnel performing this procedure will be familiar with the most current version of the following procedure:

ENV-CP-QAPP-MSGP, Multi-Sector General Permit for Industrial Activities Program

# 7.0 RECORDS

Conditions requiring corrective actions are contained within the CAR database. DEPs will retain documentation substantiating these conditions, corrective actions, and timelines reported in the CAR database (e.g., e-mails, FSRs, Work Orders, etc., as appropriate). These documents shall be made available to EPC-CP upon request.

MSGP Corrective Actions	EPC-CP-QP-022	Page 21 of 31
WISGF Corrective Actions	Revision: 3	Effective Date: 12/20/2018

#### 8.0 DEFINITIONS AND ACRONYMS

See LANL Definition of Terms.

#### 8.1 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.

**Numeric effluent limitation**—The degree of effluent reduction attainable by the application of the best practicable control technology currently available (see 40 CFR Part 443.12). For LANL, numeric effluent limitations apply only to the Asphalt Batch Plant (Sector D) (see Table 1-1 of the MSGP). Constituents with limitations for Sector D include Total Suspended Solids, pH, and oil and grease (see Table 8.D-2 of the MSGP).

**Note:** Exceedance of a numeric effluent limitation is a violation of the MSGP (see Part 4.1 of the MSGP).

**Non-numeric effluent limitations**—Per Part 2.1.2 of the MSGP, these include minimizing exposure, good housekeeping, maintenance, spill prevention and response, erosion and sediment controls, management of runoff, salt storage controls, employee training, elimination of non-stormwater discharges, and minimizing dust generation and vehicle tracking of industrial materials.

**Unauthorized release or discharge**—The release of any liquid or solid substance (within the boundary of an MSGP site) that is not an allowable non-stormwater discharge (see Section 5.6). Examples are hydraulic oil, gasoline, diesel, powdered concrete, concrete washout, steam condensate line leaks, etc.

**Impaired water quality exceedance**—Exceedance of a New Mexico water quality standard. These standards are specified in the New Mexico Administrative Code, Title 20, Chapter 6, Part 4, *Standards for Interstate and Intrastate Surface Waters*.

**Note:** Industrial stormwater discharges must be controlled as necessary to meet applicable water quality standards within the State of New Mexico (see Part 2.2.1 of the MSGP).

# 8.2 Acronyms

See LANL Acronym Master List.

ВМР	Best Management Practice
CA	Corrective Action
CAR	Corrective Action Report
EPA	Environmental Protection Agency

MSGP Corrective Actions	EPC-CP-QP-022	Page 22 of 31
WISGF Corrective Actions	Revision: 3	Effective Date: 12/20/2018

EPC-CP	Environmental Protection and Compliance-Compliance Programs
DEP	Deployed Environmental Professional
DESH	Deployed Environmental, Safety and Health
ID	Identification
IM	Issues Management
IMC	Issues Management Coordinator
IRM	Issues Responsible Manager
IWD	Integrated Work Document
FOD	Facility Operations Director
FSR	Facility Service Request
HEY	Heavy Equipment Yard
LANL	Los Alamos National Laboratory
MSGP	Multi-Sector General Permit
N	No
NPDES	National Pollutant Discharge Elimination System
Ops	Operations
P	Procedure
PD	Program Description
QA	Quality Assurance
QP	Quality Procedure
SD	System Description
STO	Science and Technology Operations
SWPPP	Stormwater Pollution Prevention Plan
40 CFR	Title 40 of the Code of Federal Regulations
WMC	Waste Management Coordinator
Υ	Yes

# 9.0 REFERENCES

- Final National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges from Industrial Activities. Federal Register: June 16, 2015, Volume 80, Number 115.
- <u>Unites States Environmental Protection Agency (EPA) National Pollutant Discharge</u>
   Elimination System (NPDES) Multi-Sector General Permit For Stormwater Discharges
   Associated With Industrial Activity (MSGP)
- Los Alamos National Laboratory Storm Water BMP Manual

MSGP Corrective Actions	EPC-CP-QP-022	Page 23 of 31
WISGF COTTECTIVE ACTIONS	Revision: 3	Effective Date: 12/20/2018

- PD100, DOE/NNSA Approved Los Alamos National Laboratory 10 CFR 857 Worker Safety and Health program Description
- <u>SD100, Integrated Safety Management System</u>
- P101-18, Procedure for Pause/Stop Work
- EPC-CP-QP-023, MSGP Routine Facility Inspections

#### 10.0 ATTACHMENTS

Attachment 1: Screenshot Example of CAR Database

Attachment 2: Lists of Limited Values in the CAR Database

**Attachment 3:** Example New Corrective Action Finding Notification

Attachment 4: Example Weekly Notification of Outstanding Corrective Action Findings

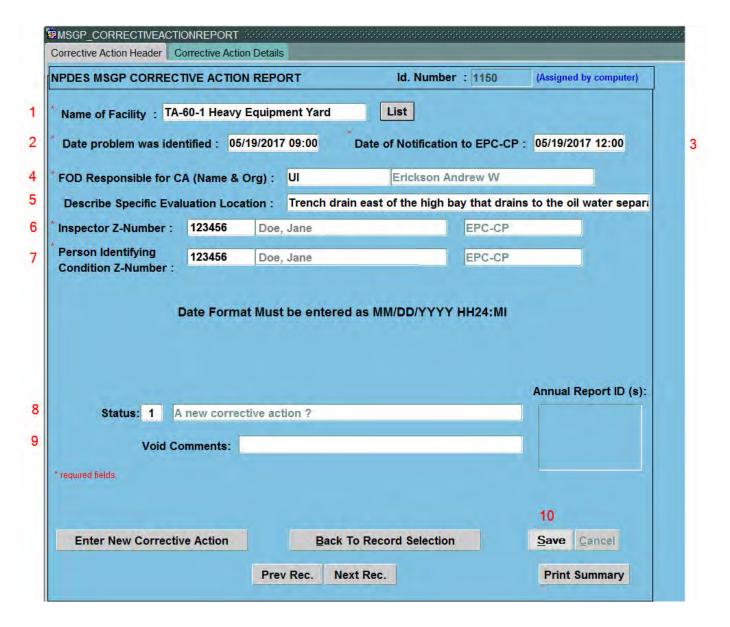
**Attachment 5:** Example Outstanding Corrective Action Report

MSGP Corrective Actions	EPC-CP-QP-022	Page 24 of 31
WISGF Corrective Actions	Revision: 3	Effective Date: 12/20/2018

# Attachment 1 - Screenshot Example of CAR Database

Page 1 of 3

### **Corrective Action Header tab**



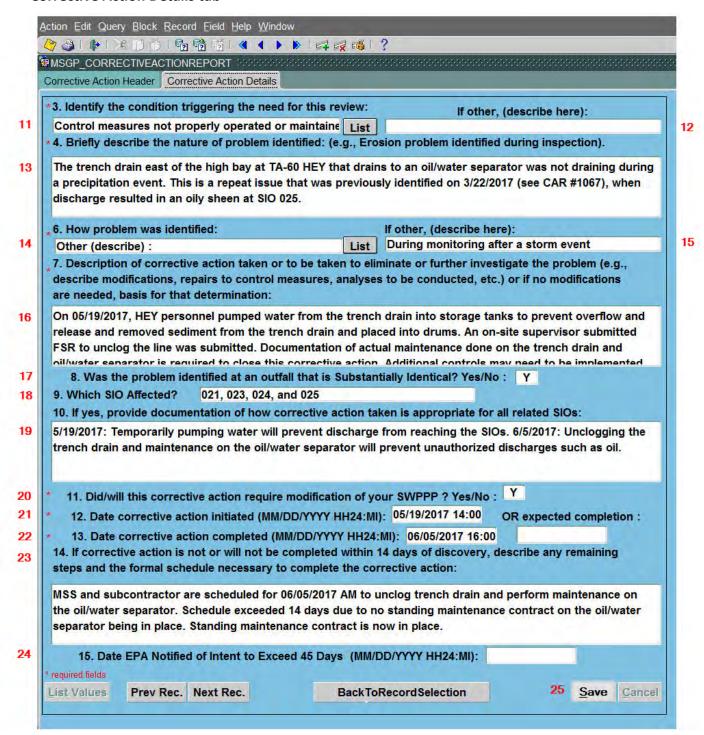
N	nc.	CD.	Car	rac	tive	۸۵	tion	
ı١	ハンに	י אי	LOF	rec	rive	$\Delta C$	TIME	16

EPC-CP-QP-022	Page 25 of 31
Revision: 3	Effective Date: 12/20/2018

# Attachment 1 - Screenshot Example of CAR Database (cont.)

Page 2 of 3

#### **Corrective Action Details tab**



MSGP Corrective Actions	EPC-CP-QP-022	Page 26 of 31
WISGF Corrective Actions	Revision: 3	Effective Date: 12/20/2018

# Attachment 1 – Screenshot Example of CAR Database (cont.)

Page 3 of 3

# Full Text for Item 16: Description of Corrective Action Taken or to be Taken

On 05/19/2017, HEY personnel pumped water from the trench drain into storage tanks to prevent overflow and release. Sediment was also removed from the trench drain and placed into drums. An on-site supervisor submitted an FSR to unclog the line. Documentation of actual maintenance done on the trench drain and oil/water separator is required to close this corrective action. Additional controls may need to be implemented until maintenance is complete to ensure that oil is not discharged into the drainage channel north of the site. In addition, the SWPPP must be modified to identify the preventative maintenance schedule and include the procedure for conducting it. On 05/30/2017, the SWPPP was modified to include a quarterly maintenance schedule and a procedure for routine maintenance on the oil/water separator. On 06/05/2017, MSS jet-routed the drain to remove the clog and a subcontractor performed maintenance on the oil/water separator.

MSGP Corrective Actions	EPC-CP-QP-022	Page 27 of 31
	Revision: 3	Effective Date: 12/20/2018

### Attachment 2 - Lists of Limited Values in the CAR Database

Page 1 of 2

# Name of Facility (Item 1 on Attachment 1 Screenshot)

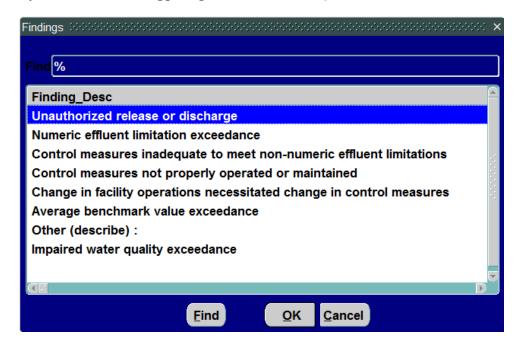


MSGP Corrective Actions	EPC-CP-QP-022	Page 28 of 31
WISGF Corrective Actions	Revision: 3	Effective Date: 12/20/2018

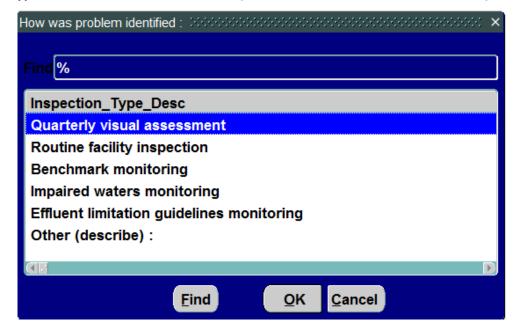
# Attachment 2 – Lists of Limited Values in the CAR Database (cont.)

Page 2 of 2

Finding Description/Condition Triggering Need for Review (Item 11 on Attachment 1 Screenshot)



Inspection Type/How Problem was Identified (Item 14 on Attachment 1 Screenshot)



# **MSGP Corrective Actions**

EPC-CP-QP-022	Page 29 of 31
Revision: 3	Effective Date: 12/20/2018

# Attachment 3 - Example New Corrective Action Finding Notification

Page 1 of 1

From: MSGPCorrectiveActionDB@esp-esh-as01.lanl.gov [mailto:MSGPCorrectiveActionDB@esp-esh-as01.lanl.gov] Sent: Friday, January 19, 2018 10:00 PM

To:

Cc:

Subject: New Corrective Action finding relative to the NPDES MSGP Program

This email is generated automatically by the National Pollutant Discharge Elimination System (NPDES) Multi-Sector General Permit (MSGP) Corrective Action Report (CAR) database to provide notification of discovery of a new condition requiring corrective action. As the recipient of this notification, you are responsible for immediately taking all reasonable steps necessary to minimize or prevent the discharge of pollutants until a permanent solution is installed and made operational.

"Immediately" requires initial action on the same day a condition is found. However, if a problem is identified at a time in the work day when it is too late to initiate corrective action (after 2 P.M.), the initiation must begin no later than the following work day.

Documentation of newly identified conditions requiring corrective action must occur within 24 hours of discovery, evidenced by entry into the

At TA-50-37 WCRRF on 01/17/18, a condition requiring a corrective action was observed and a corrective action report was generated per the 2015 Multi-Sector General Permit requirements for stormwater controls at industrial sites. The condition(s) requiring a corrective action(s) is/are listed below.

CA#: 1296 located at TA-50-37 WCRRF.

Person Identifying Condition: DOE JANE

Description of finding: Unauthorized release or discharge

Condition requiring corrective action: Forklift was leaking hydraulic fluid

Description of the corrective action taken or to be taken to eliminate the condition or further investigation: On 1/17/2018 prior tot he start of work the operator noticed the forklift was leading hydraulic fluid from the line to the mast. Approximately 4 to 6 oz leaked onto the asphalt. The Operation Center was notified and the WMC and ENV. The Nuc Operators placed spill pads under the leak. FSR#182723 was entered to repair forklift and apply microblaze. At 1702 MSS personnel applied micro blaze to the spill. On 1/18/2018 the WMC collected all spill pads and managed them accordingly.

Status: The corrective action was initiated on 01/17/2018 and was completed on 01/17/2018.

 ${\color{blue} \textbf{Click}} \ \underline{\textbf{HERE}} \ to \ access \ the \ list \ of \ MSGP \ corrective \ action(s) \ not \ yet \ completed \ for \ EWMO.$ 

Click  $\underline{\text{HERE}}$  to access the list of all MSGP corrective action(s) not yet completed.

The ESH Deployed Environmental Professional (DEP) assigned to your organization/area is (are) Jane Doe.

The color legend on the linked reports corresponds to the following schedule for corrective action completion as required by the 2015 MSGP:

#### You must complete the corrective action within 14 calendar days of discovery

If completion of final corrective actions within 14 days is not feasible, the reason(s) must be documented and a description of steps required and formal schedule for completion, which must be done as soon as practicable after the 14-day timeframe, but not longer than 45 days after discovery. The reasons, steps and schedule for completion must be entered into the CAR database.

If the completion of corrective action will exceed the 45-day timeframe, you make take the <u>minimum</u> additional time necessary, provided that you notify Region 6 of the Environmental Protection Agency:

- of your intent to exceed 45 days.
- · your rationale for an extension, and
- a completion date.

To assist the preparation of this notification, as a responsible individual, you must contact the EPC-CP Project Lead at 667-1312 for any corrective action that remains open 35 days or more, and provide a formal status of the progress for each corrective action. By day 40, the DEP must provide the EPC-CP Project Lead the rationale for potentially exceeding the required 45-day timeframe and a proposed completion date for each associated corrective action. The DEP must also amend the rationale and completion date in the CAR database.

An extension request must be submitted to Region 6 of the U.S. Environmental Protection Agency by EPC-CP personnel prior to day 45 for final corrective actions not completed or estimated to be completed within 45 days of discovery.

The responsible individual must ensure compliance with the proposed completion schedule.

These intervals are not considered grace periods, but are defined schedules to ensure the conditions requiring corrective action do not persist indefinitely.

Where corrective actions result in changes to controls or any procedures documented in the facility's Storm Water Pollution Prevention Plan (SWPPP), the DEP must modify the SWPPP accordingly within 14 calendar days of completing corrective action work.

# **MSGP Corrective Actions**

EPC-CP-QP-022	Page 30 of 31	
Revision: 3	Effective Date: 12/20/2018	

# Attachment 4 - Example Weekly Notification of Outstanding Corrective Action Findings

Page 1 of 1

From: MSGPCorrectiveActionDB@esp-esh-as01.lanl.gov [mailto:MSGPCorrectiveActionDB@esp-esh-as01.lanl.gov]
Sent: Monday, January 01, 2018 10:00 PM

To:

Cr.

Subject: Weekly Notification of Outstanding NPDES MSGP Corrective Action finding(s)

This email is generated automatically by the National Pollutant Discharge Elimination System (NPDES) Multi-Sector General Permit (MSGP) Corrective Action Report (CAR) database to provide notification of discovery of a new condition requiring corrective action. As the recipient of this notification, you are responsible for immediately taking all reasonable steps necessary to minimize or prevent the discharge of pollutants until a permanent solution is installed and made operational.

"Immediately" requires initial action on the same day a condition is found. However, if a problem is identified at a time in the work day when it is too late to initiate corrective action (after 2 P.M.), the initiation must begin no later than the following work day.

Documentation of newly identified conditions requiring corrective action must occur within 24 hours of discovery, evidenced by entry into the CAR database.

At TA-3-38 Carpenter Shop, 1 total MSGP stormwater corrective action(s) has (have) not been completed.

At TA-3-38 Metals Fab. Shop, 1 total MSGP stormwater corrective action(s) has (have) not been completed.

At TA-60-1 Heavy Equipment Yard, 7 total MSGP stormwater corrective action(s) has (have) not been completed.

At TA-60-2 Warehouse, 4 total MSGP stormwater corrective action(s) has (have) not been completed.

Click HERE to access the list of MSGP corrective action(s) not yet completed for UI.

Click HERE to access the list of all MSGP corrective action(s) not yet completed.

The ESH Deployed Environmental Professional (DEP) assigned to your organization/area is (are) Jane Doe : John Doe.

The color legend on the linked reports corresponds to the following schedule for corrective action completion as required by the 2015 MSGP:

#### You must complete the corrective action within 14 calendar days of discovery.

If completion of final corrective actions within 14 days is not feasible, the reason(s) must be documented and a description of steps required and formal schedule for completion, which must be done as soon as practicable after the 14-day timeframe, but not longer than 45 days after discovery. The reasons, steps and schedule for completion must be entered into the CAR database.

If the completion of corrective action will exceed the 45-day timeframe, you make take the minimum additional time necessary, provided that you notify Region 6 of the Environmental Protection Agency:

- of your intent to exceed 45 days,
- your rationale for an extension, and
- a completion date.

To assist the preparation of this notification, as a responsible individual, you must contact the EPC-CP Project Lead at 667-1312 for any corrective action that remains open 35 days or more, and provide a formal status of the progress for each corrective action. By day 40, the DEP must provide the EPC-CP Project Lead the rationale for potentially exceeding the required 45-day timeframe and a proposed completion date for each associated corrective action. The DEP must also amend the rationale and completion date in the CAR database.

An extension request must be submitted to Region 6 of the U.S. Environmental Protection Agency by EPC-CP personnel <u>prior to day 45</u> for final corrective actions not completed or estimated to be completed within 45 days of discovery.

The responsible individual must ensure compliance with the proposed completion schedule.

These intervals are not considered grace periods, but are defined schedules to ensure the conditions requiring corrective action do not persist indefinitely.

Where corrective actions result in changes to controls or any procedures documented in the facility's Storm Water Pollution Prevention Plan (SWPPP), the DEP must modify the SWPPP accordingly within 14 calendar days of completing corrective action work.

MSGP Corrective Actions	EPC-CP-QP-022	Page 31 of 31
WISGP COTTECTIVE ACTIONS	Revision: 3	Effective Date: 12/20/2018

# **Attachment 5 – Example Outstanding Corrective Action Report**

Page 1 of 1



# EPC-CP MultiSector General Permit (MSGP) Corrective Action Report Findings Final Corrective Actions Not Yet Complete (as of 02/01/2018)

FOD	RAD	MSGP Facility	CA#	Person Identifying Condition	Date Problem Identified	Corrective Action Initiated Date	Days to Take Action	Completion		Days Open (since	EPA Notified of Intent to Exceed 45 Days	Problem Description
UI	DOE JOHN	TA-3-38 Carpenter Shop	1298	DOE JANE	01/31/18		!	02/02/18	1	1		Tarp was totally torn off of the stack of metal posts at the southwest corner of the storage yard.
	DOE JOHN	TA-3-38 Metals Fab. Shop	1299	DOE JANE	01/31/18		·!	02/02/18	1	1		A pile of gravel (from a torn gravel bag) is directly east of the trench drain.
Total	Total Findings:								2			

Legend					
į.	Action must be taken and documented in CAR.	3	Indicates immediate action was not taken (i.e., <=2 days of discovery)		
	Within 14 days of discovery		Between 35 and 44 days of discovery		
	Between 15 and 34 days of discovery		45 days of discovery or greater		

# ATTACHMENT 18: EPC-CP-QP-064, MSGP STORMWATER VISUAL ASSESSMENT

EPC-CP-QP-064	Revision: 0	
Effective Date: 10/04/2017	Next Review Date: 10/04/2020	

Name:

Name:

Holly L. Wheeler



# **Environment, Safety, and Health Directorate Environmental Protection and Compliance-Compliance Programs Quality Procedure**

# **MSGP Stormwater Visual Assessments**

#### **Document Owner:** Date: Organization: Signature: EPC-CP Signature on File 10-2-17

#### Unclassified or DUSA ENVPRO **Derivative Classifier:** Organization: Signature: Date: Ellena I. Martinez EPC-CP Signature on File 10-2-17

# **Approval Signatures:**

Subject Matter Expert:	Organization:	Signature:	Date:
Holly L. Wheeler	EPC-CP	Signature on File	10-2-17
Responsible Line Manager:	Organization:	Signature:	Date:
Terrill W. Lemke	EPC-CP Team Leader	Signature on File	10-4-17
Responsible Line Manager:	Organization:	Signature:	Date:
Michael T. Saladen	EPC-CP Acting Group Leader	Signature on File	10-4-17

This copy is uncontrolled.

Users are responsible for ensuring they work to the latest approved version. To document a required read, Login to <u>UTrain</u>, and go to the Advanced Search.

<b>MSGP</b>	<b>Stormwater</b>	<b>Visual</b>
Assess	ments	

EPC-CP-QP-064	Page 2 of 20	
Revision: 0	Effective Date: 10/04/2017	

# **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-064, R0	7/09	New document MSGP Storm Water Visual Inspections.
ENV-RCRA -QP-064, R1	3/10	Clarifications and added attachments.
ENV-RCRA -QP-064, R2	2/12	Biennial review/revision
EPC-CP-QP-064, R0	10/04/2017	This document replaces ENV-RCRA-QP-064 R2. Converted into new format, and new organization name, clarified steps, updated attachments.

# MSGP Stormwater Visual Assessments

EPC-CP-QP-064Page 3 of 20Revision: 0Effective Date: 10/04/2017

# **Table of Contents**

Qual	ity Proced	ure	1
	-	γ	
		, nts	
1.0		ion	_
		oose	
	-	De	
	•	licability	
2.0		ns and Limitations	
3.0		ite Actions	
	•	ning and Coordination	
		ls and Equipment	
4.0	Visual Ass	sessment of Stormwater	6
		umenting Sample Information	
		essing Parameters	
		pleting the Assessment Form	
		pleting the Certification Statement	
5.0		of Stormwater Pollution	
6.0			
7.0	_		
8.0	Definition	ns and Acronyms	12
		nitions	
		pnyms	
9.0		25	
		ents	
		ent 1: Screenshot Examples of EPC-CP-Form-1021 in MC Express	
		ent 2: Crosswalk of EPC-CP-Form-1021 Hard Copy Format to Electronic Format	
		ent 3: Screenshot Examples of Printing from Maintenance Connection	

MSGP Stormwater Visual	EPC-CP-QP-064	Page 4 of 20
Assessments	Revision: 0	Effective Date: 10/04/2017

#### 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 <u>low</u>, however the cumulative hazard rating for activities described in the IWD is <u>moderate</u>.

MSGP Stormwater Visual	EPC-CP-QP-064	Page 5 of 20
Assessments	Revision: 0	Effective Date: 10/04/2017

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.

MSGP Stormwater Visual	EPC-CP-QP-064	Page 6 of 20
Assessments	Revision: 0	Effective Date: 10/04/2017

- 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.

MSGP Stormwater Visual	EPC-CP-QP-064	Page 7 of 20
Assessments	Revision: 0	Effective Date: 10/04/2017

- 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.

MSGP Stormwater Visual	EPC-CP-QP-064	Page 8 of 20
Assessments	Revision: 0	Effective Date: 10/04/2017

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.).

MSGP Stormwater Visual	EPC-CP-QP-064	Page 9 of 20
Assessments	Revision: 0	Effective Date: 10/04/2017

- 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 <u>immediately if it is determined that the foam is</u> 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).

MSGP Stormwater Visual	EPC-CP-QP-064	Page 10 of 20
Assessments	Revision: 0	Effective Date: 10/04/2017

#### CAUTION

Contact the EPC-CP Project Leader for MSGP <u>immediately</u>. 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.

MSGP Stormwater Visual	EPC-CP-QP-064	Page 11 of 20
Assessments	Revision: 0	Effective Date: 10/04/2017

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

- Using the Safari web browser on a desktop computer, navigate to
   <a href="http://www.maintenanceconnection.com">http://www.maintenanceconnection.com</a>. 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" subtab.
- 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.

MSGP Stormwater Visual	EPC-CP-QP-064	Page 12 of 20
Assessments	Revision: 0	Effective Date: 10/04/2017

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.

MSGP Stormwater Visual	EPC-CP-QP-064	Page 13 of 20
Assessments	Revision: 0	Effective Date: 10/04/2017

### 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

MSGP Stormwater Visual	EPC-CP-QP-064	Page 14 of 20
Assessments	Revision: 0	Effective Date: 10/04/2017

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

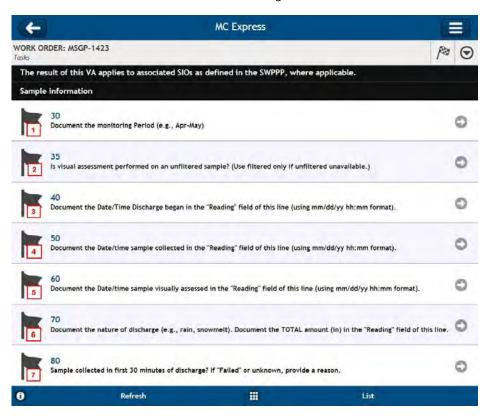
**Attachment 3:** Screenshot Examples of Printing from Maintenance Connection

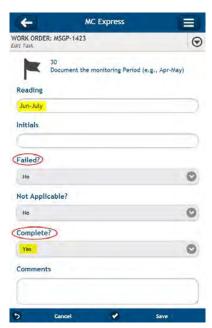
<b>MSGP</b>	<b>Stormwater Visual</b>	
Assess	ments	

EPC-CP-QP-064	Page 15 of 20
Revision: 0	Effective Date: 10/04/2017

# Attachment 1: Screenshot Examples of EPC-CP-Form-1021 in MC Express

Page 1 of 3





MSGP Stormwater Visual	EPC-CP-QP-064	Page 16 of 20
Assessments	Revision: 0	Effective Date: 10/04/2017

# Attachment 1: Screenshot Examples of EPC-CP-Form-1021 in MC Express (cont.)

Page 2 of 3



<b>MSGP Stormwater Visual</b>	EPC-CP-QP-064	Page 17 of 20
Assessments	Revision: 0	Effective Date: 10/04/2017

# Attachment 1: Screenshot Examples of EPC-CP-Form-1021 in MC Express (cont.)

Page 3 of 3

<b>←</b>	MC Express	
ORK ORDER: MS atus Update	GP-1423	
Issued		
New Status	17	
Completed		0
Date		
6/28/2017 03:1	2 PM	
Percent Comp	plete 100%	
Labor Report	Update 18	
Select Commen	ts to Add	0
Jane Admin		
o c	ancel 🗸	Save
ATT.	Maria a	
← _	MC Express	
CONTROL FOR STATE OF	ASGP-1423	
atus Update	, 19	
Signature	. 19	
VORK ORDER: A tatus Update  Signature (Remove)	19 Le Adn n	

Cancel

MSGP Stormwater Visual Assessments

EPC-CP-QP-064 Page 18 of 20

Revision: 0 Effective Date: 10/04/2017

# Attachment 2: Crosswalk of EPC-CP-Form-1021 Hard Copy Format to Electronic Format $Page\ 1\ of\ 2$

						Printed	7/12/2017 -	MSGP 10:57 A	Monitor M (Dup	ring Sta
/la	intenar	nce [	Details			-				
	quested		Admin, Jane on 7/11/2017 1:25:00 PM MSGP Quarterly Visual Assessment (EPC Sig) (EPC-CP-Form-1021.02 3)	Target: Priority/Type: Department:	12/31/2017 / Inspection Utilities and Infrastructure	₩ RG12	88 Carpent ored Outfal		)	
La	st PM:		N/A			Contact	Admin, Ja	no		
Re	ason;	Hard (	Copy MSGP Visual Asses	sment Example			123-4567	10		
īas	sks-									
			A Process					M	insi	63.0
#		escri					Meas.	No	N/A	Yes
Th	e result	of th	is VA applies to associa	ted SIOs as defi	ined in the SWPPP, where	applicable.				
5	ample in	form	ation							
30	D	ocum	ent the monitoring Period	(e.g., Apr-May)				_E	E.	
				on an unfiltered s	ample? (Use filtered only if a	infiltered			37	-
35			lable.)	AND ASSOCIATION OF THE PARTY	Dec Contraction and Contraction	L. C.		ᅟᅳ	T.	_G
40			ent the Date/Time Discha /yy hh:mm format).	rge began in the	"Reading" field of this line (u	sing		-		
70				collected in the "	Reading" field of this line (us	ina		-	-4-	-12-
5.0			/yy hh:mm format).	oonedada III ino	reduing held of this interpret				LT.	П
				visually assessed	d in the "Reading" field of thi	sline			_	
60			mm/dd/yy hh:mm format).	- rame many and	W. D W LIV - TOTAL	******		-13	- 12	
70			he "Reading" field of this I		wmelt). Document the TOTA	amount		E.	T.	П
		ample	collected in first 30 minut	es of discharge?	If "Failed" or unknown, prov	ide a				7.0
80	re	eason	h .				-			
Pa	ramete	rs								
11	0 Is	sam	ple colorless? If "Failed", o	lescribe.					П	
				rovide description	n (e.g. musty, sewage, sulfui	sour			-	35
12			, petroleum/gas)	also also as almata is 25	a allabito Stando atando sa	a anna v	-			
13					.g., slightly cloudy, cloudy, or lbe if raw or waste material(s			100	-1-2	14
14			ents of this line.	in Falled , descri	no il law oi waste material(s	, in the		П		F
1.5	0 Is	sami	ple free of settled solids? I	f "Failed", provide	e description (e.g., fine, cour	se)			G	
16	0 ls	sam	ple free of suspended solid	ds? If "Falled", pr	ovide description (e.g., fine,	course).			E	E
					d" describe foam color and lo	cation		3		1
17			n the surface' or 'in the sa		ORGA GARAGE GARAGE MATERIAL 4	No alex		13	_0	- 12
18		lobs).	pie devoid of an oil sheen.	in Falled", desc	cribe color and thickness (e.g.	necks,		П	П	
19			ple free of other obvious in	dicators of pollut	ion? If "Failed", describe.				F	F
al	oor Rep	oort								
C	omplete	d: <u>6/:</u>	28/2017 3:23:00 PM							
R	eport: J	ane A	dmin							

EPC-CP-Form-1021.1 07/2017

MSGP Stormwater Visual	EPC-CP-QP-064	Page 19 of 20
Assessments	Revision: 0	Effective Date: 10/04/2017

# Attachment 2: Crosswalk of EPC-CP-Form-1021 Hard Copy Format to Electronic Format (cont.)

Page 2 of 2

	CERTIFICATION STATEMENT
a system designed to assure that qualified the person or persons who manage the system to the best of my knowledge and belief	rument and all attachments were prepared under my direction or supervision in accordance with personnel properly gathered and evaluated the information submitted. Based on my inquiry of term, or those persons directly responsible for gathering information, the information submitted true, accurate, and complete. I am aware that there are significant penalties for submitting falsone and imprisonment for knowing violations.
(Signatory must meet definition in Secti	on B.11.A, eg. FOD, Ops Mgr, DSESH Group Leader, EPC Group Leader)
and the control of th	
Print name and title:	

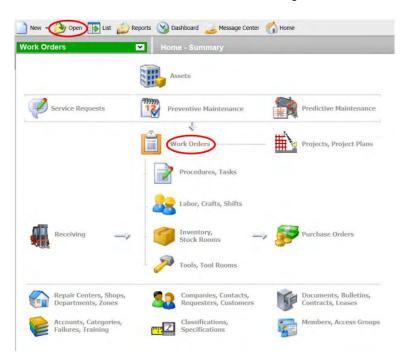
EPC-CP-Form-1021.1 07/2017

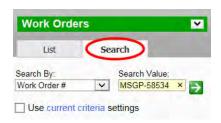
<b>MSGP</b>	Stormwater	<b>Visual</b>
Assess	ments	

EPC-CP-QP-064	Page 20 of 20
Revision: 0	Effective Date: 10/04/2017

# **Attachment 3: Screenshot Examples of Printing from Maintenance Connection**

Page 1 of 1









# ATTACHMENT 19: EPC-CP-QP-047, INSPECTING STORMWATER RUNOFF SAMPLERS AND RETRIEVING SAMPLES FOR THE MSGP

EPC-CP-QP-047	Revision: 2	A
Effective Date: 09/06/2017	Next Review Date: 09/06/2020	Los Alamos NATIONAL LABORATORY EST. 1943

# **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:**

Name:	Organization:	Signature:	Date:	
Holly L. Wheeler	EPC-CP	PC-CP Signature on File		
Derivative Classifier: Unclassified or DUSA ENVPRO				
Name:	Organization:	Signature:	Date:	
Ellena I. Martinez	EPC-CP	Signature on File	8-22-17	
			_	
	Approval S	ignatures:		
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:	
	EPC-CP Group Leader	Signature on File	9-6-17	

This copy is uncontrolled.

Users are responsible for ensuring they work to the latest approved version. To document a required read, Login to <u>UTrain</u>, and go to the Advanced Search.

<b>Inspecting Storm Water Runoff</b>
<b>Samplers &amp; Retrieving Samples</b>
for the MSGP

EPC-CP-QP-047	Page 2 of 26	
Revision: 2	Effective Date: 09/06/2017	

# **REVISION HISTORY**

Document Number and Revision [Include revision number, beginning with Revision 0]	Effective Date [Document Control Coordinator inserts effective date]	<b>Description of Changes</b> [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.

# Inspecting Storm Water Runoff Samplers & Retrieving Samples for the MSGP

EPC-CP-QP-047	Page 3 of 26
Revision: 2	Effective Date: 09/06/2017

# **Table of Contents**

Qual	ity Pr	ocedur	e	1		
Revi	sion F	listory		2		
Tabl	e of C	ontents	) 	3		
1.0	Intro	oductio	1	4		
	1.1	Purpos	se	4		
	1.2 Scope			4		
	1.3	Applic	ability	4		
2.0	Prec	autions	and Limitations	4		
3.0			e Actions			
	3.1	•	ng and Coordination			
	3.2	Tools	and Equipment	<del>6</del>		
4.0	Insp		tormwater samplers and retrieving samples			
	4.1	_	ting the Sampler			
		4.1.1	On Arrival			
		4.1.2	Water Collection Information	8		
		4.1.3	Water Retrieval Information			
		4.1.4	On Departure	<u>c</u>		
		4.1.5	Equipment Specific Tasks			
		4.1.6	Maintenance Information	11		
		4.1.7	Bottle Information	12		
	4.2	Retrie	ving Samples	12		
	4.3	Compl	eting the Inspection Form	13		
4.4	Rem	oving S	tormwater Samples from the field	14		
5.0	Trair	ning	·	14		
6.0						
7.0	Defi	nitions	and Acronyms	15		
	7.1	Definit	tions	15		
	7.2	Acron	yms	15		
8.0	Refe	rences		15		
9.0	Atta	chment	·S	16		
	Atta	chment	: 1: Screenshot Examples of EPC-CP-Form-1010.02 in MC Express	17		
	Attachment 2: Crosswalk of EPC-CP-Form-1010.02 Hard Copy Format to Electronic Format 2					
	Atta	chment	3: Flow Chart for Sample Retrieval	26		

<b>Inspecting Storm Water Runoff</b>
<b>Samplers &amp; Retrieving Samples</b>
for the MSGP

EPC-CP-QP-047	Page 4 of 26
Revision: 2	Effective Date: 09/06/2017

#### 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

<b>Inspecting Storm Water Runoff</b>
Samplers & Retrieving Samples
for the MSGP

EPO	C-CP-QP-047	Page 5 of 26
Rev	vision: 2	Effective Date: XX/XX/2017

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.

<b>Inspecting Storm Water Runoff</b>
<b>Samplers &amp; Retrieving Samples</b>
for the MSGP

EPC-CP-QP-047	Page 6 of 26
Revision: 2	Effective Date: XX/XX/2017

### 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

<b>Inspecting Storm Water Runoff</b>
Samplers & Retrieving Samples
for the MSGP

EPC-CP-QP-047	Page 7 of 26
Revision: 2	Effective Date: XX/XX/2017

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.
- 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".

<b>Inspecting Storm Water Runoff</b>
<b>Samplers &amp; Retrieving Samples</b>
for the MSGP

EPC-CP-QP-047	Page 8 of 26
Revision: 2	Effective Date: XX/XX/2017

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".

<b>Inspecting Storm Water Runoff</b>
<b>Samplers &amp; Retrieving Samples</b>
for the MSGP

EPC-CP-QP-047	Page 9 of 26
Revision: 2	Effective Date: XX/XX/2017

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 dissimilar 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.

<b>Inspecting Storm Water Runoff</b>
<b>Samplers &amp; Retrieving Samples</b>
for the MSGP

EPC-CP-QP-047	Page 10 of 26
Revision: 2	Effective Date: XX/XX/2017

### 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

<b>Inspecting Storm Water Runoff</b>
Samplers & Retrieving Samples
for the MSGP

EPC-CP-QP-047	Page 11 of 26
Revision: 2	Effective Date: XX/XX/2017

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.

<b>Inspecting Storm Water Runoff</b>
<b>Samplers &amp; Retrieving Samples</b>
for the MSGP

EPC-CP-QP-047	Page 12 of 26
Revision: 2	Effective Date: XX/XX/2017

### 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

<b>Inspecting Storm Water Runoff</b>
Samplers & Retrieving Samples
for the MSGP

EPC-CP-QP-047	Page 13 of 26
Revision: 2	Effective Date: XX/XX/2017

### **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.

Inspecting Storm Water Runoff Samplers & Retrieving Samples	EPC-CP-QP-047	Page 14 of 26
for the MSGP	Revision: 2	Effective Date: XX/XX/2017

- 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 autopopulated 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.

<b>Inspecting Storm Water Runoff</b>
<b>Samplers &amp; Retrieving Samples</b>
for the MSGP

EPC-CP-QP-047	Page 15 of 26
Revision: 2	Effective Date: XX/XX/2017

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

None.

<b>Inspecting Storm Water Runoff</b>
Samplers & Retrieving Samples
for the MSGP

EPC-CP-QP-047	Page 16 of 26
Revision: 2	Effective Date: XX/XX/2017

### 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

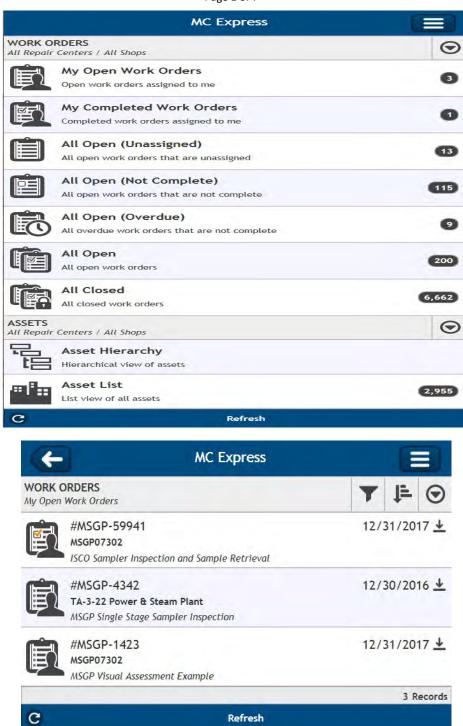
**Attachment 3**: Flow Chart for Sample Retrieval

<b>Inspecting Storm Water Runoff</b>
<b>Samplers &amp; Retrieving Samples</b>
for the MSGP

EPC-CP-QP-047	Page 17 of 26
Revision: 2	Effective Date: 09/06/2017

### Attachment 1: Screenshot Examples of EPC-CP-Form-1010.02 in MC Express

Page 1 of 7

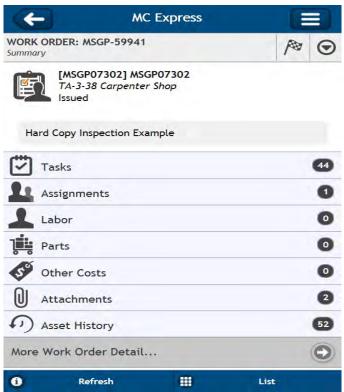


<b>Inspecting Storm Water Runoff</b>
<b>Samplers &amp; Retrieving Samples</b>
for the MSGP

EPC-CP-QP-047	Page 18 of 26
Revision: 2	Effective Date: 09/06/2017

### Attachment 1: Screenshot Examples of EPC-CP-Form-1010.02 in MC Express (cont.)

Page 2 of 7





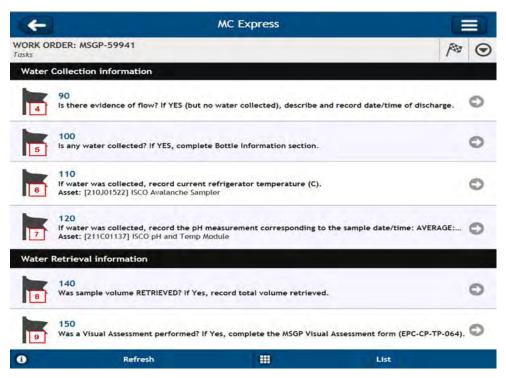
# Inspecting Storm Water Runoff Samplers & Retrieving Samples for the MSGP

EPC-CP-QP-047	Page 19 of 26
Revision: 2	Effective Date: 09/06/2017

### Attachment 1: Screenshot Examples of EPC-CP-Form-1010.02 in MC Express (cont.)

Page 3 of 7



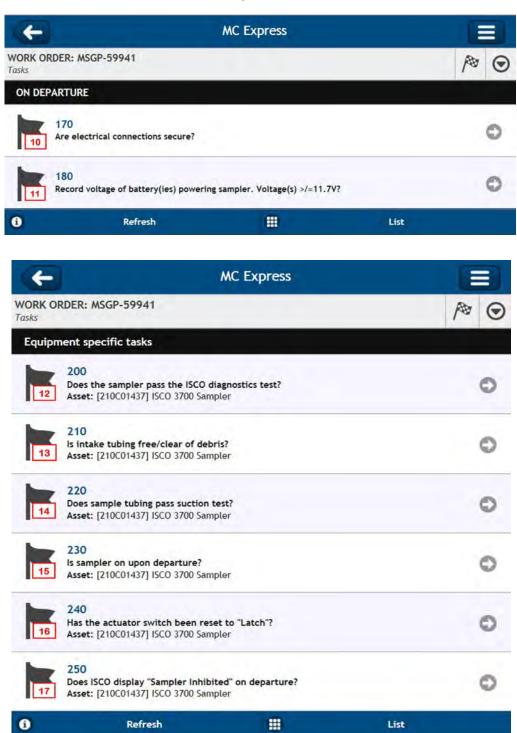


<b>Inspecting Storm Water Runoff</b>
<b>Samplers &amp; Retrieving Samples</b>
for the MSGP

EPC-CP-QP-047	Page 20 of 26
Revision: 2	Effective Date: 09/06/2017

Attachment 1: Screenshot Examples of EPC-CP-Form-1010.02 in MC Express (cont.)

Page 4 of 7

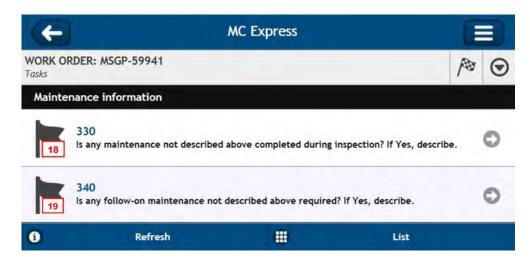


<b>Inspecting Storm Water Runoff</b>
<b>Samplers &amp; Retrieving Samples</b>
for the MSGP

EPC-CP-QP-047	Page 21 of 26
Revision: 2	Effective Date: 09/06/2017

### Attachment 1: Screenshot Examples of EPC-CP-Form-1010.02 in MC Express (cont.)

Page 5 of 7





<b>Inspecting Storm Water Runoff</b>
<b>Samplers &amp; Retrieving Samples</b>
for the MSGP

EPC-CP-QP-047	Page 22 of 26
Revision: 2	Effective Date: 09/06/2017

Attachment 1: Screenshot Examples of EPC-CP-Form-1010.02 in MC Express (cont.)

Page 6 of 7

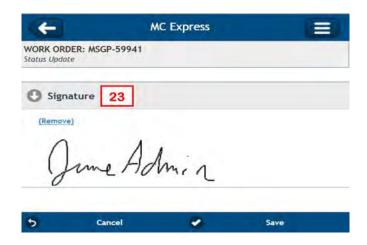


<b>Inspecting Storm Water Runoff</b>
<b>Samplers &amp; Retrieving Samples</b>
for the MSGP

EPC-CP-QP-047	Page 23 of 26		
Revision: 2	Effective Date: XX/XX/2017		

Attachment 1: Screenshot Examples of EPC-CP-Form-1010.02 in MC Express (cont.)

Page 7 of 7



Inspecting Storm Water Runoff Samplers & Retrieving Samples for the MSGP

EPC-CP-QP-047	Page 24 of 26
Revision: 2	Effective Date: 09/06/2017

### Attachment 2: Crosswalk of EPC-CP-Form-1010.02 Hard Copy Format to Electronic Format

0	s Ala	mos National Lab - Al	DESH		Printed	Work C	MSGP	Monito	ring Sta
M	ainten	ance Details				2			
	tequest rocedu	ed By: Admin, Jane on 8/10/2017 11:23:00 AM re: MSGP ISCO Sampler Inspection and Sample Retrieval (EPC-CP-	Target: Priority/Type: Department:	12/31/2017 / Inspection Utilities and Infrastructure	A RG12 A TA-3∴ Monitor	38 Carpent ored Outfa		p	
		Form-1010.2 2)			MSGF	07302			
L	ast PM	7/20/2017			12				
F	roject:	ISCO Inspections wk 8/7/17 (P-MSGP-5212)			Phone:	Admin, Ja 123-4567	ne		
F	leason:	Hard Copy ISCO Sampler Insp	ection and Sampl	e Retrieval					
Fá	sks								
	#	Description				Meas.	No	N/A	Yes
į.						meds.	140	Larry	100
п	ON ARE		271 le campler ON	and functioning properly up	on orranal?		-	-	-
7.4	CW.	ISCO 3700 Sampler [210C014] ISCO 3700 Sampler [210C014]					-	-	44
	30	record specific message(s).	ort pres me sam	vier diapier dempler minibile	M T II NO.		F	F	П
		ISCO 3700 Sampler [210C014	37] is sampler time	e delta < 1 min (MST)? If No	record				
4	40	adjustment					П		П
1	50	ISCO Avalanche Sampler [210 arrival?	J01522] Is sampl	er ON and functioning prope	rly upon		-	-	
-	30	ISCO Avalanche Sampler [210	1015221 Does the	Avalanche display "Program	n.		15	-	
6	30	Disabled"? If No, record specific		The didition and high is indian				П	TI.
ľ	70	ISCO Avalanche Sampler [210	J01522] Is sample	er time delta < 1 min (MST)?	IF No.		15.		
2	70	record adjustment			-				
1	Nater C	ollection information							
		Is there evidence of flow? If YE	S (but no water co	llected), describe and record	date/time				_
	90	of discharge		Parties of the control of the contro			-0	- 6	
Į	100	Is any water collected? If YES,					18	18	14
1	110	ISCO Avalanche Sampler [210 refrigerator temperature (C).	Journal II water	vas collected, record cuffent				П	П
		ISCO pH and Temp Module [2	11C01137] If wate	r was collected, record the p	Н				
1	inn	measurement corresponding to					-	5	1
ŀ	120	MAXIMUM:					13	-Ia	
1	Nater R	etrieval information							
	140	Was sample volume RETRIEVE					Г	_ [	П
	150	Was a Visual Assessment perform (EPC-CP-TP-064).	rmed? If Yes, com	plete the MSGP Visual Asse	ssment		-		-
1	I JU	TOTAL (EFC+OF+1 F+004).					15		-11
1		ARTURE							
-	170	Are electrical connections secu					_E_	E	
1	180	Record voltage of battery(ies) p	owering sampler.	/oltage(s) >/=11.7V?			13		
i	Equipm	ent specific tasks							
2 4.4	200	ISCO 3700 Sampler [210C014	37] Does the samp	oler pass the ISCO diagnosti	cs test?				III
	210	ISCO 3700 Sampler [210C014	37] Is intake tubing	free/clear of debris?			П		П
220 ISCO 3700 Sampler [210C01437] Does sample tubing pass suction test? 230 ISCO 3700 Sampler [210C01437] Is sampler on upon departure?									
	500	ISCO 3700 Sampler [210C014	371 is sampler on	upon departure?			- [7]	_□	
1640	230								
1640	240	ISCO 3700 Sampler [210C014]	37] Has the actual	or switch been reset to "Late	h"?		П	П	П

# Inspecting Storm Water Runoff Samplers & Retrieving Samples for the MSGP

EPC-CP-QP-047	Page 25 of 26
Revision: 2	Effective Date: 09/06/2017

### Attachment 2: Crosswalk of EPC-CP-Form-1010.02 Hard Copy Format to Electronic Format (cont.)

Page 2 of 2

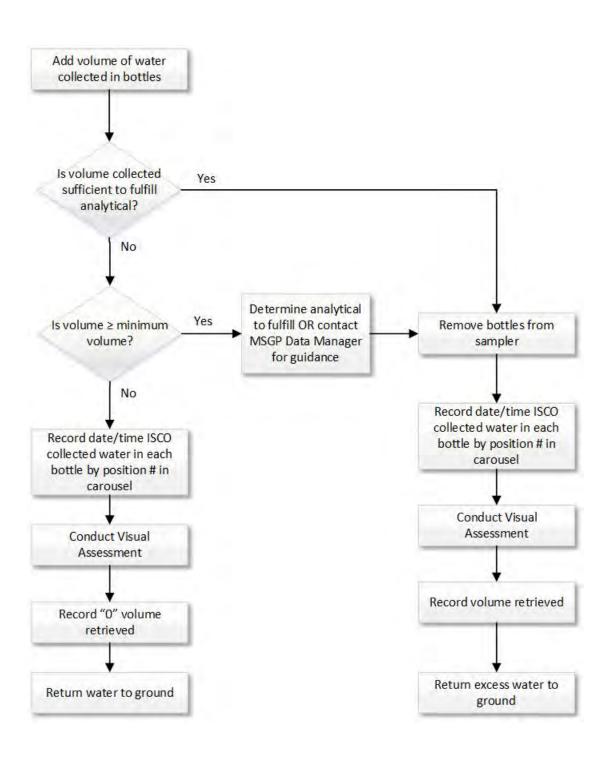
	ISCO Avalanche Sampler [210J01522] Does the sampler pass the ISCO diagnostics test?		П	П
270	ISCO Avalanche Sampler [210J01522] Is intake tubing free/clear of debris?	- D	F	
280	ISCO Avalanche Sampler [210J01522] Does sample tubing pass suction test?		П	
290	ISCO Avalanche Sampler [210J01522] is sampler on upon departure?	ាធា		
300	ISCO Avalanche Sampler [210J01522] Has the actuator switch been reset to "Latch"?		-	П
-	ISCO Avalanche Sampler [210J01522] Does Avalanche display "Program Disabled" on			_
310	departure?		П	J
-	tenance information			
8 330	Is any maintenance not described above completed during inspection? If Yes, describe.			┸
9 340	Is any follow-on maintenance not described above required? If Yes, describe.	E	П	
	e Information: IF bottle collected record bottle type (P or G), collection date & time, volume, a sages	and/or any l	sco	
0 360	ISCO 3700 Sampler [210C01437] Bottle #17		П.	П
370	ISCO 3700 Sampler [210C01437] Bottle #2?	- 17	T.	
380	ISCO 3700 Sampler [210C01437] Bottle #3?		П	
390	ISCO 3700 Sampler [210C01437] Bottle #4?		П	F
400	ISCO 3700 Sampler [210C01437] Bottle #5?	- 6		-
410	ISCO 3700 Sampler [210C01437] Bottle #6?		F	-
420	ISCO 3700 Sampler [210C01437] Bottle #7?		П	-
430				-
-	ISCO 3700 Sampler [210C01437] Bottle #8?	<u> </u>	-	
440	ISCO 3700 Sampler [210C01437] Bottle #9?		-	ييا
450	ISCO 3700 Sampler [210C01437] Bottle #10?		므	므
460	ISCO 3700 Sampler [210C01437] Bottle #11?		┸	4
470	ISCO 3700 Sampler [210C01437] Bottle #12?			
480	ISCO Avalanche Sampler [210J01522] Bottle #1?		П	
490	ISCO Avalanche Sampler [210J01522] Bottle #2?		T.	
500	ISCO Avalanche Sampler [210J01522] Bottle #3?			
510	ISCO Avalanche Sampler [210J01522] Bottle #4?			
Com	Pleted: 5/30/2017 4 44/00 PM  ort: Jane Admin  June Admin  5/30/2017  Signature / Name  Date  Signature / Name		Date	_
127	irm the information as recorded is true, accurate and complete.			
con	Pageof			
	Pageof			
	Pageof Time:			
VO ID:_	Time:			
VO ID:_	Time:			
VO ID:_ Date: lame/Z‡	Time:			

<b>Inspecting Storm Water Runoff</b>
<b>Samplers &amp; Retrieving Samples</b>
for the MSGP

EPC-CP-QP-047	Page 26 of 26
Revision: 2	Effective Date: 09/06/2017

### **Attachment 3: Flow Chart for Sample Retrieval**

Page 1 of 1



### ATTACHMENT 20: EPC-CP-QP-2106, PROCESSING MSGP STORMWATER SAMPLES

EPC-CP-QP-2106	Revision: <b>0</b>	Los Alamos		
Effective Date: 10/18/2019	Next Review Date: 10/18/2022	NATIONAL LABORATORY EST. 1943		

Environment, Safety, Health, Quality, Safeguards, and Security Directorate

Environment Protection and Compliance – Compliance Programs Group

Quality Procedure

### **Processing MSGP Stormwater Samples**

Hazard Grading:   Low			Hi	igh/Complex		
Usage Level: Referen		ce UET		Mixed: UET Sections:		
Status:	New	Major Revision		Minor Revision		
	Review	w/No Changes	Other: New EPC-CP format and numbering system		g system	
Safety Basis: N/A		USQ	U:	USI Number:		
		Document Author	/Subje	ect Matter Expert:		
Name:		Organization:	Si	gnature:	Date:	
Holly L. Wheeler		EPC-CP	-CP Signature on File		10-17-19	
	Deriv	vative Classifier: 🔀 U	Jnclass	sified or		
Name:		Organization:	Si	gnature:	Date:	
Steven E. Wolfel		EPC-CP	Si	gnature on File	10-17-19	
	Approval Signatures:					
EPC-CP Reviewer:		Organization:	Si	gnature:	Date:	
Terrill W. Lemke		EPC-CP Team Leader	Si	gnature on File	10-17-19	
EPC-CP RLM:		Organization:	Si	gnature:	Date:	
Taunia Van Valkenburg		EPC-CP Group Leader	Si	gnature on File	10-18-19	

This copy is uncontrolled.

Users are responsible for ensuring they work to the latest approved version. To document a required read, Login to <u>UTrain</u>, and go to the Advanced Search.

<b>Processing</b>	<b>MSGP</b>	Stormwater
Samples		

No: EPC-CP-QP-2106	Page 2 of 19
Revision: 0	Effective Date: 10/18/2019

### **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-048, Rev. 0	07/2011	New document
ENV-CP-QP-048, Rev. 1	09/2013	Annual Review and Revision, new format, process change, and new organization name.
EPC-CP-QP-048, Rev. 2	06/05/2017	Review and Revision, new format, and new organization name, clarified steps, updated attachments.
EPC-CP-QP-048 R3	10/05/2017	Updated Sample Collection Log instructions, added a step describing evidence of flow, and added section for addressing excess stormwater material.
EPC-CP-QP-048 R4	01/31/2019	Sample Collection Log form and associated text updated. Added text for collecting quality control samples.
EPC-CP-QP-2106 R0	10/18/2019	Supersedes EPC-CP-QP-048 R4. New EPC-CP procedure format and numbering system. Minor editorial updates.

## Processing MSGP Stormwater Samples

No: EPC-CP-QP-2106 Page 3 of 19

Revision: 0 Effective Date: 10/18/2019

### **Table of Contents**

Revis	sion H	istory	2
1.0	Intro	duction	4
	1.1	Purpose	4
	1.2	Scope	4
	1.3	Applicability	4
2.0	Prec	autions and Limitations	4
3.0	Prer	equisite Actions	5
	3.1	Planning and Coordination	5
	3.2	Performance Documents	5
	3.3	Special Tools, Equipment, Parts and Supplies	5
4.0	Proc	essing Samples	6
	4.1	Preparation for Processing Samples	6
	4.2	Filtering Samples	9
	4.3	Preserving Unfiltered and Filtered Samples	9
	4.4	Quality Control Samples	10
		4.4.1 Field Blank Samples	10
		4.4.2 Field Duplicate Samples	11
	4.5	Handling Excess Stormwater	12
	4.6	Submit Samples for Shipping to Offsite Analytical Laboratory	12
5.0	Trair	ning	14
6.0	Reco	rds	14
7.0	Defir	nitions and Acronyms	15
	7.1	Definitions	15
	7.2	Acronyms	15
8.0	Refe	rences	15
9.0	Atta	chments	16
	Atta	chment 1: Water Sample Collection and Processing Log/Field Chain of Custody Example	17
		chment 2: Sample Container Labels Example	
	Atta	chment 3: Chain of Custody/Analysis Request Example	19

<b>Processing MSGP Stormwater</b>	No: EPC-CP-QP-2106	Page 4 of 19
Samples	Revision: 0	Effective Date: 10/18/2019

### 1.0 INTRODUCTION

Triad LLC, the operator for Los Alamos National Laboratory (LANL or the Laboratory), conducts stormwater monitoring activities pursuant to the National Pollutant Discharge Elimination System (NPDES), Multi-Sector General Permit (MSGP). As part of this monitoring, Environmental Protection and Compliance, Compliance Programs (EPC-CP) personnel collect stormwater discharge samples from outfalls at industrial sites and prepare them for analysis.

### 1.1 Purpose

This procedure describes the process for filtering, preserving and preparing stormwater samples for shipment to an analytical laboratory from locations where EPC-CP conducts stormwater monitoring activities required pursuant to the NPDES MSGP. This procedure may also be used for other Associate Laboratory Directorate for Environment, Safety, Health, Quality, Safeguards, and Security (ALDESHQSS) stormwater monitoring activities as needed.

### 1.2 Scope

Stormwater samples are collected in the field with either a refrigerated Avalanche® or ISCO 3700 automated sampler, single stage sampler, or by hand. When in-line filtration is not possible, sample filtration, along with chemical preservation (as required) is 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 Environmental Protection Agency (EPA) and New Mexico Water Quality Control Commission guidelines. MSGP monitoring samples are collected and analyzed according to test procedures approved under Title 40 of the Code of Federal Regulations Part 136 unless other test procedures have been specified in the MSGP. Quantitation limits associated with these test procedures are sufficiently sensitive to meet MSGP limits.

### 1.3 Applicability

This procedure applies to EPC-CP technical staff and subcontractor personnel (as applicable) who conduct processing and chemical preservation of stormwater samples either in the EPC-CP Stormwater Laboratory or in the field.

The MSGP Program Lead is the primary person responsible for this procedure. EPC-CP personnel are appointed responsibility for a subset of sampling stations. Other stormwater monitoring programs or projects utilizing this procedure will refer to program or project specific roles and responsibilities.

### 2.0 PRECAUTIONS AND LIMITATIONS

The hazard level for the activities in this procedure is <u>LOW</u>. An Integrated Work Document Part II (2101 Form) will address any site-specific requirements and training for Facility Operations Divisions (FOD) if required by the FOD.

<b>Processing MSGP Stormwater</b>	No: EPC-CP-QP-2106	Page 5 of 19
Samples	Revision: 0	Effective Date: 10/18/2019

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

Refer to the most current revision of the MSGP or program/project specific Sampling and Analysis Plan (SAP) to determine the need for collecting quality control samples. Collect the types and quantities of quality control samples at the locations specified.

Schedule and complete stormwater processing to meet the analytical holding time requirements identified in the MSGP SAP or as requested by the MSGP Program Lead. Other stormwater monitoring programs or projects utilizing this procedure will refer to their program or project specific SAP.

The MSGP Data Manager will generate Water Sample Collection and Processing Log/Field Chain of Custody (SCPL) 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 will be obtained from the EPC-CP Sample Management Office (SMO).

### 3.2 Performance Documents

Personnel performing this procedure will be familiar with the most current versions of the following documents if the equipment or chemicals are utilized.

- Peristaltic Pump User Manual (e.g., GeoTech)
- Material Safety Data Sheet or Safety Data Sheet for preservation chemicals

### 3.3 Special Tools, Equipment, Parts and Supplies

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)
- Water SCPL form
- Chain of Custody/Analysis Request
- EPC-CP MSGP SAP most recent revision for the current monitoring year OR project specific monitoring plan

<b>Processing MSGP Stormwater</b>	No: EPC-CP-QP-2106	Page 6 of 19
Samples	Revision: 0	Effective Date: 10/18/2019

- 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 (μm) and/or 0.10 μm cartridge filters (where applicable)
- Deionized water (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
- Cell phone (only government cell phones are allowed in secure areas) (See
   <a href="https://int.lanl.gov/policy/documents/P217.pdf">https://int.lanl.gov/policy/documents/P217.pdf</a> for requirements for using portable electronic devices on Laboratory property.

### 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 is transferred (as necessary) during processing and shipped to the analytical laboratory.

**NOTE:** Prior to performing any of the steps in the following sub-sections, ensure that you are wearing the proper clothing. Don nitrile gloves, safety glasses with side shields, and a lab coat. Confirm that the eyewash station is operational prior to processing samples.

### 4.1 Preparation for Processing Samples

### Sample Retriever

[1] Arrange sample collection bottles on the workbench in order by MSGP sampling location, ensuring to distinguish bottles collected via in-line filtration from non-filtered bottles, where applicable.

#### **CAUTION**

Process only one sample set (i.e., samples listed on one SCPL form or samples from one location) at a time to ensure stormwater from different locations is not co-mingled.

<b>Processing MSGP Stormwater</b>	No: EPC-CP-QP-2106	Page 7 of 19
Samples	Revision: 0	Effective Date: 10/18/2019

- [2] Cross-check the Location ID (e.g., MSGP00201) on the sample bottles with the LOCATION ID on the SCPL form (see example in Attachment 1).
- [3] Ensure the pre-populated information on the SCPL form is correct. Document any changes [e.g., change FIELD MATRIX code from rain (WT) to snowmelt (WM)].
- [4] Write the following information on the SCPL.
  - [a] Sampler Inspection and Sample Retrieval form (refer to EPC-CP-QP-2103) identification number (e.g., Work Order: MSGP-xxxx);
  - [b] Date/time the sample was collected in the field (e.g., date/time automated sampler filled sample bottles or a grab sample was taken);
  - [c] Date/time the sample was retrieved from the field;
  - [d] "Not Applicable" (N/A) in the LOCATION SYNONYM(S) field unless the information is required by the SAP;
  - [e] N/A in the PRIORITY box if box is not pre-populated;
  - [f] Any pertinent information regarding sample collection and/or retrieval in the SAMPLE COMMENTS field (e.g., grab sample collected by hand, recent erosion observed up-gradient of sampler) or N/A;
  - [g] N/A for FIELD PARAMETER Sample Time (this is documented at the top of the form as COLLECTION TIME);
  - [h] pH measurement taken at the time the sample was collected in the field (if applicable) or N/A;
  - [i] Indicate if a visual assessment was performed.
    - <u>IF</u> a visual assessment <u>WAS NOT</u> performed, THEN write N or No in the Visual Inspection space.
    - <u>IF</u> a visual assessment <u>WAS</u> performed, <u>THEN</u> write Y or Yes in the Visual Inspection space and the identification number from the MSGP Visual Assessment form (refer to EPC-CP-QP-2105) (e.g., MSGP-xxxx).
  - [j] The printed name and signature of the person who retrieved the sample in the COLLECTED BY box and date/time the sample was retrieved from field
- [5] <u>IF</u> the person who retrieved the sample is processing, <u>THEN</u> write N/A in the first RELINQUISHED BY and RECEIVED BY boxes.
- [6] <u>IF</u> the person who retrieved the sample is NOT processing, <u>THEN</u>
  - [a] He/she will print and sign his/her name and the date/time samples are relinquished to the processor in the RELINQUISHED BY box.

<b>Processing MSGP Stormwater</b>	No: EPC-CP-QP-2106	Page 8 of 19
Samples	Revision: 0	Effective Date: 10/18/2019

[b] The processor will print and sign his/her name and the date/time samples are received in the first RECEIVED BY box.

### **Sample Processor**

- [7] Ensure the following information is correct for the analysis requested on the SCPL.
  - [a] Sample container volume and type [e.g., 500 milliliter (mL) POLY].
  - [b] Preservation type (e.g., ICE, HNO<sub>3</sub>).
  - [c] Note any deviation from the planned sample container volume, type, or preservation on the SCPL.
- [8] Determine which samples require filtration and chemical preservation as requested on the SCPL.
  - [a] Mark each container lid with the 3-digit outfall ID, required analysis, filtration requirement, and preservative requirement.
    - **NOTE 2:** Requirements are also identified in the most current SAP revision.
- [9] For split samples, follow these steps:
  - [a] Turn the sample collection bottle upside down multiple times to ensure sediment is loose from the bottom of the bottle.
  - [b] Pour sample into sample containers ensuring the sample remains homogenized throughout the transfer.
- [10] Refer to Section 4.2 Filtering Samples, Section 4.3 Preserving Unfiltered and Filtered Samples, and Section 4.4 Quality Control Samples as needed.
- [11] Indicate if each sample on the SCL was collected by writing Y for Yes or N for No in the COLLECTED Y/N box.
- [12] <u>IF</u> the SPECIAL INSTRUCTIONS box is not pre-populated, <u>THEN</u> write N/A in the box.
- [13] Document any other deviations from the planned sample processing on the SCPL (e.g., turbid sample required extra filtration step, used standard deionized water in lieu of ultrapure water for field blank) under PROCESSING COMMENTS or SAMPLING COMMENTS,
  - OR write N/A.
- [14] <u>IF</u> no further processing is required (e.g., chemical preservation), <u>THEN</u> apply a chain-of-custody seal/tape around the bottle and lid and sign and date the seal/tape.
- [15] The person processing the sample will print and sign his/her name and indicate the date/time samples were processed in the PROCESSED BY box.
- [16] Proceed to Section 4.5.

<b>Processing MSGP Stormwater</b>	No: EPC-CP-QP-2106	Page 9 of 19
Samples	Revision: 0	Effective Date: 10/18/2019

### 4.2 Filtering Samples

Filter samples if specified on the SCPL or if an in-line filter was not used during sample collection.

- [1] Select the appropriate sized cartridge filter (e.g., 0.10µm or 0.45µm).
- [2] Set up the filter assembly.
  - [a] Attach an appropriate amount of silicone tubing to both ends of the cartridge filter.
  - [b] Place the filter upstream of the peristaltic pump to prevent overpressurization.
  - IF the sample contains a significant amount of sediment,
     THEN a pre-filter of the same size or larger micron capacity may be used.
- [3] For split filtered samples, follow these steps:
  - [a] Move the intake tube up and down through the sample during filtration.
    - **NOTE 1:** A sample collected solely for filtration can be filtered without being homogenized by gently shaking.
- [4] Replace the filter if any of the following conditions occur:
  - flow diminishes,
  - the pump begins to make a grinding sound, or
  - the tubing is forced off the filter by backpressure.
- [5] Place the lid on the container.
  - [a] Ensure the lid is securely affixed to the container.
  - [b] Add a check mark next to the filtered requirement previously marked on the lid to indicate that filtration has been completed.
  - [c] Clean and dry the exterior of sample container.
  - [d] Check sample container for leakage and breakage.
- [6] Remove and dispose of filter and tubing when filtration of one sample set (location) has been completed.
  - **NOTE 2:** A new filter must be used with each new sample set.
- [7] Return to Section 4.1, Step 11.

### 4.3 Preserving Unfiltered and Filtered Samples

Preservation entails the addition of acid or base to a sample. Acids currently used include hydrochloric acid (HCl), nitric acid (HNO<sub>3</sub>), and sulfuric acid (H<sub>2</sub>SO<sub>4</sub>). Bases currently used in preservation include sodium hydroxide (NaOH). Review the appropriate Material Safety Data Sheet or Safety Data Sheet for specific guidelines prior to preserving samples. Specific acids/bases used

<b>Processing MSGP Stormwater</b>	No: EPC-CP-QP-2106	Page 10 of 19
Samples	Revision: 0	Effective Date: 10/18/2019

depend on the required monitored parameters and are subject to change (e.g., biennial Clean Water Act §303(d)/305(b) Integrated Report updates).

### WARNING

Preservatives are strong acids and bases that can cause severe burns. Take extreme care when using these acids and bases.

- [1] Review the analysis requested on the SCPL or SAP.
- [2] Select the pre-measured preservative type and size that matches the sample container size.
  - [a] <u>IF</u> you only have one size pre-measured preservative that does not match the sample container size, <u>THEN</u> you will use more than one. For example, if you have a 1-liter sample container and 500 mL pre-measured preservative vial, you will need to add two preservative vials to the sample container.
  - **NOTE:** 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). Error in measurement precision may lead to a risk of violating Department of Transportation shipping requirements.
- [3] Add the preservative (acid or base) to the sample.
  - [a] Securely affix the lid to the container.
  - [b] Agitate the preserved sample by turning the container upside down two to three times.
- [4] Add a check mark next to the preservation type previously marked on the lid to indicate that preservation has been completed.
  - [a] Clean and dry the exterior of sample container.
  - [b] Check sample container for leakage and breakage.
- [5] Return to Section 4.1, Step 11.

### 4.4 Quality Control Samples

Refer to the SCPL or the program specific SAP for the types and quantities of quality control samples and the locations where these samples will be collected.

### 4.4.1 Field Blank Samples

- [1] Review the analysis requested on the SCPL or SAP.
  - [a] Ensure the sample container volume, type, and preservation type is correct for the analysis requested (e.g., 500 mL POLY, HNO<sub>3</sub>).

<b>Processing MSGP Stormwater</b>	No: EPC-CP-QP-2106	Page 11 of 19
Samples	Revision: 0	Effective Date: 10/18/2019

[b] Note any deviation from the planned sample container volume or type on the SCPL.

### **CAUTION**

**DO NOT** use tap, distilled, or drinking water purchased from a local store. These sources may not meet the water quality standards specified in the New Mexico Administrative Code (Title 20, Chapter 6, Part 4).

- [2] Obtain analyte free water (e.g., High Performance Liquid Chromatography grade ultrapure in amber glass) in sealed bottle(s) in sufficient quantity to fulfill the analysis requested.
- [3] Select another empty sample container(s) of the same type and volume for the analysis requested.
- [4] Mark the bottle and container lids with the 3-digit outfall ID and "Field Blank".
- [5] Transport both the field blank bottle(s) and container(s) to the sampling location.
- [6] During retrieval of samples, open the field blank bottle(s) and pour the analyte free water into the field blank sample container(s).
- [7] Securely affix the lid(s) to the container(s).
- [8] Replace the lid on the analyte free water bottle.
  - [a] <u>IF</u> 500 mL or greater remain in the bottle, <u>THEN</u> replace lid and mark the bottle with the date it was opened and "For Decon Use Only".
  - [b] <u>IF</u> less than 500 mL remain in the bottle, <u>THEN</u> dispose of water in the EPC-CP Stormwater Laboratory sink and dispose of the bottle.
- [9] Return the field blank containers with retrieved samples to the EPC-CP Stormwater Laboratory (TA-59-01) for any further required processing.
- [10] Return to Section 4.1, Step 11 to complete sample processing.

### 4.4.2 Field Duplicate Samples

- [1] Review the analysis requested on the SCPL or SAP.
  - [a] Ensure the sample container volume, type, and preservation type is correct for the analysis requested (e.g., 500 mL POLY, HNO<sub>3</sub>).
  - [b] Note any deviation from the planned sample container volume, type, or preservation on the SCPL.
- [2] Field duplicate samples must be samples collected from the same location, at the same time, and in the same manner:

<b>Processing MSGP Stormwater</b>	No: EPC-CP-QP-2106	Page 12 of 19
Samples	Revision: 0	Effective Date: 10/18/2019

 Select two sample collection bottles next to each other in the automated sampler carousel.

### OR

- Select one sample collection bottle to split into separate sample containers
- [3] For split samples, follow these steps:
  - [a] Turn the sample collection bottle upside down multiple times to ensure sediment is loose from the bottom of the bottle.
  - [b] Pour sample into sample containers ensuring the sample remains homogenized throughout the transfer.
- [4] Return to Section 4.1, Step 11 to complete sample processing.

### 4.5 Handling Excess Stormwater

Minimize the amount of stormwater sample brought into the EPC-CP Stormwater Laboratory. Field personnel will attempt to retrieve only the volumes needed to fulfill the requested analyses from the current MSGP SAP or program/project specific SAP.

[1] <u>IF</u> any excess stormwater sample exists after processing has been completed, <u>THEN</u> perform the following steps.

### **Sample Processor**

- [a] Ensure the container is labeled with the site of origin, date and time sample was collected, and "Return to Site."
- [b] Place the container in the designated storage location in the EPC-CP Stormwater Laboratory.

### **EPC-CP technical staff**

- [c] Return the sample to the site of origin as soon as possible.
- [d] Discharge at the sampler location.
- [2] <u>IF</u> the excess stormwater has been altered (e.g., tap water or preservative added), <u>THEN</u> contact the TA-59-0001 Waste Management Coordinator for further instruction.

### 4.6 Submit Samples for Shipping to Offsite Analytical Laboratory

### **Sample Processor**

[1] Deliver completed SCPL(s) to the MSGP Data Manager.

### **MSGP Data Manager**

[2] Process the sample information in the EIM system.

<b>Processing MSGP Stormwater</b>	No: EPC-CP-QP-2106	Page 13 of 19
Samples	Revision: 0	Effective Date: 10/18/2019

- [a] Capture any documented deviations from planned conditions (as noted on the SCPLs).
- [b] Generate Chain of Custody/Analysis Request (COC) form(s) and sample container labels to reflect the processed samples (see examples in Attachments 2 and 3).

#### **Sample Processor**

- [3] Ensure the sample containers are securely sealed and wiped dry.
- [4] Cross-check to ensure the Sample ID on the SCPL matches the Field Sample ID on the COC.
- [5] Compare the information from the SCPL and lid of each container and apply the correct labels to the sample containers.
- [6] <u>IF</u> the person who processed the sample is NOT submitting the samples to the SMO, THEN
  - [a] He/she will print and sign his/her name and the date/time samples are relinquished to the submitter in the second RELINQUISHED BY box.
  - [b] The submitter will print and sign his/her name and the date/time samples are received in the second RECEIVED BY box.

#### **EPC-CP technical staff**

- [7] Place the sample(s) in a cooler with sufficient Blue Ice® (or equivalent) to maintain the required preservation temperature (≤4° C).
  - **NOTE:** Cushioning material (e.g., bubble wrap) may be used to separate containers to avoid breakage during transport
- [8] Place the SCPL(s) and COC(s) in a zip lock type bag, seal, and place in the cooler with samples.
- [9] Transport samples to the SMO.
  - [a] Deliver samples during SMO business hours by 2pm for same day shipping.
  - [b] Coordinate with the SMO for delivery during other times or for delivery of samples that have limited holding times.
  - [c] If delivery of samples to the SMO will be delayed, place sample containers with SCPL(s) in the EPC-CP Stormwater Laboratory refrigerator and ensure the refrigerator is locked.
- [10] Complete the COC form as follows:
  - [a] On the Relinquished By line, the person submitting the sample(s) will sign and print his/her name and date/time samples are relinquished to the SMO.

<b>Processing MSGP Stormwater</b>	No: EPC-CP-QP-2106	Page 14 of 19
Samples	Revision: 0	Effective Date: 10/18/2019

- [b] The SMO personnel accepts the sample(s) by signing and printing his/her name and recording the date/time on the Received By line.
- [11] Complete the SCPL form as follows:
  - [a] Ensure all fields are filled out with sample information or N/A. Do not leave blank fields.
  - [b] In the RELINQUISHED BY box, the person submitting the sample(s) will sign and print his/her name. Sign and print your name on the SCPL in the "Relinquished By" box.
  - [c] Record the date/time that matches the data and time RELINQUISHED BY on the COC.
  - [d] Record the COC number (e.g., 2017-xxxx) in the RECEIVED BY box.
- [12] Ensure the following steps are taken:
  - [a] SMO makes a copy of the SCPL(s) to accompany the COC and samples.
  - [b] Keep the original SCPL(s) for the MSGP program.
  - [c] Make a copy of the signed Chain of Custody/Analysis Request.
- [13] Deliver the copy of the signed COC and original SCPL(s) to the MSGP Data Manager for record keeping.

#### 5.0 TRAINING

All EPC-CP personnel that execute the activities specified in this procedure must meet the minimum qualification and training requirements for their position as identified EPC-CP-PIP-2101, NPDES Multi-Sector General Permit Program. This will include "self-study" (required reading) for this procedure as assigned and documented in accordance with ENV-DO-QP-115, *Personnel Training*. Other participating LANL groups may require training documentation pursuant to local procedures.

Contract personnel that execute the activities specified in this procedure will be qualified and trained as required by the Exhibit D and Exhibit F. In addition, contract personnel will be required to complete "self-study" (required reading) of this procedure.

Personnel performing this procedure will be familiar with the most current versions of the following procedures and operation manuals:

- EPC-CP MSGP SAP for the current monitoring year
- EPC-CP-QP-2103 Inspecting Stormwater Runoff Samplers and Retrieving Samples for the MSGP

#### 6.0 RECORDS

EPC-CP is the Office of Record for this document and must be maintained in accordance with PD1020, Document Control and Records Management and ADESH-AP-006, Records Management

<b>Processing MSGP Stormwater</b>	No: EPC-CP-QP-2106	Page 15 of 19
Samples	Revision: 0	Effective Date: 10/18/2019

*Plan.* Records generated by this document will be submitted to the Records Management designated point of contact or document manager for document management.

Below are records generated as a result of implementing this procedure. Records generated are identified by title and type.

Record Title	QA Record	Non-QA Record
*Water Sample Collection and Processing Log/Field Chain of Custody	$\boxtimes$	
*Chain of Custody/Analysis Request	$\boxtimes$	
Copy of log book entry(s) (if a log book is used)	$\boxtimes$	
Other pertinent field or lab notes (if additional notes are required)	$\boxtimes$	

<sup>\*</sup>The original document is part of the data package QA records for the SMO. MSGP retains a copy for tracking purposes only.

#### 7.0 DEFINITIONS AND ACRONYMS

#### 7.1 Definitions

See LANL *Definition of Terms*.

#### 7.2 Acronyms

See LANL Acronym Master List.

COC	Chain of Custody/Analysis Request
EIM	Environmental Information Management
EPA	Environmental Protection Agency
EPC-CP	Environmental Protection and Compliance – Compliance Programs
LANL	Los Alamos National Laboratory
μm	Micron
mL	Milliliter
MSGP	Multi-Sector General Permit
N/A	Not Applicable
NPDES	National Pollutant Discharge Elimination System
SAP	Sample Analysis Plan
SCPL	Water Sample Collection and Processing Log/Field Chain of Custody
SMO	Sample Management Office

#### 8.0 REFERENCES

None.

<b>Processing MSGP Stormwater</b>	No: EPC-CP-QP-2106	Page 16 of 19
Samples	Revision: 0	Effective Date: 10/18/2019

#### 9.0 ATTACHMENTS

**Attachment 1:** Water Sample Collection and Processing Log/Field Chain of Custody Example

**Attachment 2:** Sample Container Labels Example

**Attachment 3:** Chain of Custody/Analysis Request Example

### **Processing MSGP Stormwater** Samples

No: EPC-CP-QP-2106 Page 17 of 19

Revision: 0 Effective Date: 10/18/2019

#### Attachment 1: Water Sample Collection and Processing Log/Field Chain of Custody Example

(Page 1 of 1)

Los Alamos National Laboratory

#### WATER SAMPLE COLLECTION AND PROCESSING LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 11743 EVENT NAME: MSGP 2018

SAMPLE ID: MSGP-18-153015 WORK ORDER: MSGP-12345

COLLECTION RETRIEVAL 16:03 DATE/TIME: DATE/TIME:

LOCATION ID: MSGP04301 SAMPLER TYPE: APS-R

LOCATION TYPE: WCS SAMPLE PREP: UF

LOCATION

SYNONYM(S): NA FIELD QC TYPE: REG

FIELD MATRIX: WT SAMPLE USAGE: COMP.

PRIORITY	ORDER	CONTAINER	#	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS	PROCESSING COMMENTS
Alu	MSGP-TSS	500 ML POLY	1	ICE	X	NIA	Alu

SAMPLE COMMENTS: NIA

FIELD PARAMETERS:

Sample Time NA HH:MM

Visual Inspection WO# MSGP- 67890

COLLECTED BY Jane Doc (Printed Name) (Signature)	Date/Time 07/03/18 09:25		
RELINQUISHED BY (Printed Name) (Signature)	Date/Time 07/03/18 10:05	(Printed Name) (Signature)  RECEIVED BY  John Smith	07/03/18 10:05
PROCESSED BY John Smith (Printed Name) (Signature)	Date/Time 07/03/18 13:00		
RELINQUISHED BY John Smith (Printed Name) (Signature)	Date/Time の7/04/18 の8:35	RECEIVED BY (Printed Name) See CoC# (Signature) 20(7-1326	Date/Time
RELINQUISHED BY (Printed Name) N/A (Signature)	Date/Time	RECEIVED BY (Printed Name) NAA (Signature)	Date/Time

<b>Processing MSGP Stormwater</b>	No: EPC-CP-QP-2106	Page 18 of 19
Samples	Revision: 0	Effective Date: 10/18/2019

## **Attachment 2: Sample Container Labels Example**

(Page 1 of 1)

Los Alamos N	National Laboratory
Sample ID: MSGP-17-131786	
Container: 500 ML POLY	1 of 1
Preservative: HNO3 ICE	
Analysis: NPDES-Al-Total Recov	rerable
Data/ 04/01/2017	Time: 16:03

Los Alamos N	ational Laboratory
Sample ID: MSGP-17-131787	
Container: 500 ML POLY	1 of
Preservative: HNO3 ICE	
Analysis: NPDES-Al-Total Recove	rable
Date/ 04/01/2017	Time: 16:03

<b>Processing N</b>	SGP Stormwater	r
Samples		

No: EPC-CP-QP-2106 Page 19 of 19

Revision: 0 Effective Date: 10/18/2019

## Attachment 3: Chain of Custody/Analysis Request Example

(Page 1 of 1)

LANL SMO Los Alamos NM			Chair	10	f (	Cu	sto	00	ly/	Αı	na	lys	sis	F	Re	que	es	t				2	OC/Lab Request # 017-1326 Page 1 of 1	
Client Contact:	Lab Agreen	nent#:		Site	Nan	ne:	1	Los	Alar	mos	Nati	ional	Lat	oora	tory									
	Project Nur															T	T	T	1			Ra	d Screening Info:	
	Analysis Tun 24 Hour- 7 Days - 14 Days - 21 Days - 28 Days -	Other		12-0									4										b Reporting Limit Method Detection	
Field Sample ID	Sample Date	Sample Time	Sample Matrix	MSGP-Zn										d		1								
MSGP-17-131904	Apr 1 2017	16:03	W	1							- (				4				-					
MSGP-17-132187	Apr 1 2017	16:03	W	1						1		1	Ą	1										
				1	- 1				4	1	1													
									14	6	1													
							4	6	1	1	b.													
			11 = 1					6	1	7							1							
						6	6		6								1			T				
	1					1	1	-	ř								1	1						
		-		Н		-											1	1						
-			-				2							Н			+	+	+	+				
	_		1	+	8	_							-				+	+	+	1				
	_	-	<	1	7						-		-	-			+	+	+			-		_
			×	1		-		-				$\vdash$		Н		-	+	+	+	+		-		_
	_		- 4	-	-	-			-		-	$\vdash$	-	$\vdash$		-	+	+	+	+	H	+		_
	-												-				+	+	+	+	H	+		_
				-												-	4	+	+	+		-		_
			4	_													4	1	-	-		-		_
			- 1														1							_
Special Instructions:																							4/12/	17
Relinquished by	Dac Prin	t Name	ine Doc		Date/Time at 12 17 Ker Received by: Print !					rint Name: B. Green		Date/Time: 3:/	0											
Relinquished by:		Name:		-		e/Tin		- EU L			Land to the second seco				int Name:		Date/Time:							
Relinquished by:				Dat	Date/Time: Received by: Print Name:								Date/Time:											

# ATTACHMENT 21: EPC-DO-QP-101, ENVIRONMENTAL REPORTING REQUIREMENTS FOR RELEASES OR EVENTS

EPC-DO-QP-101	Revision: <b>3</b>	Los Alamos		
Effective Date: 08/07/2017	Next Review Date: 08/07/2020	NATIONAL LABORATORY		

## **Environment, Safety, and Health Directorate**

## **Environmental Protection and Compliance Division – Compliance Programs**

## **Quality Procedure**

## **Environmental Reporting Requirements for Releases or Events**

#### **Document Owner/Subject Matter Expert:**

Name:	Organization:	Signature:	Date:			
Brian Iacona	EPC-CP	Signature on File	4-27-17			
Derivative Classifier: Unclassified or DUSA ENVPRO						
Name:	Organization:	Signature:	Date:			
Jacob Meadows	EPC-CP	Signature on File	5-2-17			

#### **Approval Signatures:**

Subject Matter Expert:	Organization:	Signature:	Date:
Brian Iacona	EPC-CP	Signature on File	4-27-17
Responsible Line Manager:	Organization:	Signature:	Date:
Michael Saladen	EPC-CP, Team Leader	Signature on File	7-21-17
Responsible Line Manager:	Organization:	Signature:	Date:
	EPC-CP, Group Leader	Signature on File	8-3-17
Responsible Line Manager	Organization	Signature:	Date:
	EPC-DO, Division Leader	Signature on File	8-7-17

This copy is uncontrolled.

Users are responsible for ensuring they work to the latest approved version. To document a required read, Login to <u>UTrain</u>, and go to the Advanced Search.

<b>Environmental Reporting Requirements</b>	
for Releases or Events	

EPC-DO-QP-101	Page 2 of 23
Revision: 3	Effective Date: 08/07/2017

#### **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]
0	02/09	New document
1	4/10	Revision and update
ENV-DO-QP-101 R2	6/12	Biennial Review/Revision, new template implemented.
EPC-DO-QP-101 R3	08/07/17	Revision and update. This document replaces ENV-DO-QP-101 R2. New document number reflects organizational name change.

# **Environmental Reporting Requirements** for Releases or Events

EPC-DO-QP-101 Page 3 of 23

Revision: 3 Effective Date: 08/07/2017

#### **Table of Contents**

Qualit	ty Pro	cedure	1
Revisi	on Hi	story	2
Table	of Co	ntents	3
1.0	Intro	duction	4
	1.1	Purpose	4
	1.2	Applicability	4
2.0	Preca	autions and Limitations	4
3.0	Respo	onsibilities	4
4.0	Work	Processes	5
	4.1	Responsibility of On-Call Representative	5
	4.2	Follow-Up Reporting	6
	4.3	Summary of Policy Reporting	6
	4.4	Using this Procedure	6
	4.5	Determining if a Release is Reportable under RCRA	7
	4.6	Determining if a Release is Reportable under TSCA	7
	4.7	Determining if a Release is Reportable under the NM Water Quality Act or the CWA	8
		4.7.1 Reporting Requirement for Petroleum Storage Tanks	9
		4.7.2 Additional Reporting Requirements under the NPDES Pesticide General Permit	10
	4.8	Determining if a Release is Reportable under CERCLA or EPCRA	11
		4.8.1 Regulatory Classification of the Released Material	11
	4.9	Determining Release Impacts to Biological or Cultural Resources	13
	4.10	Reporting a Release or Event	13
		4.10.1 Steps to Notify LANL Management and DOE	14
5.0	Reco	rds	15
6.0	Defin	itions and Acronyms	16
	6.1	Definitions	16
7.0	Refer	rences	18
8.0	Attac	hments or Appendices	19
	Attac	hment 1: Emergency Notification Requirements for RCRA	20
	Attac	hment 2. Summary of Emergency Release or Event Reporting Requirements	21

<b>Environmental Reporting Requirements</b>	EPC-DO-QP-101	Page 4 of 23
for Releases or Events	Revision: 3	Effective Date: 08/07/2017

#### 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 <a href="PD1200">PD1200</a>, <a href="Emergency Management">Emergency Management</a>, and <a href="P322-4">P322-4</a>, <a href="Performance">Performance</a> <a href="Improvement from Abnormal Events">Improvement from Abnormal Events</a>. 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 <u>not</u> 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").

<b>Environmental Reporting Requirements</b>	EPC-DO-QP-101	Page 5 of 23
for Releases or Events	Revision: 3	Effective Date: 08/07/2017

#### 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 <u>remaining steps in this procedure may be passed to that person.</u>

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.

<b>Environmental Reporting Requirements</b>	EPC-DO-QP-101	Page 6 of 23
for Releases or Events	Revision: 3	Effective Date: 08/07/2017

#### 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

<b>Environmental Reporting Requirements</b>	EPC-DO-QP-101	Page 7 of 23
for Releases or Events	Revision: 3	Effective Date: 08/07/2017

#### 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.

<b>Environmental Reporting Requirements</b>	EPC-DO-QP-101	Page 8 of 23
for Releases or Events	Revision: 3	Effective Date: 08/07/2017

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 ...

equal to or over 1 pound by weight of PCBs (TSCA) or greater than 270 gallons of untested mineral oil suspected of containing PCBs

#### Then...

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.

<b>Environmental Reporting Requirements</b>	EPC-DO-QP-101	Page 9 of 23
for Releases or Events	Revision: 3	Effective Date: 08/07/2017

## 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 <a href="EPC-CP-QP-010">EPC-CP-QP-010</a>: 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

<b>Environmental Reporting Requirements</b>	EPC-DO-QP-101	Page 10 of 23
for Releases or Events	Revision: 3	Effective Date: 08/07/2017

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, <u>and</u>
- 2. The person or non-target organism suffered a toxic or adverse effect.

The phrase <u>toxic or adverse effect</u> 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 <u>toxic or adverse effects</u> 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).

<b>Environmental Reporting Requirements</b>	EPC-DO-QP-101	Page 11 of 23
for Releases or Events	Revision: 3	Effective Date: 08/07/2017

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 <a href="https://www.epa.gov/npdes/pesticide-permitting">https://www.epa.gov/npdes/pesticide-permitting</a>.

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 <a href="mailto:immediately">immediately</a> (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 (<a href="https://www.epa.gov/npdes/pesticide-permitting">https://www.epa.gov/npdes/pesticide-permitting</a>).

#### 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

<b>Environmental Reporting Requirements</b>	EPC-DO-QP-101	Page 12 of 23
for Releases or Events	Revision: 3	Effective Date: 08/07/2017

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.

Step	Action		
1	Obtain an estimate of the quantity and type of material released (e.g. 4 pounds of chlorine gas or 150 curies of tritium).		
2	Compare this quantity against the RQs provided in 40 CFR Table 302.4 and 40 CFR §355, Appendices A and B.		
3	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 chemic exposure (Table 302.4) and for radiological exposure (Appendix B to §302.4). In these cases, t 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.	
4	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 <i>Reporting a Release or Event.</i>	
	Less than the RQ	Proceed to Step 5	
5	Continue to re-evaluate the release as as necessary.	new data becomes available. Perform Steps 1 through 4	

<b>Environmental Reporting Requirements</b>	EPC-DO-QP-101	Page 13 of 23
for Releases or Events	Revision: 3	Effective Date: 08/07/2017

#### 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 oncall 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.

<b>Environmental Reporting Requirements</b>	EPC-DO-QP-101	Page 14 of 23
for Releases or Events	Revision: 3	Effective Date: 08/07/2017

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
	<ul> <li>Name, address, and telephone number of the person to contact for further information</li> </ul>
	Whether the substance is an HS or EHS
	<ul> <li>Associated health risks and medical attention necessary for exposed individuals</li> </ul>
	<ul> <li>If available, information concerning the release of any hazardous and/or mixed waste which may endanger public or private drinking water supplies</li> </ul>
	<ul> <li>Assessment of actual or potential hazards to human health or the environment outside the facility</li> </ul>
	<ul> <li>If available, estimated quantity and disposition of recovered material that resulted from the incident</li> </ul>
	<ul> <li>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</li> </ul>
	<ul> <li>Any other information which may help emergency personnel responding to the incident</li> </ul>
	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	

<b>Environmental Reporting Requirements</b>	EPC-DO-QP-101	Page 15 of 23
for Releases or Events	Revision: 3	Effective Date: 08/07/2017

	required under applicable regulations.
	<b>NOTE:</b> 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

<b>Environmental Reporting Requirements</b>	EPC-DO-QP-101	Page 16 of 23
for Releases or Events	Revision: 3	Effective Date: 08/07/2017

- 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

<b>Environmental Reporting Requirements</b>	EPC-DO-QP-101	Page 17 of 23
for Releases or Events	Revision: 3	Effective Date: 08/07/2017

**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

<b>Environmental Reporting Requirements</b>	EPC-DO-QP-101	Page 18 of 23
for Releases or Events	Revision: 3	Effective Date: 08/07/2017

**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

<b>Environmental Reporting Requirements</b>	EPC-DO-QP-101	Page 19 of 23
for Releases or Events	Revision: 3	Effective Date: 08/07/2017

- 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

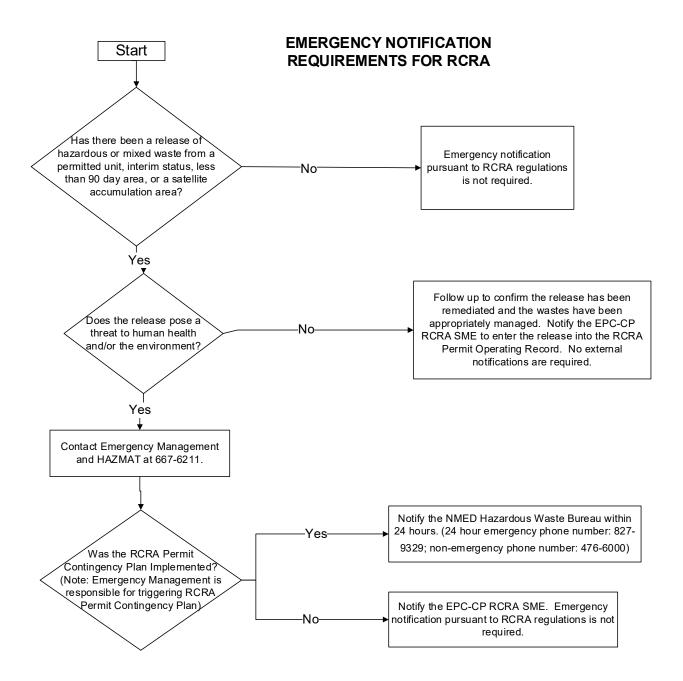
Attachment 1: Emergency Notification Requirements for RCRA

Attachment 2: Summary of Emergency Release or Event Reporting Requirements

<b>Environmental Reporting Requirements</b>
for Releases or Events

EPC-DO-QP-101	Page 20 of 23
Revision: 3	Effective Date: 08/07/2017

**Attachment 1: Emergency Notification Requirements for RCRA** 



<b>Environmental Reporting Requirements</b>
for Releases or Events

EPC-DO-QP-101	Page 21 of 23
Revision: 3	Effective Date: 08/07/2017

#### **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 nontarget 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).

<b>Environmental Reporting Requirement</b>	S
for Releases or Events	

 EPC-DO-QP-101
 Page 22 of 23

 Revision: 3
 Effective Date: 08/07/2017

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.

<b>Environmental</b>	Reporting	Requirements
for Releases or	Events	

 EPC-DO-QP-101
 Page 23 of 23

 Revision: 3
 Effective Date: 08/07/2017

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.

## ATTACHMENT 22: EPC-CP-QP-007, SPILL INVESTIGATIONS

ENV-CP-QP-007	Revision: 10	
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	ENV-CP	Signature on File	08/13/15		
Name:	Organization:	Signature:	Date:		
Jacob W. Meadows	ENV-CP	Signature on File	08/28/15		
Deriva	ative Classifier: 🛛 Und	classified DUSA ENVPRO			
Name:	Organization:	Signature:	Date:		
Gian A. Bacigalupa	ENV-CP	Signature on File	08/31/15		
	Approval	Signatures:			
Subject Matter Expert: Organization: Signature: Date:					
Jacob W. Meadows	ENV-CP, Program Lead	Signature on File	08/31/15		
Responsible Line Manager:	Organization:	Signature:	Date:		
Michael T. Saladen ENV-CP, Team Leader		Signature on File	08/31/15		
Responsible Line Manager:	Organization:	Signature:	Date:		
ENV-CP, Group Leader Signature on File 09/30/15			09/30/15		

This copy is uncontrolled.

Users are responsible for ensuring they work to the latest approved version. To document a required read, Login to <u>UTrain</u>, and go to the Advanced Search.

Spill Investigations	ENV-CP-QP-007	Page 2 of 12
	Revision: 10	Effective Date: 09/30/15

#### **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.

## **Spill Investigations**

ENV-CP-QP-007 Page 3 of 12

Revision: 10

Effective Date: 09/30/15

### **Table of Contents**

1.0	PURP	OSE	4
2.0	SCOP	E	4
	2.1	Hazard review	
3.0	RESPO	ONSIBILITIES	4
	3.1	Prerequisites	4
4.0	WOR	K PROCESSES	4
	4.1	Field Activity	5
	4.2	Communication	6
	4.3	Facility Management Work Control Requirements for Field Activities	6
	4.4	Facility Management-Specific Access Requirements	6
	4.5	Regulatory Spill Reporting	8
5.0	DOCL	JMENT CONTROL/RECORDS MANAGEMENT	8
6.0	DEFIN	NITIONS	9
7.0	REFE	RENCES	9
8.0	ATTA	CHMENTS	9
	Attac	hment 1- ENV-CP Release Notification Phone List	10
	Attac	hment 2- LANL ENV-CP Unplanned Release Report	12

Spill Investigations	ENV-CP-QP-007	Page 4 of 12
	Revision: 10	Effective Date: 09/30/15

#### 1.0 PURPOSE

This Environmental Protection Division – Compliance Programs Group (ENV-CP) procedure describes processes and implements requirements for spill investigations.

#### 2.0 SCOPE

This procedure applies to all ENV-CP staff and personnel conducting spill investigations.

#### 2.1 HAZARD REVIEW

The work described in this procedure is <u>field work</u> and has a <u>LOW hazard</u> rating as documented by submittal of a completed <u>ENV Low Hazard Verification form</u>.

#### 3.0 RESPONSIBILITIES

The following personnel require training before implementing this procedure:

• ENV-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 ENV-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;

Spill Investigations	ENV-CP-QP-007	Page 5 of 12
	Revision: 10	Effective Date: 09/30/15

- 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.
	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:

- ENV-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

Spill Investigations	ENV-CP-QP-007	Page 6 of 12
	Revision: 10	Effective Date: 09/30/15

If WM-SVS will collect the required sample, complete a Request For Analysis (RFA), <a href="http://int.lanl.gov/environment/waste/sampling.shtml">http://int.lanl.gov/environment/waste/sampling.shtml</a>, 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, <a href="http://int.lanl.gov/computing/communications/mobile/index.shtml">http://int.lanl.gov/computing/communications/mobile/index.shtml</a>.

Radio or cellular contact must be established with a designated contact prior to leaving ENV-CP and upon arrival/departure at the site in accordance with <u>ENV-DO-QP-100</u>, <u>General Field Safety</u>.

The Incident Commander can make special communication exceptions.

All photography at LANL must adhere to <u>P217, Controlled Articles</u>.

Wastes generated from activities described in the procedure will be properly characterized, managed, and disposed in accordance with <u>P409, LANL Waste Management</u>, <u>P930-1, LANL Waste Acceptance Criteria</u>, and P403, *Environmental Risk Identification and Management*.

### 4.3 FACILITY MANAGEMENT WORK CONTROL REQUIREMENTS FOR FIELD ACTIVITIES

Most field activities performed by the ENV-CP spill response personnel are impacted by facility management work control requirements. Requirements vary between the respective Facility Operations Divisions (FODs) and therefore necessitate ENV-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.

Spill Investigations	ENV-CP-QP-007	Page 7 of 12
	Revision: 10	Effective Date: 09/30/15

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, ENV-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, ENV-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.

Spill Investigations	ENV-CP-QP-007	Page 8 of 12
_	Revision: 10	Effective Date: 09/30/15

### 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, ENV-CP Release Notification Phone List.

If a spill impacts a Solid Waste Management Unit (SWMU) or Area of Concern (AOC), contact ENV-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 ENV-CP Unplanned Release Report must be completed (Attachment 2) and submitted to the ENV-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 ENV-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 <u>ADESH-AP-006 Records Management Plan</u>.

- Field notebook documentation of the release including:
  - Time and date of the release
  - Time and date of ENV-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 ENV-CP Unplanned Release Report (Attachment 2) for non-reportable releases.

Spill Investigations	ENV-CP-QP-007	Page 9 of 12
	Revision: 10	Effective Date: 09/30/15

### 6.0 DEFINITIONS

AOC: Area of Concern

ER: Environmental Remediation

<u>Field Work</u>: 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- ENV-CP Release Notification Phone List

Attachment 2- LANL ENV-CP Unplanned Release Report

Spill Investigations	ENV-CP-QP-007	Page 10 of 12
	Revision: 10	Effective Date: 09/30/15

### **ATTACHMENT 1- ENV-CP RELEASE NOTIFICATION PHONE LIST**

# Los Alamos National Laboratory ENV-CP

## Release notification phone list

# August 2015

Los Alamos National Laborato	ry
------------------------------	----

(1)	Security and Emergency Operations	
	Emergency Management (SEO-EM)	667-6211
(2)	ENV-ES Group Office	665-8855
(3)	ENV-CP Group Office	667-0666
(4)	ENV-DO	667-2211
(5)	LANL Central Alarm Station (SOC-LA)	667-7080
	L.A. Fire Department	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

Spill Investigations	ENV-CP-QP-007	Page 11 of 12
	Revision: 10	Effective Date: 09/30/15

## **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	Pager	Cellular	Email address
		Phone		Phone	
Jake Meadows	ENV-CP	606-0185	664-1333	231-0460	jmeadows@lanl.gov
Mike Saladen	ENV-CP	665-6085		699-1284	saladen@lanl.gov
Mark Haagenstad	ENV-CP	665-2014		699-1733	mph@lanl.gov
Tim Zimmerly	ENV-CP	664-0105	664-1237	699-7621	tzimmer@lanl.gov
Terrill Lemke	ENV-CP	665-2397		699-0725	tlemke@lanl.gov

### Web addresses:

NMED home page <a href="http://www.nmenv.state.nm.us">http://www.nmenv.state.nm.us</a>

National Response Center home page <a href="http://www.nrc.uscg.mil/Default.aspx">http://www.nrc.uscg.mil/Default.aspx</a>

Reportable Quantities web page <a href="http://homer.ornl.gov/rg/">http://homer.ornl.gov/rg/</a>

Spill Investigations	ENV-CP-QP-007	Page 12 of 12
-	Revision: 10	Effective Date: 09/30/15

# ATTACHMENT 2- LANL ENV-CP UNPLANNED RELEASE REPORT

# Los Alamos National Laboratory Environmental Compliance Programs (ENV-CP) Unplanned Release Report

Form Completed By: Telepho	one: Group:
Spill Details Spill Ow	wner (Specify): □LANS, LLC □Subcontractor:
Date of Spill/Date Spill Discovered:	
Location:	
Material Spilled:	☐ Anti-freeze/coolant ☐ Gasoline
☐ Hydraulic Fluid ☐ Potable Water	☐ Steam Condensate ☐ Other: ☐ Lubricants/oils ☐ Refrigerant Oil
☐ Diesel Volume Spilled:	Waste Volume Generated:
Source of Spill:	☐ Hydraulic Line ☐ Radiator
Vehicle ID:	□ Potable Water Line □ Condensate Line □ Fire Suppression System □ Other: □ Fuel Tank
Did the spill enter or impact any of the	☐ Floor Drain, if so please indicate affected facility
Did the spill enter or impact any of the following? (Check as many as apply)	Watercource/drainage area if so please indicate
Did the spill enter or impact any of the	Watercource/drainage area if so please indicate
Did the spill enter or impact any of the following? (Check as many as apply)  RCRA Treatment Storage Disposal Facility RCRA Satellite Accumulation Area	□ Watercourse/drainage area, if so please indicate
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	□ Watercourse/drainage area, if so please indicate □ Solid Waste Management Unit/Area of Concern, if so please indicate □ None
following? (Check as many as apply)  RCRA Treatment Storage Disposal Facility RCRA Satellite Accumulation Area	□ Watercourse/drainage area, if so please indicate □ Solid Waste Management Unit/Area of Concern, if so please indicate □ None
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  Did the spill occur inside or outside a building? Did the spill occur on:	□ Watercourse/drainage area, if so please indicate     □ Solid Waste Management Unit/Area of Concern, if so please indicate     □ None     □ Inside □ Outside     □ Concrete □ Asphalt     □ Carpeted Floor □ Graveled/Rocky Area     □ Tile □ Soil/Vegetated Area     □ Wooden floor/deck □ Other:     □ If samples were collected, indicate analytical suite:
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  Did the spill occur inside or outside a building?  Did the spill occur on: (Check as many as apply)  Samples Collected:  None Water	□ Watercourse/drainage area, if so please indicate     □ Solid Waste Management Unit/Area of Concern, if so please indicate     □ None     □ Inside □ Outside     □ Concrete □ Asphalt     □ Carpeted Floor □ Graveled/Rocky Area     □ Tile □ Soil/Vegetated Area     □ Wooden floor/deck □ Other:     □ If samples were collected, indicate analytical suite:
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  Did the spill occur inside or outside a building?  Did the spill occur on: (Check as many as apply)  Samples Collected: None Water Capilifection	□ Watercourse/drainage area, if so please indicate     □ Solid Waste Management Unit/Area of Concern, if so please indicate     □ None     □ Inside □ Outside     □ Concrete □ Asphalt     □ Carpeted Floor □ Graveled/Rocky Area     □ Tile □ Soil/Vegetated Area     □ Wooden floor/deck □ Other:     □ If samples were collected, indicate analytical suite:
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  Did the spill occur inside or outside a building?  Did the spill occur on: (Check as many as apply)  Samples Collected: None Water Confidention	□ Watercourse/drainage area, if so please indicate □ Solid Waste Management Unit/Area of Concern, if so please indicate □ None □ Inside □ Outside □ Concrete □ Asphalt □ Carpeted Floor □ Graveled/Rocky Area □ Tile □ Soil/Vegetated Area □ Wooden floor/deck □ Other: □ If samples were collected, indicate analytical suite:

# ATTACHMENT 23: EPC-CP-QP-2110, MSGP STORMWATER POLLUTION PREVENTION PLAN PREPARATION AND MAINTENANCE

EPC-CP-QP-2110	Revision: <b>0</b>	Los Alamos
Effective Date: 01/07/2020	Next Review Date: 01/07/2023	NATIONAL LABORATORY EST.1943

Environment, Safety, Health, Quality, Safeguards, and Security Directorate Environment Protection and Compliance – Compliance Programs Group Quality Procedure

# MSGP Stormwater Pollution Prevention Plan Preparation and Maintenance

Hazard Grading:	⊠ Low	Moderate	☐ High/Complex			
Usage Level:		UET	Mixed: UET Sections:			
Status: New		Major Revision	Minor Revision			
Review w/No Ch		Changes	Other:			
Safety Basis:	⊠ N/A	USQ	USI Number:			
	I	Document Author	/Subject Matter Expert:			
Name:		Organization:	Signature:	Date:		
Holly L. Wheeler		EPC-CP	Signature on File	1-6-2020		
	Derivative Classifier:					
Name:		Organization:	Signature:	Date:		
Steven E. Wolfel		EPC-CP	Signature on File 1-6-2020			
Approval Signatures:						
EPC-CP Reviewer:		Organization:	Signature:	Date:		
Terrill W. Lemke, Team Leader EPC-0		EPC-CP	Signature on File	1-7-2020		
EPC-CP RLM: O		Organization:	Signature:	Date:		
Taunia Van Valkenb	urg, Group Leader	EPC-CP	Signature on File	1-7-2020		

This copy is uncontrolled.

Users are responsible for ensuring they work to the latest approved version. To document a required read, Login to <u>UTrain</u>, and go to the Advanced Search.

No: EPC-CP-QP-2110	Page 2 of 72
Revision: 0	Effective Date: 01/07/2020

# **REVISION HISTORY**

	Effective Date	
<b>Document Number and Revision</b>	[Document Control	
[Include revision number, beginning	Coordinator inserts	Description of Changes
with Revision 0]	effective date]	[List specific changes made since the previous revision]
EPC-CP-QP-2110, Rev. 0	01/07/2020	New document

No: EPC-CP-QP-2110 Page 3 of 72

Revision: 0 Effective Date: 01/07/2020

# **Table of Contents**

Revis	ion H	istory	2
1.0	Introduction		4
	1.1	Purpose	4
	1.2	Scope	
	1.3	Applicability	
2.0		autions and Limitations	
3.0	Preparing an MSGP Stormwater Pollution Prevention Plan		4
	3.1	Gathering Information for the SWPPP	5
	3.2	Preparing the SWPPP	
4.0	Maintaining the MSGP SWPPP		
	4.1	Availability of the MSGP SWPPP	
	4.2	Additional Documentation Requirements	7
5.0	Revi	sing the MSGP SWPPP	
6.0	Trair	ning	9
7.0		ords	
8.0	Definitions and Acronyms		10
	8.1	Definitions	
	8.2	Acronyms	
9.0	Refe	rences	
		chments	
10.0		chment 1: EPC-CP-QP-2110 R0 Form 1, MSGP SWPPP Template Example	
		chment 2: MSGP SWPPP Review Guidance Checklist Example	
			_

MSGP Stormwater Pollution
<b>Prevention Plan Preparation and</b>
Maintenance

No: EPC-CP-QP-2110	Page 4 of 72
Revision: 0	Effective Date: 01/07/2020

### 1.0 INTRODUCTION

The Environmental Protection Agency (EPA) National Pollutant Discharge Elimination System (NPDES) Multi-Sector General Permit (MSGP), also referred to as the Permit, contains specific requirements for industrial activities of Los Alamos National Laboratory (LANL) covered by the permit. One requirement is the preparation, maintenance, and routine revision of a Stormwater Pollution Prevention Plan (SWPPP).

## 1.1 Purpose

Active MSGP facilities must be included in a SWPPP. The SWPPP is intended to document the selection, design, and installation of control measures to meet permit effluent limits. Additional documentation required by the Permit is to be kept with the SWPPP (including inspection maintenance, monitoring, and corrective action) and is intended to document the implementation of permit requirements.

## 1.2 Scope

This procedure contains information and specific steps for preparing a SWPPP, and identifying and documenting conditions in order to meet Permit requirements. Part 5 of the Permit contains specific requirements for developing, maintaining, and revising a SWPPP for facilities with stormwater discharge associated with industrial activities permitted under an MSGP. Part 5.5 describes the additional documentation required to be kept with the SWPPP.

## 1.3 Applicability

This procedure applies to Environmental Protection and Compliance-Compliance Programs (EPC-CP) technical staff, Deployed Environmental Professionals (DEPs), and subcontractor personnel (as applicable) who develop and maintain SWPPPs at MSGP regulated LANL facilities operated by Triad, LLC.

### 2.0 PRECAUTIONS AND LIMITATIONS

The hazard rating for the activities described in this procedure is **LOW** and does not require an Integrated Work Document.

### 3.0 PREPARING AN MSGP STORMWATER POLLUTION PREVENTION PLAN

Part 5 of the Permit contains the specific requirements for developing, maintaining, and revising a SWPPP. At a minimum, the SWPPP must contain the following elements:

- Stormwater pollution prevention team (Stormwater PPT);
- Site description (including a site map);
- Summary of potential pollutant sources;
- Description of control measures;

MSGP Stormwater Pollution	
<b>Prevention Plan Preparation and</b>	
Maintenance	

No: EPC-CP-QP-2110	Page 5 of 72
Revision: 0	Effective Date: 01/07/2020

- · Schedules and procedures;
- Documentation to support eligibility considerations under other federal laws; and
- Signature requirements.

Where the SWPPP refers to procedures in other facility documents, such as a Spill Prevention, Control and Countermeasure Plan or an Environmental Management System, copies of the relevant portions of those documents must be kept with the SWPPP.

The template provided in Attachment 1, EPC-CP-QP-2110 R0 Form 1, MSGP SWPPP Template Example contains the elements required in a LANL MSGP SWPPP. Contact the MSGP Program Lead for questions regarding content.

# 3.1 Gathering Information for the SWPPP

### **SWPPP Preparer**

- [1] Contact the MSGP Program Lead for a copy of the most current SWPPP template.
- [2] Obtain a copy of the previous year's SWPPP for reference (if one is available).
- [3] Review the SWPPP template.
  - [a] Identify information that will need to be included in the SWPPP (e.g., MSGP sector, operational areas, Pollution Prevention Team member names, etc.).
  - [b] Identify documents that will need to be attached to the SWPPP (e.g., certifications, memorandums, maps, data summaries, endangered species reports, etc.).
- [4] Identify documents and/or reports that are provided by EPC-CP.
  - [a] Contact the MSGP Program Lead with a request for needed information.
- [5] Obtain maps as specified in the SWPPP template.
  - [a] Request a new map or update to existing map from the MSGP Program Lead.
  - [b] Provide a draft or map markup with information as required in the Permit.

### 3.2 Preparing the SWPPP

### **SWPPP Preparer**

- [1] Use a copy of the most current SWPPP template.
- [2] Add information to the relevant sections.
- [3] Text highlighted in yellow indicate areas to be replaced with facility specific information.

MSGP Stormwater Pollution	
Prevention Plan Preparation and Maintenance	Rev

No: EPC-CP-QP-2110	Page 6 of 72
Revision: 0	Effective Date: 01/07/2020

- [a] <u>IF</u> text is part of an instruction (e.g., Insert site description text here.)

  THEN delete the entire line and replace with the appropriate information.
- [b] <u>IF</u> text is embedded as part of the line,

  <u>THEN</u> replace just the yellow highlighted text with appropriate information (e.g., delete <u>Sector XX-(Insert Sector Title)</u> and replace with <u>Sector P Land Transportation & Warehousing</u>).
- [4] Delete attachments that are not applicable to the active facility specific SWPPP.
- [5] Attach other documentation (e.g., Spill Prevention, Control and Countermeasure Plan, Environmental Management System, copies of relevant portions of documents) as necessary.
- [6] Send the draft SWPPP to the EPC-CP MSGP Program Lead and request a review.
  - **NOTE 1:** The EPC-CP MSGP Program Lead may delegate the review to personnel in the Storm Water Permitting/Compliance Team.

### **MSGP Program Lead or Designee**

- [7] Review the SWPPP to ensure information required by the Permit is included.
  - [a] Encourage the use of the MSGP SWPPP Review Guidance Checklist as a best management practice to cross-check SWPPP content with the Permit. See checklist example in Attachment 2.
  - [b] Provide comments to the SWPPP Preparer.

### **SWPPP Preparer**

- [8] The Preparer must resolve review comments with the MSGP Program Lead.
- [9] Obtain the signature of a duly authorized representative (refer to Appendix B, Subsection 11 of the Permit) on the certification statements associated with the SWPPP and attachments (refer to Attachment 9 of the MSGP SWPPP Template Example).
  - NOTE 2: The Review & Approval System for Scientific and Technical Information (RASSTI) system requires upload of only PDF documents. It is highly recommended that all final certifications obtained contain a written signature rather than electronic signature. The RASSTI system adds a cover page to the document containing the LA-UR number, which obviates all electronic signatures due to the document change.

MSGP Stormwater Pollution	
<b>Prevention Plan Preparation and</b>	
Maintenance	

No: EPC-CP-QP-2110	Page 7 of 72
Revision: 0	Effective Date: 01/07/2020

### 4.0 MAINTAINING THE MSGP SWPPP

### 4.1 Availability of the MSGP SWPPP

A complete copy of the current SWPPP is required to be kept at the active facility in an accessible format. The SWPPP must be immediately available to facility employees, EPA, and other entities identified in the Permit. The SWPPP must also be made available to the public. LANL meets this requirement by posting SWPPPs to the Public Reading Room internet web page. Refer to Part 5.4 of the Permit for more information.

## **SWPPP Preparer**

- [1] Submit the final certified SWPPP in PDF format to the RASSTI system at rassti.lanl.gov.
  - [a] The SWPPP must be identified as Los Alamos Unlimited Release, or LA-UR, to be posted to the Public Reading Room.
  - [b] Identify a derivative classifier to review the document.
  - [c] Identify the document for a **full classification review**. The Designated Unclassified Subject Area, or DUSA, system may **NOT** be used.
  - [d] Identify a line manager for an approval signature.
  - [e] Identify the document for release to Public Reading Room.
- [2] Add the cover page containing the LA-UR number generated by the RASSTI system to the SWPPP.
- [3] Contact the RASSTI staff for questions and assistance using this system.

## 4.2 Additional Documentation Requirements

The Permit requires additional documentation to be kept with the SWPPP that together keep records complete and up-to-date, and demonstrate full compliance with the conditions of the Permit. Some documents may be generated when a SWPPP is first written (e.g., copy of the permit). Other documents may be generated on an ongoing basis throughout a calendar year (e.g., inspections). Refer to Part 5.5 of the Permit for additional information.

# **SWPPP Preparer or Owner**

- [1] <u>IF</u> any of the following documents are generated, <u>THEN</u> add the document to the facility SWPPP as soon as the document is generated and finalized (i.e., all signatures have been obtained).
  - A copy of the Notice of Intent to Discharge (NOI) submitted to EPA and correspondence exchanged between Triad, LLC and EPA specific to coverage under the permit;

MSGP Stormwater Pollution
<b>Prevention Plan Preparation and</b>
Maintenance

No: EPC-CP-QP-2110	Page 8 of 72
Revision: 0	Effective Date: 01/07/2020

**NOTE:** There may be several modifications to the NOI during a permit term. Ensure you coordinate with the MSGP Program Lead to confirm all modifications are included in the SWPPP.

- A copy of the acknowledgement received from the EPA assigning the NPDES permit identification number
- · A copy of the permit;
- Documentation of maintenance and repairs of control measures (refer to Part 2.1.2.3 of the Permit);
- All inspections, including Routine Facility Inspections and Quarterly Visual Assessments (refer to Parts 3.1.2 and 3.2.2 of the Permit);
- Description of any deviations from the schedule for visual assessments and/or monitoring, and the reason for the deviations (refer to Parts 3.2.3 and 6.1.5 of the Permit);
- Corrective action documentation (refer to Part 4.4 of the Permit);
- Documentation of any benchmark exceedances and the type of response to the exceedance employed;
- Documentation to support any determination that pollutants of concern are not expected to be present above natural background levels if stormwater is discharged directly to impaired waters; and
- Documentation to support any claim that the facility has changed its status from active to inactive and unstaffed.

### 5.0 REVISING THE MSGP SWPPP

The Permit specifies conditions that trigger a SWPPP review to ensure numeric and non-numeric effluent limits are met and to determine if modifications to stormwater controls are necessary (refer to Parts 4.1 and 4.2 of the Permit).

The SWPPP must also be modified based on corrective actions and deadlines required under Part 4.3 of the Permit, and documented in accordance with Part 4.4 of the Permit.

At a minimum, the SWPPP must be reviewed and revised once per calendar year, and no later than 45 days after conducting the final routine facility inspection for the year.

## **SWPPP Preparer or Owner**

- [1] The Stormwater PPT will review the SWPPP for the following at a minimum.
  - The selection, design, installation, and implementation of control measures.
  - Sources of pollution.

MSGP Stormwater Pollution
<b>Prevention Plan Preparation and</b>
Maintenance

No: EPC-CP-QP-2110	Page 9 of 72
Revision: 0	Effective Date: 01/07/2020

- · Spill and leak procedures.
- Non-stormwater discharges (as applicable).
- [2] <u>IF</u> any of the following conditions occur or are detected during an inspection, monitoring or other means,

<u>THEN</u> the Stormwater PPT must **immediately** review the SWPPP as specified above.

- Unauthorized release or discharge (e.g., spill, leak, discharge of non-stormwater not authorized by the permit);
- A discharge violates a numeric effluent limit (refer to Table 2-1 of the Permit);
- Controls measures are not stringent enough for discharge to meet applicable water quality standards or the non-numeric effluent limits in the permit;
- A required control measure was never installed, installed incorrectly, or not in accordance with Parts 2 and/or 8, or is not properly operated or maintained;
- Whenever a visual assessment shows evidence of stormwater pollution (e.g., foam, oil sheen, etc.).
- Construction or a change in design, operation, or maintenance at the facility that significantly changes the nature of pollutants discharged in stormwater from the facility, or significantly increases the quantity of pollutants discharged;
  - **NOTE 1:** Changes include building removal or replacement, BMP removal or installation, outfall removal or creating a new outfall, changing drainage pathways or the path of stormwater flow.
- The average of four quarterly sampling results exceeds an applicable benchmark.
  - **NOTE 2:** 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 this is considered a benchmark exceedance.
- [3] The Stormwater PPT must determine the modification(s) to be made to implement or maintain control measures and/or take corrective action.
- [4] The revision/modification(s) will be implemented at the facility.
- [5] The SWPPP will be revised/modified within 14 days of completion of a modification or corrective action to reflect the modification(s) made.
- [6] Obtain a signature and date from a duly authorized representative on all SWPPP revisions/modifications in accordance with Appendix B, Subsection 11 of the Permit.

### 6.0 TRAINING

The following personnel require training before implementing this procedure.

MSGP Stormwater Pollution
<b>Prevention Plan Preparation and</b>
Maintenance

No: EPC-CP-QP-2110	Page 10 of 72
Revision: 0	Effective Date: 01/07/2020

- Deployed Environment, Safety, and Health Group and Team Leaders
- EPC-CP MSGP stormwater compliance personnel
- DEPs
- Other LANL or subcontract personnel identified as being required to prepare and maintain MSGP SWPPPs as part of their job duties

All EPC-CP personnel that execute the activities specified in this procedure must meet the minimum qualification and training requirements for their position as identified EPC-CP-PIP-2101, NPDES Multi-Sector General Permit Program. This will include "self-study" (required reading) for this procedure as assigned and documented in accordance with ADSH-TPP-301, *ADESH Training Program Plan*. Other participating LANL groups may require training documentation pursuant to local procedures.

Contract personnel that execute the activities specified in this procedure will be qualified and trained as required by the Exhibit D and Exhibit F. In addition, contract personnel will be required to complete "self-study" (required reading) of this procedure.

### 7.0 RECORDS

MSGP SWPPPs are signed and certified by a duly authorized representative of the individual facilities. These completed documents are maintained at the permitted facility, managed by the facility's Records Management designated point-of-contact or document manager, and posted to the LANL public reading room. The MSGP team may retain a copy for reference purposes.

Below, are records generated as a result of implementing this procedure. Records generated are identified by title and type.

Record Title	QA Record	Non-QA Record
Stormwater Pollution Prevention Plan	$\boxtimes$	
MSGP SWPPP Review Guidance Checklist	N/A	N/A

### 8.0 DEFINITIONS AND ACRONYMS

### 8.1 Definitions

See LANL Definition of Terms.

**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.

MSGP Stormwater Pollution
<b>Prevention Plan Preparation and</b>
Maintenance

No: EPC-CP-QP-2110	Page 11 of 72
Revision: 0	Effective Date: 01/07/2020

# 8.2 Acronyms

See LANL Acronym Master List.

EPA	Environmental Protection Agency
EPC-CP	Environmental Protection and Compliance-Compliance Programs
DEP	Deployed Environmental Professional
DUSA	Designated Unclassified Subject Area
LANL or the Laboratory	Los Alamos National Laboratory
LA UR	Los Alamos Unlimited Release
MSGP or Permit	Multi-Sector General Permit
NPDES	National Pollutant Discharge Elimination System
NOI	Notice of Intent to Discharge
SWPPP	Stormwater Pollution Prevention Plan
PDF	Portable Document Format
PPT	Pollution Prevention Team

### 9.0 REFERENCES

Unites States Environmental Protection Agency (EPA) National Pollutant Discharge Elimination System (NPDES) Multi-Sector General Permit for Stormwater Discharges Associated With Industrial Activity (MSGP)

Federal Register, Final National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges from Industrial Activities. Federal Register: June 16, 2015, Volume 80, Number 115

Clean Water Act, Title 33 U.S.C. 1251

### 10.0 ATTACHMENTS

Attachment 1: EPC-CP-QP-2110 R0 Form 1, MSGP SWPPP Template Example

**Attachment 2:** MSGP SWPPP Review Guidance Checklist Example

MSGP Stormwater Pollution
<b>Prevention Plan Preparation and</b>
Maintenance

No: EPC-CP-QP-2110	Page 12 of 72
Revision: 0	Effective Date: 01/07/2020

# Attachment 1: EPC-CP-QP-2110 R0 Form 1, MSGP SWPPP Template Example (Page 1 of 50)

Insert Facility Name MSGP Stormwater Pollution Prevention Plan Document Reference Number Revision X, Date

# **MSGP Stormwater Pollution Prevention Plan**

# **Insert Facility Name**

Triad National Security, LLC Los Alamos National Laboratory

XX/XX/XXX

Revision X

MSGP Stormwater Pollution
<b>Prevention Plan Preparation and</b>
Maintenance

No: EPC-CP-QP-2110	Page 13 of 72
Revision: 0	Effective Date: 01/07/2020

Attachment 1: EPC-CP-QP-2110 R0 Form 1, MSGP SWPPP Template Example (cont.)
(Page 2 of 50)

Insert Facility Name
MSGP Stormwater Pollution Prevention Plan
Document Reference Number
Revision X, Date

Page intentionally blank



No: EPC-CP-QP-2110 Page 14 of 72

Revision: 0

Effective Date: 01/07/2020

# Attachment 1: EPC-CP-QP-2110 R0 Form 1, MSGP SWPPP Template Example (cont.) (Page 3 of 50)

Insert Facility Name
MSGP Stormwater Pollution Prevention Plan
Document Reference Number
Revision X, Date

TABL	LE OF CONTENTS		
PREF	ACE	6	
1.0	FACILITY DESCRIPTION	6	
1.1	Facility Information	6	
1.2	Stormwater Pollution Prevention Team (PPT)		
1.3	Site Description		
1.4	General Location Map		
1.5	Site Map.		
1.5			
2.0	POTENTIAL POLLUTANT SOURCES		
2.1	Potential Pollutants Associated with Industrial Activity	9	
2.2	Spills and Leaks	9	
2.3	Unauthorized Non-Stormwater Discharges	10	
2.4	Salt Storage	10	
2.5	Historical Data Summary		
3.0	STORMWATER CONTROL MEASURES	11	
3.1	Non-Numeric Technology-Based Effluent Limits		
5.1	3,1.1 Minimize Exposure		
	3.1.2 Good Housekeeping		
	3.1.3 Maintenance		
	3.1.4 Spill Prevention and Response		
	3.1.5 Erosion and Sediment Control	12	
	3.1.6 Management of Runoff	12	
	3.1.7 Salt Storage Piles or Piles Containing Salt	13	
	3.1.8 Dust Generation and Vehicle Tracking of Industrial Materials		
3.2	Numeric Effluent Limitations Based on Effluent Limitations Guidelines	13	
3.3	Water Quality-Based Effluent Limitations and Water Quality Standards	13	
4.0	SCHEDULES AND PROCEDURES	13	
4.1	Good Housekeeping		
4.2	Maintenance		
4.3	Spill Prevention and Response		
4.4	Erosion and Sediment Control		
4.5	Employee Training	14	
16	Pourtine Excility Inspections and Quarterly Visual Assessments	15	

No: EPC-CP-QP-2110 Page 15 of 72

Revision: 0

Effective Date: 01/07/2020

# Attachment 1: EPC-CP-QP-2110 R0 Form 1, MSGP SWPPP Template Example (cont.)

(Page 4 of 50)

MSGP Stormwater Pollution Prevention Plan 4.7 DOCUMENTATION FOR ELIGIBILITY CONSIDERATIONS UNDER OTHER FEDERAL LAWS20 5.0 5.1 5.2 6.1 6.3 ACRONYMS.......22 7.0 SWPPP CERTIFICATION ......23 8.0 GENERAL LOCATION MAP......24 FIGURE A: MAP(S).......25 ATTACHMENT 1: NOTICE OF INTENT, SUPPORTING DOCUMENTATION, AND UPDATES ...... 26 ATTACHMENT 3: CERTIFICATION OF NO UNAUTHORIZED STORMWATER DISCHARGES ...... 28 ATTACHMENT 4: DULY AUTHORIZED SIGNATORY MEMORANDUM.......29 ATTACHMENT 5; DISCHARGE MONITORING REPORTS .......30 ATTACHMENT 9: CORRECTIVE ACTION DOCUMENTATION AND CERTIFICATION ......34 ATTACHMENT 10: SCHEDULED MAINTENANCE LOG.......35

 No: EPC-CP-QP-2110
 Page 16 of 72

 Revision: 0
 Effective Date: 01/07/2020

Attachment 1: EPC-CP-QP-2110 R0 Form 1, MSGP SWPPP Template Example (cont.) (Page 5 of 50)

Insert Facility Name
MSGP Stormwater Pollution Prevention Plan
Doctument Reference Number
Revision X Data

ATTACHMENT 13:	THREATENED AND ENDANGERED SPECIES HABITAT MANAGEMENT PLAN
FOR LOS AL	AMOS NATIONAL LABORATORY38
ATTACHMENT 14:	MSGP IPAC TRUST RESOURCES REPORT
ATTACHMENT 15:	EPC-CP-PIP-2101, NPDES MULTI-SECTOR GENERAL PERMIT 40
ATTACHMENT 16:	EPC-CP-QP-023, MSGP ROUTINE FACILITY INSPECTIONS41
ATTACHMENT 17:	EPC-CP-QP-022, MSGP CORRECTIVE ACTIONS
ATTACHMENT 18:	EPC-CP-QP-064, MSGP STORMWATER VISUAL ASSESSMENTS 43
	EPC-CP-QP-047, INSPECTING STORMWATER RUNOFF SAMPLERS AND
RETRIEVING	S SAMPLES FOR THE MSGP 44
ATTACHMENT 20:	EPC-CP-QP-2106, PROCESSING MSGP STORMWATER SAMPLES 45
ATTACHMENT 21:	EPC-DO-QP-101, ENVIRONMENTAL REPORTING REQUIREMENTS FOR
RELEASES C	PR EVENTS
ATTACHMENT 22:	EPC-CP-QP-007, SPILL INVESTIGATIONS
	EPC-CP-QP-2110, MSGP STORMWATER POLLUTION PREVENTION PLAN
PREPARATI	ON AND MAINTENANCE48
ATTACHMENT 24:	LOCAL PROCEDURE
ATTACHMENT 25	LOCAL PROCEDURE 50

 No: EPC-CP-QP-2110
 Page 17 of 72

 Revision: 0
 Effective Date: 01/07/2020

# Attachment 1: EPC-CP-QP-2110 R0 Form 1, MSGP SWPPP Template Example (cont.)

(Page 6 of 50)

Insert Facility Name MSGP Stormwater Pollution Prevention Plan Document Reference Number Revision X, Date

# Insert Name of Facility 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 United States Environmental Protection Agency (EPA) National Pollutant Discharge Elimination System (NPDES) Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity (MSGP) (U.S. EPA, June 2015) issued by EPA. The SWPPP uses the industry specific permit requirements for Sector XX-(Insert Sector Title) as a guide. The applicable stormwater discharge permit is EPA General Permit Identification Tracking Number NMR050013 [Triad National Security, LLC (Triad)]. Click here to view contents of the 2015 Multi-Sector General Permit.

This SWPPP applies to discharges of stormwater from the operational areas of (List the operational areas) at Los Alamos National Laboratory. Los Alamos National Laboratory (also referred to as LANL or the "Laboratory") is owned by the Department of Energy (DOE), and is operated by Triad. Throughout this document, the term "facility" refers to (Insert facility name). The current MSGP expires at midnight on June 4, 2020.

#### 1.0 FACILITY DESCRIPTION

### 1.1 Facility Information

3-22 Power and Stea	m Plant)
-	
State: NM	ZIP Code: 87545
50013	
and Subsector (2015	MSGP, Appendix D and Part 8):
sed to stormwater:	XX acres
ves stormwater fron	your facility: Sandia Canyon
Roads and Grounds	also add "and Mortandad Canyon
one, delete Sandia C	anyon information and insert only
	gment of an "impaired water"
⊠Yes N	0
	sed to stormwater:  ves stormwater from Roads and Grounds one, delete Sandia C

 No: EPC-CP-QP-2110
 Page 18 of 72

 Revision: 0
 Effective Date: 01/07/2020

# Attachment 1: EPC-CP-QP-2110 R0 Form 1, MSGP SWPPP Template Example (cont.)

(Page 7 of 50)

Insert Facility Name MSGP Stormwater Pollution Prevention Plan Document Reference Number Revision X. Date

Pollutants causing the impairment (see above) that may be present in industrial stormwater discharges from this Facility:

Are any of your stormwater discharges subject to effluent limitation guidelines (ELGs) (2015 MSGP Table 1-1)?

If Yes, which guidelines apply? (Note: Asphalt Batch Plant is subject to ELGs) Not applicable.

#### 1.2 Stormwater Pollution Prevention Team (PPT)

#### Insert a description of the team

The specific duties of individual team members of the PPT are listed in the table below.

Staff Names	Individual Responsibilities	
Group Leader: Name Title, Organization	Responsible for the management of all environmental, safety, health, and quality programs for the yards, buildings and facilities 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 problems noted during inspections are corrected. The Group Leader must also ensure adequate resources are obtained to ensure compliance requirements of the MSGP and this SWPPP are met.	
Deployed Environmental Professional (DEP): Name Title, Organization	Responsible for the management of all environmental programs and issues for the yards, buildings and facilities listed within this Plan. The DEP is responsible for training, recordkeeping, and SWPPP revision. The DEP ensures documentation of inspections and other required MSGP records relative to the SWPPP are managed in accordance with the Permit and established documen control procedures and that the SWPPP is kept current. The DEP provides technical and regulatory support to facility and operations personnel regarding implementation of the MSGP and this SWPPP. Lastly, the DEP conducts routine facility inspections and if necessary, visual assessments, in accordance with the Permit. Identified conditions requiring corrective actions from routine facility inspections are entered into the Environmental Protection and Compliance-Compliance Programs (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.	
Facility Operations Division (FOD) Manager: Name Title, Organization	Responsible for managing the maintenance and operation of all aspects of the yards, buildings and facilities listed within this Plan. The manager shall provide review and ensure coordination with core personnel and the PPT, as appropriate, when tenants within	

MSGP Stormwater Pollution
<b>Prevention Plan Preparation and</b>
Maintenance

 No: EPC-CP-QP-2110
 Page 19 of 72

 Revision: 0
 Effective Date: 01/07/2020

# Attachment 1: EPC-CP-QP-2110 R0 Form 1, MSGP SWPPP Template Example (cont.)

(Page 8 of 50)

Insert Facility Name MSGP Stormwater Pollution Prevention Plan Document Reference Number Revision X, Date

	the FOD propose new processes, operations, features, or a new site that may be subject to the MSGP.	
EPC Core: Name Title, Organization	The MSGP Program Lead is responsible for managing and administering the MSGP Program for all industrial facilities operated by Triad within Los Alamos National Laboratory. The MSGP Program Lead advises and provides guidance to facility or operations personnel on NPDES MSGP regulations/requirements. The Program Lead also acts as the institutional point of contact for all interactions with the regulatory authority (EPA) and supervises personnel implementing stormwater monitoring requirements for the facility.	
Operations Manager(s):  Name Title, Organization	Responsible for day-to-day operations at the facility. Assists the DEP and EPC with inspections; spill reporting; implementing, installing and maintaining storm water controls (also known as Best Management Practices) (BMPs); and providing documentation as requested by other team members. The Operations Manager is key to ensuring adequate communication and coordination of issues regarding implementation of the MSGP and this Plan. Operations Managers also assist the DEP/EPC with SWPPP training and/or briefings, as requested.	

#### 1.3 Site Description

Insert text with site description. Include information on type of operation(s), industrial operating equipment (associated with the Asphalt Batch Plant and the TA-3-22 Power and Steam Plant), main structures, activities, outfalls, and substantially identical outfalls.

## 1.4 General Location Map

The general location map for the facility can be found in Figure A. Figure B-X (if you have more than one site map, list them all here) contains all site maps and identifies all receiving waters associated with stormwater discharges from the facility. X percent of the site flows to (Insert canyon name). The canyon at this location is a (Insert stream type e.g., perennial, ephemeral, intermittent) and eventually flows to the Rio Grande approximately X miles southeast of the site.

#### 1.5 Site Map

The site map is provided as Figure B-X (if you have more than one site map, list them all here) and illustrates the facility's activities: including facility boundary, structures, impervious surfaces, industrial activity areas, spills, operational areas, drainage patterns, stormwater controls, monitoring locations, outfalls and nearby receiving streams.

As required by the 2015 MSGP, the following information specific to the facility is either shown on the site map or contained with additional information provided in this SWPPP.

- Site boundaries and acreage. The site covers approximately X acres.
- Significant structures and impervious surfaces. The site is X percent impervious, primarily structures and paved lots.

MSGP Stormwater Pollution
<b>Prevention Plan Preparation and</b>
Maintenance

 No: EPC-CP-QP-2110
 Page 20 of 72

 Revision: 0
 Effective Date: 01/07/2020

# Attachment 1: EPC-CP-QP-2110 R0 Form 1, MSGP SWPPP Template Example (cont.)

(Page 9 of 50)

Insert Facility Name MSGP Stormwater Pollution Prevention Plan Document Reference Number Revision X, Date

- Direction of stormwater flow and site drainage. Direction of flow is indicated with arrows.
- · Locations of stormwater control measures.
- Locations of all receiving waters. In the immediate vicinity of the facility, (Indicate if any of the
  waters are Impaired and, if so, whether the waters have TMDLs established for them. See
  paragraph below this list). Also, indicate if the receiving water includes a wetland. A map of
  nearby receiving waters is provided as Figure B-X.
- Locations of all stormwater conveyances. This includes all ditches, pipes, and swales.
- Locations of potential pollutant sources.
- · Locations of significant spills or leaks.
- · Locations of all stormwater monitoring points.
- Locations of stormwater inlets and outfalls. Of which each will require a unique identification
  code for each outfall (e.g., Outfall 005, etc.), indicating if you are treating one or more outfalls as
  "substantially identical" and an approximate outline of the areas draining to each outfall.
- This facility is not associated with a municipal separate storm sewer system (MS4).
- Areas of designated critical habitat for endangered or threatened species. There are (Insert
  "no areas" or a number of areas) in the direct vicinity of the facility. However, a map for
  threatened and endangered species within LANL property is included as Figure B-X.
- Locations of the following activities where such activities are exposed to precipitation:
  - Insert all facility activities exposed to stormwater (e.g., fueling locations; loading/unloading areas; locations used for the treatment, storage, or disposal of wastes; liquid storage tanks; processing and storage areas; machinery; location and sources of run-on to the site; transfer areas for substances in bulk; immediate access roads used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility; and vehicle and equipment maintenance and/or cleaning areas. Only include the activity areas specific to the facility (for example, if you do not refuel within the active facility boundary, do not include "fueling locations" in this bulleted list). Use a secondary bullet list level in this section.

#### 2.0 POTENTIAL POLLUTANT SOURCES

Industrial activities that could potentially result in releases to the environment are summarized in 2.1 below. The site map for the facility is provided in Figure B-1.

Insert text describing structures and industrial activities that could potentially result in a release to the environment. Include information on location (e.g., inside, outside), associated containment, protection (e.g., roofed areas or coverings), and other devices or practices to prevent or contain spills, prevent runon and run-off.

### 2.1 Potential Pollutants Associated with Industrial Activity

List specific areas and activities that could potentially result is a release to the environment and the constituents that may be released. Include a list of any Solid Waste Management Units and Areas of Concern (also known as Consent Order Sites or Potential Release Sites) with a description of each and associated potential pollutants/contaminants.

### 2.2 Spills and Leaks

 No: EPC-CP-QP-2110
 Page 21 of 72

 Revision: 0
 Effective Date: 01/07/2020

# Attachment 1: EPC-CP-QP-2110 R0 Form 1, MSGP SWPPP Template Example (cont.)

(Page 10 of 50)

insert Facility Name
MSGP Stormwater Pollution Prevention Plan
Document Reference Number
Revision X. Date

Insert information on spill and leak history at the facility, if any. Text may be in table format as shown below.

Date	Description	Outfall(s) Affected

Insert information on areas where spills and leaks could occur at the facility. Text may be in table format as shown below.

Specific Equipment/Industrial Activity Areas and Location	Outfall(s) Affected

In the event of any future spill or leak at any of the facility areas, a spill report, documenting the occurrence and the nature of the spill or leak, will be completed. The spill report will be filed promptly upon completion and documentation of the spill clean-up, and will be summarized in this section of the SWPP. In addition, spills within MSGP facility boundaries will be entered as conditions requiring corrective action in the MSGP CAR database and will be updated as corrective action occurs, in accordance with EPC-CP-QP-022, MSGP Corrective Actions.

The probability of spills or releases at the facility is minimized by (Insert information on how the facility will minimize spills and leaks).

### 2.3 Unauthorized Non-Stormwater Discharges

Insert information describing any NPDES permitted non-stormwater discharges, unpermitted outfalls, or unauthorized discharges associated with the facility. Describe any potential sources of non-stormwater discharges (e.g., testing of fire hydrants) and where wastewater drains to. Include a reference to the "Non-Stormwater Discharge Assessment and Certification" and indicate that it is provided in Attachment 3.

#### 2.4 Salt Storage

Insert text describing salt storage areas at the facility, if present. If none exists, state salt is not stored at the facility.

#### 2.5 Historical Data Summary

The following tables provide monitoring data at the facility for the past X years.

Permitted Facility: (insert facility name)

Calendar Year XXXX

Contact MSGP Program Lead to obtain this information formatted for insertion.

Note: This information will be updated every year during the annual SWPPP update, to include the 3 most current years of monitoring data.

 No: EPC-CP-QP-2110
 Page 22 of 72

 Revision: 0
 Effective Date: 01/07/2020

# Attachment 1: EPC-CP-QP-2110 R0 Form 1, MSGP SWPPP Template Example (cont.)

(Page 11 of 50)

Insert Facility Name
MSGP Stormwater Pollution Prevention Plan
Document Reference Number
Revision & Date of Page 1988

#### 3.0 STORMWATER CONTROL MEASURES

Control measures at the facility are designed to minimize the potential release of pollutants that could adversely affect water quality. Insert text with stormwater control measure information.

#### 3.1 Non-Numeric Technology-Based Effluent Limits

Insert text with non-numeric technology-based effluent limits information. Note: This is specific to Sectors A, AA, N, O and P.

#### 3.1.1 Minimize Exposure

Insert text describing all structural controls (structures or covers) or practices used to minimize the exposure of industrial activities to precipitation. The SWPPP must describe where the controls or practices are being implemented at the facility. Examples of exposure-minimizing control measures include: location and extent of grading, berms, curbs used to contain contaminated stormwater or divert it around areas of industrial activity, materials stored within secondary containment, location of spill cleanup kits, schedule for employee spill abatement and cleanup training, procedure or practices for storage of leaky vehicles and equipment.

#### 3.1.2 Good Housekeeping

Good housekeeping practices specifically applicable to the prevention of stormwater contamination include the following measures: Insert text describing any practices implemented to keep exposed areas at the facility clean. Describe where each practice is being implemented at the facility. Examples of good housekeeping control measures include how workspaces are maintained; routine inspections of heavy equipment, other equipment and waste containers; inspections of material storage areas; identifying specific personnel/positions responsible for empting drip pans, etc. Refer to Section 4.1 of this document for specific schedules for waste and recyclable material pickup and sweeping.

All site areas exposed to precipitation are walked down during daily operations and monthly routine facility inspections to ensure that the grounds are kept in an orderly condition. The outdoor metal storage areas are inspected to ensure all piping and metal raw material is off the ground on storage racks and covered, or stored inside buildings, sheds or transportable containers. Vehicle and forklift parking areas are inspected for leaks or spills as well as storage areas containing oil-filled equipment. The entire site, including loading areas and outfalls, are inspected for floatable debris, garbage, waste and all other potential pollutants. All dumpsters and roll-off bins are inspected to ensure they are closed.

#### 3.1.3 Maintenance

Control measures at the facility will be kept in effective operating condition by the implementation of scheduled preventive maintenance, standard operating procedures (SOPs), engineering guidance, and manufacturer's specifications as applicable. If control measures need to be replaced or repaired to maintain compliance with the 2015 MSGP, necessary modifications will be made according to the timelines specified in the *Corrective Action and Deadlines* requirements of Section 6.0 of this SWPPP.

Deficient items identified during routine facility inspections, walk-downs, or by any other means of identification, will be documented on the routine facility inspection forms and entered into the MSGP CAR database. The condition requiring corrective action will remain open until proper maintenance or

No: EPC-CP-QP-2110 Page 23 of 72

Revision: 0 Effective Date: 01/07/2020

# Attachment 1: EPC-CP-QP-2110 R0 Form 1, MSGP SWPPP Template Example (cont.)

(Page 12 of 50)

corrective action has been completed. CAR information, along with documentation of maintenance/repair of control measures, is in Attachment 9 of the SWPPP.

Insert text identifying how industrial equipment is maintained to avoid leaks or other releases. Also, include information on how site-specific control measures are maintained to ensure effective operating condition.

#### 3.1.4 Spill Prevention and Response

Spills, leaks, or other releases will be prevented and minimized by (insert information on how the facility prevents and minimizes unauthorized releases).

#### Insert text describing the general facility approach to spill cleanup.

All spills or releases are reported to EPC-CP by using the spills pager (505) 664-7722. Although incidental spills may be cleaned up by facility personnel, all emergency spills or releases are reported to Emergency Management Division-Emergency Response (EMD-ER) and/or the Facility Duty Officer by calling 667-2400. If 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. In the event of a spill, EMD-ER will coordinate appropriate cleanup procedures and EPC-CP will notify the individuals or organizations responsible for completing spill reports and providing information needed to fulfill regulatory reporting requirements.

Unauthorized releases or discharges within industrial facility boundaries are entered into the MSGP Corrective Action Reporting database in accordance with EPC-CP-QP-Q22, MSGP Corrective Actions. In addition, the completion of an Unplanned Release Report is required in the event of a spill. The report will be submitted to EPC-CP personnel and handled according to internal spill record keeping procedures. Spills may be "reportable" (requiring external agency notification) depending on the nature of the spilled material and the location of the release. External agency notification may consist of verbal and/or written notification to the National Response Center, Environmental Protection Agency Region VI, or the New Mexico Environment Department (NMED). EMD-ER, the FOD and EPC-CP, in accordance with Laboratory and DOE policies and federal and state regulatory reporting requirements, will make the determination for the type of reporting required. EPC-DO-QP-101, Environmental Reporting Requirements for Releases or Events is used for this purpose (see Attachment 21).

Copies of internal spill reports are maintained by the responsible organization and in the EPC-CP database. The EPC-CP procedure for spill reporting and response, ENV-CP-QP-007, Spill Investigations, can be found in Attachment 22 of this SWPPP.

### 3.1.5 Erosion and Sediment Control

Insert text describing how erosion at the facility and sediment transport off the facility is prevented/minimized. Erosion control measures that prevent soil or sediment from becoming mobilized should be used as the primary line of defense. Sediment control measures that trap, infiltrate, or settle out mobilized sediments, should be used to back-up the erosion control measures.

#### 3.1.6 Management of Runoff

Insert text describing how the facility manages stormwater runoff. This will include a description of controls used to divert, infiltrate, reuse, contain, or otherwise reduce stormwater runoff. Installed or utilized control measures may be listed with a description of their function at the facility.

 No: EPC-CP-QP-2110
 Page 24 of 72

 Revision: 0
 Effective Date: 01/07/2020

# Attachment 1: EPC-CP-QP-2110 R0 Form 1, MSGP SWPPP Template Example (cont.)

(Page 13 of 50)

Insert Facility Name MSGP Stormwater Pollution Prevention Plan Document Reference Number Revision X, Date

#### 3.1.7 Salt Storage Piles or Piles Containing Salt

Insert text describing how the facility manages salt storage piles or piles containing salt. Offloading operations should occur within contained areas with appropriate measures in place to prevent off-site migration or track out of salt from the contained area. Installed or utilized control measures may be listed with a description of their function at the facility. If none exists, state salt is not stored at the facility.

#### 3.1.8 Dust Generation and Vehicle Tracking of Industrial Materials

Insert text describing how the facility manages dust generation and vehicle tracking.

#### 3.2 Numeric Effluent Limitations Based on Effluent Limitations Guidelines

Insert information identifying the facility as meeting or not meeting the industrial category requirements for effluent monitoring as listed in Part 2.1.3 (*Table 2-1 Applicable Effluent Limitation Guidelines*) of the 2015 MSGP and if benchmark monitoring is or is not required.

If the permit does identify sector-specific requirements for the facility, insert a description of specific controls implemented at the facility to ensure numeric effluent limits are met.

### 3.3 Water Quality-Based Effluent Limitations and Water Quality Standards

Impaired waters monitoring is performed annually at the facility as listed in Section 4.7 of this SWPPP. The pollutants monitored can change yearly based on the requirements of the MSGP. The table in Section 4.7 lists the current year monitoring requirements and standards.

Stormwater from (insert facility name) discharges to (insert canyon name). Insert information on canyon reaches identified as impaired waters, pollutants causing the impairment, and approved or established TMDLs for the canyon. Also, insert specific information relative to the controls measures used to ensure discharges from industrial activities meet the water quality standards.

Refer to Section 4.7 for specific actions that will be taken when a water quality standard is exceeded.

### 4.0 SCHEDULES AND PROCEDURES

Preventative maintenance of control measures used to comply with the Permit effluent limits can avoid situations that result in discharges to the environment. Part 5.2.5 of the 2015 MSGP specifies control measures will have a schedule or frequency for maintenance and procedures specifying how maintenance is conducted. Part 5.5 requires documentation of maintenance and repairs including the date(s) of regular maintenance. See Attachment 10 for the Scheduled Maintenance Log.

### 4.1 Good Housekeeping

Insert a schedule for housekeeping activities such as waste and recyclable material (scrap metal, wood tires) pickup, street sweeping, etc. and identify any procedures used to ensure this occurs.

### 4.2 Maintenance

Insert a discussion of and schedule for preventative or regular maintenance of equipment such as oil/water separators, culvert clean outs, other control measures, etc. Note: Industrial equipment will be

 No: EPC-CP-QP-2110
 Page 25 of 72

 Revision: 0
 Effective Date: 01/07/2020

# Attachment 1: EPC-CP-QP-2110 R0 Form 1, MSGP SWPPP Template Example (cont.)

(Page 14 of 50)

Insert Facility Name
MSGP Stormwater Pollution Prevention Plan
Document Reference Number
Revision X. Date

maintained so that leaks and other releases are avoided. All control measures will be maintained in effective operation condition.

#### 4.3 Spill Prevention and Response

Insert a discussion of and schedule for preventing and responding to spills and leaks such as regular maintenance of equipment, placing pans under heavy equipment, and maintaining spill kits. Also, specify cleanup equipment, procedures and spill logs, and identify how often employees are trained in spill response procedures, as appropriate.

#### 4.4 Frosion and Sediment Control

Insert a discussion of and schedule for preventative or regular maintenance of erosion, sediment and velocity control measures. If polymers and/or other chemical treatments are used as erosion or sediment control measures, identify them and include a regular schedule for reapplication. Also, include a schedule for restocking these materials to ensure the facility does not run out.

#### 4.5 Employee Training

Employee training is essential for effective implementation of the SWPPP and MSGP requirements. The goals for the training program are to ensure that employees: (1) are aware of what happens when pollutants come in contact with stormwater; (2) are familiar with and will implement the requirements of this SWPPP; (3) are capable of preventing spills; (4) respond safely and effectively to an accident when one occurs; (5) recognize when there is an issue with a control measure; (6) recognize when additional control measure are necessary; and (7) identify situations that could lead to stormwater contamination.

Per Part 2.1.2.8 of the 2015 MSGP, training relevant to the SWPPP and MSGP is required for all workers at the facility that work in areas where industrial materials or activities are exposed to stormwater (MSGP sites); workers, managers, and supervisors who are responsible for implementing activities necessary to meet the conditions of this permit (e.g., inspectors, maintenance personnel); and all members of the PPT. Training is designed to ensure these personnel understand the MSGP and SWPPP requirements, as well as their specific responsibilities regarding these requirements.

Training provided and assigned to these personnel cover both the specific control measures used at the facility; along with monitoring, inspection, planning, reporting, and documentation requirements described in this SWPPP. Training will be conducted at least annually. The DEP, Deployed Environment Safety and Health (DESH) Group Leader and Pollution Prevention Team members are responsible for ensuring all appropriate personnel receive this training. It is suggested to add a list of job titles per facility that require training (e.g., Mechanics, Heavy Equipment Operators, PPT members, Operations Manager(s), etc.).

Training activities are documented in accordance with LANL's Training Standards. In cases where training is formalized enough to require specific curricula and reoccurrence, the training activity will be recorded in LANL's official U-TRAIN database. Informal briefings, such as those included in-group safety meetings are not typically recorded in U-TRAIN. Sign-in sheets are used to document attendance and will be kept on file in Attachment 11 of this SWPPP.

The topics in this SWPPP that are covered in the latest version of the facility-specific annual MSGP training (see Attachment 11) include the following:

 No: EPC-CP-QP-2110
 Page 26 of 72

 Revision: 0
 Effective Date: 01/07/2020

# Attachment 1: EPC-CP-QP-2110 R0 Form 1, MSGP SWPPP Template Example (cont.)

(Page 15 of 50)

Insert Facility Name MSGP Stormwater Pollution Prevention Plan Document Reference Number Revision X, Date

- · Overview of the SWPPP contents;
- Spill response and cleanup procedures, good housekeeping, maintenance requirements, and material management practices to prevent stormwater pollution;
- . The location of all controls on the site required by this permit and how they are maintained;
- The proper procedures to follow with respect to the permit's pollution prevention requirements; and
- When and how to conduct inspections, record applicable findings, and take corrective actions.

#### 4.6 Routine Facility Inspections and Quarterly Visual Assessments

Routine inspections at this facility are conducted and documented monthly in accordance with EPC-CP-QP-023, MSGP Routine Facility Inspections (Attachment 16).

Visual assessments are conducted in accordance with EPC-CP-QP-064, MSGP Stormwater Visual Assessments (Attachment 18).

#### 4.6.1 Routine Facility Inspections

At least once each calendar year, the routine facility inspection is conducted during a period when a stormwater discharge is occurring. A qualified member of the PPT (typically the DEP, a representative from the EPC-CP Storm Water Permitting/Compliance Team or EPC-CP Program Lead) performs the inspection. The 2015 MSGP consolidates the different and separate documentation requirements in the Comprehensive Site Inspection Procedures and Routine Facility Inspection Procedures from the 2008 MSGP. EPC-CP will perform at least one routine inspection per year in order to evaluate corrective action status for the Annual Report requirements.

Routine inspections will evaluate the following areas, at a minimum:

- · Areas where industrial materials or activities are exposed to stormwater;
- Areas identified in the SWPPP and those that are potential pollutant sources;
- Areas where spills and leaks have occurred in the last three years;
- Discharge points(outfalls/Substantially Identical Outfalls (SIOs); and
- · Control measures used to comply with the effluent limits contained in this permit.
- Specific areas of the facility to be inspected are described in Section 2.1.

During routine inspections, the following must be examined and looked for:

- 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, 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 maintenance, repairs or replacement.

Inspections performed by the PPT member are documented by completing the routine facility inspection form, which identifies all conditions requiring corrective action and other potential stormwater pollution issues that were encountered. All conditions requiring corrective actions identified during the inspection are addressed in accordance with Section 6.0 Corrective Actions and Deadlines of this plan. Facility personnel or the DEP may also perform daily, weekly, or other periodic facility surveys (walk downs)

 No: EPC-CP-QP-2110
 Page 27 of 72

 Revision: 0
 Effective Date: 01/07/2020

# Attachment 1: EPC-CP-QP-2110 R0 Form 1, MSGP SWPPP Template Example (cont.)

(Page 16 of 50)

Insert Facility Name MSGP Stormwater Pollution Prevention Plan Document Reference Number Revision X, Date

between monthly routine inspections to ensure compliance with the SWPPP and MSGP. Completed routine facility inspection forms are provided in Attachment 7 of this SWPPP and meet the requirements listed in the 2015 MSGP (Part 3.1.2.).

#### 4.6.2 Quarterly Visual Assessments

Once each quarter, (April 1-May 31, June 1-July 31, August 1-September 30, October 1-November 30) a stormwater sample is obtained and visual assessment performed at each outfall, if a measureable storm event occurred. A qualified member of the PPT (DEP, EPC-CP field team member or MSGP Program Lead) conducts the visual assessment. The visual assessment will be:

- Of a sample in a clean, clear colorless glass or plastic container and examined in a well-lit area;
- On samples collected within the first 30 minutes of an actual discharge from a storm event or as soon as practicable thereafter. Alternatively, document why it was not possible to collect the sample within the first 30 minutes (i.e. adverse conditions, not enough flow, etc.); and
- Conducted at least 72 hours since the last storm event; or document that the 72-hour period is representative of local storm events during the sampling period.

Note: Snowmelt samples need only be collected during a period of measurable discharge.

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 stormwater pollution.

Exceptions to visual assessments:

- Document rationale if a visual assessment is unable to be collected in a quarter (no precipitation event or adverse conditions, etc.);
- Perform an additional assessment during the next qualifying storm event if unable to perform in a particular quarter; and
- Perform one quarterly assessment during snowmelt discharge (taken during a measurable discharge from the site).

For facilities with substantially identical outfalls, quarterly visual assessments may be performed at only one of the outfalls, provided that you perform visual inspections on a rotating basis at each substantially identical outfall.

The PPT member performing the visual assessment documents potential stormwater pollution problems that were observed during the assessment on the quarterly visual assessment form. Any required corrective actions identified during the assessment are addressed in accordance with Section 6.0 Corrective Actions and Deadlines of this plan. Completed quarterly visual assessments are provided in Attachment 8 of this SWPPP and meet the requirements listed in the 2015 MSGP (Part 3.2.2).

#### 4.7 Monitoring

Analytical monitoring comprised of Impaired Waters [Insert Effluent Limitation Guideline monitoring for industrial activity identified in Tables 1-1 and 6-1 of the 2015 MSGP (for example the Asphalt Batch Plant)] monitoring is performed annually on stormwater discharges from the site. Benchmark constituents are monitored quarterly. Monitoring occurs when storm events result in an actual discharge from the site and follow the preceding measurable storm event by at least 72 hours (3 days), unless documented that the storm event is representative of local storm events during the sampling

### MSGP Stormwater Pollution Prevention Plan Preparation and Maintenance

 No: EPC-CP-QP-2110
 Page 28 of 72

 Revision: 0
 Effective Date: 01/07/2020

### Attachment 1: EPC-CP-QP-2110 R0 Form 1, MSGP SWPPP Template Example (cont.)

(Page 17 of 50)

Insert Facility Name
MSGP Stormwater Pollution Prevention Plan
Document Reference Number
Revision X, Date

period. For runoff from snowmelt, the monitoring is 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 is collected as soon as practicable after the first 30 minutes and documentation is kept with the SWPPP explaining why it was not possible.

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. If adverse weather conditions prevent the collection of a sample according to the relevant monitoring schedule, a sample will be collected during the next qualifying storm event or as soon as practicable.

Monitoring occurs at automated sampling station [insert automated sampler identifier (e.g., MSGP07501)] as identified in Section 1.5. Discharge from the facility is (insert cardinal direction) to (insert canyon name) (impaired waters), which is a tributary of the Rio Grande located approximately X miles east of the facility.

Outfall (insert substantially identical outfall identification number) is "substantially identical" to Outfall (insert monitored outfall identification number) based on (insert the following information: industrial activities conducted in the drainage area, description of control measures implemented in the drainage area of each outfall, description of exposed material located in the drainage area of each outfall that are likely to be significant contributors of pollutants to stormwater discharges, and an estimate of the runoff coefficient of the drainage areas). Outfall locations are shown on the site map provided in Figure B-1. Note: Delete this paragraph if the facility has no substantially identical outfalls. If the facility has multiple maps, reference them all.

Monitoring will continue annually for constituents associated with impaired waters until a constituent is no longer detected in stormwater samples.

If the impaired water or benchmark constituent value exceeds the New Mexico Water Quality criterion (insert or ELG value is exceeded, if applicable), the Pollution Prevention Team will:

- Review the selection, design, installation, and implementation of control measures to determine
  if modifications are necessary to meet the effluent limits;
- · Implement the necessary modifications within the timeframe specified for corrective action; and
- Continue benchmark or annual monitoring of the constituent (as required by Part 6.2 of the 2015 MSGP);
- If an ELG is exceeded, follow-up monitoring within 30 calendar days (or during the next
  qualifying runoff event) of implementing corrective action(s) is required. When follow-up
  monitoring exceeds the applicable effluent limitation, an exceedance report is submitted to EPA
  and monitoring continues at least quarterly, until the discharge complies with the effluent limit.

For each monitoring event, except snowmelt monitoring, the following information will be recorded and maintained through work orders, 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

MSGP Stormwater Pollution
<b>Prevention Plan Preparation and</b>
Maintenance

No: EPC-CP-QP-2110	Page 29 of 72
Revision: 0	Effective Date: 01/07/2020

### Attachment 1: EPC-CP-QP-2110 R0 Form 1, MSGP SWPPP Template Example (cont.)

(Page 18 of 50)

Insert Facility Name
MSGP Stormwater Pollution Prevention Plan

Document Reference Number
Revision X, Date

- · 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.

All records of monitoring information, including all calibration and maintenance records are maintained for a minimum period of at least three years from the date the permit expires.

Insert information on quarterly benchmark and annual Impaired Waters or Effluent Limitation Guideline monitoring required for facility and benchmark pollutants to be sampled.

LANL's applicable stormwater monitoring procedures can be found in the following Attachments:

- EPC-CP-QP-047, Inspecting Stormwater Runoff Samplers and Retrieving Samples for the MSGP (Attachment 19)
- EPC-CP-QP-2106, Processing MSGP Stormwater Samples (Attachment 20).

The table on the following page lists the current Summary of Monitoring Requirements. The monitoring values have been modified to reflect New Mexico water quality standards and are based on the most protective water quality standards from the Standards for Interstate and Intrastate Surface Waters (effective on February 28, 2018), 20.6.4.900 NMAC; and as set forth in Part 9.6.2.1 of the 2015 MSGP.

MSGP Stormwater Pollution
<b>Prevention Plan Preparation and</b>
Maintenance

No: EPC-CP-QP-2110	Page 30 of 72
Revision: 0	Effective Date: 01/07/2020

Attachment 1: EPC-CP-QP-2110 R0 Form 1, MSGP SWPPP Template Example (cont.) (Page 19 of 50)

Insert Facility Name
MSGP Stormwater Pollution Prevention Plan
Document Reference Number
Revision X, Date

**Summary of Monitoring Requirements** 

Outfalls: (insert outfall numbers)

Contact MSGP Program Lead to obtain this information formatted for insertion.



MSGP Stormwater Pollution
<b>Prevention Plan Preparation and</b>
Maintenance

 No: EPC-CP-QP-2110
 Page 31 of 72

 Revision: 0
 Effective Date: 01/07/2020

Attachment 1: EPC-CP-QP-2110 R0 Form 1, MSGP SWPPP Template Example (cont.)

(Page 20 of 50)

Insert Facility, Name MSGP Stormwater Pollution Prevention Plan Document Reference Number Revision X, Data

### 5.0 DOCUMENTATION FOR ELIGIBILITY CONSIDERATIONS UNDER OTHER FEDERAL LAWS

### 5.1 Endangered Species

The Final Site-Wide Environmental Impact Statement (EIS) for the Operation of Los Alamos National Laboratory (DOE/EIS-0380) was issued in May 2008, and a Record of Decision in September 2008. Stormwater 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 LANL's Integrated Review Tool (IRT), which incorporates both the Excavation Permit (EX-ID) and Permit Requirements Identification (PR-ID) process. Stormwater 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 stormwater pollution prevention compliance at MSGP sites in accordance with Section 4.7 Monitoring of this plan. Corrective actions are taken as necessary as described in Section 6.0 Corrective Actions and Deadlines of this plan.

Part 5.2.2 of the 2015 MSGP requires areas of designated critical habitat for endangered or threatened species, as applicable, be included in the SWPPP. The *Threatened and Endangered Species Habitat Management Plan for Los Alamos National Laboratory* (LA-UR-17-29454) was last updated in October 2017 (see Attachment 13). This document provides a management strategy for the protection of threatened and endangered species and their habitats on LANL property. The MSGP IPaC Trust Resource Report (see Attachment 14) is also attached for informational purposes.

### 5.2 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 RANT

### 6.0 CORRECTIVE ACTIONS AND DEADLINES

When any of the following conditions occur or are detected during an inspection, monitoring or any other means, this SWPPP (e.g., sources of pollution; spill and leak procedures; non-stormwater discharges; the selection, design, installation and implementation of control measures) is reviewed and

MSGP Stormwater Pollution
<b>Prevention Plan Preparation and</b>
Maintenance

 No: EPC-CP-QP-2110
 Page 32 of 72

 Revision: 0
 Effective Date: 01/07/2020

### Attachment 1: EPC-CP-QP-2110 R0 Form 1, MSGP SWPPP Template Example (cont.)

(Page 21 of 50)

insert Facility, Name MSGP Stormwater Pollution Prevention Plan Document Reference Number Revision X, Date

revised (as appropriate). The purpose is to ensure effluent limits of the 2015 MSGP permit are met and pollutant discharges are minimized:

- An unauthorized release or discharge (e.g., spill, leak, or discharge of non-stormwater not authorized by this or another NPDES permit to a water of the U.S.) occurs at the facility;
- A discharge violates a numeric effluent limit;
- Control measures are not stringent enough for the discharge to meet applicable water quality standards or non-numeric effluent limits;
- An inspection identifies that a required control measure was never installed, was installed incorrectly or is not being properly operated or maintained; and
- Whenever a visual assessment shows evidence of stormwater pollution.

When any of the following conditions occur, a review of the selection, design, installation, and implementation of control measures is 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 the facility significantly
  changes the nature of pollutants discharged in stormwater from the facility, or significantly
  increases the quantity of pollutants discharged; or
- The average of 4 quarterly sampling results exceeds an applicable benchmark. If less than 4
  benchmark samples have been taken, but the results are such that an exceedance of the 4
  quarter average is mathematically certain (i.e., if the sum of quarterly sample results to date is
  more than 4 times the benchmark level) this is considered a benchmark exceedance, triggering
  this review (see Section 4.7); or
- If an impaired water constituent exceeds the NM Water Quality criterion (see Section 4.7).

When the review identifies the need to modify the SWPPP, it will be revised within 14 calendar days of completion of the associated condition requiring corrective action.

### 6.1 Immediate Actions

When a condition requiring corrective action is identified, all reasonable steps necessary to minimize or prevent the discharge of pollutants are immediately taken (i.e. spill clean-up, scheduling repairs) until a permanent solution (if needed) can be implemented. Immediate action means all reasonable steps are taken the same workday or no later than the following workday (when it is too late in the day to take corrective action).

### 6.2 Subsequent Actions

When additional corrective actions are required (e.g. installing or making operational a new or modified control, completing repairs, ordering BMPs) they will be completed by the next storm event, if possible, or within 14 calendar days (from initial discovery). When it is determined that it is infeasible to complete corrective actions within 14 days, documentation of infeasibility and a schedule for completion of the work is documented in the CAR database, which will be completed no later than 45 days (from initial discovery). When it is determined that corrective actions will exceed 45 days, EPA is notified and provided justification of why actions will exceed the timeframe; and a minimal amount of additional time to complete the work may be approved.

### 6.3 Corrective Action Documentation

MSGP Stormwater Pollution
<b>Prevention Plan Preparation and</b>
Maintenance

 No: EPC-CP-QP-2110
 Page 33 of 72

 Revision: 0
 Effective Date: 01/07/2020

### Attachment 1: EPC-CP-QP-2110 R0 Form 1, MSGP SWPPP Template Example (cont.)

(Page 22 of 50)

Insert Facility Name MSGP Stormwater Pollution Prevention Plan Document Reference Number Revision X, Date

Upon discovery, conditions requiring corrective action are documented by the DEP or EPC-CP on a Routine Facility Inspection Form and/or entered into the CAR database. The action will be kept open in the database until the issue has been resolved. Documentation of maintenance and repairs of stormwater control measures (BMPs) will be kept in Attachment 10 of this SWPPP. Where corrective actions result in changes to procedures or controls documented in this SWPPP, modifications to the SWPPP are made accordingly within 14 calendar days of completing the corrective action(s). LANL procedure EPC-CP-QP-022, MSGP Corrective Actions can be found in Attachment 17.

### 7.0 ACRONYMS

ВМР	Best Management Practice
CAR	Corrective Action Report
DEP	Deployed Environmental Professional
DESH	Deployed Environmental Safety and Health
DOE	Department of Energy
EIS	Environmental Impact Statement
ELG	Effluent Limitation Guidelines
EMD-ER	Emergency Management Division-Emergency Response
EPA	Environmental Protection Agency
EPC-CP	Environmental Protection and Compliance – Compliance Programs
FOD	Facility Operations Division
IPaC	Information for Planning and Consultation
LANL or the Laboratory	Los Alamos National Laboratory
MSGP or Permit	Multi-Sector General Permit
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
PPT	Pollution Prevention Team
SWPPP	Stormwater Pollution Prevention Plan
URL	Uniform Resource Locator

### **MSGP Stormwater Pollution Prevention Plan Preparation and** Maintenance

No: EPC-CP-QP-2110 Page 34 of 72 Effective Date: 01/07/2020 Revision: 0

### Attachment 1: EPC-CP-QP-2110 R0 Form 1, MSGP SWPPP Template Example (cont.) (Page 23 of 50)

MSGP Stormwater Pollution Prevention Plan Document Reference Number Revision X, Date

8.0 SWPPP CERTIFICATION

### STORMWATER POLLUTION PREVENTION PLAN (Insert Facility Name)

Los Alamos National Laboratory

### CERTIFICATION STATEMENT

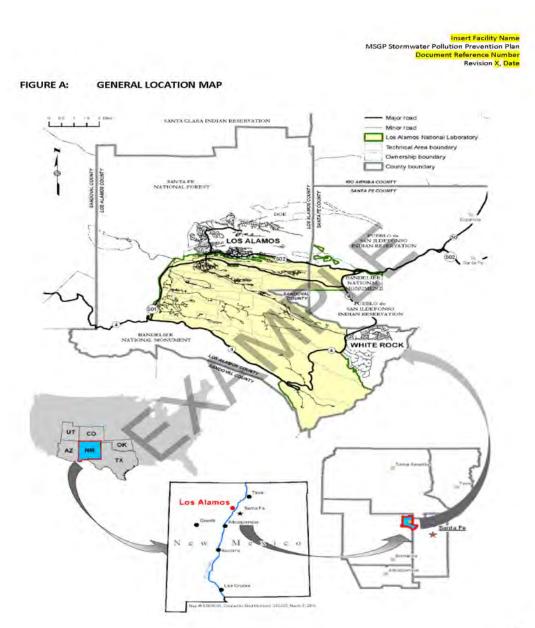
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage 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.

Signature	10.7	Date	
(Insert Printed Name)			
(Insert Title)	101		

MSGP Stormwater Pollution
<b>Prevention Plan Preparation and</b>
Maintenance

No: EPC-CP-QP-2110	Page 35 of 72
Revision: 0	Effective Date: 01/07/2020

Attachment 1: EPC-CP-QP-2110 R0 Form 1, MSGP SWPPP Template Example (cont.) (Page 24 of 50)



MSGP Stormwater Pollution
<b>Prevention Plan Preparation and</b>
Maintenance

No: EPC-CP-QP-2110	Page 36 of 72
Revision: 0	Effective Date: 01/07/2020

Attachment 1: EPC-CP-QP-2110 R0 Form 1, MSGP SWPPP Template Example (cont.) (Page 25 of 50)

Insert Facility Name
MSGP Stormwater Pollution Prevention Plan
Document Reference Number
Revision X, Date

FIGURE B: MAP(S)

Label the figures as Figure B-1, Figure B-2, etc.

Insert maps in the following order:

- Facility specific site map(s),
- Receiving waters maps, and
- Threatened Endangered Species Map.



MSGP Stormwater Pollution
<b>Prevention Plan Preparation and</b>
Maintenance

No: EPC-CP-QP-2110	Page 37 of 72
Revision: 0	Effective Date: 01/07/2020

Attachment 1: EPC-CP-QP-2110 R0 Form 1, MSGP SWPPP Template Example (cont.) (Page 26 of 50)

Insert Facility Name MSGP Stormwater Pollution Prevention Plan Document Reference Number Revision X, Date

ATTACHMENT 1:

NOTICE OF INTENT, SUPPORTING DOCUMENTATION, AND UPDATES

Insert the appropriate attachment, Note: There may be several "Change NOIs" submitted to EPA within a permit term. Contact the MSGP Program Lead to ensure all are included in this attachment.



MSGP Stormwater Pollution		
<b>Prevention Plan Preparation and</b>		
Maintenance		

No: EPC-CP-QP-2110	Page 38 of 72
Revision: 0	Effective Date: 01/07/2020

### Attachment 1: EPC-CP-QP-2110 R0 Form 1, MSGP SWPPP Template Example (cont.)

(Page 27 of 50)

Insert Facility Name MSGP Stormwater Pollution Prevention Plan Document Reference Number Revision X, Date

ATTACHMENT 2: SWPPP AMENDMENTS

Insert text documenting all changes or updates made to the SWPPP. Text may be in table format as shown below.

Date	Plan Section	Reason for Amendment	Amendment	



MSGP Stormwater Pollution
<b>Prevention Plan Preparation and</b>
Maintenance

No: EPC-CP-QP-2110	Page 39 of 72
Revision: 0	Effective Date: 01/07/2020

Attachment 1: EPC-CP-QP-2110 R0 Form 1, MSGP SWPPP Template Example (cont.) (Page 28 of 50)

Insert Facility Name
MSGP Stormwater Pollution Prevention Plan
Document Reference Number
Revision X, Date

ATTACHMENT 3: CERTIFICATION OF NO UNAUTHORIZED STORMWATER DISCHARGES

Insert the appropriate attachment.



MSGP Stormwater Pollution		
<b>Prevention Plan Preparation and</b>		
Maintenance		

No: EPC-CP-QP-2110	Page 40 of 72
Revision: 0	Effective Date: 01/07/2020

Attachment 1: EPC-CP-QP-2110 R0 Form 1, MSGP SWPPP Template Example (cont.) (Page 29 of 50)

Insert Facility Name
MSGP Stormwater Pollution Prevention Plan
Document Reference Number
Revision X, Date

ATTACHMENT 4:

**DULY AUTHORIZED SIGNATORY MEMORANDUM** 

Insert the appropriate attachment.



MSGP Stormwater Pollution		
<b>Prevention Plan Preparation and</b>		
Maintenance		

No: EPC-CP-QP-2110	Page 41 of 72
Revision: 0	Effective Date: 01/07/2020

Attachment 1: EPC-CP-QP-2110 R0 Form 1, MSGP SWPPP Template Example (cont.) (Page 30 of 50)

Insert Facility Name
MSGP Stormwater Pollution Prevention Plan
Document Reference Number
Revision X, Date

ATTACHMENT 5: DISCHARGE MONITORING REPORTS

Insert the discharge monitoring reports.



MSGP Stormwater Pollution
<b>Prevention Plan Preparation and</b>
Maintenance

No: EPC-CP-QP-2110	Page 42 of 72
Revision: 0	Effective Date: 01/07/2020

Attachment 1: EPC-CP-QP-2110 R0 Form 1, MSGP SWPPP Template Example (cont.) (Page 31 of 50)

Insert Facility Name
MSGP Stormwater Pollution Prevention Plan
Document Reference Number
Revision X, Date

ATTACHMENT 6: ANNUAL REPORTS

Insert the annual reports. The MSGP Program Lead provides these.



MSGP Stormwater Pollution
<b>Prevention Plan Preparation and</b>
Maintenance

No: EPC-CP-QP-2110	Page 43 of 72
Revision: 0	Effective Date: 01/07/2020

Attachment 1: EPC-CP-QP-2110 R0 Form 1, MSGP SWPPP Template Example (cont.) (Page 32 of 50)

Insert Facility Name MSGP Stormwater Pollution Prevention Plan Document Reference Number Revision X, Date

ATTACHMENT 7: ROUTINE FACILITY INSPECTIONS

Insert completed Routine Facility Inspection forms,



MSGP Stormwater Pollution
<b>Prevention Plan Preparation and</b>
Maintenance

No: EPC-CP-QP-2110	Page 44 of 72
Revision: 0	Effective Date: 01/07/2020

# Attachment 1: EPC-CP-QP-2110 R0 Form 1, MSGP SWPPP Template Example (cont.) (Page 33 of 50)

Insert Facility Name
MSGP Stormwater Pollution Prevention Plan
Document Reference Number
Revision X, Date

ATTACHMENT 8: QUARTERLY VISUAL ASSESSMENTS

Insert completed Quarterly Visual Assessment forms. EPC-CP provides these by memorandum as they are produced.



MSGP Stormwater Pollution
<b>Prevention Plan Preparation and</b>
Maintenance

No: EPC-CP-QP-2110	Page 45 of 72
Revision: 0	Effective Date: 01/07/2020

Attachment 1: EPC-CP-QP-2110 R0 Form 1, MSGP SWPPP Template Example (cont.) (Page 34 of 50)

Insert Facility Name MSGP Stormwater Pollution Prevention Plan Document Reference Number Revision X, Date

ATTACHMENT 9:

CORRECTIVE ACTION DOCUMENTATION AND CERTIFICATION

Contact the EPC-CP MSGP Program Lead for an excel spreadsheet of all corrective actions and a certification statement for signature.



### MSGP Stormwater Pollution Prevention Plan Preparation and Maintenance

 No: EPC-CP-QP-2110
 Page 46 of 72

 Revision: 0
 Effective Date: 01/07/2020

Attachment 1: EPC-CP-QP-2110 R0 Form 1, MSGP SWPPP Template Example (cont.)

(Page 35 of 50)

Insert Facility Name
MSGP Stormwater Pollution Prevention Plan
Document Reference Number
Revision X, Date

ATTACHMENT 10: SCHEDULED MAINTENANCE LOG

### SCHEDULED MAINTENANCE LOG

Date	Control Measure or Equipment Description (include location where appropriate)	Action Taken/Comments	Action Taken By (printed name & Z no.
		-/,	
		.0	
		-11	
		0/12	
	1	Y	
	4		

Page 1 of X

MSGP Stormwater Pollution
<b>Prevention Plan Preparation and</b>
Maintenance

No: EPC-CP-QP-2110	Page 47 of 72
Revision: 0	Effective Date: 01/07/2020

Attachment 1: EPC-CP-QP-2110 R0 Form 1, MSGP SWPPP Template Example (cont.) (Page 36 of 50)

Insert Facility Name
MSGP Stormwater Pollution Prevention Plan
Document Reference Number
Revision X, Date

ATTACHMENT 11: TRAINING DOCUMENTATION

Insert the appropriate documentation.



MSGP Stormwater Pollution
<b>Prevention Plan Preparation and</b>
Maintenance

No: EPC-CP-QP-2110	Page 48 of 72
Revision: 0	Effective Date: 01/07/2020

Attachment 1: EPC-CP-QP-2110 R0 Form 1, MSGP SWPPP Template Example (cont.) (Page 37 of 50)

Insert Facility Name
MSGP Stormwater Pollution Prevention Plan
Document Reference Number
Revision X, Date

ATTACHMENT 12: MSGP (OR ACTIVE URL)

Either insert a copy of the most current Permit, or insert the URL address (see example below).

A copy of the 2015 MSGP is kept on file with the SWPPP in hard copy.

The active URL for the permit is https://www.epa.gov/npdes/final-2015-msgp-documents



MSGP Stormwater Pollution
<b>Prevention Plan Preparation and</b>
Maintenance

No: EPC-CP-QP-2110	Page 49 of 72
Revision: 0	Effective Date: 01/07/2020

Attachment 1: EPC-CP-QP-2110 R0 Form 1, MSGP SWPPP Template Example (cont.) (Page 38 of 50)

Insert Facility Name
MSGP Stormwater Pollution Prevention Plan
Document Reference Number
Revision X, Data

ATTACHMENT 13: THREATENED AND ENDANGERED SPECIES HABITAT MANAGEMENT PLAN FOR

LOS ALAMOS NATIONAL LABORATORY

Insert the most current revision of the management plan for LANL.



MSGP Stormwater Pollution
<b>Prevention Plan Preparation and</b>
Maintenance

No: EPC-CP-QP-2110	Page 50 of 72
Revision: 0	Effective Date: 01/07/2020

### Attachment 1: EPC-CP-QP-2110 R0 Form 1, MSGP SWPPP Template Example (cont.)

(Page 39 of 50)

Insert Facility Name
MSGP Stormwater Pollution Prevention Plan
Document Reference Number
Revision X, Date

ATTACHMENT 14: MSGP IPAC TRUST RESOURCES REPORT

Contact the EPC-CP MSGP Program Lead for this information formatted for insertion.

NOTE: The Permit requires this information. However, LANL EPC-ES has completed consultation with U.S. Fish and Wildlife Service. Letters of Consultation are contained in the NOI (see Attachment 1). Refer to Attachment 13 for the species habitat management plan.



MSGP Stormwater Pollution
<b>Prevention Plan Preparation and</b>
Maintenance

No: EPC-CP-QP-2110	Page 51 of 72
Revision: 0	Effective Date: 01/07/2020

Attachment 1: EPC-CP-QP-2110 R0 Form 1, MSGP SWPPP Template Example (cont.) (Page 40 of 50)

Insert Facility Name MSGP Stormwater Pollution Prevention Plan Document Reference Number Revision X, Date

ATTACHMENT 15: EPC-CP-PIP-2101, NPDES MULTI-SECTOR GENERAL PERMIT

Insert the appropriate plan into this SWPPP. Ensure the most current revision of this plan is inserted.



MSGP Stormwater Pollution
<b>Prevention Plan Preparation and</b>
Maintenance

No: EPC-CP-QP-2110	Page 52 of 72
Revision: 0	Effective Date: 01/07/2020

Attachment 1: EPC-CP-QP-2110 R0 Form 1, MSGP SWPPP Template Example (cont.) (Page 41 of 50)

Insert Facility Name
MSGP Stormwater Pollution Prevention Plan
Document Reference Number
Revision X, Date

ATTACHMENT 16: EPC-CP-QP-023, MSGP ROUTINE FACILITY INSPECTIONS



MSGP Stormwater Pollution
<b>Prevention Plan Preparation and</b>
Maintenance

No: EPC-CP-QP-2110	Page 53 of 72
Revision: 0	Effective Date: 01/07/2020

# Attachment 1: EPC-CP-QP-2110 R0 Form 1, MSGP SWPPP Template Example (cont.) (Page 42 of 50)

Insert Facility Name MSGP Stormwater Pollution Prevention Plan Document Reference Number Revision X, Date

ATTACHMENT 17: EPC-CP-QP-022, MSGP CORRECTIVE ACTIONS



MSGP Stormwater Pollution
<b>Prevention Plan Preparation and</b>
Maintenance

No: EPC-CP-QP-2110	Page 54 of 72
Revision: 0	Effective Date: 01/07/2020

Attachment 1: EPC-CP-QP-2110 R0 Form 1, MSGP SWPPP Template Example (cont.) (Page 43 of 50)

Insert Facility Name
MSGP Stormwater Pollution Prevention Plan
Document Reference Number
Revision X, Date

ATTACHMENT 18: EPC-CP-QP-064, MSGP STORMWATER VISUAL ASSESSMENTS



MSGP Stormwater Pollution
<b>Prevention Plan Preparation and</b>
Maintenance

No: EPC-CP-QP-2110	Page 55 of 72
Revision: 0	Effective Date: 01/07/2020

# Attachment 1: EPC-CP-QP-2110 R0 Form 1, MSGP SWPPP Template Example (cont.) (Page 44 of 50)

Insert Facility Name
MSGP Stormwater Pollution Prevention Plan
Document Reference Number
Revision X, Date

ATTACHMENT 19: EPC-CP-QP-<mark>Q47, INSPECTING STORMWATER RUNOFF SAMPLERS AND RETRIEVING SAMPLES FOR THE MSGP</mark>



MSGP Stormwater Pollution
<b>Prevention Plan Preparation and</b>
Maintenance

No: EPC-CP-QP-2110	Page 56 of 72
Revision: 0	Effective Date: 01/07/2020

Attachment 1: EPC-CP-QP-2110 R0 Form 1, MSGP SWPPP Template Example (cont.) (Page 45 of 50)

Insert Facility Name
MSGP Stormwater Pollution Prevention Plan
Document Reference Number
Revision X, Date

ATTACHMENT 20: EPC-CP-QP-21

EPC-CP-QP-2106, PROCESSING MSGP STORMWATER SAMPLES



MSGP Stormwater Pollution
<b>Prevention Plan Preparation and</b>
Maintenance

No: EPC-CP-QP-2110	Page 57 of 72
Revision: 0	Effective Date: 01/07/2020

Attachment 1: EPC-CP-QP-2110 R0 Form 1, MSGP SWPPP Template Example (cont.) (Page 46 of 50)

Insert Facility Name
MSGP Stormwater Pollution Prevention Plan
Document Reference Number
Revision X, Date

ATTACHMENT 21: EPC-DO-QP-101, ENVIRONMENTAL REPORTING REQUIREMENTS FOR RELEASES

**OR EVENTS** 



MSGP Stormwater Pollution
<b>Prevention Plan Preparation and</b>
Maintenance

No: EPC-CP-QP-2110	Page 58 of 72
Revision: 0	Effective Date: 01/07/2020

# Attachment 1: EPC-CP-QP-2110 R0 Form 1, MSGP SWPPP Template Example (cont.) (Page 47 of 50)

Insert Facility Name MSGP Stormwater Pollution Prevention Plan Document Reference Number Revision X, Date

ATTACHMENT 22: EPC-CP-QP-007, SPILL INVESTIGATIONS



MSGP Stormwater Pollution
<b>Prevention Plan Preparation and</b>
Maintenance

No: EPC-CP-QP-2110	Page 59 of 72
Revision: 0	Effective Date: 01/07/2020

Attachment 1: EPC-CP-QP-2110 R0 Form 1, MSGP SWPPP Template Example (cont.) (Page 48 of 50)

Insert Facility Name
MSGP Stormwater Pollution Prevention Plan
Document Reference Number
Revision X, Date

ATTACHMENT 23:

EPC-CP-QP-2110, MSGP STORMWATER POLLUTION PREVENTION PLAN

PREPARATION AND MAINTENANCE



MSGP Stormwater Pollution
<b>Prevention Plan Preparation and</b>
Maintenance

No: EPC-CP-QP-2110	Page 60 of 72	
Revision: 0	Effective Date: 01/07/2020	

# Attachment 1: EPC-CP-QP-2110 R0 Form 1, MSGP SWPPP Template Example (cont.) (Page 49 of 50)

Insert Facility Name
MSGP Stormwater Pollution Prevention Plan
Document Reference Number
Revision X, Date

ATTACHMENT 24: LOCAL PROCEDURE

Insert the appropriate procedure or parts of the procedure that pertain to this SWPPP. If this section is used, ensure the most current revision of the attached procedure is inserted. Delete section if not needed.



MSGP Stormwater Pollution
<b>Prevention Plan Preparation and</b>
Maintenance

No: EPC-CP-QP-2110	Page 61 of 72
Revision: 0	Effective Date: 01/07/2020

# Attachment 1: EPC-CP-QP-2110 R0 Form 1, MSGP SWPPP Template Example (cont.) (Page 50 of 50)

Insert Facility Name
MSGP Stormwater Pollution Prevention Plan
Document Reference Number
Revision X, Date

ATTACHMENT 25:

LOCAL PROCEDURE

Insert the appropriate procedure or parts of the procedure that pertain to this SWPPP. If this section is used, ensure the most current revision of the attached procedure is inserted. Delete section if not needed.



# No: EPC-CP-QP-2110 Revision: 0 MSGP Stormwater Pollution Prevention Plan Preparation and Maintenance

Effective Date: 01/07/2020

Page 62 of 72

# Attachment 2: MSGP SWPPP Review Guidance Checklist Example

(Page 1 of 11)

SWPPP Title

REQUIREMENT	YES/NO	NOTES
Stormwater Pollution Prevention Team		
Is the SWPPP being developed or updated by a qualified person?		
Does the SWPPP list Stormwater Pollution Prevention Team members (by name or title) and each		
individual's responsibilities?		
Is a copy of the SWPPP immediately available at the site and on-line?		
Contents of the SWPPP		
If the SWPPP refers to procedures or other documents, are copies of the relevant portions of these	4	
procedures or documents present in the SWPPP?		
Site Description		
Does the SWPPP include the following information?		
Identify a description of the nature of the industrial activities at the site		
Provide a general location map (e.g., U.S. Geological Survey (USGS) quadrangle map) with enough		
detail to identify the location of the site and all receiving waters for industrial stormwater discharges.		
Site map showing the following:		
Boundaries of the property and size of the property in acres		
Location and extent of significant structures and impervious surfaces		
Direction(s) of stormwater flow (using arrows)		
Locations of all stormwater control measures		
<ul> <li>Locations of all receiving waters, including wetlands, in the immediate vicinity of the site. Indicate which water bodies are listed as impaired and which are identified as Tier 2, Tier 2.5, or Tier 3 waters (for LANL, none)</li> </ul>		
Locations of all stormwater conveyances including ditches, pipes, and swales		
• Locations of potential pollutant sources associated with each industrial activity (see Part 5.2.3.2) that could be exposed to rainfall or snowmelt and could be discharged from the site.		
Locations where significant spills or leaks have occurred (see Part 5.2.3.3)		
Location(s) of all stormwater monitoring points		
• Location of each stormwater inlet and outfall, with a unique identification code for each outfall (i.e., 001, 002, 003, etc.), indicating if you are treating one or more outfalls as "substantially identical" (see Parts 3.2.3, 5.2.5.3, and 6.1.1)		
If applicable, location of the MS4 and where your stormwater discharges to it.     NOTE: Although LANL does not currently have an MS4, EPA has published a draft permit.		
Areas of designated critical habitat for endangered or threatened species		
Locations of the following activities where such activities are exposed to precipitation:		

MSGP SWPPP Review Guidance Checklist

MSGP Stormwater Pollution	No: EPC-CP-QP-2110	Page 63 of 72
Maintenance	Revision: 0	Effective Date: 01/07/2020

# Attachment 2: MSGP SWPPP Review Guidance Checklist Example (cont.) (Page 2 of 11)

### MSGP SWPPP Review Guidance Checklist

REQUIREMENT	YES/NO	NOTES
- Fueling station(s)		
- Vehicle and equipment maintenance and/or cleaning area		
- Loading/unloading areas		
- Locations used for the treatment, storage, or disposal of wastes		
- Liquid storage tanks		
- Processing and storage areas		
<ul> <li>Immediate access roads used by carriers of raw materials, manufactured products, waste material, or by-products used or created by the site</li> </ul>		
- Transfer areas for substances in bulk	de .	
- Machinery	4	
<ul> <li>Locations and sources of run-on to the site from adjacent property that contains significant quantities of pollutants</li> </ul>		
Potential Pollutant Sources		
Are areas described in the SWPPP where industrial material or activities are exposed to stormwater or from which allowable non-stormwater discharges originate?  NOTE 1: Industrial material or activities include material handling equipment or activities; industrial machinery; raw material; industrial production and processes; and intermediate products; by-products; final products, and waste products. Material handling activities include the storage, loading and unloading, transportation, disposal or conveyance of any raw material, intermediate product, final product or waste product.		
Are all pollutants or pollutant constituents (e.g., zinc, sulfuric acid, cleaning solvents, motor oil, diesel, gasoline, brake fluid, etc.) associated with each activity identified?  NOTE 2: The list must include all pollutants/materials that have been handled, treated, stored, or disposed and that have been exposed to stormwater in the three years prior to the date the SWPPP is prepared or amended.		
Are areas where <b>potential</b> spills and leaks could occur that could contribute pollutants to stormwater discharges and the corresponding outfall(s) that would be affected by such spills and leaks identified in the SWPPP?		
Are all significant spills and leaks of oil or toxic or hazardous substances identified that actually occurred at exposed areas, or that drained to a stormwater conveyance, in the three years prior to the date the SWPPP was prepared or amended?		
Has an evaluation for the presence of unauthorized non-stormwater discharges (see Part 1.1.3) been done and does it include the following information?		
Date of the evaluation		
A description of the evaluation criteria used		
A list of the outfall or onsite drainages points that were directly observed during the evaluation		

MSGP Stormwater Pollution	No. FPC-CP-0P-2110	Dage 64 of 72
Prevention Plan Preparation and	100: El C.C. (21:10)	1 485 04 01 7 2
Maintenance	Revision: 0	Effective Date: 01/07/2020

# Attachment 2: MSGP SWPPP Review Guidance Checklist Example (cont.) $(\mathsf{Page}\ 3\ \mathsf{of}\ 11)$

REQUIREMENT	YES/NO	NOTES
<ul> <li>The action(s) taken, such as a list of control measures used to eliminate unauthorized discharge(s), or documentation that a floor drain was sealed, re-routed to sanitary, or an NPDES permit application was submitted for an unauthorized cooling water discharge.</li> </ul>		
s there documentation of the location of any salt storage piles used for deicing or other commercial or ndustrial purposes?		
s all stormwater discharge sampling data collected at the site during the precious permit term summarized in a narrative description? This may include data tables and figures.		
Control Measures to Meet Effluent Limits		
Does the SWPPP indicate whether the following control measure selection and design criteria were considered?		
Preventing stormwater from coming into contact with polluting materials is generally more effective, and less costly, than trying to remove pollutants from stormwater		
<ul> <li>Using control measures in combination which may be more effective than using control measures in isolation for minimizing pollutants in stormwater discharge</li> </ul>	ule T	
<ul> <li>Assessing the type and quantity of pollutants, including their potential to impact receiving water quality, is critical to designing effective control measures that will achieve the limits in this permit</li> </ul>		
<ul> <li>Minimizing impervious areas at the facility and infiltrating runoff onsite (including bio-retention cells, green roofs, and impervious pavement, among other approaches) can reduce runoff and improve ground water recharge and stream base flows in local streams, although care must be taken to avoid ground water contamination</li> </ul>		
<ul> <li>Attenuating flow using open vegetated swales and natural depressions can reduce in-stream impacts of erosive flows</li> </ul>		
<ul> <li>Conserving and/or restoring riparian buffers will help protect streams from stormwater runoff and improve water quality</li> </ul>	LET	
<ul> <li>Using treatment interceptors (e.g., swirl separators and sand filters) may be appropriate in some instances to minimize the discharge of pollutants.</li> </ul>		
Does the SWPPP indicate how the control measure addresses the potential pollutant sources?		
Are the selection and design considerations for control measures to meet the following non-numeric technology-based effluent limits (see Part 2,1,2) identified in the SWPPP?		
<ul> <li>Minimize Exposure: All manufacturing, processing and material storage areas (including loading and unloading, storage, disposal, cleaning, maintenance, and fueling operations) must have controls that minimize exposure to pollutant discharges by either locating these industrial materials and activities inside or protecting them with storm resistant coverings.</li> </ul>		
<ul> <li>Use grading, berming or curbing to prevent runoff of contaminated flows and divert run-on away from these areas;</li> </ul>		

MSGP Stormwater Pollution	No: EPC-CP-QP-2110	Page 65 of 72
Maintenance	Revision: 0	Effective Date: 01/07/2020

Attachment 2: MSGP SWPPP Review Guidance Checklist Example (cont.) (Page 4 of 11)

REQUIREMENT	YES/NO	NOTES
- Locate materials, equipment, and activities so that potential leaks and spills are contained or able		
to be contained or diverted before discharge;		
<ul> <li>Clean up spills and leaks promptly using dry methods (e.g., absorbents) to prevent the discharge of pollutants;</li> </ul>		
- Store leaky vehicles and equipment indoors or, if stored outdoors, use drip pans and absorbents;		
- Use spill overflow protection equipment;		
<ul> <li>Perform all vehicle and/or equipment cleaning operations indoors, under cover, or in bermed areas that prevent runoff and run-on and also that capture any overspray; and</li> </ul>		
<ul> <li>Drain fluids from equipment and vehicles that will be decommissioned, and, for any equipment and vehicles that will remain unused for extended periods of time, inspect at least monthly for leaks.</li> </ul>		
• Good housekeeping (all areas where potential pollutants are exposed to stormwater must be kept clean).		
<ul> <li>Sweep or vacuum at regular intervals or wash down the area and collect and/or treat and properly dispose of the wash down water.</li> </ul>		
- Store materials in appropriate containers.		
<ul> <li>Keep all dumpster lids closed when not in use. For dumpsters and roll off boxes that do not have lids and could leak, ensure that discharges have a control (e.g., secondary containment). Part 1.1.3 of the permit does not authorize dry weather discharges from dumpsters or roll off boxes.*</li> </ul>		
* You may include extra information, or you may just "cut-and-paste" the effluent limits verbatim into the SWPPP w/out providing additional documentation.		
<ul> <li>Minimize the potential for waste, garbage, and floatable debris to be discharged by keeping exposed areas free of such materials.</li> </ul>		
<ul> <li>Maintenance (All industrial equipment, systems and control measures must be maintained in effective operating condition in order to minimize pollutant discharges).</li> </ul>		
Perform inspections and preventive maintenance of stormwater drainage, source controls, treatment systems, and plant equipment and systems that could fail and result in contamination of stormwater.		
<ul> <li>Diligently maintain non-structural control measures (e.g., keep spill response supplies available, and personnel appropriately trained).</li> </ul>		
<ul> <li>Inspect and maintain baghouses at least quarterly to prevent the escape of dust from the system and immediately removing any accumulated dust at the base of the exterior baghouse.*</li> </ul>		
<ul> <li>Cleaning catch basins when the depth of debris reached two thirds (2/3) of the sump depth and keeping the debris surface at least six inches below the lowest outlet pipe.*</li> </ul>		
Does the SWPPP contain language indicating immediate action must be taken to minimize pollutant discharges if control measures need routine maintenance?		
Is there language in the SWPPP indicating in instances where control measures need repair or replacement that the facility (or associated representatives thereof) must immediately take all		

MSGP Stormwater Pollution	No: EPC-CP-QP-2110	Page 66 of 72
Maintenance	Revision: 0	Effective Date: 01/07/2020

# Attachment 2: MSGP SWPPP Review Guidance Checklist Example (cont.) (Page 5 of 11)

REQUIREMENT	YES/NO	NOTES
reasonable steps (see Part 4.3.1 for definition) to prevent or minimize the discharge of pollutants until the final repair or replacement is implemented, including cleaning up any contaminated surfaces so that the material will not be discharged during subsequent storm events. Final repairs/replacement of stormwater controls should be completed as soon as feasible but must be no later than the timeframes established in Part 4.3 for corrective actions, i.e., within 14 days or, if that is infeasible, within 45 days.		
is there language in the SWPPP indicating corrective action must be taken (in accordance with Part 4.0) of a control measure was never installed, was installed incorrectly or not in accordance with Parts 2 and/or 8, or isn't being properly operated or maintained?		
<ul> <li>Spill Prevention and Response - The potential for leaks, spills, and other release must be minimized by the development of plans for effective response to such spills if or when they occur in order to minimize pollutant discharges.</li> </ul>	1	
<ul> <li>Plainly label containers (e.g., "Used Oil," "Spent Solvents," "Fertilizers and Pesticides") that could be susceptible to spillage or leakage to encourage proper handling and facilitate rapid response if spills or leaks occur:*</li> </ul>		
<ul> <li>Implement procedures for material storage and handling including use of secondary containment and barriers between material storage and traffic areas.</li> </ul>		
<ul> <li>Develop training on the procedures for expeditiously stopping, containing, and cleaning up leaks, spills, and other releases as soon as possible.</li> </ul>		
<ul> <li>Keep spill kits on-site, located near areas where spills may occur or where a rapid response can be made</li> </ul>		
Notify appropriate facility personnel when a leak, spill, or other release occurs. Where a leak, spill or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR Part 110, 40 CFR Part 117, or 40 CFR part 302, occurs during a 24-hour period, you must notify the National Response Center (NRC) at (800) 424-8802 in accordance with the above referenced requirements as soon as you have knowledge of the discharge.		
- In the event of a spill, does the SWPPP indicate where the contact information is so that it is readily accessible and available?		
Erosion and Sediment Controls		
- Does the SWPPP identify how exposed soils will be stabilized to minimize pollutant discharges?		
<ul> <li>Does the SWPPP identify flow velocity dissipation devices placed at discharge locations to minimize channel and streambank erosion and scour in the immediate vicinity of discharge points?</li> </ul>		
<ul> <li>Does the SWPPP identify structural and non-structural control measure to minimize the discharge of sediment?</li> </ul>		

Effective Date: 01/07/2020

Page 67 of 72

# Attachment 2: MSGP SWPPP Review Guidance Checklist Example (cont.) (Page 6 of 11)

REQUIREMENT	YES/NO	NOTES
- If polymers and/or other chemical treatments are used for dust control or stabilization, does the		
SWPPP must identify the polymers and/or chemicals used and the purpose?		
Management of Runoff - Does the SWPPP identify how stormwater runoff is diverted, infiltrated,		
reused, contained, or otherwise reduced to minimize pollutants in the discharge?		
• Salt Storage Piles or Piles Containing Salt - Does the SWPPP identify how salt piles are enclosed or covered?		
<ul> <li>Are controls in place to minimize exposure to stormwater resulting from adding to or removing materials from the salt pile?</li> </ul>		
<ul> <li>Non-Stormwater Discharges - Does the SWPPP indicate that personnel will evaluate the site for non-stormwater discharges not explicitly authorized in Part 1.1.3 or covered by another NPDES permit and eliminate the discharge?)</li> </ul>	/	
<ul> <li>Dust Generation and Vehicle Tracking of Industrial Materials - Does the SWPPP indicate dust generation and off-site tracking of raw, final, or waste materials must be minimized in order to minimize pollutant discharges?)</li> </ul>		
Control Measures to Meet Numeric Effluent Limitations Guidelines-Based Limits (see Part 2.1.3 and Pa	rt 8)	
Are effluent limitations identified for the Sector D facility (Asphalt Paving) (see Part 8.D.4)?		
Are effluent limitations identified for the Sector A facility (Timber Products) (see Part 8.A.7)?		
Control Measures to Meet Water Quality Based Effluent Limits (see Part 2.2 and Part 9.6.2)		
Are the benchmark values (i.e., the Lowest New Mexico Water Quality Standard) listed in MSGP		
Section 9.6.2.1 identified in the SWPPP?		
Schedules and Procedures - Control Measures		
Does the SWPPP contain a schedule or convention used for determining when pickup or disposal of waste materials occurs?		
Are preventative maintenance procedures (including regular inspections, testing, maintenance and repair) for all control measures included in the SWPPP to avoid situations that may result in leaks, spills, and other releases?		
Are backup practices in place should a runoff event occur while a control measure is off line?		
s there a schedule or frequency for maintaining all control measures?		
Are procedures included in the SWPPP for preventing and responding to spills and leaks, including notification procedures?		
Are control measures for material handling and storage identified?		
Are clean-up equipment, procedures and spill logs (i.e., reportable and non-reportable spill reports and		
he MSGP Corrective Action Reporting database) identified?		
chedules and Procedures - Employee Training		
Are the following employees identified as requiring training?		

# Effective Date: 01/07/2020 Page 68 of 72 No: EPC-CP-QP-2110 MSGP Stormwater Pollution Prevention Plan Preparation and Maintenance

Revision: 0

Attachment 2: MSGP SWPPP Review Guidance Checklist Example (cont.)

(Page 7 of 11)

# MSGP SWPPP Review Guidance Checklist

REQUIREMENT	YES/NO	NOTES	
<ul> <li>Personnel who are responsible for the design, installation, maintenance and/or repair of controls (including pollution prevention measures)</li> </ul>			
<ul> <li>Personnel responsible for the storage and handling of chemicals and materials that could become contaminants in stormwater discharges</li> </ul>			
<ul> <li>Personnel who are responsible for conducting and documenting monitoring and inspections</li> </ul>	/		
<ul> <li>Personnel who are responsible for taking and documenting corrective actions.</li> </ul>			
Are the following identified as elements of required training?			
An overview of what is in the SWPPP			
Spill response procedures, good housekeeping, maintenance requirements, and material management practices	1		
The location of all controls on the site required by this permit and how they are to be maintained	1		
The proper procedures to follow with respect to the permit's pollution prevention requirements			
When and how to conduct inspections, record applicable findings, and take corrective actions	-		
Are the following elements of the training plan documented in the SWPPP?			
Content of the training			
Frequency/schedule of training			
Are records of completed training kept in the SWPPP?			
Schedules and Procedures - Inspections and Assessments			
Is the procedure identified for conducting routine facility inspections?			
Is the procedure identified for conducting visual assessments?			
For each type of inspection performed (i.e., routine inspection and visual assessments) does the SWPPP identify the person (s) or positions of person(s) responsible for the inspection?			
Does the SWPPP contain an alternative schedule for conducting visual assessments in climates with irregular stormwater runoff discharges (see Part 3.2.3)?			
Are specific items to be covered by the inspection, including schedules for specific outfalls identified in the SWPPP?			
Is the facility claiming an exception as an inactive and unstaffed site? If yes, the facility must include information in the SWPPP that supports this claim as required by Parts 3.1.1, 3.2.3, 6.2.1.3 and 6.2.4.2. That is, the SWPPP must contain a signed certification indicating that there are no industrial materials or activities exposed to precipitation at the site and the NOI must be modified and re-certified.			
Schedules and Procedures - Monitoring			
Does the SWPPP contain documentation of procedures used to conduct benchmark, effluent limitations guidelines and impaired waters monitoring?			
Are locations where samples are collected, including any determination that two or more outfalls are substantially identical, in the SWPPPP?			
Are parameters for sampling and the frequency of sampling for each parameter listed?			

Page 7 of 11

# Effective Date: 01/07/2020 Page 69 of 72 No: EPC-CP-QP-2110 Revision: 0 MSGP Stormwater Pollution Prevention Plan Preparation and Maintenance

Attachment 2: MSGP SWPPP Review Guidance Checklist Example (cont.) (Page 8 of 11)

REQUIREMENT	YES/NO	NOTES
Does the SWPPP contain schedules for monitoring at the facility, including a schedule for alternate		
monitoring periods for climates with irregular stormwater runoff (see Part 6.1.6)?		
Are numeric control values (benchmark, effluent limitations guidelines, water quality standards)		
applicable to discharges from each outfall identified?		
Does the SWPPP list procedures for gathering storm event data (see Part 6.1)?		
Schedules and Procedures - Substantially Identical Outfalls (SIOs)		(
Does the SWPPP contain the following relative to SIOs?		
Location of each of the substantially identical outfalls		
Description of the general industrial activities conducted in the drainage area of each outfall	0	
Description of the control measures implemented in the drainage area of each outfall	- 4	
<ul> <li>Description of the exposed material located in the drainage area of each outfall that are likely to be significant contributors of pollutants to stormwater discharges</li> </ul>		
• An estimate of the runoff coefficient of the drainage areas (low = under 40%, medium = 40% to 65%, high = above 65%		
Justification as to why the outfalls are expected to discharge substantially identical effluents		=
Do Substantially Identical Outfalls identified on the SWPPP map match those identified in MDMRs?		
Is there language indicating quarterly visual assessments of substantially identical outfalls will be performed on a rotating basis throughout the permit term?		
Is there language indicating quarterly visual assessment of the discharge at one SIO will also apply to the other SIOs?		
Corrective Action Documentation - If an event triggering corrective action is associated with an SIO, did the review of the need for action encompass all related substantially identical outfalls?		
Documentation		
Does the SWPPP contain the following up-to-date and complete inspection, monitoring, and certification records?		
Copy of NOI submitted to EPA along with any correspondence exchanged between the facility and EPA specific to coverage under this permit.		
Copy of the acknowledgement you receive from the EPA assigning your NPDES ID.		
Copy of the MSGP Permit (an electronic copy easily available to SWPPP personnel is also acceptable).		
Documentation of maintenance and repairs of control measures, including the date(s) of regular maintenance, date(s) of discovery of areas in need of repair/replacement, and for repairs, date(s) that the control measure(s) returned to full function, and the justification for any extended maintenance/repair schedules (See Part 2.1.2.3).		
<ul> <li>All inspection reports, including the Routine Facility Inspection Reports (see Part 3.1.2) and Quarterly Visual Assessment Reports (see Part 3.2.2).</li> </ul>		

MSGP Stormwater Pollution	No: EPC-CP-QP-2110	Page 70 of 72
Prevention Plan Preparation and Maintenance	Revision: 0	Effective Date: 01/07/2020

# Attachment 2: MSGP SWPPP Review Guidance Checklist Example (cont.) $(\mathsf{Page}\ 9\ \mathsf{of}\ 11)$

REQUIREMENT	YES/NO	NOTES
<ul> <li>Description of any deviations from the schedule for visual assessments and/or monitoring, and the reason for the deviations (e.g., adverse weather or it was impracticable to collect samples within the first 30 minutes of a measurable storm event) (see Parts 3.2.3 and 6.1.5)</li> </ul>		
Corrective action documentation (see Part 4.4)		
<ul> <li>Documentation of any benchmark exceedances and the type of response to the exceedance employed including the following:</li> </ul>		
- The corrective action taken;		
- A finding that the exceedance was due to natural background pollutant levels;		
<ul> <li>A determination from EPA that benchmark monitoring can be discontinued because the exceedance was due to run-on; OR</li> </ul>		
<ul> <li>A finding that no further pollutant reductions were technologically available and economically practicable and achievable in light of best industry practice consistent with Part 6.2.1.2</li> </ul>		
<ul> <li>Documentation to support any determination that pollutants of concern are not expected to be present above natural background levels if you discharge directly to impaired waters and that such pollutants were not detected in your discharge or were solely attributable to natural background sources. (see Part 6.2.4.1)</li> </ul>		
<ul> <li>Documentation supporting that stormwater discharges, allowable non-stormwater discharges, and stormwater discharge-related activities are not likely to adversely affect any species that are federally listed as endangered or threatened ("listed") and are not likely to adversely affect habitat that is designated as "critical habitat" under the Endangered Species Act (see Part 1.1.4.5).</li> </ul>		
<ul> <li>Documentation supporting the determination that stormwater discharges, allowable non- stormwater discharges, and stormwater discharge-related activities meet one of the eligibility criteria for historic property preservation (Criterion A, B, C or D) (see Part 1.1.4.6).</li> </ul>		
All Discharge Monitoring Reports and Annual Reports	1	
<ul> <li>Support for claim that facility has changed its status from active to inactive and is unstaffed with respect to the requirements to conduct routine facility inspections, quarterly visual assessments, benchmark monitoring, and/or impaired waters monitoring.</li> </ul>		
Is the SWPPP signed and dated by a duly authorized representative (per Part B.11)?	-	
Is the Annual Report signed by a duly authorized representative (per Part B.11)?		
SWPPP Modifications		
Where a corrective action triggers a change in any of the control measures or procedures, has the SWPPP been updated within 14 calendar days of completing the corrective action (see Part 4.4)?	1	
Are SWPPP modifications signed and dated by a duly authorized representative?		
Has the SWPPP been reviewed and does documentation exist as to the modifications made or why none were needed under the following circumstances?		

MSGP Stormwater Pollution	No: EPC-CP-QP-2110	Page 71 of 72
Maintenance	Revision: 0	Effective Date: 01/07/2020

Attachment 2: MSGP SWPPP Review Guidance Checklist Example (cont.)
(Page 10 of 11)

REQUIREMENT	YES/NO	NOTES
<ul> <li>An unauthorized release or discharge (e.g., spill leak, or discharge of non-stormwater not authorized by this or another NPDES permit to a water of the U.S.) occurs at your facility.</li> </ul>		
<ul> <li>A discharge violates a numeric effluent limit listed in Table 2-1 and in the sector specific requirements.</li> </ul>		
<ul> <li>The control measures are not stringent enough for the discharge to meet applicable water quality standards or the non-numeric effluent limits in this permit.</li> </ul>		
<ul> <li>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.</li> </ul>		
<ul> <li>Whenever a visual assessment shows evidence of stormwater pollution (e.g., color, odor, floating solids, settled solids, suspended solids, foam).</li> </ul>		
<ul> <li>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.</li> </ul>		
<ul> <li>The average of four quarterly sampling results exceeds an applicable benchmark (see Part 6.2.1.2). 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., the sum of quarterly sample results to date is more than four times the benchmark level) this is considered a benchmark exceedance.</li> </ul>		
Public Accessibility of SWPPP		
Is your SWPPP uploaded to the URL provided in the NOI?		
Are subsequent SWPPP modifications (updates), records and all other reporting elements required for the previous year updated no later than 45 days after conducting the final routine facility inspection for the year?		
If you did not upload your SWPPPs to a URL, was the following information provided in the NOI and documented in the SWPPP?		
<ul> <li>Onsite industrial activities exposed to stormwater, including potential spill and leak areas (see Parts 5, 2.3.1, 5.2.3.3 and 5.2.3.5);</li> </ul>		
<ul> <li>Pollutants or pollutant constituents associated with each industrial activity exposed to stormwater that could be discharged in stormwater and/or any authorized non-stormwater discharges listed in Part 1.1.3 (see Part 5.2.3.2)</li> </ul>		
<ul> <li>Stormwater control measures employed 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. If polymers and/or other chemical treatments are used as controls, these must be identified and the purpose explained.</li> </ul>		
• The schedule for good housekeeping, maintenance, and schedule for all inspections required in Part 3.		

MSGP Stormwater Pollution	No: EPC-CP-QP-2110	Page 72 of 72
Maintenance	Revision: 0	Effective Date: 01/07/2020

# Attachment 2: MSGP SWPPP Review Guidance Checklist Example (cont.) $(\mathsf{Page}\ 11\ \mathsf{of}\ 11)$

REQUIREMENT	YES/NO	NOTES
Are modifications to the SWPPP information required in the four bullets above submitted on a "Change NOI" form no later than 45 days after conducting the final routine facility inspection for the year?		
Corrective Actions		
Are corrective actions documented within 24 hours of becoming aware of such condition?		7
Is the condition triggering the need for the corrective action identified?		
Is the date the corrective action was identified captured?		
Was immediate action taken to minimize or prevent the discharge of pollutants?		
In the case of leaks and spills, were response actions, date/time of clean up, notification, etc. documented?		

# **ATTACHMENT 24: SPILL LOG**

# **SPILLS AND LEAKS (2017-2019)**

Date	Spill Location	What Spilled	Quantity Spilled	Corrective Action Taken	Outfall Affected
3/23/2017	Compressor inside roll-off bin	Lubricant oil	Less than 1 cup	Absorbent was applied to the spill and impacted material was removed	None
7/25/2017	Entrance to covered structure 60- 249	Hydraulic Fluid	Less than 5 ounces	Stain on asphalt was sprayed with micro-blaze	None
10/25/2017	Inside covered structure 60-85	Lubricant oil	Less than 3 ounces	Stain on concrete was sprayed with micro-blaze	None
3/27/2019	Staging area for metal for recycle bins	Water/oily mixture	4 gallons	HAZMAT used absorbent pads and micro-blaze for the clean up	None
10/31/2019	Parking lot of Material Recycling Facility	Hydraulic oil	1/4 cup	Absorbent pads and micro-blaze were used for the clean up	None

# **ATTACHMENT 25: LOCAL PROCEDURES**

No. P322-3

Revision: 4

Issued: 12/10/15 Effective Date: 12/10/15

# **Performance Improvement from Abnormal Events**

### 1.0 PURPOSE

This document defines the process for notification and reporting of abnormal events at Los Alamos National Laboratory (LANL or the Laboratory). The abnormal event process is part of the LANL Contractor Assurance System (CAS), and is focused on effectively driving continuous performance improvement from each event. The intent of the investigative and analysis process is to understand and identify causes (both individual and organizational) that contributed to the event so that deficiencies identified can be addressed and corrected. Analyzing events promotes the values and concepts of a learning organization envisioned in the Integrated Safety Management (ISM) Program Feedback and Improvement function. Events that pose an immediate threat to life or property are subject to additional emergency notification requirements. See Section 2.3.

### 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 Contractor Assurance Officer (CAO), as provided in the <a href="Prime Contract">Prime Contract</a>. This document derives from the Laboratory <a href="Governing Policies">Governing Policies</a>, particularly the section on Management Systems, and <a href="SD320">SD320</a>, Los Alamos National Laboratory <a href="Contractor Assurance System Description Document">Contractor Assurance System Description Document</a>.

- Issuing Authority (IA): Contractor Assurance Officer (CAO)
- Responsible Manager (RM): Quality and Performance Assurance (QPA) Division Leader
- Responsible Office (RO): Quality and Performance Assurance
   –Performance Assurance
   (QPA-PA)

### 2.2 Applicability

This document applies to all Laboratory workers, including employees of Los Alamos National Security, LLC (LANS), its contractors/subcontractors, students, guests, affiliates, or visitors. This document applies to work-related events onsite, i.e., within the physical boundaries of LANL, and off-site when the workers are (1) in LANL pay status, and (2) working under LANL procedures and requirements. Events involving LANL workers that occur at another Department of Energy (DOE)/National Nuclear Security Administration (NNSA) contractor site and where the work is under that site's procedures and requirements are managed by that site's abnormal event process.

Abnormal events include all abnormal conditions, accidents, incidents, or deviations from the planned outcome of a workplace activity that did or could have adversely affect(ed) health or safety of workers, the public, the environment, or the integrity of LANL programs or facilities.

P322-3, Rev. 4 1 of 24

Roles assigned in this document are based on P313, Roles, Responsibilities, Authorities, and Accountability. Key roles are filled by the Facility Operations Directors (FODs) and trained occurrence investigators from QPA-PA who support the FODs. The term FOD in this document refers to individuals in the Nuclear and High-Hazard Operations Directorate (NHHO). However, for events that do not fall within the boundary of an NHHO-managed FOD Unit, institutional program managers may fill the FOD role as defined in DOE O 232.2, Occurrence Reporting and Processing of Operations Information. Examples may include the following:

- construction/demolition project managers for events within their project;
- Subject Matter Experts (SMEs), such as managers from Environmental Protection (ENV) for environmental-related notices of violation, Operations Support-Packaging and Transportation (OS-PT) for P&T-related institutional events, and the Safety Basis Office for institutionalrelated safety basis issues;
- senior management for wildland fires impacting LANL property;
- institutional program owners such as for the beryllium, crane, hoisting and rigging, and electrical safety programs for multi-facility events or events with institutional impact; and
- the Laboratory Director or designee for Team Investigations.

Although programmatic management or SMEs may assume ownership of the event, the local area FOD and/or the Associate Director for Nuclear and High-Hazard Operations (ADNHHO) should be engaged to provide guidance, the infrastructure, and resources necessary to ensure consistent application of the reporting process.

Management authority and responsibility for execution of the abnormal event process are assigned to the FODs. FODs may delegate responsibilities and authorities for the abnormal event process to Operations Managers or Duty Officers. Facility-owning Responsible Associate Directors (RADs) establish their involvement in the process through agreements with the FODs. QPA-PA maintains details of and procedures for the abnormal event process on the Occurrence Reporting webpage and in the current Functional Series Document (FSD) QPA-PA-FSD-003, Abnormal Events Handbook. The FSD describes in detail all the aspects of the LANL abnormal event reporting process, including event discovery, notification, categorization, fact finding, investigation, causal analysis, and final report preparation. Attachment A, Abnormal Event Categorization Criteria, of the FSD provides SME guidance (e.g., from health and safety, ENV, Suspect/Counterfeit Items Coordinator [SCIC], Safety Basis, P&T) to assist the FOD/designee with event categorization. The FSD defines the roles and responsibilities for the FODs, occurrence investigators, and the necessary support personnel.

### 2.3 Precautions and Limitations

Processes related to Operational Emergencies (OEs), security incidents, and the Price-Anderson Amendments Act (PAAA)/Worker Safety and Health (WSH) program are beyond the scope of this document, and in some instances preempt requirements of this document. Examples follow.

Operational Emergencies (OEs). Events requiring emergency response (e.g., explosion, fire, hazardous material release) are subject to categorization, notifications, and response under PD1200, Emergency Management, and SEO-DO-PLAN-100, Hazardous Materials Program Emergency Plan, available through the Emergency Operations Center at 667-6211, plus any facility-specific emergency management plans and procedures. For the duration of emergency conditions, Security and Emergency Operations (SEO) personnel and procedures take precedence and preempt the requirements of this document.

Workers witnessing or involved in such events must immediately request assistance by calling 911 and/or Security and Emergency Operations-Emergency Management (SEO-EM, 667-6211) as noted in Attachment A, *Abnormal Event Process*.

It is recommended that the FOD/RAD and/or line management contact SEO Division immediately for assistance with severe events that do or might meet OE criteria. SEO personnel manage all verbal and written communications regarding a declared OE, both internal and external to LANL and from declaration through termination of the emergency condition.

After SEO personnel terminate the OE, the FOD regains control of the event scene and the balance of the abnormal event process proceeds according to this document.

**Security Incidents**. Workers must report incidents of known or potential security concern to the Security Incident Team (SIT) in accordance with requirements in P201-3, Reporting Known and Potential Incidents of Security Concern. Events strictly of security concern are not subject to the requirements in this document. For events that present components of security concern but also safety or operational issues, the FOD must work with the SIT to ensure requirements of this document and P201-3 are met. Contact the SIT for assistance with the security incident program.

**Price-Anderson Amendments Act/Worker Safety and Health (PAAA/WSH)**. Events at all levels of severity (Occurrence Reporting and Processing System [ORPS] and Sub-ORPS) are subject to all requirements in this document, but also to additional screening and possibly reporting to the DOE Noncompliance Tracking System (NTS) in accordance with <u>P141</u>, *Price Anderson Amendments Act (PAAA), Worker Safety and Health (WSH), and Classified Information Security (CIS) Enforcement Procedure.* Contact the local PAAA Point of Contact and/or PAAA Coordinators in the <u>QPA PAAA Program Office</u> for assistance with this program.

### 3.0 PROCEDURE DESCRIPTION

The Laboratory implements a graded approach for investigating and resolving abnormal events. See Table 1 for a summary of the three-tier graded approach, and Attachment A, *Abnormal Event Process*, for the process flow at each of the three tiers.

Table 1. Graded Approach	Table 1. Graded Approach to Abnormal Events			
Event Type	Examples	Who Investigates/Resolves		
Certain high-profile Occurrence Reporting and Processing System (ORPS)-reportable events (i.e., Operational Emergency [OE], Significance Category [SC]1 or Significance Category Recurring [SCR]) may be subject to a Team Investigation	<ul> <li>Fatality, terminal or disabling injury</li> <li>Criticality accident or near miss</li> <li>Radiation exposure exceeding limits for a worker or member of the public</li> </ul>	<ul> <li>A team appointed by the Laboratory Director (DIR) or designee investigates events and resolves concerns.</li> <li>Management oversees Corrective Action Plan (CAP) and response in accordance with the charter memo (see Section 3.11). In the absence of a charter memo, the Contractor Assurance Officer (CAO) will assign the CAP oversight responsibility.</li> <li>A team appointed by the Facility Operations Director (FOD)/Responsible Associate Director (RAD) investigates events and resolves concerns.</li> </ul>		
Low- to moderate- significance ORPS-	<ul> <li>Injury requiring hospitalization</li> </ul>	FODs and qualified Quality and Performance Assurance		

**LANL** 

P322-3, Rev. 4 3 of 24

reportable events that exceed the ORPS thresholds	<ul> <li>Failures of safety-required equipment</li> <li>Moderate-hazard electrical shock events</li> <li>Violations of safety requirements</li> </ul>	Performance Assurance (QPA-PA) investigators investigate event.  Appropriate Management Review Boards (MRBs) oversee corrective action.
Sub-ORPS events that fall below the ORPS thresholds	<ul> <li>Minor workplace incidents or near misses</li> <li>Minor equipment failures</li> <li>Operational concerns resulting in pause or stop work</li> </ul>	<ul> <li>Improvement Responsible Managers (IRMs) from the facility or program where the event occurred investigate event.</li> <li>Local MRB oversees corrective action.</li> </ul>

## 3.1 Notify Management of an Abnormal Event

Abnormal events at LANL require immediate management notifications. Workers generally witness first hand or discover evidence of abnormal events, and must recognize the abnormality, stabilize the situation to the extent possible and safe to do so (e.g., pause or stop work), and initiate the notifications to their chain of facility and line management.

Workers who are involved in any abnormal event or who discover any abnormal condition must do the following:

- notify their immediate supervisor, or the first immediately available manager in the worker's chain of command; and
- notify the FOD or designee if required by local procedures or if their immediate supervisor is unavailable.

Supervisors and first line managers, group-level managers, and division-level managers who are notified by a worker or in any way become aware of an abnormal event must do the following:

- ensure notification of the FOD/designee for all abnormal events;
- notify the first immediately available manager in their upward chain; and
- follow any additional FOD or RAD expectations for additional notifications.

RADs, upon being notified of an abnormal event in their facility and based on the significance of the event, should do the following:

- consult with the FOD/designee on response to the event and to ensure that compensatory
  measures for significant conditions adverse to quality are in place prior to the resumption of
  work;
- notify their Principal Associate Director (PAD);
- notify the DIR; and
- notify affected sponsors or external program managers of the involved facility or project.

The management notifications described above are generally verbal. The FOD is responsible for official written notification of the event in accordance with Section 3.3.

LANL

P322-3, Rev. 4 4 of 24 Effective Date: 12/10/15

# 3.2 Categorize the Event

The FOD categorizes all nonemergency abnormal events within two hours of the discovery date/time, or as soon thereafter as reasonably possible. This categorization is critical because it sets the course for the level of investigating and reporting and the subsequent involvement of investigators. The FOD or designee must gather key facts, decide whether an abnormal event has in fact occurred, and categorize the event as either ORPS reportable or Sub-ORPS reportable. Categorization follows the reporting criteria of <a href="DOE O 232.2">DOE O 232.2</a>, Occurrence Reporting and Processing of Operations Information. DOE reporting and categorization criteria and QPA-PA procedures are found on the <a href="Occurrence Reporting">Occurrence Reporting</a> webpage. Events falling below the ORPS thresholds are processed as Sub-ORPS. See Section 3.10.

The event categorization establishes the next steps, including the following:

- External notifications to include the DOE/NNSA-Los Alamos Field Office (NA-LA) Facility Representative (FR) and possibly DOE Headquarters Operations Center (HQ OC).
- Reporting timelines.
- Rigor applied to the investigation, causal analysis, and corrective action development.
- Approvals required for the final report.

Categorization places each ORPS-reportable event into a Significance Category (SC) based on DOE requirements as follows:

- OE (as defined in <u>DOE O 151.1C</u>, Comprehensive Emergency Management System). Major unplanned or abnormal events or conditions that: involve or affect DOE/NNSA facilities and activities by causing, or having the potential to cause, serious health and safety or environmental impacts; require resources from outside the immediate/affected area or local event scene to supplement the initial response; and, require time-urgent notifications to initiate response activities at locations beyond the event scene. OEs are the most serious occurrences and require an increased alert status for onsite personnel and, in specified cases, for offsite authorities.
- SC 1. Non-OE events that caused actual harm; posed the potential for immediate harm or
  mission interruption due to safety system failure and required prompt mitigative action; or
  constituted an egregious noncompliance with regulatory requirements that created the potential
  for actual harm or mission interruption.
- SC 2. Circumstances that reflected degraded safety margins necessitating prompt
  management attention along with modified normal operations to prevent an adverse effect on
  safe facility operations; worker or public safety and health, including significant personnel
  injuries; regulatory compliance; or public/business interests.
- SC 3. Events or circumstances with localized implications including personnel injury, environmental releases, equipment damage or hazardous circumstances that were locally contained and did not immediately suggest broader systemic concerns.
- SC 4. Events or circumstances that were mitigated or contained by normal operating practices, but where reporting provides potential learning opportunities for others.
- SC R. Recurring occurrences are those identified as recurring, either directly or through periodic analysis of occurrences and other non-reportable events.

If early information is incomplete, the FOD must categorize conservatively (at the higher level being considered) within two hours, then adjust the category at the fact finding (the worker-involved meeting to discuss the abnormal event) or as more information becomes available.

**Note**: Disputes about categorization may be encountered at any time in the ORPS process but are most common on initial, pre-fact finding categorization or in the management close out portion of the fact finding (see Section 3.3). Differences of opinion are most common in subjective cases falling under Group 10, *Management Concerns/Issues*, but may occur in cases falling under the more objective Groups 1–9 (see QPA-PA-FSD-003, *Abnormal Events Handbook* for definitions of these groups). If consensus on categorization is not possible (e.g., disputes involving the NA-LA FR), the FOD is responsible for coordinating with the RAD and resolving the dispute. If necessary, the FOD and RAD are expected to escalate the decision via the appropriate LANL chain of command. The investigator should remain advisory to this discussion, bringing to the table knowledge of prior similar event categorizations and, as possible, fostering institutional consistency even in the most subjective areas of the categorization process.

**Note**: If, in the investigator's professional opinion, a reporting decision finalized by the FOD is clearly inconsistent with the objective elements of the DOE reporting criteria, the investigator must advise the FOD of this opinion, explain the technical basis for the opinion, and attempt to negotiate resolution. If the discrepancy remains unresolved, the investigator must report the unresolved disagreement to the QPA-PA Group Leader for his/her advice and possible direct involvement in the discussion with ADNHHO, if necessary.

### 3.3 Transmit Prompt (E-mail) Event/Incident Notification

As soon as possible after categorization, the FOD or designee sends an Event Notification to key stakeholders both inside and outside LANL with the best available information about the event. The Event Notification is sent to <a href="mailto:nhhonotification@lanl.gov">nhhonotification@lanl.gov</a> and includes the following information:

- Date/time of discovery
- Date/time of categorization
- FOD and RAD
- Location of the event (TA/Building; facility name, room)
- Event title and description
- Whether the event is ORPS-reportable or Sub-ORPS
- If ORPS reportable, include the significance category, the event reporting criterion, and whether or not a fact finding will be held.

### 3.4 Fact Finding for the Event

The fact finding is a discovery and learning opportunity that is the central, first step in launching an effective partnership between workers, supervisors, and managers to understand events and conditions. The purpose of a fact finding is to have workers discuss the various facts surrounding an event and any associated conditions, both positive and negative, with an overall objective to learn and improve.

Fact findings consist of two functional parts: (1) the required worker/responder segment, with the purpose of listening to the story as told by involved workers and responders, understanding and learning about the event, and reviewing compensatory actions already taken; and (2) the management closeout segment for supervisors/managers, where workers/responders are typically excused and discussion focuses on additional immediate or compensatory actions, confirmation and/or determination of categorization, and the scope of the investigation and causal analysis as well as consideration for any extent of condition evaluation.

P322-3, Rev. 4 6 of 24

The FOD has the responsibility and authority for the fact finding process. Fact findings are optional at FOD and/or RAD discretion, based on whether a discussion of the facts surrounding the event provides a reasonable opportunity for organizational learning. Examples of events that may not warrant a fact finding include receipt of Notices of Violation (NOVs), environmental related releases, and discovery of Suspect Counterfeit Items (S/CIs).

All fact findings at the Laboratory should meet the following four key expectations:

- Conduct fact finding (if held) in a timely manner to ensure reporting requirements are met. See Table 2 for reporting timelines.
- Attendance in the worker/responder portion of the fact finding should include those individuals involved in the event, including immediate response personnel. The FOD is responsible to work with the RAD and ensure that the necessary attendees are identified and invited to the fact finding. Recommended attendance at the worker/responder portion of fact findings is as follows (Note: an asterisk indicates the minimum recommended attendance):
  - FOD\*
  - Involved worker(s)\*
  - QPA-PA investigator\* (for ORPS)
  - FOD Improvement Management Coordinator (IMC)\* (required for Sub-ORPS)
  - Witnesses
  - Key responders\*
  - Immediate supervisor/manager of involved worker(s)
  - Key SMEs (e.g., Health Physicist [HP], Industrial Hygienist [IH], electrical Authority Having Jurisdiction [AHJ])
  - PAAA office coordinator (invited)
  - NA-LA FR (invited)
  - Defense Nuclear Facilities Safety Board (DNFSB) representative (invited for nuclear facilities)
  - Nuclear Criticality Safety Committee (invited for all criticality safety-related fact findings)

FODs must invite the PAAA office coordinator, the NA-LA FR, and DNFSB representative to all fact findings (DNFSB representative for nuclear facilities only), but attendance is at their discretion. Phone, e-mail, or pager messages can serve as notification.

Attendance by line management is optional; however, immediate supervisors and managers are encouraged to attend fact findings. It is important to maintain the fact finding as a discovery and learning exercise, not a management briefing, an investigation, or a corrective action session. Therefore, it is the FOD/RAD's authority to manage the attendance size of the fact finding. Additional guidance for fact finding attendance is available in <a href="QPA-PA-FSD-003">QPA-PA-FSD-003</a>, Abnormal Events Handbook

The PAAA office coordinator, NA-LA FRs, Nuclear Criticality Safety Committee representative (for criticality safety related events), and DNFSB representatives must be invited to all fact findings, but attendance is at their discretion and timely held fact findings will proceed on schedule even in the absence of these parties. These attendance guidelines for LANL fact findings apply equally to all events, from minor to the most severe.

- Attendees must strive to arrive at the fact finding with relevant documentation (e.g., photos, schematics, change notices, work packages, and/or relevant procedures/policies) to support establishment of the factual information.
- The fact finding must be an open discussion forum that exhibits all of the attributes of a
  positive safety culture. A healthy fact finding process is one cornerstone of a learning
  organization and, if well executed, will result in management and employees continually
  exhibiting all of the positive safety culture attributes of leadership, employee engagement, and
  organizational learning.

Positive safety culture attributes suggested for all LANL fact findings are listed below. These elements honor Human Performance Improvement (HPI) principles and should be encouraged by managers and attendees involved in all fact findings.

- All individuals directly involved in the event are in attendance.
- The facilitator/FOD, and management in attendance, set and maintain the tone for the fact finding as an open, no-fault, candid, learning environment at all times. If necessary, the facilitator/FOD promptly reminds those in attendance of the ground rules and prevents overt or covert placing of blame. The facilitator/FOD will excuse any individual who will not exhibit this or any other positive safety culture attribute.
- The dialogue is open and professional and all in attendance are treated equally and respectfully.
- There is no evidence of placing blame.
- Directly involved employees do most of the talking with minimal interruptions.
- Management and all attendees are actively listening. Body language and actions suggest genuine interest in hearing and learning from involved workers and responders.
- As a rule, attendees are to refrain from cell phone use, including texting or e-mail, and should not engage in any other distracting behavior during a fact finding. Fact finding attendees, especially management and oversight, do not shift the discussion towards a pre-conceived determination of individual failures in responsibility.
- Attendees do not prevent the free flow of factual information.
- Individuals should be comfortable and willing to speak up regarding the facts, including what they observed.
- The emphasis of the fact finding is on discovery, learning, and understanding the conditions associated with the event, rather than responsibility, cause, or correction.
- Participants demonstrate the intent to question, learn, and engage others to understand all aspects of an event and underlying conditions.
- Attendees discuss what went "right" in addition to what went "wrong."
- FOD/RAD and/or facilitator recognize and commend participants for self-identification of errors and/or the demonstration of behaviors consistent with positive safety culture principles.

**LANL** P322-3. Rev. 4

Involved workers, responders, managers and SMEs called upon to attend the fact finding must candidly explain the sequence of events leading up to, during, and immediately following the event. Though constructive, technical, and professional debate is considered healthy and is encouraged, participants must remain cordial and professional in their demeanor and must cooperate fully with the FOD and/or fact finding facilitator.

# 3.5 Open Event Record in the Performance Feedback and Improvement Tracking System (PFITS) and ORPS

For all ORPS-reportable events, the IMC opens a record in PFITS and the QPA-PA investigator as the agent for the FOD or designee enters a parallel record into the DOE ORPS system. PFITS maintenance beginning at this step is according to the locally applied Performance Feedback and Improvement (PFI) processes, administered with support of IMCs.

**Note:** For Sub-ORPS events where review showed that no significant event or condition occurred or existed, such as a false fire alarm, entry of a record into PFITS is only required if facility and line management determine that additional review and corrective action is required.

Consistency between the ORPS and PFITS systems is ensured at this stage when the IMC attaches the written ORPS Notification Report to the PFITS record. The QPA-PA investigator provides assistance to the FOD in generating the Notification Report, or for SC 4 events, the Notification/Final Report, in the ORPS system. Upon FOD or designee approval, the QPA-PA investigator must submit Notification Reports to the ORPS system according to Table 2.

Table 2. Timeline for Submission of Notification Reports in ORPS System		
Significance Category	Timelines*	
Operational Emergencies (defined by <u>DOE O 151.1C</u> , Comprehensive Emergency Management System) <sup>†</sup>	<ul> <li>Categorize: ASAP</li> <li>Prompt Notification: 30 min</li> <li>(15 min if further classified)</li> <li>Written Notification: Close of Business (COB) the day following the event categorization, not to exceed 90 hours</li> <li>Final Report: 45 calendar days</li> </ul>	
Significance Category 1	<ul> <li>Categorize: 2 hours</li> <li>Prompt Notification: 2 hours</li> <li>Written Notification: COB the day following event categorization, not to exceed 90 hours</li> <li>Final Report: 45 calendar days</li> </ul>	
Significance Category R	<ul> <li>Categorize: Time of SC R determination</li> <li>Written Notification: COB 2 business days after event categorization</li> <li>Final Report: 45 calendar days</li> </ul>	
Significance Category 2 <sup>^</sup>	<ul> <li>Categorize: 2 hours</li> <li>Prompt Notification: 2 hours</li> <li>Written Notification: COB the day following event categorization</li> <li>Final Report: 45 calendar days</li> </ul>	
Significance Category 3 <sup>^</sup>	<ul> <li>Categorize: 2 hours</li> <li>Prompt Notification: 2 hours</li> <li>Written Notification: COB 2 business days after the event categorization</li> <li>Final Report: 45 calendar days</li> </ul>	

9 of 24

Table 2. Timeline for Submission of Notification Reports in ORPS System		
Significance Category	Timelines*	
<ul> <li>Significance Category 4<sup>^</sup></li> <li>Categorize: 2 hours</li> <li>Prompt Notification: 2 hours (if required)</li> <li>Written Notification/Final Report: COB 2 business days after the event categorization</li> </ul>		
Comprehensive Emergency M * Categorization Time is from Dis	ification requirements are in accordance with DOE O 151.1C, anagement System. scovery date, and time. Notification is from Categorization date and no Categorization date, and time.	
Reporting and Processing of C	2, 3, and 4 occurrences (identified with * in <u>DOE O 232.2</u> , <i>Occurrence operations Information</i> , Attachment 2, <i>Reporting Criteria</i> ) also require Headquarters Emergency Operations Center (HQ EOC).	

### 3.6 Investigate

Investigations are required for ORPS-reportable events, and are normally conducted by the QPA-PA investigator. Investigations for Sub-ORPS events are required only for more significant events (see Table 1 for examples). Sub-ORPS investigations, if performed, are generally led by the IRM with assistance from the IMC (see Section 3.10). The most serious events (see Table 1) are investigated by a multidisciplinary team (see Section 3.11). All investigations of abnormal events are graded to the risk or significance of the event, and are performed by individuals trained according to P322-1, Causal Analysis and Corrective Action Development. Additional ORPS and causal analysis grading detail is available in the current FSD, QPA-PA-FSD-003, Abnormal Events Handbook.

The lead investigator may consult with SMEs, to include HPI Practitioners, as deemed necessary to understand the specific event.

### 3.7 Determine Causal Factors

Causal analysis is required for ORPS events in SCs OE/1/2/3/R, and is optional for SC 4 or Sub-ORPS events or conditions. ORPS causal analysis is led by the QPA-PA investigator as the agent of the FOD, or by the Team Chair for Team Investigations (see Section 3.11). Causal analysis for Sub-ORPS events is required only for more significant events, in accordance with criteria found in P322-4, Laboratory Performance Feedback and Improvement Process.

Generally, the IRM leads the sub-ORPS causal analysis, if performed. The IRM may request assistance from the IMC or other support personnel. HPI-trained personnel may also assist with Sub-ORPS event analysis, as requested by the owning FOD or RAD management (see Section 3.10).

The target for completion of an ORPS causal analysis is 20 business days after categorization of the event. A similar timeframe is recommended but not required for Team Investigations and Sub-ORPS events (see Attachment A, *Abnormal Event Process*). For all abnormal events the causal analysis is performed as described in <a href="P322-1">P322-1</a>, Causal Analysis and Corrective Action Development.

### 3.8 Develop Corrective Actions

Corrective action development in response to identified causal factors is the same for all abnormal events (events requiring Team Investigations, ORPS-reportable events, and Sub-ORPS events) and follows event-related PFI processes within facilities and programs. PFI processes are described in <a href="P322-1">P322-1</a>, Causal Analysis and Corrective Action Development and <a href="P322-4">P322-4</a>, Laboratory Performance Feedback and Improvement Process.

Recording and tracking of corrective actions occurs in both the DOE ORPS and the LANL PFITS systems. Upon FOD or designee approval, the QPA-PA investigator enters corrective action statements into the ORPS Final Report. The IMC manages detailed action plans and all tracking of actions to closure, including changes to the due date or content of the action, using the PFI process and the PFITS system. For ORPS corrective actions in final reports of OE, SC R, SC 1 or SC 2 significance level, it is at the FOD/RAD discretion to obtain NA-LA FR approval for any target date or corrective action text changes.

ORPS Final Reports are completed within 45 calendar days from categorization of the event (except SC 4, for which Notification/Final Reports are completed in two business days, with corrective actions optional). See Attachment A, *Abnormal Event Process*. Extensions beyond 45 days are coordinated between the FOD and QPA-PA investigator, and require FOD concurrence. Team Investigations follow a schedule established in the charter process. See Section 3.11.

Closure of Sub-ORPS events that are entered into PFITS follows requirements in <u>P322-4</u>. The IMC maintains all material that supports any investigation/evaluation and closure of the Sub-ORPS event in the PFITS record (see Section 3.10).

### 3.9 Submit Final Report in PFITS and ORPS

For ORPS-reportable events, FODs approve by signature and own the Final Report. QPA-PA staff assist with filling all required Final Report fields and obtaining Derivative Classifier (DC) review. With IMC support, QPA and the FOD ensure recording of the ORPS Final Report in the PFITS system. The PFITS record comprises the official record of corrective actions and concurrence of all assigned action owners.

The QPA-PA investigator enters Team Investigation reports into the ORPS system, but the investigations are also conducted and published in accordance with the conditions of the Team Investigation charter memo. See Section 3.11.

## 3.10 Sub-ORPS Events

By definition, Sub-ORPS events include all events reported by the FOD in an Event/Incident Notification that do not meet any ORPS threshold. The Laboratory does not publish de minimis criteria or a "floor" for incidents warranting Event/Incident Notification, i.e., Sub-ORPS reporting. FODs are expected to use operational experience, professional judgment, and common sense in their decisions. The ADNHHO is authorized and responsible for guidance and oversight of the Sub-ORPS reporting decision process.

Management notifications (see Section 3.1), categorization by the FOD (see Section 3.2), and Event Notification (see Section 3.3) apply to both ORPS and Sub-ORPS events. Process steps described in Sections 3.4 through 3.9 are carried out for Sub-ORPS events with the roles shifted from the FOD and QPA-PA investigators to responsible managers and IMCs in the facilities and programs. These differences from ORPS-reportable events are noted in each section above. (See Sections 3.1 through 3.9).

P322-3, Rev. 4 11 of 24

The IMC enters sub-ORPS records into PFITS and assigns them the appropriate level of the PFI significance hierarchy based on criteria in P322-4, Laboratory Performance Feedback and Improvement Process, and, if applicable, P141, Price Anderson Amendments Act (PAAA), Worker Safety and Health (WSH), and Classified Information Security (CIS) Enforcement Procedure.

# 3.11 Team Investigations

The highest level of investigation, analysis, and corrective action development is reserved for the most significant, high-risk ORPS-reportable occurrences. Team Investigations are undertaken based on LANL prerogative, most commonly for certain OEs and the most serious or recurrent nonemergency events (e.g., SC 1 and SC R [see Table 1 for details]). Team Investigations are chartered formally by the DIR or designee, generally involve more formal investigation and causal analysis methods, and are followed by a more comprehensive corrective action process than routine ORPS investigations. As part of the Team Investigation process, the senior management and ORPS investigator must establish support staff to enter the results of the evaluation into the PFI process, which is typically the IMC of the affected FOD organization.

The sponsoring group should recommend that the following individuals participate in the Team Investigation:

- FOD with responsibility for the facility
- RAD with responsibility for the facility and/or the programmatic activities involved in the event
- ADNHHO
- ORPS investigator and/or assigned causal analyst
- Administrative support
- Technical writer/editor
- SMEs (to include safety experts, technical SMEs, and/or HPI Practitioners)

**Note:** The charter memo outlines the team membership, the scope of the investigation, the team deliverables, due dates, and the accepting authority for the investigation results. However, small teams may be tasked by a FOD and/or RAD without a charter memo to enhance organizational involvement and learning from the investigation process. For ORPS-reportable events, the QPA-PA investigator enters the results of the Team Investigation into the ORPS system.

When a Team Investigation is declared, the FOD ensures the event scene is preserved and authority for managing access to the scene is formally turned over to the Team Chair.

Team members and consultants are appointed as needed, up to full-time, to the investigation. The Team Chair has authority to enlist additional resources (safety experts, HPI Practitioners, etc.) as deemed necessary. Sponsoring senior management determines and approves any resource and cost allocations for the team's effort. All members of the team fulfill their responsibilities in accordance with the charter memo.

In addition, while not usually stipulated in the investigation charter, management and/or the investigation sponsor and the investigation team must consider the logistics for the investigative effort and should consider development and management of a corrective action plan after the investigation report is accepted.

12 of 24

### 4.0 **RESPONSIBILITIES**

### 4.1 Laboratory Director, Deputy Director, or designated Team Investigation Sponsor

- Initiates formal Team Investigations through a charter memorandum.
- Receives and approves final reports from Team Investigations.
- Assigns RAD or other manager to oversee CAP development following the Team Investigation report submittal and acceptance.

### 4.2 Associate Directors (as Facility-Owning Responsible Associate Directors [RADs])

- Establish agreement with each sponsored FOD regarding roles, responsibilities, and RAD involvement in the abnormal event process, including categorization, fact finding, corrective action development, and report approval.
- Coordinate with the FOD on an effective PFI process that enables the timely closure of ORPS (45 days) and Sub-ORPS reports and/or records.
- For events warranting Team Investigations in an owned facility, participate as members of the local team and/or appoint a local team to conduct the investigation.
- Ensure that compensatory measures for significant conditions adverse to quality are in place prior to the resumption of work.

### 4.3 **Group- and Division-Level Managers**

- Ensure that the appropriate immediate management notifications of abnormal events are made, compliant with facility and organizational expectations.
- Cooperate with FOD, FOD staff, and QPA-PA investigators in all steps of event fact finding, Event Notification, investigation, causal analysis, and corrective action development.
- Participate in the Sub-ORPS process in accordance with FOD/RAD agreements and local PFI processes.

### 4.4 **Supervisors/First Line Managers**

- First and foremost, ensure personnel safety as part of any response.
- Ensure timely notification of the FOD and first available line manager (group-level or above) for every abnormal event within their work area or span of supervision.
- Ensure scene stabilization and evidence preservation when safe to do so.
- Cooperate with the FOD. FOD staff, and QPA-PA investigators in all steps of event fact finding, Event Notification, investigation, causal analysis, and corrective action development.

### 4.5 Workers

- Report to supervisors or first line managers any abnormal event or condition, whether within or beyond the bounds of the assigned work area.
- Participate candidly and openly when invited to fact findings of abnormal events, or when interviewed as part of the investigation.
- Cooperate with the FOD, FOD staff, and QPA-PA investigators in all steps of event fact finding, Event Notification, investigation, causal analysis, and corrective action development.

LANI.

P322-3. Rev. 4 13 of 24

### 4.6 **Associate Director for Nuclear and High Hazard Operations (ADNHHO)**

- Supports performance of all Team Investigations.
- Responsible for the sub-ORPS reporting decision process.

### 4.7 **Contractor Assurance Officer**

Support performance of all Team Investigations.

### 4.8 Facility Operations Directors (FODs) (as defined in Section 2.2)

- Establish agreement with each sponsoring RAD regarding roles, responsibilities, and RAD involvement in the abnormal event process, including categorization, fact finding, corrective action development, and report approval. Written agreements are recommended but not required.
- · Categorize each abnormal event within 2 hours of discovery, or as soon thereafter as reasonably possible.
- Conduct fact findings (if held) in a timely manner to ensure reporting requirements are met. See Table 2 for reporting timelines.
- As soon as possible after categorization, transmit an Event/Incident Notification describing the event to nhhonotification@lanl.gov.
- Ensure that required notifications to NA-LA FRs and DOE HQ OC are made within required timelines.
- Ensure that compensatory measures for significant conditions adverse to quality are in place prior to the resumption of work.
- Manage the abnormal event process for the facility, including immediate communications, fact finding, investigation, causal analysis, and handoff to the local PFI process for corrective action development.
- Review, approve, and assume ownership of the Causal Analysis Report expected by Day 20 from the QPA-PA investigator.
- Approve every written report—from Notification to Final—destined for the DOE ORPS system.
- Coordinate with the RAD on developing an effective PFI process, including MRB structure and IMC staffing, to support the closure of ORPS and Sub-ORPS abnormal event reports.
- Monitor and drive continuous improvement in meeting the target timeline of developing and providing to QPA-PA corrective actions and other report closure information by Day 40 after categorization of each ORPS-reportable event.
- · Resolve conflicts or disputes regarding any aspect of the abnormal event process, and provide field managerial support to the assigned QPA-PA investigator.
- For events warranting Team Investigation, participate as requested. For all events of any ORPS SC level that become NTS reportable, support the completion of the investigation, causal analysis, and corrective action development.

### 4.9 **Quality and Performance Assurance-Performance Assurance (QPA-PA)**

- Deploys trained occurrence investigators to support FODs in all aspects of the abnormal event process, from categorization to final report.
- Drafts for FOD review and approval all written ORPS reports.

LANL

P322-3. Rev. 4 14 of 24

- Submits all FOD-approved ORPS reports in the DOE ORPS system.
- Maintains official records for each ORPS-reportable event from categorization to final report.
   However, the IMC maintains and tracks to closure all ORPS action records in accordance with P322-4, Laboratory Performance Feedback and Improvement Process.
- Monitors and drives continuous improvement in meeting the target timeline of delivering draft Update/Final ORPS reports, complete with investigative findings and causal analysis, by the 20<sup>th</sup> business day after categorization.
- Provides trained occurrence investigators as requested for Team Investigations.
- Supports the Laboratory Lessons Learned process in response to abnormal events as requested.

### 5.0 IMPLEMENTATION

The requirements in this document are effective on the date of issue.

### 6.0 TRAINING

FODs, Deputy FODs, Operations Managers, Duty Officers, and all other FOD Unit personnel assigned specific ORPS responsibilities must complete the following:

- Self-Study of current version of <u>QPA-PA-FSD-003</u>, Abnormal Events Handbook
- Course #6206, Occurrence Investigating and Reporting
- Additional professional development as directed by ADNHHO

**Note:** (1) Prior completion of this course satisfies the requirement; refresher completion of Course #6206 is recommended every two years but is not a requirement. (2) If the training is neither grandfathered nor completed within 6 months of issuance of this document, the worker may continue to fulfill his/her roles and responsibilities with written authorization from ADNHHO. The written authorization will include a schedule for completing the required training and will expire if training is not completed as scheduled.

QPA-PA provides occurrence investigators who are trained in accordance with QPA-PA-QP-002, *Occurrence Investigator Training Program.* 

Managers and supervisors frequently involved in event investigations or causal analyses should consider additional professional development, including internally or externally offered material on causal analysis or human performance.

### 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.
- 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.

LANL

P322-3, Rev. 4 15 of 24 Effective Date: 12/10/15

### 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.

QPA-PA is the Laboratory Office of Record for ORPS-reportable events, excluding corrective action records but including categorization records, Team Investigation charters, investigation records, causal analysis records, and all written reports from the initial Event/Incident Notification to the ORPS Final Report.

Responsible FOD and RAD offices are the Laboratory Offices of Record for all records related to Sub-ORPS events, and for records of corrective actions, including change control and closure records, for both Sub-ORPS and ORPS events. PFITS is the record system for all such records. Specific responsibilities are divided between FOD and RAD offices according to local eventrelated PFI processes.

### 9.0 **DEFINITIONS AND ACRONYMS**

### 9.1 **Definitions**

See LANL Definition of Terms.

Abnormal Event—An accident, incident, or deviation from the planned outcome of a workplace activity that did or could have adversely affected the health or safety of workers, the public, the environment, or the integrity of LANL programs, operations, or facilities.

Facility Operations Director (FOD)—Any individual designated to serve the role of FOD for the abnormal event process. These individuals include not only the NHHO FODs themselves but also any individual in the FOD staff (OM, DO, etc.) to whom the FOD has delegated primary authorities for the portion of the abnormal event process under discussion, and any individual from outside NHHO designated to fill the FOD role. These individuals are generally responsible for a collection of structures/activities or a program and serve the role of FOD for certain events that cannot be assigned to a single FOD Unit. Examples of the FOD role served from outside NHHO include the following:

- construction/demolition project managers for events within their project;
- SMEs (e.g., ENV Division Director) for multi-facility events or events with institutional impact;
- the Laboratory Director or designee for all Team Investigations.

Facility Operations Director (FOD) Unit—The collected buildings/structures/systems that bound the FOD's span of authority, in accordance with NHHO designations.

Occurrence Report—A documented evaluation of a reportable occurrence that is prepared in sufficient detail to enable the reader to assess its significance, consequences, or implications and to evaluate the actions being proposed or employed to correct the condition or to avoid recurrence.

Responsible Associate Director (RAD)—The Associate Director with overall responsibility and accountability to the Laboratory Director for the safe, secure, and environmentally compliant operations of all work within an assigned set of facilities.

LANL

P322-3. Rev. 4 16 of 24

### 9.2 Acronyms

### See LANL Acronym Master List.

ADNHHO Associate Director for Nuclear and High-Hazard Operations

AHJ Authority Having Jurisdiction
CAO Contractor Assurance Officer

CAP Corrective Action Plan

CAS Contractor Assurance System

COB Close of Business
DC Derivative Classifier

DNFSB Defense Nuclear Facilities Safety Board

DOE Department of Energy ENV Environmental Protection

EOC Emergency Operations Center
FOD Facility Operations Director
FR Facility Representative
FSD Functional Series Document

HP Health Physicist

HPI Human Performance Improvement

HQ Headquarters
IA Issuing Authority
IH Industrial Hygienist

IMC Improvement Management Coordinator
IRM Improvement Responsible Manager

JON Judgment of Need

LANL Los Alamos National Laboratory
LANS Los Alamos National Security, LLC

MRB Management Review Board

NA-LA DOE/NNSA-Los Alamos Field Office
NHHO Nuclear and High-Hazard Operations
NNSA National Nuclear Security Administration

NOV Notice of Violation

NTS Noncompliance Tracking System

OC Operations Center
OE Operational Emergency

ORPS Occurrence Reporting and Processing

OS-PT Operations Support-Packaging and Transportation

PAAA Price-Anderson Amendments Act
PAD Principal Associate Director

PFI Performance Feedback and Improvement

PFITS Performance Feedback and Improvement Tracking System

QPA Quality and Performance Assurance

QPA-PA Quality and Performance Assurance—Performance Assurance

# **LANL**

RAD	Responsible Associate Director
RM	Responsible Manager
RO	Responsible Office
SC	Significance Category
S/CI	Suspect/Counterfeit Item
SCIC	Suspect/Counterfeit Items Coordinator
SCR	Significance Category Recurring
SEO	Security and Emergency Operations
SEO-EM	Security and Emergency Operations-Emergency Management
SIT	Security Incident Team
SME	Subject Matter Expert
WSH	Worker Safety and Health

# 10.0 HISTORY

Revision	History	
09/20/06	ISD 322-3.0	Initial Issue, ISD 322-3.0, Manual for Communicating, Investigating, and Reporting Abnormal Events.
09/25/06	ISD 322-3.1	Administrative Change. IP300-SD5 replaced and rescinded by IP320.0.
10/15/08	ISD 322-3.2	The following Quick Changes (minor non substantive) were made:
		Global change to document: QA-OA to ESH-IO.
		Page 5, Overview, paragraph 3, add: 1. sentence: Events that do not meet ORPS reporting criteria are reported in the LIMTS system as described in <a href="P322-4">P322-4</a> , Laboratory Performance Feedback and Improvement Process. 2. add ESH Integration Office (ESH-IO) to sentence Events that meet a DOE defined reporting criterion are reported and investigated by trained and qualified
		Page 5, Overview, paragraph 4, changed to: The Associate Director for Environment, Safety, Health, and Quality is the Issuing Authority (IA) for this document. The ESH-IO Office Manager is the Responsible Manager (RM) and the Occurrence Reporting Team (OR) is the Responsible Office (RO).
		Page 8, Abnormal Event/Condition Process Outline, change bullet 14 and add bullet 15:
		<ul> <li>14) All ORPS corrective actions are entered into LIMTS and tracked as described in P322-4.</li> <li>15) ORPS events are trended and analyzed for repetitive events on a quarterly basis.</li> </ul>
		Page 13, bullets 6 and 7: Events that do not meet ORPS reporting criteria are reported in the LIMTS system as described in P322-4.
		Page 12, Note: Delete note.
		Page 13, Categorization process, item 2, second bullet, change to: Events that do not meet ORPS reporting criteria are

		reported in the LIMTS system as described in P322-4.
		Page 14, Preparing for a Critique, item 2, second bullet, add: must be notified.
		Page 16, item 2, add: and consider extent of condition.
		Page 17, bullet 4, change to: Events are reported in LIMTS system as described in P322-4.
12/11/08	P322-3, Rev. 0	Renumbered document, ISD 322-3, Manual for Communicating, Investigating, and Reporting Abnormal Events.
04/15/09	P322-3, Rev. 1	Quick Change
		Replace previous IA with newly identified AD.
		Clarification of existing requirements as documented in detailed individual procedures (pages 5, 7, 10, 12, 15, 17, 18)
		Revision of flowchart to reflect adherence to P322-4.
07/27/11	P322-3, Rev. 2	Major Revision
		Change title from "Manual for Communicating, Investigating, and Reporting Abnormal Events," to "Performance Improvement from Abnormal Events."
		Revise process to achieve consistency with Performance Feedback and Improvement Process changes.
		Revise organizational roles due to move of ORPS Team from Environment, Safety, Health, and Quality (ESH&Q) to CAO-P
		Change IA, RO, and RM to match organizational restructure.
09/20/12	P322-3, Rev. 3	Changed CAO-PF to Quality and Performance Assurance- Performance Assurance (QPA-PA) throughout document due to reorganization.
		Clarified language in Section 2.2.
		Updated links, titles, and acronyms.
12/10/15	P322-3, Rev. 4	Performed three-year review in accordance with PD311, Requirements System and Hierarchy.
		Changed title of notification process and system to Event Notification process and added distribution for said process as <a href="mailto:nhhonotification@lanl.gov">nhhonotification@lanl.gov</a> .
		Changed the name of the worker-involved meeting to discuss the abnormal event from "critique" to "fact finding."
		Aligned Tables 1 and 2 with QPA-PA-FSD-003, Abnormal Events Handbook.
		Added requirements of NAP-24, <i>Weapon Quality Policy</i> , to Sections 3.1 and 4.0.
		Incorporated Safety Culture attributes into Section 3.4 to include emphasis on learning and eliminating both foregone conclusions and blame-placing.
		In Section 3.4, added that fact findings are optional at FOD and/or RAD discretion, based on whether a discussion of the facts surrounding the event provides a reasonable opportunity for organizational learning.

<b>Revision History</b>	
	In Section 3.8, added that obtaining NA-LA FR approval of final ORPS report dates/text changes is at FOD/RAD discretion.
	Updated training section to account for current LANL offerings.
	Updated links, titles, and acronyms.

### 11.0 REFERENCES

## **Prime Contract:**

- DOE O 232.2, Occurrence Reporting and Processing of Operations Information, or current version
- DOE O 151.1C, Comprehensive Emergency Management System
- NAP-24, Weapon Quality Policy

### 11.1 Other References

- SD320, Los Alamos National Laboratory Contractor Assurance System Description Document
- P313, Roles, Responsibilities, Authorities, and Accountability
- Occurrence Reporting webpage
- QPA-PA-FSD-003, Abnormal Events Handbook
- PD1200, Emergency Management
- SEO-DO-PLAN-100, Hazardous Materials Program Emergency Plan
- P201-3, Reporting Known and Potential Incidents of Security Concern
- P141, Price Anderson Amendments Act (PAAA), Worker Safety and Health (WSH), and Classified Information Security (CIS) Enforcement Procedure
- QPA PAAA Program Office
- P322-1, Causal Analysis and Corrective Action Development
- P322-4, Laboratory Performance Feedback and Improvement Process
- PD311, Requirements System and Hierarchy
- P781-1, Conduct of Training

### **12.0 FORMS**

There are no forms associated with this document.

### 13.0 ATTACHMENTS

Attachment A. Abnormal Event Process

### 14.0 CONTACT

Quality and Performance Assurance-Performance Assurance Group (QPA-PA), Occurrence Investigation Team

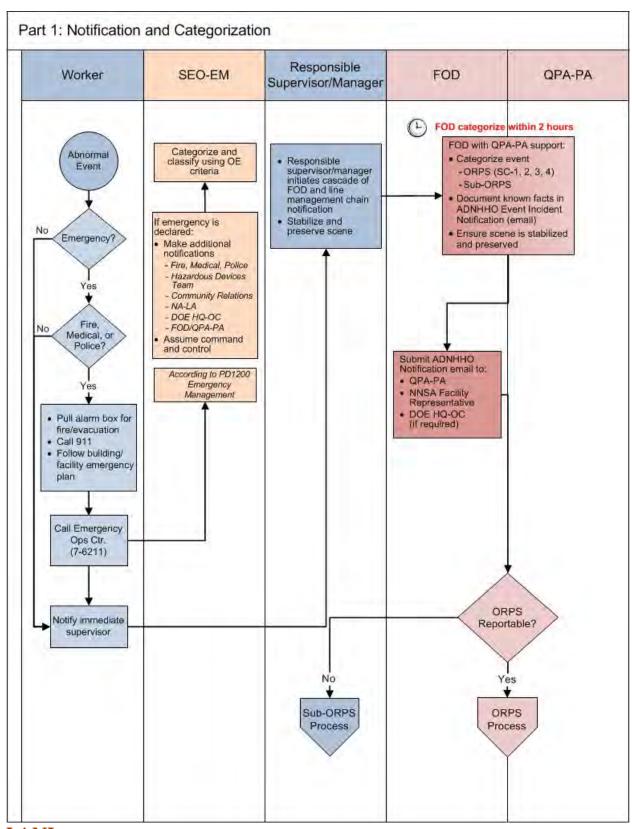
Telephone: (505) 665-0033

Occurrence Reporting webpage



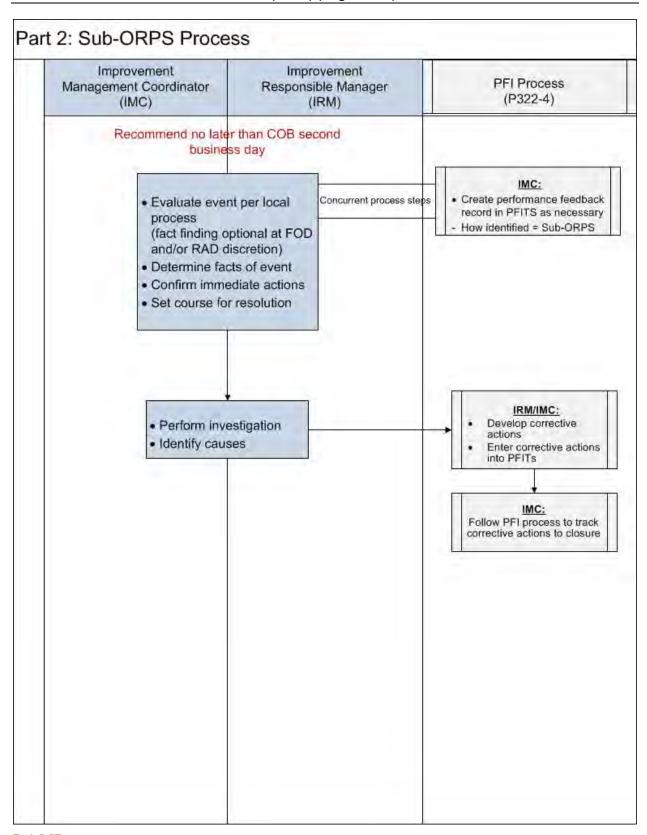
P322-3, Rev. 4 20 of 24

No: P322-3 Performance Improvement from Abnormal Events Attachment A. Abnormal Event Process (Page 1 of 4)



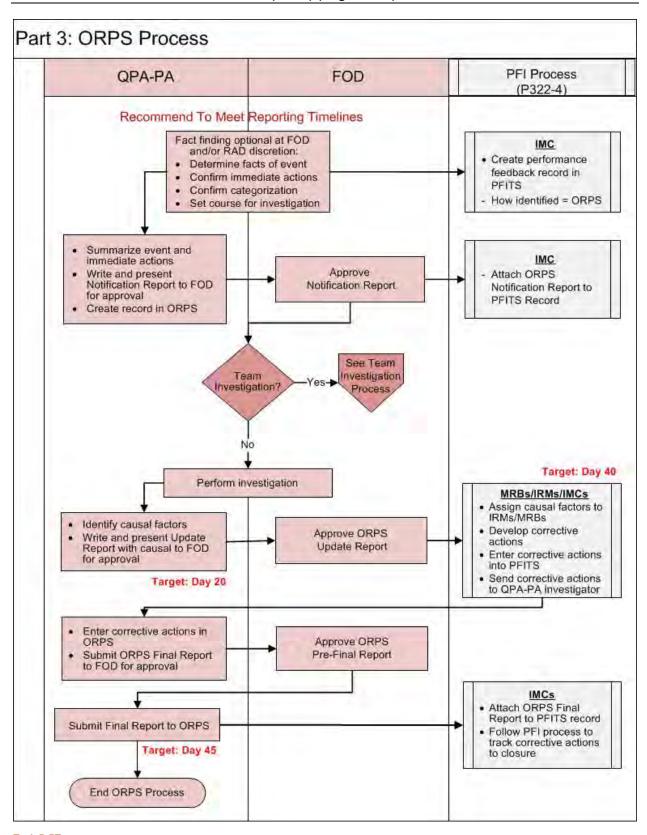
P322-3, Rev. 4 21 of 24 Effective Date: 12/10/15

No: P322-3 Performance Improvement from Abnormal Events Attachment A. Abnormal Event Process (Cont.) (Page 2 of 4)



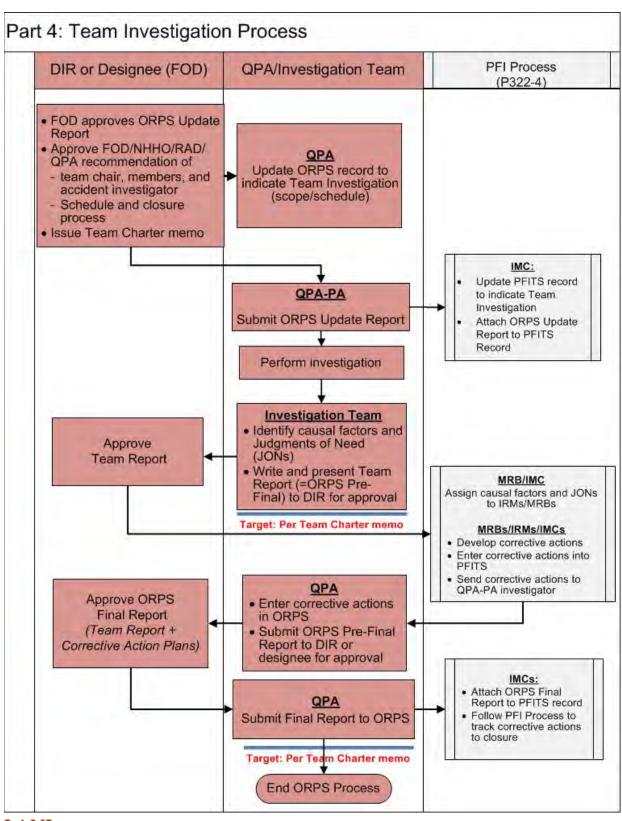
P322-3, Rev. 4 22 of 24

No: P322-3 Performance Improvement from Abnormal Events Attachment A. Abnormal Event Process (Cont.) (Page 3 of 4)



P322-3, Rev. 4 23 of 24

No: P322-3 Performance Improvement from Abnormal Events Attachment A. Abnormal Event Process (Cont.) (Page 4 of 4)



P322-3, Rev. 4 24 of 24 Fffective Date: 12/10/15

# **IMPORTANT**

If you wish to receive credit for the preceding document you **must** enter the course through **UTrain not** the Policy Office website.