Los Alamos NATIONAL LABORATORY EST. 1943

EM-LA

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Date: MAR 2 0 2017
Symbol: EPC-DO: 17-131
LA-UR: 17-22243
Locates Action No.: N/A

Mr. John E. Kieling, Chief
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87505

SUBJECT: Transmittal of Procedure for TA-54 Area G Remediated Nitrate Salt Waste Container Monitoring, Revision 4

Dear Mr. Kieling:

This letter transmits a procedure that has been updated from the previous submission to the New Mexico Environment Department (NMED). The *Los Alamos National Laboratory Nitrate Salt-Bearing Waste Containers Isolation Plan, Revision 7* (or Isolation Plan) requires that all procedures and plans attached to the Isolation Plan be submitted to the NMED upon revision. The Los Alamos National Security, LLC (LANS) and the U.S. Department of Energy (DOE), the Permittees, sent procedure *AREAG-WO-DOP-1246, R.1* to the NMED on September 30, 2016, as Attachment 4 of the Isolation Plan. The latest revision, *AREAG-WO-DOP-1246, R.4,* is included as Enclosure 1 to this letter. Also, please note that the unlimited release number for this procedure is LA-UR-17-22243. The procedure has been revised three times since September 2016 to incorporate revisions that will allow for 1) monitoring of the waste containers when they are removed from overpack containers, 2) ease of use for documentation on the procedure attachments, and 3) remote temperature monitoring. Revisions 2 and 3 of this procedure were unintentionally not transmitted to the NMED, however, the procedure attached incorporates changes made in previous revisions. Procedure changes support future processing of remediated nitrate salt-bearing waste; first with cooled storage and then transport to Technical Area 50, Building 69 for treatment by stabilization.

If you have comments/questions or would like to meet regarding this submittal, please contact Mark P. Haagenstad, LANS, at (505) 665-2014 or David S. Rhodes, Environmental Management Los Alamos Field Office, at (505) 665-5325.

Sincerely,

John C. Bretzke
Division Leader
Environmental Protection & Compliance Division
Los Alamos National Security, LLC

Sincerely,

David S. Rhodes
Director, Office of Quality & Regulatory Compliance
Environmental Management
Los Alamos Field Office

JCB:DSR:MPH/am

Enclosures 1: AREAG-WO-DOP-1246, R.4: TA-54 Area G Remediated Nitrate Salt Waste Container Monitoring

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ENCLOSURE 1

AREAG-WO-DOP-1246, R.4: TA-54 Area G Remediated Nitrate Salt Waste Container Monitoring

EPC-DO: 17-131

LA-UR-17-22243

MAR 2 0 2017

Date:_____

TA-54 Area G
RNS Waste Container Monitoring

Effective Date: March 16, 2017

Next Review Date: March 16, 2020

Hazard Class:	☐	Low	☒	Moderate	☐	High/Complex
Usage Mode:	☐	Reference	☒	UET	☐	Both UET & Reference

The Responsible Manager has determined that the following organizations' review is required for initial procedure release as well as subsequent major revisions. Review documentation is contained in the Document History File.

Operations Manager	Engineering
WD Operator SME	Quality Assurance
WD Operation	Safety Basis
WD-WPE Group Leader	Industrial Hygiene and Safety
Criticality Safety Analyst	Radiation Protection
Criticality Safety Officer	Environmental Compliance Programs
Deployed Environmental Professional	WD-WPE SME

Classification Review: ☒ Unclassified ☐ UCNI ☐ Classified

Patrice Stevens	/ 106047	/ /s/ Patrice Stevens	/ 03/15/17
Name (print)	Z#	Signature	Date

Responsible Manager, WD-WSS Group Leader

Paul Newberry	/ 112056	/ /s/ Paul Newberry	/ 03/15/17
Name (print)	Z#	Signature	Date

Working Copy / Information Only (circle one)
Initials / Date: _____ / _____

This document fully satisfies the requirements of P300, Integrated Work Management, in order to systematically describe the work activity, the associated hazards, and the controls that **MUST** be employed to mitigate the risks.

REVISION HISTORY

A comprehensive log of changes made to this procedure, including superseded documents and complete revision descriptions, is accessible through the Electronic Document Management System (EDMS). The following log is abridged to one page and includes only the latest revisions.

Document No./Revision No.	Issue Date	Action	Description
EWMO-AREAG-FO-DOP-1246, R.5	November 03, 2014	Major Revision	Revise procedure to incorporate the ability to use remote temperature indication from thermocouples and to update waste container numbers. This revision is a total rewrite and revisions bars have been omitted. This revision does not introduce any new hazards.
EWMO-AREAG-FO-DOP-1246, R.5 IPC-1	November 17, 2014	IPC	Revise procedure to change the drums in SWB LA00000070503 from "68553 and 69445" to "68540 and 68553". This revision does not introduce any new hazards.
EWMO-AREAG-FO-DOP-1246, R.6	March 26, 2015	Major Revision	Revise procedure to implement Specific Administrative Controls for daily visual inspection and monthly overpack inspection provided in AREAG-ESS-14-002-R3. This revision does not introduce any new hazards.
EWMO-AREAG-FO-DOP-1246, R.7	November 18, 2015	Major Revision	Incorporate a separate Attachment for documenting the daily visual inspection associated with SAC 4. Removed unremediated nitrate salt inspections at TA-54-231. Added section for headspace gas sampling. This revision does not introduce any new hazards. Revision constitutes a total rewrite.
EWMO-AREAG-FO-DOP-1246, R.8	November 30, 2015	Major Revision	Revised procedure to change the container temperature monitoring to once daily. Added Note that allows WR-SRS management to change inspection frequencies in Section 5 and 6. Remove 2nd Ambient temperature from Section 6. Rev bars in the left column display changes in the procedure. No additional hazards were identified in this revision.
AREAG-WO-DOP-1246, R.0	March 30, 2016	Major Revision	Revised procedure to update daily rounds checklist to include drum numbers. Added steps to conduct visual inspection through Perma-Con window before performing visual inspection inside of Perma-Con. Updated Attachments to include inspections of RNS drums once SWB lid is removed.
AREAG-WO-DOP-1246, R.0, IPC-1	April 11, 2016	IPC	Modified Attachment 1 to match Step 5.[6]. To properly capture SAC 002 A& B.
AGREAG-WO-DOP-1246, R.0, IPC-2	April 18, 2016	IPC	Revised container temperature response limit from 15°F to 10°F and added ESS driven hydrogen headspace gas limits and response actions. Section 5, Note 1 revised to delete "within 24 hours."
AREAG-WO-DOP-1246, R.0 IPC-3	May 9, 2016	IPC	Revised Step 5.[6] for inspection of drum for a rounded bottom per ESS.
AREAG-WO-DOP-1246, R.1	July 15, 2016	Major Revision	Revised to include inspection of the PRDwSF rupture disc.
AREAG-WO-DOP-1246, R.2	December 21, 2016	Major Revision	Revised to include daily refrigerator temperature surveillance. Attachments revised to provide flexibility in RNS waste container location post-denesting.
AREAG-WO-DOP-1246, R.3	February 1, 2017	Major Revision	Deleted respiratory requirements consistent with revised RWP. Revised P&L bullets to address gas hazards. Attachment 2 revised to three separate attachments, one for each cell, for ease of use.
AREAG-WO-DOP-1246, R.4	March 16, 2017	Major Revision	Added section for use of the RNS waste container temperature monitoring system (TMS). Clarified applicability of 8.[5] to address RNS waste container denesting, cold safing, and shipment preparation.

TABLE OF CONTENTS

TABLE OF CONTENTS (continued)

1. PURPOSE

This procedure provides instructions for monitoring remediated nitrate salt (RNS) waste containers.

2. SCOPE

Monitoring of RNS waste containers performed within this procedure includes:

- Daily visual inspections of RNS waste containers in accordance with New Mexico Environment Department (NMED) approvals or the Los Alamos National Laboratory (LANL) Nitrate Salt-Bearing Waste Container Isolation Plan
- Daily visual inspection of the pressure relief device with supplemental filtration (PRDwSF) rupture disc as a best management practice
- Daily visual inspections of the RNS 85-gallon overpack drums in accordance with AREAG-ESS-14-002
- Daily visual inspections of RNS waste containers in standard waste boxes (SWBs) in accordance with AREAG-ESS-14-002
- Daily temperature readings of waste containers in accordance with LANL Nitrate Salt-Bearing Waste Container Isolation Plan
- Daily ambient air temperature readings of Cells 1, 2, and 3 in accordance with AREAG-ESS-14-002, Surveillance Requirement (SR) 4.ESS.5.1.
- Daily ambient air temperature readings of the refrigerator in accordance with ABD-WFM-002, Attachment 1, SR 4.6.2.1.
- Periodic inspection of the Technical Area (TA) 54 East Entrance Road into Area G following significant precipitation
- Periodic evaluation of RNS waste container headspace gas analysis in accordance with LANL Nitrate Salt-Bearing Waste Container Isolation Plan

This procedure applies to LANL Waste Disposition (WD) Division and Environmental and Waste Management Operations (EWMO) personnel who will be monitoring RNS waste containers.

3. PRECAUTIONS AND LIMITATIONS

3.1 General Task Hazards and Controls

- General site hazards and their controls for TA-54 Area G are provided in EWMO-AP-20253, EWMO General Site Hazards and Controls. Personnel performing activities associated with this procedure shall meet facility access criteria, recognize the associated site hazards, and uphold the established controls.

- Abnormal or unexpected conditions encountered during performance of this procedure are documented in the attachments' comment section. Guidance provided by TA-54 Operations Center, as well as follow-on actions, shall also be documented therein.

- If a waste container is discovered with evidence of an imminent thermal runaway (i.e., signs of heating, pressurization, chemical reaction, smoke, or fire), Waste Operators will initiate emergency response actions in accordance with EWMO-BEP-20048, EWMO Division Building Emergency Plan. The Person-In-Charge (PIC) will notify the TA-54 Operations Center.

- Personnel shall review and understand the requirements of the Radiological Work Permit (RWP).

- The calibrated infrared thermometer is equipped with a laser that can cause eye injury if the eye is exposed to the beam. Never point beam at eyes.

- In the event of inclement weather or LANL closures, personnel who are not able to report for a planned shift or are required to leave prior to a shift's end shall contact the on-call Shift Operation Manager (SOM) to request guidance. Personnel shall not be placed in a potentially unsafe situation when trying to meet the inspection requirements of this procedure.

- Toxic gases/vapors can accumulate over time in RNS waste container headspaces. These gases/vapors include nitrous oxide (N_2O), carbon monoxide (CO), nitrogen dioxide (NO_2), nitric acid vapor, hydrogen, and volatile organic compounds (VOCs). N_2O and CO may be present in the headspace of an RNS waste container at levels above occupational exposure limits. VOCs are expected at lower levels. Toxic gas hazards are controlled by maintaining waste container temperature to minimize gas generation; RNS waste container filtered vent which prevents gas build-up and pressurization; and use of general ventilation.

3.1 General Task Hazards and Controls (continued)

- Flammable mixtures of gases can accumulate over time in RNS waste container headspace due to waste constituents and chemical/radiological breakdown of RNS wastes. The principal flammable component is hydrogen gas, but VOCs such as methanol, acetone, and benzene may be present. N_2O is also expected from waste breakdown or waste constituents. N_2O is an oxidizing gas that could increase the rate of burning. The nitrate salts in the wastes are also oxidizers. RNS wastes are classified as ignitable (EPA D001). Flammable/combustible hazards are controlled by maintaining waste container temperature to minimize gas generation; RNS container filtered vent which prevents gas build-up and pressurization; use of local ventilation; and air monitoring of the refrigerator prior to entry.

- Prior to entering the refrigerator, daily air monitoring must be performed.

- Personnel are not allowed to work inside the refrigerator with the door closed. The refrigerator door must be secured when open. The refrigerator will be inspected prior to closing the door to ensure it is unoccupied.

3.2 Safety Basis

- Procedure steps marked with the **($)** symbol implement key requirements associated with the facility's safety basis. These steps may <u>not</u> be changed without engineering approval to ensure that the Technical Safety Requirements (TSRs) and other associated requirements are maintained.

- Specific Administrative Controls (SACs) provided in AREAG-ESS-14-002 are unnumbered. To facilitate field implementation of the associated surveillances, numbers have been assigned and are provided in the following bullet. AREAG-ESS-14-002, Revision 6.1 requirements incorporated and controlled within this procedure include:

3.2 Safety Basis (continued)

- RNS waste containers inside of TA-54-0375 Perma-Con shall be inspected as follows:
  - 85-gallon drum overpacks shall be inspected daily for abnormal conditions (e.g., signs of heat, fire, pressurization, or chemical reaction) [ESS-14-002, SAC 02-A]

  AND
  - RNS waste containers inside an open overpack (excluding 85-gallon drums) shall be inspected for abnormal conditions daily (e.g., signs of heat, fire, pressurization, or chemical reactions daily. [ESS-14-002, SAC 02-B]
  - Ambient air temperature in Perma-Con shall be verified daily between the hours of 1300 and 1700. [LCO 4.ESS.5.1]

- ABD-WFM-002, Attachment 1 requirement incorporated and controlled within this procedure includes:

  - Ambient air temperature in the refrigerator shall be verified daily between the hours of 1300 and 1700. [Surveillance Requirement (SR) 4.6.2.1]

3.3 RCRA and Environmental

- Procedure steps marked with the **(&)** symbol implement key requirements associated with the Resource Conservation and Recovery Act or other environmental regulatory requirements including the LANL Nitrate Salt-Bearing Waste Container Isolation Plan (IP). These steps may not be changed without Environmental Compliance Program approval to ensure that applicable limits are maintained.

- RNS waste containers inside of Perma-Con shall be inspected as follows:
  - Daily visual inspection (IP IV.7)
  - Daily temperature reading (IP IV.7)
  - Periodic headspace gas sampling (IP IV.12)

4. PREREQUISITE ACTIONS

The listed prerequisite actions may be completed in any order or concurrently.

4.1 Planning and Coordination

PIC

[1] **ENSURE** that the procedure is the latest revision and **DOCUMENT** on the Title Page.

[2] **ENSURE** a pre-job briefing is performed for all personnel involved in the performance of this procedure in accordance with EWMO-AP-0112, EWMO Pre-Job Briefings.

[3] **ENSURE** that the following trained and/or qualified personnel are available for the performance of this procedure:
- Two Waste Operators (Sections 5 through 7)
- One Radiological Control Technician (when performing operations within the Perma-Con)

[4] **VERIFY** that AREAG-FO-DOP-1249, TA-54 Area G Dome 375 Round Sheet, has been completed on the same day and prior to the performance of this procedure.

[5] **IF** a precipitation event has occurred since the last performance of this procedure,
THEN CONTACT the TA-54 Operations Center or the on-call SOM to determine if Section 7, TA-54 Area G East Entrance/Road into Area G Monitoring, needs to be performed.

[6] **IF** abnormal condition or ESS acceptance criteria cannot be or are not met,
THEN STOP work and **DEVELOP** a recovery plan.

4.2 Materials and Equipment

Waste Operator

[1] **ENSURE** that a PRDwSF inspection mirror is available.

[2] **IF** performing Section 6,
THEN ENSURE that a calibrated infrared thermometer within the calibration due date is available.

5. PERFORMANCE—VISUAL INSPECTIONS OF RNS WASTE CONTAINERS

This section is a stand-alone section and may be performed independently or in conjunction with other Performance sections.

The daily visual inspection meets the requirements of AREAG-ESS-14-002 and the LANL Nitrate Salt-Bearing Waste Container Isolation Plan.

Surveillance inspection must be performed at least once DAILY. This inspection frequency may be increased at the discretion of WD-Waste Storage and Shipping management.

Due to operating restrictions within the Perma-Con, Waste Operators may convey inspection information to personnel outside the Perma-Con for recording on attachments.

Waste Operators

[1] **ENSURE** that the prerequisite actions have been completed and **INITIAL** Attachment 1.

[2] **RECORD** the date and time of the inspection on Attachment 1.

[3] Prior to entering the Perma-Con, **PERFORM** an initial visual inspection through the windows of Perma-Con looking for evidence of a chemical reaction such as smoke, fire, or release of internal contents to the atmosphere.

.

[4] **IF** evidence of a chemical reaction is discovered,
THEN PERFORM an emergency response in accordance with EWMO-BEP-20048.

[5] **ENTER** the Perma-Con.

5. PERFORMANCE—VISUAL INSPECTIONS OF RNS WASTE CONTAINERS (continued)

NOTE *Inspections performed in Steps 5.[6] through 5.[12] may be performed concurrently in each cell and in the refrigerator.*

[6] **($)(&) VISUALLY INSPECT** 85-gallon drum overpacks, RNS waste containers inside open SWBs, and denested RNS waste containers in the refrigerator for signs of degradation, indications of an abnormal condition including an internal reaction (e.g., chemical/thermal), and/or loss of container integrity, including:

- Evidence of heating such as discoloration, peeling, or yellowing of the paint
- Evidence of loss of container integrity such as leakage or compromised lid
- Evidence of pressurization such as expansion of side walls, rounded bottom (e.g., container is not level) or rounded top
- Signs of chemical reaction such as smoke or release of contents to atmosphere
- Signs of smoke or fire from a container

and **CHECK** (✓) SAT or UNSAT on Attachment 1 for each RNS waste container. (ESS-14-002 SAC 02-A and 02-B) (IP IV.7)

[7] **IF** evidence of a chemical reaction such as smoke, fire, or release of internal contents to the atmosphere, compromised container lid or seam, substantial paint wrinkling, peeling or darkening, or other signs of a chemical/thermal reaction are discovered,
THEN PERFORM an emergency response in accordance with EWMO-BEP-20048.

[8] **IF** evidence of rusting, leaking, or other signs of deterioration which does not appear related to a chemical reaction of drum contents are discovered,
THEN PERFORM an abnormal response in accordance with EWMO-BEP-20048.

[9] **IF** the RNS waste container has been removed from the Perma-Con and the refrigerator,
THEN CHECK (✓) N/A on Attachment 1.

NOTE *85-gallon overpack drums and 55-gallon POC drums originally stored in 85-gallon overpack drums do not have PRDwSFs and are noted as N/A on Attachment 1.*

[10] **VISUALLY INSPECT** the pressure relief device rupture disc on the RNS waste containers for sign of damage, degradation, or rupture and **CHECK** (√) SAT or UNSAT, on Attachment 1 for the RNS waste container.

5. PERFORMANCE—VISUAL INSPECTIONS OF RNS WASTE CONTAINERS (continued)

[11] **IF** rupture disc is damaged, degraded, or ruptured,
THEN PERFORM an abnormal response in accordance with EWMO-BEP-20048.

[12] **IF** the RNS waste container has been removed from the Perma-Con and the refrigerator,
THEN CHECK (✓) N/A on Attachment 1.

[13] **REPEAT** Steps 5.[6] through 5.[12] for the remaining Perma-Con cells and the refrigerator.

[14] **PROVIDE** a description of any unsatisfactory conditions, notifications, and corrective actions in the Comments section of Attachment 1.

[15] **PRINT** name, **SIGN**, and **RECORD** Z# and date on Attachment 1.

6. PERFORMANCE—TEMPERATURE READINGS

This section is a stand-alone section and may be performed independently or in conjunction with other Performance sections.

This section shall be performed daily between 1300 and 1700 per AREAG-ESS-14-002 Surveillance Requirement 4.ESS.5.1 and ABD-WFM-002, Attachment 1 frequency requirements. The following attachments, based on original waste container location, are used to document these temperature measurements.

- Attachment 2, TA-54-0375, Refrigerator and Cell 1 RNS Waste Container Daily Temperature Data Sheet
- Attachment 3, TA-54-0375, Cell 2 RNS Waste Container Daily Temperature Data Sheet
- Attachment 4, TA-54-0375, Cell 3 RNS Waste Container Daily Temperature Data Sheet

Temperature measurements must be performed at least once daily per LANL Nitrate Salt-Bearing Waste Container Isolation Plan, Section IV.7. Temperature measurement frequency of one or more RNS waste containers may be increased at the discretion of WD-Waste Storage and Shipping management. Attachment 5, TA-54-0375 RNS Waste Container Supplemental Temperature Data Sheet, is use to document these supplemental temperature measurements

NOTE *Daily waste container temperature measurements are obtained by entering the Perma-Con and individually measuring and recording the RNS waste container temperatures.*

Waste Operators

[1] **ENSURE** that all Section 4 prerequisite actions have been completed.

[2] **RECORD** the date and start time on the applicable attachment for the applicable day of the week.

[3] **RECORD** the following infrared calibration information on the applicable attachment:

- Brand name
- Model number
- Calibration due date
- File number

6. PERFORMANCE—TEMPERATURE READINGS (continued)

[4] **DETERMINE** the ambient air temperature in the following locations on the wall of the contamination control enclosure and the refrigerator in the designated location using a calibrated infrared thermometer and **RECORD** the ambient temperature (in °F) on the applicable attachment.

- Cell 1
- Cell 2
- Cell 3
- Refrigerator

[5] **($) VERIFY** the Perma-Con (Cells 1, 2, and 3) ambient air temperature is less than or equal to 75°F and **CHECK** (√) SAT or UNSAT on the applicable attachment. (ESS-14-002, SR 4.ESS.5.1)

[6] **IF** the Cell ambient temperature is greater than 75°F,
THEN NOTIFY the Operations Center of the temperature.

NOTE *Step 6.[7] combines the implementation of ABD-WFM-002, Att. 1, SAC 5.7.24 (refrigerator greater than 32°F and less than or equal to 41°F) and SR 4.6.2.1 (refrigerator less than or equal to 57°F).*

[7] **($) VERIFY** the refrigerator ambient air temperature is greater than 32°F and less than or equal to 41°F and **CHECK** (√) SAT or UNSAT on Attachment 2. [ABD-WFM-002, Att. 1, SAC 5.7.24 and SR 4.6.2.1]

[8] **IF** the refrigerator ambient air temperature is less than or equal to 32°F or greater than 41°F,
THEN NOTIFY the Operations Center of the temperature.

[9] **MARK** the location (i.e., Cell 1, 2, 3, or refrigerator) of the RNS waste container or "N/A," if the RNS waste container is removed from the Perma-Con and the refrigerator, on the applicable attachment.

[10] **(&) IF** the RNS waste container is <u>not</u> in a closed overpack,
THEN MEASURE the temperature (in °F) on the top approximate center of the RNS waste container using a calibrated infrared thermometer and **RECORD** the container number (Attachment 5 only) and the temperature on the applicable attachment. (IP IV.7)

6. PERFORMANCE—TEMPERATURE READINGS (continued)

[11] **(&) IF** the RNS waste container is in a closed overpack,
THEN MEASURE the temperature (in °F) on the top of the overpack lid at the approximate center of each RNS waste container using a calibrated infrared thermometer and **RECORD** the container number (Attachment 5 only) and the temperature on the applicable attachment. (IP IV.7)

[12] **IF** the RNS waste container is in Cells 1, 2, or 3 and the container temperature is greater than 10°F above the ambient air temperature of the Cell where it is located,
THEN PERFORM an abnormal response in accordance with EWMO-BEP-20048.

[13] **IF** the RNS waste container is located in the refrigerator and the container temperature is greater than the entry container temperature as provided on the container specific white board on the outside of the refrigerator or the applicable attachment of AREAG-WO-DOP-1371,
THEN PERFORM an abnormal response in accordance with EWMO-BEP-20048.

[14] **IF** a discrepancy with a container number pre-populated on the attachment is discovered,
THEN REQUEST applicable actions from TA-54 Operations Center or SOM.

[15] **REPEAT** Steps 6.[9] through 6.[14] until temperatures for all of the RNS waste containers in the Perma-Con, including the refrigerator, have been recorded.

[16] **RECORD** the end time and **INITIAL** on the applicable attachment.

[17] **RECORD** N/A for RNS waste container temperature readings that were not recorded and **DOCUMENT** an explanation in the Comments section of the applicable attachment.

[18] **PROVIDE** a description of any unsatisfactory conditions, notifications, and corrective actions in the Comments section of the applicable attachment.

[19] **PRINT** name, **SIGN**, and **RECORD** Z# and date the applicable attachment.

7. PERFORMANCE—TA-54 AREA G EAST ENTRANCE/ROAD INTO AREA G MONITORING

This section is a stand-alone section and may be performed independently or in conjunction with, other Performance sections.

This section is performed in response to significant precipitation (rain fall greater than 0.25 inches within 30 minutes or greater than a 0.5 inches in 24 hours of rain fall) that may cause damage or road deterioration of east entrance/road into TA-54 Area G. Weather information may be obtained from TA-54 Meteorological Station or National Oceanic and Atmospheric Administration.

SOM

[1] **DETERMINE** if a significant precipitation event has occurred in the last 24 hours.

[2] **VISUALLY INSPECT** the TA-54 Area G East entrance/road for deterioration (e.g., washout).

[3] **IF** deterioration is observed or the TA-54 Area G East entrance/road is impassable, **THEN:**

[A] **NOTIFY** Emergency Management and Response **(**EM&R) that the road is impassable.

[B] **NOTIFY** Maintenance and Site Services to repair the deteriorated section of the road.

[C] **NOTIFY** Deployed Environmental Professional of the situation.

[4] **WHEN** the road repairs are complete,
THEN:

[A] **VISUALLY INSPECT** that the road is repaired and passable.

[B] **NOTIFY** EM&R that the TA-54 Area G East entrance/road is passable.

[C] **NOTIFY** Deployed Environmental Professional of road condition and repair activities for stormwater tracking purposes.

8. PERFORMANCE—EVALUATION OF HEADSPACE GAS ANALYSIS OF RNS WASTE CONTAINERS

This section is a stand-alone section and may be performed independently of other Performance sections.

NOTE 1 *The prerequisite actions do not apply to performance of this section.*

NOTE 2 *Headspace gas sampling is performed by Central Characterization Project personnel and analysis is performed by Chemistry Division personnel in accordance with their procedures.*

NOTE 3 *Minimum headspace gas sampling frequencies are defined in the LANL Nitrate Salt-Bearing Waste Container Isolation Plan, Section IV.12.*

NOTE 4 *Evaluation of the headspace gas analysis results is performed using a combination of data review, graphical analysis, and statistical analysis. Departure of a headspace gas concentration from expected trends considers the storage temperature and previous concentrations and is primarily indicated by a headspace gas analysis result that is beyond three standard deviations from the mean of a set of previous concentrations.*

Waste Process Engineering Representative

[1] **EVALUATE** the headspace gas analysis results.

[2] **IF** a container's headspace gas hydrogen concentration is greater than or equal to 20,000 parts per million (ppm),
THEN ENSURE that daily headspace gas sampling and analysis have been initiated for that container.

[3] **IF** a container's headspace gas concentration for any gas indicates a departure from expected trends,
THEN:

[A] **DETERMINE** if the departure indicates an adverse condition (i.e., increasing chemical reactivity and a potentially increased hazard).

[B] **DETERMINE** if a resample or change in sampling frequency of the container is warranted and **INITIATE** the resample or change accordingly.

8. PERFORMANCE—EVALUATION OF HEADSPACE GAS ANALYSIS OF RNS WASTE CONTAINERS (continued)

[4] **IF** a container's headspace gas hydrogen concentration is greater than or equal to 30,000 ppm or a departure from expected trends indicating an adverse condition,
THEN NOTIFY the Operations Center or SOM to enter AREAG-RM-AOP-1299, 375 Perma-Con Nitrate Salt Waste Container Abnormal Conditions.

[5] **($) IF** a container's headspace gas concentration indicates any of the following conditions AND the container's headspace gas was sampled to support RNS waste container denesting, cold safing, overpack lid removal, and shipment preparation activities:

- A hydrogen concentration greater than or equal to 10,000 ppm
- A departure from expected trends

THEN ENSURE that the WD-Waste Storage and Shipping Group is notified.

[6] On a monthly basis, **COMPILE** the previous month's headspace gas analysis results and **SUBMIT** them to Records Management in accordance with EP-AP-10003, Records Management.

9. PERFORMANCE—SUPPLEMENTAL TEMPERATURE MONITORING

This section is a stand-alone section and may be performed independently of other Performance sections.

Performance of this section is at the discretion of the WD-WPE or WD-WSS Group Leader for the purpose of collecting supplemental temperature data using the RNS Waste Container Temperature Monitoring System (TMS). This section cannot be used to credit SR 4.ESS.5.1 performance.

Performance of this section may be used to satisfy the Isolation Plan RNS waste container temperature monitoring requirements.

NOTE *Appendix A, Thermocouple Numbers and RNS Waste Container Crosswalk, provides a list of thermocouple numbers and their associated RNS waste container.*

Waste Operator

[1] **RECORD** the date and time on Attachment 6.

[2] **ACCESS** TMS at pn1503040.lanl.gov:8000/RNS.html.

[3] **PRINT** the RNS waste container TMS intranet page.

[4] **REVIEW** the graph on the TMS intranet page for the following and **CHECK** (√) SAT or UNSAT on Attachment 6:

- Date and time are correct.
- No indication of flat-lined temperature lines.
- No indication of temperature spikes.
- No temperature lines are "trending high" (e.g. individual temperatures that deviate high from other temperature readings).

NOTE *Thermocouple 13 is non-functioning and indicates "NaN". Notification to WPE is not required.*

[5] **REVIEW** the data on the TMS intranet page (right hand side) for the following and **CHECK** (√) SAT or UNSAT on Attachment 6:

- No thermocouples indicating "NaN" (not a number) excluding Thermocouple 13.
- Data for TC1 through TC65 is visible in the Temperature column

9. PERFORMANCE—SUPPLEMENTAL TEMPERATURE MONITORING (continued)

[6] **REVIEW** the Alarms/Alerts section on the TMS intranet page (bottom left hand side) for the following and **CHECK** (√) SAT or UNSAT on Attachment 6:

- All alarms and alerts are green.

[7] **IF** any UNSAT conditions,
THEN NOTIFY the WD-WPE Representative and **DOCUMENT** observations/comments and guidance provided on Attachment 6.

[8] **ATTACH** the RNS waste container TMS intranet page printout to Attachment 6.

[9] **PRINT** name, **SIGN**, and **RECORD** Z#, and date on Attachment 6.

10. POST-PERFORMANCE ACTIVITY

10.1 Activity Closeout

NOTE *Steps 10.1[1] through 10.1[3] are performed at the completion of each work shift.*

SOM

[1] **REVIEW** the applicable attachments (Attachments 1 through 5) for accuracy and completeness.

[2] **PRINT** name, **SIGN**, and **RECORD** Z# and date on the applicable attachments.

[3] **IF** abnormal conditions were identified during the performance of this procedure, **THEN INITIATE** actions to correct the deficiency/discrepancy, such as generating a Nonconformance Report or Performance Feedback and Improvement Tracking System and **DOCUMENT** actions taken in the Comments Section of the applicable attachment.

NOTE *Steps 10.1[4] and 10.1[6] may be performed at an operationally convenient time.*

[4] **ENSURE** all attachments are forwarded for final disposition.

NOTE *Completing a Post-Job Review may be accomplished using the applicable P300, Integrated Work Management, form or online (the preferred method since the institution has access to feedback and lessons learned http://int.lanl.gov/safety/iwmc/ [Click on the Submit IWD Part 4 Post-Job Review]).*

[5] **PERFORM** a Post-Job Review in accordance with P300.

[6] **IF** the Post-Job Review identified any necessary changes to this procedure, **THEN INITIATE** a revision to this procedure.

10.2 Records Processing

Records generated while performing this procedure must be processed and maintained in accordance with EP-AP-10003, Records Management.

Record Name	QA Record	Non-QA Record
Attachment 1, TA-54-0375 Daily Rupture Disc and Visual Inspection of RNS Waste Containers Data Sheet	☒	☐
Attachment 2, TA-54-0375 Refrigerator and Cell 1 RNS Waste Container Daily Temperature Data Sheet	☒	☐
Attachment 3, TA-54-0375 Cell 2 RNS Waste Container Daily Temperature Data Sheet	☒	☐
Attachment 4, TA-54-0375 Cell 3 RNS Waste Container Daily Temperature Data Sheet	☒	☐
Attachment 5, TA-54-0375 RNS Waste Container Supplemental Temperature Data Sheet	☒	☐
Attachment 6, TA-54-0375 RNS Waste Container TMS Data Sheet	☒	☐

Records associated with Isolation Plan Implementation are also part of the Operating Record and must be retained accordingly.

11. REFERENCES

ABD-WFM-002, Attachment 1, Technical Safety Requirements (TSRs) for RNS Waste Activities

AREAG-ESS-14-002, Transuranic (TRU) Waste Drums Containing Treated Nitrate Salts May Challenge the Safety Basis

AREAG-RM-AOP-1299, 375 Perma-Con Nitrate Salt Waste Container Abnormal Conditions

AREAG-FO-DOP-1249, TA-54 Area G Dome 375 Round Sheet

EP-AP-10003, Records Management

EWMO-AP-0112, EWMO Pre-Job Briefings

EWMO-AP-20253, EWMO General Site Hazards and Controls

EWMO-BEP-20048, EWMO Division Building Emergency Plan (BEP)

LANL Nitrate Salt-Bearing Waste Container Isolation Plan, LA-UR-16-26708

P300, Integrated Work Management

P322-4, Laboratory Performance Feedback and Improvement Process

P330-6, Nonconformance Reporting

APPENDIX A
Page 1 of 1

THERMOCOUPLE NUMBERS AND RNS WASTE CONTAINER CROSSWALK

Thermo-couple Number	Assigned RNS Waste Container ID/Ambient Cell Location	Thermo-couple Number	Assigned RNS Waste Container ID/Ambient Cell Location
1	69079	34	68648
2	69208	35	68430
3	92669	36	69615
4	69636	37	69639
5	69280	38	68624
6	68685	39	69644
7	69298	40	69633
8	69616	41	69635
9	69076	42	69637
10	68540	43	69638
11	68553	44	69183
12	69641	45	69630
13	NaN*	46	69642
14	69490	47	54-0375 Cell 2
15	69445	48	69036
16	69520	49	69595
17	69620	50	69519
18	69013	51	69361
19	69618	52	68665
20	54-0375 Cell 1	53	69645
21	69598	54	69559
22	69553	55	69604
23	68567	56	94068
24	69634	57	69491
25	68408	58	69548
26	92459	59	93605
27	92472	60	87825
28	69568	61	87823
29	94227	62	87826
30	68631	63	87827
31	68638	64	54-0375 Cell 3
32	69015	65	54-0375 Refrigerator
33	68507		

* NaN = Not a number. Thermocouple 13 is non-functioning.

ATTACHMENT 1
Page 1 of 3

TA-54-0375 DAILY RUPTURE DISC AND VISUAL INSPECTION OF RNS WASTE CONTAINERS DATA SHEET

5.[2] Date: _____ Time: _____

5.[1] Prerequisite actions have been completed (Initials): _____

NOTE *Container 69417 is no longer considered a RNS waste container by LANL or NMED.*
Containers 87823, 87825, 87826, 87827 do not have PRDwSFs.
Document N/A if the container is removed from Perma-Con and refrigerator.

TA-54-0375			
Container ID #	Original Cell Location	**($)(&)** Visual Inspection of RNS Waste Containers (ESS-14-002, SAC 02-A/B) (IP IV.7) (5.[7]/5.[10])	Visual Inspection of PRDwSF Rupture Discs on RNS Waste Container (5.[11]/5.[13])
68408	2	☐ SAT ☐ UNSAT ☐ N/A	☐ SAT ☐ UNSAT ☐ N/A
68430	2	☐ SAT ☐ UNSAT ☐ N/A	☐ SAT ☐ UNSAT ☐ N/A
68507	2	☐ SAT ☐ UNSAT ☐ N/A	☐ SAT ☐ UNSAT ☐ N/A
68540	1	☐ SAT ☐ UNSAT ☐ N/A	☐ SAT ☐ UNSAT ☐ N/A
68553	1	☐ SAT ☐ UNSAT ☐ N/A	☐ SAT ☐ UNSAT ☐ N/A
68567	2	☐ SAT ☐ UNSAT ☐ N/A	☐ SAT ☐ UNSAT ☐ N/A
68624	2	☐ SAT ☐ UNSAT ☐ N/A	☐ SAT ☐ UNSAT ☐ N/A
68631	2	☐ SAT ☐ UNSAT ☐ N/A	☐ SAT ☐ UNSAT ☐ N/A
68638	2	☐ SAT ☐ UNSAT ☐ N/A	☐ SAT ☐ UNSAT ☐ N/A
68648	2	☐ SAT ☐ UNSAT ☐ N/A	☐ SAT ☐ UNSAT ☐ N/A
68665	3	☐ SAT ☐ UNSAT ☐ N/A	☐ SAT ☐ UNSAT ☐ N/A
68685	1	☐ SAT ☐ UNSAT ☐ N/A	☐ SAT ☐ UNSAT ☐ N/A
69013	1	☐ SAT ☐ UNSAT ☐ N/A	☐ SAT ☐ UNSAT ☐ N/A
69015	2	☐ SAT ☐ UNSAT ☐ N/A	☐ SAT ☐ UNSAT ☐ N/A
69036	3	☐ SAT ☐ UNSAT ☐ N/A	☐ SAT ☐ UNSAT ☐ N/A
69076	1	☐ SAT ☐ UNSAT ☐ N/A	☐ SAT ☐ UNSAT ☐ N/A
69079	1	☐ SAT ☐ UNSAT ☐ N/A	☐ SAT ☐ UNSAT ☐ N/A
69183	2	☐ SAT ☐ UNSAT ☐ N/A	☐ SAT ☐ UNSAT ☐ N/A

ATTACHMENT 1
Page 2 of 3

5.[2] Date: _____

TA-54-0375			
Container ID #	Original Cell Location	**($)(&)** Visual Inspection of RNS Waste Containers (ESS-14-002, SAC 02-A/B) (IP IV.7) (5.[7]/5.[10])	Visual Inspection of PRDwSF Rupture Discs on RNS Waste Container (5.[11]/5.[13])
69208	1	☐ SAT ☐ UNSAT ☐ N/A	☐ SAT ☐ UNSAT ☐ N/A
69280	1	☐ SAT ☐ UNSAT ☐ N/A	☐ SAT ☐ UNSAT ☐ N/A
69298	1	☐ SAT ☐ UNSAT ☐ N/A	☐ SAT ☐ UNSAT ☐ N/A
69361	3	☐ SAT ☐ UNSAT ☐ N/A	☐ SAT ☐ UNSAT ☐ N/A
69417	1	N/A	N/A
69445	1	☐ SAT ☐ UNSAT ☐ N/A	☐ SAT ☐ UNSAT ☐ N/A
69490	1	☐ SAT ☐ UNSAT ☐ N/A	☐ SAT ☐ UNSAT ☐ N/A
69491	3	☐ SAT ☐ UNSAT ☐ N/A	☐ SAT ☐ UNSAT ☐ N/A
69519	3	☐ SAT ☐ UNSAT ☐ N/A	☐ SAT ☐ UNSAT ☐ N/A
69520	1	☐ SAT ☐ UNSAT ☐ N/A	☐ SAT ☐ UNSAT ☐ N/A
69548	3	☐ SAT ☐ UNSAT ☐ N/A	☐ SAT ☐ UNSAT ☐ N/A
69553	2	☐ SAT ☐ UNSAT ☐ N/A	☐ SAT ☐ UNSAT ☐ N/A
69559	3	☐ SAT ☐ UNSAT ☐ N/A	☐ SAT ☐ UNSAT ☐ N/A
69568	2	☐ SAT ☐ UNSAT ☐ N/A	☐ SAT ☐ UNSAT ☐ N/A
69595	3	☐ SAT ☐ UNSAT ☐ N/A	☐ SAT ☐ UNSAT ☐ N/A
69598	2	☐ SAT ☐ UNSAT ☐ N/A	☐ SAT ☐ UNSAT ☐ N/A
69604	3	☐ SAT ☐ UNSAT ☐ N/A	☐ SAT ☐ UNSAT ☐ N/A
69615	2	☐ SAT ☐ UNSAT ☐ N/A	☐ SAT ☐ UNSAT ☐ N/A
69616	1	☐ SAT ☐ UNSAT ☐ N/A	☐ SAT ☐ UNSAT ☐ N/A
69618	1	☐ SAT ☐ UNSAT ☐ N/A	☐ SAT ☐ UNSAT ☐ N/A
69620	1	☐ SAT ☐ UNSAT ☐ N/A	☐ SAT ☐ UNSAT ☐ N/A
69630	2	☐ SAT ☐ UNSAT ☐ N/A	☐ SAT ☐ UNSAT ☐ N/A
69633	2	☐ SAT ☐ UNSAT ☐ N/A	☐ SAT ☐ UNSAT ☐ N/A
69634	2	☐ SAT ☐ UNSAT ☐ N/A	☐ SAT ☐ UNSAT ☐ N/A
69635	2	☐ SAT ☐ UNSAT ☐ N/A	☐ SAT ☐ UNSAT ☐ N/A
69636	1	☐ SAT ☐ UNSAT ☐ N/A	☐ SAT ☐ UNSAT ☐ N/A

ATTACHMENT 1
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5.[2] Date: _____

TA-54-0375			
Container ID #	Original Cell Location	**($)(&)** Visual Inspection of RNS Waste Containers (ESS-14-002, SAC 02-A/B) (IP IV.7) (5.[7]/5.[10])	Visual Inspection of PRDwSF Rupture Discs on RNS Waste Container (5.[11]/5.[13])
69637	2	☐ SAT ☐ UNSAT ☐ N/A	☐ SAT ☐ UNSAT ☐ N/A
69638	2	☐ SAT ☐ UNSAT ☐ N/A	☐ SAT ☐ UNSAT ☐ N/A
69639	2	☐ SAT ☐ UNSAT ☐ N/A	☐ SAT ☐ UNSAT ☐ N/A
69641	1	☐ SAT ☐ UNSAT ☐ N/A	☐ SAT ☐ UNSAT ☐ N/A
69642	2	☐ SAT ☐ UNSAT ☐ N/A	☐ SAT ☐ UNSAT ☐ N/A
69644	2	☐ SAT ☐ UNSAT ☐ N/A	☐ SAT ☐ UNSAT ☐ N/A
69645	3	☐ SAT ☐ UNSAT ☐ N/A	☐ SAT ☐ UNSAT ☐ N/A
87823	3	☐ SAT ☐ UNSAT ☐ N/A	N/A
87825	3	☐ SAT ☐ UNSAT ☐ N/A	N/A
87826	3	☐ SAT ☐ UNSAT ☐ N/A	N/A
87827	3	☐ SAT ☐ UNSAT ☐ N/A	N/A
92459	2	☐ SAT ☐ UNSAT ☐ N/A	☐ SAT ☐ UNSAT ☐ N/A
92472	2	☐ SAT ☐ UNSAT ☐ N/A	☐ SAT ☐ UNSAT ☐ N/A
92669	1	☐ SAT ☐ UNSAT ☐ N/A	☐ SAT ☐ UNSAT ☐ N/A
93605	3	☐ SAT ☐ UNSAT ☐ N/A	☐ SAT ☐ UNSAT ☐ N/A
94068	3	☐ SAT ☐ UNSAT ☐ N/A	☐ SAT ☐ UNSAT ☐ N/A
94227	2	☐ SAT ☐ UNSAT ☐ N/A	☐ SAT ☐ UNSAT ☐ N/A

Comments: _____

_____

_____

_____

_____

5.[15] Performed by: _____ / _____ / _____ / _____
Waste Operator (print) Signature Z # Date

10.1[2] Reviewed By: _____ / _____ / _____ / _____
SOM (print) Signature Z # Date

ATTACHMENT 2
Page 1 of 3

TA-54-0375 REFRIGERATOR AND CELL 1 RNS WASTE CONTAINER DAILY TEMPERATURE DATA SHEET

NOTE 1 *Drum 69417 is no longer considered a RNS drum by LANL or NMED.*
NOTE 2 ① = Cell 1; ② = Cell 2; ③ = Cell 3; ® = refrigerator; N/A – removed from Perma-Con and refrigerator

	Monday 6.[2] Date & Start Time: _____	Tuesday 6.[2] Date & Start Time: _____	Wednesday 6.[2] Date & Start Time: _____	Thursday 6.[2] Date & Start Time: _____	Friday 6.[2]Date & Start Time: _____	Saturday 6.[2] Date & Start Time: _____	Sunday 6.[2] Date & Start Time: _____
TA-54-0375 Cell 1							
Calibrated infrared thermometer (6.[3])	Brand: _____ Model: _____ Cal. Due Date: _____ File Number _____	Brand: _____ Model: _____ Cal. Due Date: _____ File Number _____	Brand: _____ Model: _____ Cal. Due Date: _____ File Number _____	Brand: _____ Model: _____ Cal. Due Date: _____ File Number _____	Brand: _____ Model: _____ Cal. Due Date: _____ File Number _____	Brand: _____ Model: _____ Cal. Due Date: _____ File Number _____	Brand: _____ Model: _____ Cal. Due Date: _____ File Number _____
Ambient Temperature (6.[4])	Cell 1: _____°F	Cell 1: _____°F	Cell 1: _____°F	Cell 1: _____°F	Cell 1: _____°F	Cell 1: _____°F	Cell 1: _____°F
($) Temperature ≤ 75°F SR 4.ESS.5.1 (6.[5])	□ SAT □ UNSAT	□ SAT □ UNSAT	□ SAT □ UNSAT	□ SAT □ UNSAT	□ SAT □ UNSAT	□ SAT □ UNSAT	□ SAT □ UNSAT
Ambient Temperature (6.[7])	Refrig.: _____°F	Refrig.: _____°F	Refrig.: _____°F	Refrig.: _____°F	Refrig.: _____°F	Refrig.: _____°F	Refrig.: _____°F
($) Ambient Refrig. Temp.: > 32°F and ≤ 41°F; SR 4.6.2.1, SAC 5.7.24 (6.[7])	□ SAT □ UNSAT	□ SAT □ UNSAT	□ SAT □ UNSAT	□ SAT □ UNSAT	□ SAT □ UNSAT	□ SAT □ UNSAT	□ SAT □ UNSAT
Container ID #	**Location/(&) Temp (°F) (6.[9]/6.[10]/6.[11]) (IP IV.7)**						
68685	① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A	
68540	① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A	
68553	① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A	
69445	① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A	

ATTACHMENT 2
Page 2 of 3

	Monday 6.[2]		Tuesday 6.[2]		Wednesday 6.[2]		Thursday 6.[2]		Friday 6.[2]		Saturday 6.[2]		Sunday 6.[2]	
TA-54-0375 Cell 1 (continued)														
69618	① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A	
69013	① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A	
69490	① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A	
69076	① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A	
69280	① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A	
69208	① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A	
69079	① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A	
69636	① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A	
69616	① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A	
69417	N/A		N/A		N/A		N/A		N/A		N/A		N/A	
69620	① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A	
69520	① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A	
69641	① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A	
69298	① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A	
92669	① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A	
End Time (6.[16])	_____		_____		_____		_____		_____		_____		_____	
Initial (6.[16])	WO: _____ WO: _____		WO: _____ WO: _____		WO: _____ WO: _____		WO: _____ WO: _____		WO: _____ WO: _____		WO: _____ WO: _____		WO: _____ WO: _____	

ATTACHMENT 2
Page 3 of 3

Comments:

6.[19] Performed by:

Waste Operator (print)	Signature	Z#	Date
Waste Operator (print)	Signature	Z#	Date
Waste Operator (print)	Signature	Z#	Date
Waste Operator (print)	Signature	Z#	Date
Waste Operator (print)	Signature	Z#	Date
Waste Operator (print)	Signature	Z#	Date
Waste Operator (print)	Signature	Z#	Date

Waste Operator (print)	Signature	Z#	Date
Waste Operator (print)	Signature	Z#	Date
Waste Operator (print)	Signature	Z#	Date
Waste Operator (print)	Signature	Z#	Date
Waste Operator (print)	Signature	Z#	Date
Waste Operator (print)	Signature	Z#	Date
Waste Operator (print)	Signature	Z#	Date

10.1[2] Reviewed by:

SOM (print)	Signature	Z#	Date

ATTACHMENT 3
Page 1 of 3

TA-54-0375 CELL 2 RNS WASTE CONTAINER DAILY TEMPERATURE DATA SHEET

NOTE ① = Cell 1; ② = Cell 2; ③ = Cell 3; ® = refrigerator; N/A – removed from Perma-Con and refrigerator

	Monday 6.[2] Date & Start Time: _____	Tuesday 6.[2] Date & Start Time: _____	Wednesday 6.[2] Date & Start Time: _____	Thursday 6.[2] Date & Start Time: _____	Friday 6.[2] Date & Start Time: _____	Saturday 6.[2] Date & Start Time: _____	Sunday 6.[2] Date & Start Time: _____
TA-54-0375 Cell 2							
Calibrated infrared thermometer (6.[3])	Brand: _____ Model: _____ Cal. Due Date: _____ File Number _____	Brand: _____ Model: _____ Cal. Due Date: _____ File Number _____	Brand: _____ Model: _____ Cal. Due Date: _____ File Number _____	Brand: _____ Model: _____ Cal. Due Date: _____ File Number _____	Brand: _____ Model: _____ Cal. Due Date: _____ File Number _____	Brand: _____ Model: _____ Cal. Due Date: _____ File Number _____	Brand: _____ Model: _____ Cal. Due Date: _____ File Number _____
Ambient Temperature (6.[4])	Cell 2: _____°F	Cell 2: _____°F	Cell 2: _____°F	Cell 2: _____°F	Cell 2: _____°F	Cell 2: _____°F	Cell 2: _____°F
($) Temperature ≤ 75°F SR 4.ESS.5.1 (6.[5])	□ SAT □ UNSAT	□ SAT □ UNSAT	□ SAT □ UNSAT	□ SAT □ UNSAT	□ SAT □ UNSAT	□ SAT □ UNSAT	□ SAT □ UNSAT
Container ID #	**Location/(&) Temp (°F) (6.[9]/6.[10]/6.[11]) (IP IV.7)**						
68408	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A
68638	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A
69615	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A
69635	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A
69642	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A
69630	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A
69633	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A
68430	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A
68631	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A
69634	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A

ATTACHMENT 3
Page 2 of 3

	Monday 6.[2]	Tuesday 6.[2]	Wednesday 6.[2]	Thursday 6.[2]	Friday 6.[2]	Saturday 6.[2]	Sunday 6.[2]
TA-54-0375 Cell 2 (continued)							
Container ID #	**Location/(&) Temp (°F) (6.[9]/6.[10]/6.[11]) (IP IV.7)**						
68567	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A
94227	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A
68648	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A
69644	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A
69183	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A
69638	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A
68624	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A
68507	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A
69568	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A
69553	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A
69598	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A
92472	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A
92459	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A
69015	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A
69639	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A
69637	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A
End Time (6.[16])	_____	_____	_____	_____	_____	_____	_____
Initial (6.[16])	WO: _____ WO:_____	WO: _____ WO:_____	WO: _____ WO:_____	WO: _____ WO:_____	WO: _____ WO:_____	WO: _____ WO:_____	WO: _____ WO:_____

ATTACHMENT 3
Page 3 of 3

Comments:

6.[19] Performed by:

Waste Operator (print)	Signature	Z#	Date
Waste Operator (print)	Signature	Z#	Date
Waste Operator (print)	Signature	Z#	Date
Waste Operator (print)	Signature	Z#	Date
Waste Operator (print)	Signature	Z#	Date
Waste Operator (print)	Signature	Z#	Date
Waste Operator (print)	Signature	Z#	Date
Waste Operator (print)	Signature	Z#	Date
Waste Operator (print)	Signature	Z#	Date
Waste Operator (print)	Signature	Z#	Date
Waste Operator (print)	Signature	Z#	Date
Waste Operator (print)	Signature	Z#	Date
Waste Operator (print)	Signature	Z#	Date
Waste Operator (print)	Signature	Z#	Date
Waste Operator (print)	Signature	Z#	Date
Waste Operator (print)	Signature	Z#	Date

10.1[2] Reviewed by:

SOM (print)	Signature	Z#	Date

ATTACHMENT 4
Page 1 of 3

TA-54-0375 CELL 3 RNS WASTE CONTAINER DAILY TEMPERATURE DATA SHEET

NOTE ① = Cell 1; ② = Cell 2; ③ = Cell 3; ® = refrigerator; N/A – removed from Perma-Con and refrigerator

	Monday 6.[2] Date & Start Time: _____	Tuesday 6.[2] Date & Start Time: _____	Wednesday 6.[2] Date & Start Time: _____	Thursday 6.[2] Date & Start Time: _____	Friday 6.[2] Date & Start Time: _____	Saturday 6.[2] Date & Start Time: _____	Sunday 6.[2] Date & Start Time: _____
TA-54-0375 Cell 3							
Calibrated infrared thermometer (6.[3])	Brand: _____ Model: _____ Cal. Due Date: _____ File Number _____	Brand: _____ Model: _____ Cal. Due Date: _____ File Number _____	Brand: _____ Model: _____ Cal. Due Date: _____ File Number _____	Brand: _____ Model: _____ Cal. Due Date: _____ File Number _____	Brand: _____ Model: _____ Cal. Due Date: _____ File Number _____	Brand: _____ Model: _____ Cal. Due Date: _____ File Number _____	Brand: _____ Model: _____ Cal. Due Date: _____ File Number _____
Ambient Temperature (6.[4])	Cell 3: _____°F	Cell 3: _____°F	Cell 3: _____°F	Cell 3: _____°F	Cell 3: _____°F	Cell 3: _____°F	Cell 3: _____°F
($) Temperature ≤ 75°F SR 4.ESS.5.1 (6.[5])	□ SAT □ UNSAT	□ SAT □ UNSAT	□ SAT □ UNSAT	□ SAT □ UNSAT	□ SAT □ UNSAT	□ SAT □ UNSAT	□ SAT □ UNSAT

Container ID #	**Location/(&) Temp (°F) (6.[9]/6.[10]/6.[11]) (IP IV.7)**													
69519	① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A	
69645	① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A	
94068	① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A	
93605	① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A	
69548	① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A	

ATTACHMENT 4
Page 2 of 3

	Monday 6.[2]	Tuesday 6.[2]	Wednesday 6.[2]	Thursday 6.[2]	Friday 6.[2]	Saturday 6.[2]	Sunday 6.[2]
TA-54-0375 Cell 3 (continued)							
Container ID #	**Location/(&) Temp (°F) (6.[9]/6.[10]/6.[11]) (IP IV.7)**						
69604	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A
68665	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A
69595	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A
69036	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A
69361	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A
69559	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A
69491	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A
87827	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A
87826	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A
87823	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A
87825	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A	① ② ③ ® N/A
End Time (6.[16])	_____	_____	_____	_____	_____	_____	_____
Initial (6.[16])	WO: _____ WO:_____	WO: _____ WO:_____	WO: _____ WO:_____	WO: _____ WO:_____	WO: _____ WO:_____	WO: _____ WO:_____	WO: _____ WO:_____

ATTACHMENT 4
Page 3 of 3

Comments:

6.[19] Performed by:

Waste Operator (print)	Signature	Z#	Date
Waste Operator (print)	Signature	Z#	Date
Waste Operator (print)	Signature	Z#	Date
Waste Operator (print)	Signature	Z#	Date
Waste Operator (print)	Signature	Z#	Date
Waste Operator (print)	Signature	Z#	Date
Waste Operator (print)	Signature	Z#	Date
Waste Operator (print)	Signature	Z#	Date
Waste Operator (print)	Signature	Z#	Date
Waste Operator (print)	Signature	Z#	Date
Waste Operator (print)	Signature	Z#	Date
Waste Operator (print)	Signature	Z#	Date
Waste Operator (print)	Signature	Z#	Date
Waste Operator (print)	Signature	Z#	Date
Waste Operator (print)	Signature	Z#	Date
Waste Operator (print)	Signature	Z#	Date

10.1[2] Reviewed by:

SOM (print)	Signature	Z#	Date

ATTACHMENT 5

Page 1 of 3

TA-54-0375 RNS WASTE CONTAINER SUPPLEMENTAL TEMPERATURE DATA SHEET

	Date & Start Time: (6.[2])						
	Date _______ Time: ______	Date _______ Time: ______	Date _______ Time: ______	Date _______ Time: ______	Date _______ Time: ______	Date _______ Time: ______	Date _______ Time: ______
Calibrated infrared thermometer (6.[3])	Brand: ___________________ Model: __________________ Cal. Due Date: _____________ File Number _______________	Brand: ___________________ Model: __________________ Cal. Due Date: _____________ File Number _______________	Brand: ___________________ Model: __________________ Cal. Due Date: _____________ File Number _______________	Brand: ___________________ Model: __________________ Cal. Due Date: _____________ File Number _______________	Brand: ___________________ Model: __________________ Cal. Due Date: _____________ File Number _______________	Brand: ___________________ Model: __________________ Cal. Due Date: _____________ File Number _______________	Brand: ___________________ Model: __________________ Cal. Due Date: _____________ File Number _______________
Ambient Temperature (6.[4])	Cell 1: ________°F Cell 2 ________°F Cell 3: ________°F Refrigerator: _______°F	Cell 1: ________°F Cell 2 ________°F Cell 3: ________°F Refrigerator: _______°F	Cell 1: ________°F Cell 2 ________°F Cell 3: ________°F Refrigerator: _______°F	Cell 1: ________°F Cell 2 ________°F Cell 3: ________°F Refrigerator: _______°F	Cell 1: ________°F Cell 2 ________°F Cell 3: ________°F Refrigerator: _______°F	Cell 1: ________°F Cell 2 ________°F Cell 3: ________°F Refrigerator: _______°F	Cell 1: ________°F Cell 2 ________°F Cell 3: ________°F Refrigerator: _______°F
($) Cell Temperature ≤ 75°F SR 4.ESS.5.1 (6.[5])	□ SAT □ UNSAT □ NA	□ SAT □ UNSAT □ NA	□ SAT □ UNSAT □ NA	□ SAT □ UNSAT □ NA	□ SAT □ UNSAT □ NA	□ SAT □ UNSAT □ NA	□ SAT □ UNSAT □ NA
($) Refrigerator Temperature > 32°F and ≤ 41°F; SR 4.6.2.1, SAC 5.7.24 (6.[7])	□ SAT □ UNSAT □ NA	□ SAT □ UNSAT □ NA	□ SAT □ UNSAT □ NA	□ SAT □ UNSAT □ NA	□ SAT □ UNSAT □ NA	□ SAT □ UNSAT □ NA	□ SAT □ UNSAT □ NA

ATTACHMENT 5

Container ID #	**Location/(&) Temp (°F) (6.[9]/6.[10]/6.[11]) (IP IV.7)**													
	① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A	
	① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A	
	① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A	
	① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A	
	① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A	
	① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A	
	① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A	
	① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A	
	① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A	
	① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A	
	① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A	
	① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A	
	① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A	
	① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A	
	① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A	
	① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A	
	① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A	
	① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A	
	① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A	
	① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A	
	① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A		① ② ③ ® N/A	
End Time (6.[16])														
Initials (6.[16])	WO: ________________ WO: ________________		WO: ________________ WO: ________________		WO: ________________ WO: ________________		WO: ________________ WO: ________________		WO: ________________ WO: ________________		WO: ________________ WO: ________________		WO: ________________ WO: ________________	

ATTACHMENT 5
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Comments:

6.[19] Performed by:

Waste Operator (print)	Signature	Z#	Date
Waste Operator (print)	Signature	Z#	Date
Waste Operator (print)	Signature	Z#	Date
Waste Operator (print)	Signature	Z#	Date
Waste Operator (print)	Signature	Z#	Date
Waste Operator (print)	Signature	Z#	Date
Waste Operator (print)	Signature	Z#	Date
Waste Operator (print)	Signature	Z#	Date
Waste Operator (print)	Signature	Z#	Date
Waste Operator (print)	Signature	Z#	Date

10.1[2] Reviewed by:

SOM (print)	Signature	Z#	Date

ATTACHMENT 6
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TA-54-0375 RNS WASTE CONTAINER TMS DATA SHEET

9.[1] Date: _____ Time: _____

Graph (9.[4]) Date and time are correct. No indication of flat-lined temperature lines. No indication of temperature spikes. No temperature lines "trending high."	☐ SAT ☐ UNSAT ☐ SAT ☐ UNSAT ☐ SAT ☐ UNSAT ☐ SAT ☐ UNSAT
Data (9.[5]) **NOTE** *Thermocouple 13 is non-functioning and indicates "NaN". Notification to WPE is not required.* No thermocouples indicating "NaN" (not a number) excluding Thermocouple 13. Data for TC1 through TC65 is visible in the Temperature column	☐ SAT ☐ UNSAT ☐ SAT ☐ UNSAT
Alarms and Alerts (9.[6]) All alarms and alerts are green.	☐ SAT ☐ UNSAT

9.[7] Observations/Comments: _____

_____

_____

_____

_____

9.[7] Guidance Provided: _____

_____

_____

_____

_____

9.[9] Performed by: _____ / _____ / _____ / _____
Waste Operator (print) Signature Z # Date

10.1[2] Reviewed By: _____ / _____ / _____ / _____
SOM (print) Signature Z # Date