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Date: NOV 1 2 2014
Symbol: ENV-DO-14-0346
LA-UR: 14-28602, 14-28580
Locates Action No.: Not Applicable

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

Dear Mr. Kieling:

Subject: Transmittal of Revised Procedure for Nitrate Salt-Bearing TRU Waste Container Monitoring and Standing Order for Access Restrictions

The purpose of this letter is to transmit a procedure and a standing order that have been updated from the previous submission to the New Mexico Environment Department (NMED). The Los Alamos National Security, LLC (LANS) and the U.S. Department of Energy (DOE), the Permittees, sent the enclosed procedure and standing order (EP-AREAG-FO-DOP-1246, R.0 and EP-AREAG-SO-1247, R.0) to the NMED originally on May 29, 2014, as Attachments 5 and 10 of the *Revised LANL Nitrate Salt-Bearing Waste Container Isolation Plan.* The isolation plan requires that all procedures and plans attached to the isolation plan be submitted to the NMED upon revision.

Revisions of EP-AREAG-FO-DOP-1246, were submitted to the NMED on July 23, 2014 and August 25, 2014. The last update of the procedure on September 30, 2014 changed the name of the procedure to: EWMO-AREAG-FO-DOP-1246, R.4: *Nitrate Salt-Bearing TRU Waste Container Monitoring.* EWMO-AREAG-FO-DOP-1246, R.4 was also included as Attachment 7 of the *LANL Nitrate Salt-Bearing Waste Container Isolation Plan, Revision 2* sent to the NMED on September 19, 2014.

EWMO-AREAG-FO-DOP-1246, R.5: *Nitrate Salt-Bearing TRU Waste Container Monitoring*, has been revised to incorporate the ability to use remote temperature indication from thermocouples and to update waste container numbers. It has been included as Enclosure 1.

A revision of EP-AREAG-SO-1247 was submitted to the NMED on August 25, 2014 (EP-AREAG-SO-1247, R.1) and that revision was included as Attachment 14 of the *LANL Nitrate Salt-Bearing Waste*

Container Isolation Plan, Revision 2 sent to the NMED on September 19, 2014. EWMO-AREAG-SO-1247, R.2: *TA-54 Area G Domes TA-54-231 and TA-54-375 PermaCon Access Restrictions*, has been revised to change the name and incorporate additional access restrictions. It has been included as Enclosure 2.

If you have comments or questions regarding this submittal, please contact Mark P. Haagenstad at (505) 665-2014 or Gene E. Turner at (505) 667-5794.

Sincerely,

Alison M. Dorries
Division Leader
Environmental Protection Division
Los Alamos National Security LLC

Sincerely,

Gene E. Turner
Environmental Permitting Manager
Environmental Projects Office
Los Alamos Field Office
U.S. Department of Energy

AMD:GET:MPH:LVH/lm

Enclosures: (1) EWMO-AREAG-FO-DOP-1246, R.5: Nitrate Salt-Bearing TRU Waste Container Monitoring
(2) EWMO-AREAG-SO-1247, R.2: TA-54 Area G Domes TA-54-231 and TA-54-375 PermaCon Access Restrictions

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ENCLOSURE 1

EWMO-AREAG-FO-DOP-1246, R.5: Nitrate Salt-Bearing TRU Waste Container Monitoring

ENV-DO-14-0346

LA-UR-14-28580

Date: NOV 1 2 2014

Nitrate Salt-Bearing TRU Waste Container Monitoring

Effective Date: 11/03/14

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

The Responsible Manager has determined that the following organizations' review/concurrence is required for the initial document, and for major revisions a same type and level review is required. Review documentation is contained in the Document History File:

Environmental
EWMO Criticality Safety
EWMO Industrial Hygiene and Safety
EWMO Operations Center
EWMO Quality Assurance
EWMO Radiation Protection
EWMO Shift Operations Manager
EWMO Waste Management Coordinator
Facility Operations Director (FOD)
LTP EWMO Engineering
LTP EWMO Operations Support
Safety Basis
Subject-Matter Expert

Responsible Manager, EWMO - Operations Manager

Gail M. Welsh	/ 114849	/s/ Gail Welsh	/ 10/29/14
Name (print)	Z#	Signature	Date

Classification Review: ☐ N/A ☒ Unclassified ☐ UCNI ☐ Classified _____

Art Crawford	/ 10/28/14	/s/ Art Crawford	/ 10/28/14
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.

LA-UR-14-28580

REVISION HISTORY

Document No./Revision No.	Issue Date	Action	Description
EP-AREAG-FO-DOP-1246, R.0	May 29, 2014	Major	Generated to incorporate EP-AREAG-SO-1237, TA-54 Area G Temperature Readings of Remediated Nitrate Salt Containers, EP-AREAG-SO-1244, TA-54 Area G Nitrate Waste Container Inspection. A Job hazard analysis was developed and controls incorporated into the procedure through precautions, limitations, warnings, cautions and notes.
EP-AREAG-FO-DOP-1246, R.1	Approved for Training	Major Revision	Revise procedure to incorporate container numbers into the procedure, checks, and actions for HVAC Low D/P and make editorial corrections as necessary. Section 6, added note to clarify Attachment 2 lists the container numbers. Correct step 5.[6] to revise word from smoking to smoke. Added Step 6.[8] to address container number discrepancies. This revision does not introduce any new hazards.
EP-AREAG-FO-DOP-1246, R.2	July 15, 2014	Major Revision	Revise procedure to incorporate ENV-CP comments and make editorial corrections as necessary. This revision does not introduce any new hazards.
EP-AREAG-FO-DOP-1246, R.3	August 1, 2014	Major Revision	Revise procedure to allow for performing the temperature measurements in TA-54-231 and TA-54-375 independent of each other. Allow for multiple infrared thermometers to be used. Delete control drum temperature readings throughout. Revise attachments to include a separate attachment for recording daily temperatures in each cell in TA-54-375. Make process improvement changes. Make editorial corrections as necessary. This revision does not introduce any new hazards. This revision is a total rewrite and revision bars have been omitted.

REVISION HISTORY (continued)

Document No./Revision No.	Issue Date	Action	Description
EWMO-AREAG-FO-DOP-1246, R.4	September 11, 2014	Major	Revised procedure to change Procedure number from EP to EWMO. Deleted Step 6.[19] and the associated SOM initials for the daily review on Attachments 2 through 6. Moved Step 8.1[1] Operator signoff to the end of Sections 5 and 6. Deleted Step 8.1[1]. Delete SOM initials on attachments 2 through 6. Rev bars is in the left column display location of changes. No additional hazards were identified during this revision.
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.

TABLE OF CONTENTS

1. PURPOSE

This procedure provides the instructions and directions for performing nitrate salt-bearing Transuranic (TRU) WASTE container monitoring (i.e., temperature readings of nitrate salt, nitrate salt waste container inspections).

2. SCOPE

This procedure applies to Los Alamos National Laboratory (LANL) Transuranic Programs (LTP) and Environmental and Waste Management Operations (EWMO) personnel who will be monitoring the nitrate salt TRU WASTE containers. Activities associated with the nitrate salt-bearing TRU WASTE containers and the associated storage locations other than identified in this procedure will require prior approval from the EWMO-Facility Operations Director (EWMO FOD) and the Associate Director of Environmental Programs.

Inspections required by Attachment E, Inspection Plan, of the LANL Hazardous Waste Permit are performed in accordance with EWMO-DOP-20215, EWMO RCRA Inspections and Notifications.

3. PRECAUTIONS AND LIMITATIONS

- Activities, items, and containers **SHALL** satisfy approved design specifications, regulatory requirements, process-specific parameters, and procedural requirements. Activities, items, or containers that do not conform to the approved specifications and requirements are considered nonconforming and Nonconformance Reports (NCRs) **SHALL** be generated in accordance with P330-6, Nonconformance Reporting, as required.

- When a worker observes an unsafe condition or act that may pose an imminent danger or other safety concern/hazard, the worker has the authority and responsibility to inform the worker engaged in the work and request that the work activity be paused and/or stopped based on the risk posed to the individual, the employees, the environment, or the facility in accordance with P101-18, Procedure for Pause/Stop Work.

- Not Applicable (N/A) is documented on the attachments during the performance of this procedure indicating information that is not required to be recorded.

- Personnel associated with this procedure **SHALL** review and understand the requirements of the Radiological Work Permit (RWP).

3. PRECAUTIONS AND LIMITATIONS (continued)

- Personal protective equipment (PPE) **SHALL** be worn as required by the RWP and Industrial Hygiene personnel.

- To comply with the intent of the As Low As Reasonably Achievable (ALARA) Program, all personnel **SHALL** apply the principles of time, distance, and shielding when working with radiological materials.

- Infrared thermometer is equipped with a laser. Care should be taken to prevent pointing beam to eyes. Do not allow eyes of user or observers to become exposed to the beam.

- Waste containers with liquids (any amount or configuration) that have not been solidified (absorbed) and are stored or staged for a period longer than 24 hours **SHALL** be labeled "Free Liquids" and managed on secondary containment pallets or in structures designed to satisfy the secondary containment requirements (e.g., Sheds, Bldg. TA-54-1027, 1028, 1030, 1041, 144, 145, 146, and 177, and Dome 230).

- Support Services Subcontractors executing this procedure **SHALL** comply with the safety and health requirements documented in contractual agreements with the LANL.

4. PREREQUISITE ACTIONS

NOTE *The listed prerequisite actions may be completed in any order.*

4.1 Planning and Coordination

PIC/Designee

[1] **ENSURE** that the performance of this procedure has been scheduled on the TA-54 Area G schedule.

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

[3] **ENSURE** that the procedure is the latest revision, and **IDENTIFY** this document as Working Copy or Information Only on the Title Page.

4.1 Planning and Coordination (continued)

[4] **ENSURE** that, as a minimum, the following personnel trained to the use of this procedure are available for the performance of this procedure, as required:
- Two Operators
- One Radiological Control Technician (RCT) [when performing operations in Contamination Area (CA)]

Operator/Designee

[5] **IF** performing Section 6, TA-54 Area G Temperature Readings of Nitrate Salt TRU Waste Containers,
THEN:

[A] **ENSURE** that the applicable PermaCon round sheet (i.e., Dome TA-54-231, Dome TA-54-375) was completed.

[B] **ENSURE** that an RWP has been issued for the planned activity, as applicable.

4.2 Materials and Equipment

4.2.1 Measuring and Test Equipment (M&TE)

Operator/Designee

[1] **IF** performing Section 6,
AND an infrared thermometer is to be used to obtain the waste container temperatures,
THEN:

[A] **ENSURE** that a calibrated infrared thermometer is available.

[B] **RECORD** the following infrared calibration information on Attachment 2 through 6, as applicable:
- Brand name
- Model number
- Calibration due date
- File number

[C] **IF** the infrared thermometer has exceeded the calibration due date,
THEN:

[a] **NOTIFY** the TA-54 Operations Center of the discrepancy.

4.2.1 Measuring and Test Equipment (M&TE) (continued)

[b] **OBTAIN** another infrared thermometer that is within the calibration due date.

[c] **GO** to Step 4.2.1[1][A].

5. INSTRUCTIONS—NITRATE SALT TRU WASTE CONTAINER VISUAL INSPECTIONS

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

This activity will be performed at a minimum of once an hour.

NOTE *Multiple nitrate salt TRU WASTE container storage locations may be visually inspected concurrently.*

Operator/Designee

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

NOTE *Waste containers that are stored in a PermaCon (e.g., TA-54-231 or TA-54-375) will be visually inspected from a point outside of the PermaCon without entering the CA.*

[2] **IF** assuming nitrate drum observation (NDO) duties,
THEN DOCUMENT the following in the Comments section of Attachment 1, Nitrate Salt TRU Waste Container Visual Inspection Data Sheet:
- Time and assumption of duties
- Signature and Z number

[3] **IF** turning over NDO duties,
THEN DOCUMENT the following in the Comments section of Attachment 1:
- Time and turnover of duties
- Printed name of relief
- Signature

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

[5] **RECORD** the following information on Attachment 1:
- Date range and time (24 hours)
- Location (e.g., Storage Areas: TA-54-231 PermaCon or TA-54-375 PermaCon)

5. INSTRUCTIONS—NITRATE SALT TRU WASTE CONTAINER VISUAL INSPECTIONS (continued)

[6] **DETERMINE** whether the following applicable PermaCon HVAC system components (TA-54-231 or TA-54-375) are operational, and **CHECK** (√) YES or NO on Attachment 1:

TA-54-231

- FE-1000, ON and operating
- FE-2000, ON and operating
- FE-3000, ON and operating
- FE-4000, ON and operating
- PDI-1000 and PDI-2000 alarm light are not illuminated (panel outside cell)

TA-54-375

- FE-001, VFD-001 is ON and set to HAND, 30 to 60 Hz, and
- FE-002, VFD-002 is ON and set to HAND, 30 to 60 Hz, and
- PDA-001, PDA-002, and PDA-003 alarm light are not illuminated (panel outside cell)

[7] **IF** NO was checked (√) in the previous step,
THEN:

[A] **GO TO** EP-AREAG-RM-ARP-1123, 231 PermaCon Low Cell D/P Alarm, or EP-AREAG-RM-ARP-1150, 375 PermaCon Low Cell D/P Alarm, as applicable.

[B] **NOTIFY** the TA-54 Operations Center and Shift Operation Manager (SOM) for applicable actions.

[8] **VISUALLY INSPECT** nitrate salt waste containers for indications of an abnormal condition including an internal reaction (e.g., chemical/thermal) and/or loss of container integrity:

- Evidence of deterioration such as signs of discoloration, paint peeling or yellowing
- Loss of container integrity such as evidence of leakage, or lid compromised
- Bulging such as pressurized, expansion of side walls, or round bottom
- Chemical reaction such as smoke or release of internal contents to atmosphere
- Signs of smoke and fire from a container

5. INSTRUCTIONS—NITRATE SALT TRU WASTE CONTAINER VISUAL INSPECTIONS (continued)

NOTE 1 *During back-shifts or off-shifts, or if the TA-54 Operations Center is not available, the SOM can be notified directly at 505-231-8289. Additional notifications to the Emergency Operations Support Center (EOSC), 505-667-6211, or 911, are performed based upon the severity of the situation or in accordance with direction from the SOM.*

NOTE 2 *Any follow-up calls to 911 should be conducted at a safe location from the incident after the activation of a manual pull.*

[9] **IF** a chemical reaction such as smoke, fire, or release of internal contents to the atmosphere are discovered,
THEN:

[A] **ACTIVATE** the manual pull station in the general area of the incident if safe to do so.

[B] **PERFORM** an Emergency response in accordance with EP-DIV-BEP-20048, EWMO Division Building Emergency Plan (BEP), to include:
- **SUSPEND** work.
- **WARN** others.
- **ISOLATE** immediate area.
- **EVACUATE** to an upwind Assembly/Muster area from the incident.
- **MAKE** notifications [e.g., TA-54 Operations Center, EOSC, 911].

[C] **CHECK** (√) UNSAT for the inspection location, and **DOCUMENT** the condition in the Comments section of Attachment 1 when in a safe area and at a time when operationally convenient.

5. INSTRUCTIONS—NITRATE SALT TRU WASTE CONTAINER VISUAL INSPECTIONS (continued)

[10] **IF** evidence of deterioration is discovered, such as signs of discoloration, paint peeling or yellowing, loss of container integrity such as evidence of leakage or a compromised lid, bulging, pressurization (expansion of side walls, or round bottom) are discovered, **THEN:**

[A] **PERFORM** an off-normal response in accordance with EP-DIV-BEP-20048, to include:
- **SUSPEND** work.
- **WARN** others.
- **ISOLATE** the immediate area.
- **MOVE-AWAY** upwind from the area of concern.
- **MAKE** Notifications (e.g., TA-54 Operations Center).

[B] **CHECK** (√) UNSAT for the status of the inspection location, and **DOCUMENT** the condition in the Comments section of Attachment 1 when in a safe area and at a time when operationally convenient.

[11] **CHECK** (√) SAT for the status of the affected inspection location on Attachment 1.

[12] **RECORD** initials and Z number on Attachment 1.

[13] **REPEAT** Steps 5.[2] through 5.[12] until each nitrate salt TRU WASTE container storage location has been visually inspected.

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

6. INSTRUCTIONS—TA-54 AREA G TEMPERATURE READINGS OF NITRATE SALT TRU WASTE CONTAINERS

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

This section provides the instructions for performing hourly or daily temperature readings.

NOTE 1 *Waste container temperature measurements are obtained by entering the applicable PermaCon (e.g., TA-54-231 or TA-54-375) Contamination Area and individually measuring and recording the waste container temperatures or by observing the waste container temperature on the computer located in the TA-54-375 PermaCon Control Room.*

NOTE 2 *The temperature indications for each waste container with an input to the TA-54-375 PermaCon Control Room computer are labeled with the waste container number except for the ambient temperature thermocouple which is labeled AMBIENT.*

NOTE 3 *Separate attachments are provided to allow for recording daily waste container temperatures independently as listed below:*

- *Attachment 2, TA-54 Area G TA-54-231 Nitrate Salt TRU Waste Container Daily Temperature Data Sheet*
- *Attachment 3, TA-54 Area G TA-54-375 Cell 1 Nitrate Salt TRU Waste Container Daily Temperature Data Sheet*
- *Attachment 4, TA-54 Area G TA-54-375 Cell 2 Nitrate Salt TRU Waste Container Daily Temperature Data Sheet*
- *Attachment 5, TA-54 Area G TA-54-375 Cell 3 Nitrate Salt TRU Waste Container Daily Temperature Data Sheet*

NOTE 4 *Attachment 6, TA-54 Area G Nitrate Salt TRU Waste Container Hourly Temperature Data Sheet, is set up for documenting hourly readings of one or more containers as directed by the LTP-SSS management.*

Operator/Designee

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

6. INSTRUCTIONS—TA-54 AREA G TEMPERATURE READINGS OF NITRATE SALT TRU WASTE CONTAINERS (continued)

[2] **PROVIDE** a description of any unsatisfactory conditions, notifications, and corrective actions in the Comments section of Attachment 2 through 6, as applicable.

[3] **IF** at any time during the performance of this section a chemical reaction such as smoke, fire, or release of internal contents to the atmosphere is discovered,
THEN:

[A] **ACTIVATE** the manual pull station in the general area of the incident if safe to do so.

[B] **PERFORM** an Emergency response in accordance with EP-DIV-BEP-20048, to include:

- **SUSPEND** work.
- **WARN** others.
- **ISOLATE** the immediate area.
- **EVACUATE** to an upwind Assembly/Muster Area from the incident.
- **MAKE** Notifications (e.g., TA-54 Operations Center, EOSC, 911).

[C] **DOCUMENT** the condition in the Comments section of the applicable attachment when in a safe area and at a time when operationally convenient.

[4] **IF** at any time during the performance of this section evidence of deterioration is discovered, such as signs of discoloration, paint peeling or yellowing, loss of container integrity such as evidence of leakage or a compromised lid, bulging, pressurization (expansion of side walls, or round bottom) are discovered,
THEN:

[A] **PERFORM** an off-normal response in accordance with EP-DIV-BEP-20048, to include:

- **SUSPEND** work.
- **WARN** others.
- **ISOLATE** the immediate area.
- **MOVE-AWAY** upwind from the area of concern.
- **MAKE** Notifications (e.g., TA-54 Operations Center).

[B] **DOCUMENT** the condition in the Comments section of the applicable attachment when in a safe area and at a time when operationally convenient.

6. INSTRUCTIONS—TA-54 AREA G TEMPERATURE READINGS OF NITRATE SALT TRU WASTE CONTAINERS (continued)

[5] **DETERMINE** whether the daily or hourly temperature readings are to be conducted as directed by the SOM.

[6] **RECORD** the location, date range, and start time on the applicable attachment.

[7] **DETERMINE** the ambient temperature (e.g., the wall of the contamination control enclosure or designated location using an infrared thermometer or the AMBIENT temperature indication on the TA-54-375 PermaCon Control Room computer), and **RECORD** the ambient temperature (in °F) on the applicable attachment.

6. INSTRUCTIONS—TA-54 AREA G TEMPERATURE READINGS OF NITRATE SALT TRU WASTE CONTAINERS (continued)

NOTE 1 *Attachments 2 through 5 are pre-populated with the container numbers for TA-54-231 PermaCon and for Cells 1, 2, and 3 of TA-54-375 PermaCon.*

NOTE 2 *Standard waste boxes (SWBs) that were not packaged for Waste Isolation Pilot Plant (WIPP) shipment (without a LASBxxxxx number) identify the location of the nitrate salt-bearing drum inside by the location of the container label on the outside of the SWB.*

NOTE 3 *SWBs that were packaged for WIPP shipment (with a LASBxxxxx number) do not have the location of the nitrate salt-bearing drum identified on the outside of the SWB.*

NOTE 4 *The temperature indications for each waste container with an input to the TA-54-375 PermaCon Control Room computer are labeled with the waste container number except for the ambient temperature thermocouple which is labeled AMBIENT.*

[8] **IF** the nitrate salt-bearing drum location within the SWB is known,
THEN OBTAIN the nitrate salt-bearing drum temperature using one or both of the following methods and **RECORD** the container number, as applicable, and temperature on the applicable attachment:

- **MEASURE** the temperature (in °F) on the top approximate center of each nitrate salt drum, through the SWB lid, using an infrared thermometer
- **READ** the SWB temperature (°F) indication on the TA-54-375 PermaCon Control Room computer

[9] **IF** the nitrate salt-bearing drum location within the SWB is **NOT** known,
THEN MEASURE the temperature (in °F) on the top approximate center of each drum in the SWB, through the SWB lid, using an infrared thermometer, and **RECORD** the container number, as applicable, and the highest temperature measurement on the applicable attachment.

6. INSTRUCTIONS—TA-54 AREA G TEMPERATURE READINGS OF NITRATE SALT TRU WASTE CONTAINERS (continued)

[10] **IF** a container's temperature is greater than 10 °F higher than the ambient temperature, **THEN:**

[A] **EXIT** the PermaCon.

[B] **NOTIFY** the TA-54 Operations Center of the discrepancy, **REPORT** the container's temperature and amount greater than ambient, and **REQUEST** direction.

TA-54 Operations Center

[C] **NOTIFY** the Operations Manager and EOSC at 505-667-6211 of the discrepancy.

[D] **IF** a container's temperature is greater than 15 °F higher than the ambient temperature,
THEN REQUEST support from EOSC at 505-667-6211 and **NOTIFY** the Operations Manager of the discrepancy.

Operator/Designee

[11] **IF** a deficiency with a container number pre-populated on the attachment is discovered, **THEN:**

[A] **SUSPEND** operations.

[B] **NOTIFY** the TA-54 Operations Center and SOM for guidance and direction.

NOTE *The ambient temperature of the contamination control enclosure will be measured a second time after measuring the temperature of the last nitrate salt waste container.*

[12] **DETERMINE** the ambient temperature [e.g., of the contamination control enclosure using an infrared thermometer or the AMBIENT temperature indication on the TA-54-375 PermaCon Control Room computer], and **RECORD** the ambient temperature (in °F) on the applicable attachment.

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

6. INSTRUCTIONS—TA-54 AREA G TEMPERATURE READINGS OF NITRATE SALT TRU WASTE CONTAINERS (continued)

[14] **RECORD** "N/A" (not applicable) for temperature readings that were not recorded and **DOCUMENT** an explanation in the Comments section of the applicable attachment.

[15] **IF** a temperature is recorded incorrectly,
THEN RECONCILE the discrepancy and **INITIAL** on the applicable attachment.

[16] **REPEAT** Steps 6.[2] through 6.[15] for TA-54-231 and TA-54-375 until all of the nitrate salt drum temperatures to be measured have been recorded.

[17] **PRINT** name, **SIGN**, and **RECORD** Z#, initials, and date on the applicable attachments (Attachments 2 through 6).

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

This section is a stand-alone section and may be performed independently of, or in conjunction with other Instructions 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 (NOAA).

Shift Operations Manager

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

[2] **IF** deterioration is observed,
THEN:

[A] **NOTIFY** Maintenance and Site Services.

[B] **GENERATE** a Facility Service Request (FSR) to repair roadway as applicable.

[C] **NOTIFY** the Los Alamos Fire Department (LFPD) of road condition.

8. POST-PERFORMANCE ACTIVITY

8.1 Disposition

SOM or designee

[1] **REVIEW** the applicable attachments (Attachments 1 through 6) for accuracy and completeness.

[2] **PRINT** name, **SIGN**, and **RECORD** Z#, initials, and date on the applicable attachments (Attachments 1 through 6).

NOTE *Completing a Post-Job Review may be accomplished using the applicable P300 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]).*

[3] **IF** any of the following occur:

- A new activity was completed for the first time
- A request was made by anyone involved with the performance of this procedure to perform a post-job review
- An abnormal event occurred
- A revision to an existing procedure was issued and it has been determined by the procedure owner or designee that a Post-Job Review is required

THEN PERFORM a Post-Job Review in accordance with P300.

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

8.2 Records Processing

Operator/Designee

[1] Ensure that documents generated by the performance of this procedure are processed as follows:

Record Identification	Record Type Determination	Protection/Storage Methods	Processing Instructions
Attachment 1, Nitrate Salt TRU Waste Container Visual Inspection Data Sheet Attachment 2, TA-54 Area G TA-54-231 Nitrate Salt TRU Waste Container Daily Temperature Data Sheet Attachment 3, TA-54 Area G TA-54-375 Cell 1 Nitrate Salt TRU Waste Container Daily Temperature Data Sheet Attachment 4, TA-54 Area G TA-54-375 Cell 2 Nitrate Salt TRU Waste Container Daily Temperature Data Sheet Attachment 5, TA-54 Area G TA-54-375 Cell 3 Nitrate Salt TRU Waste Container Daily Temperature Data Sheet Attachment 6, TA-54 Area G Nitrate Salt TRU Waste Container Hourly Temperature Data Sheet	QA Record	Supervision **SHALL** implement a reasonable level of protection to prevent loss and degradation. Records should be maintained in a one-hour fire rated metal file cabinet when not in use.	When the records are ready for final disposition, the record is transferred to Records Management in accordance with EP-DIR-AP-10003, Records Management Procedure For ADEP Employees.

9. REFERENCES

EP-AREAG-RM-ARP-1123, 231 PermaCon Low Cell D/P Alarm

EP-AREAG-RM-ARP-1150, 375 PermaCon Low Cell D/P Alarm

EP-DIR-AP-10003, Records Management Procedure For ADEP Employees

EP-DIV-AP-0112, EWMO Pre-Job Briefings

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

EWMO-DOP-20215, EWMO RCRA Inspections and Notifications

9. REFERENCES (continued)

LANL Hazardous Waste Facility Permit

P101-18, Procedure for Pause/Stop Work

P300, Integrated Work Management

P330-6, Nonconformance Reporting

ATTACHMENT 1
Page 1 of 2

NITRATE SALT TRU WASTE CONTAINER VISUAL INSPECTION DATA SHEET

5.[5] Date: From ___________ to ____________

Time (24 hrs) (5.[5])	Storage Area (e.g., 231, 375) (5.[5])	HVAC Operational (5.[6])	Visual Inspection (5.[9][C]/5.[10][B]/ 5.[11])	Operator Initials and Z# (5.[12])
		☐ YES ☐ NO	☐ SAT ☐ UNSAT	
		☐ YES ☐ NO	☐ SAT ☐ UNSAT	
		☐ YES ☐ NO	☐ SAT ☐ UNSAT	
		☐ YES ☐ NO	☐ SAT ☐ UNSAT	
		☐ YES ☐ NO	☐ SAT ☐ UNSAT	
		☐ YES ☐ NO	☐ SAT ☐ UNSAT	
		☐ YES ☐ NO	☐ SAT ☐ UNSAT	
		☐ YES ☐ NO	☐ SAT ☐ UNSAT	
		☐ YES ☐ NO	☐ SAT ☐ UNSAT	
		☐ YES ☐ NO	☐ SAT ☐ UNSAT	
		☐ YES ☐ NO	☐ SAT ☐ UNSAT	
		☐ YES ☐ NO	☐ SAT ☐ UNSAT	
		☐ YES ☐ NO	☐ SAT ☐ UNSAT	
		☐ YES ☐ NO	☐ SAT ☐ UNSAT	
		☐ YES ☐ NO	☐ SAT ☐ UNSAT	
		☐ YES ☐ NO	☐ SAT ☐ UNSAT	
		☐ YES ☐ NO	☐ SAT ☐ UNSAT	
		☐ YES ☐ NO	☐ SAT ☐ UNSAT	
		☐ YES ☐ NO	☐ SAT ☐ UNSAT	
		☐ YES ☐ NO	☐ SAT ☐ UNSAT	
		☐ YES ☐ NO	☐ SAT ☐ UNSAT	
		☐ YES ☐ NO	☐ SAT ☐ UNSAT	
		☐ YES ☐ NO	☐ SAT ☐ UNSAT	
		☐ YES ☐ NO	☐ SAT ☐ UNSAT	
		☐ YES ☐ NO	☐ SAT ☐ UNSAT	
		☐ YES ☐ NO	☐ SAT ☐ UNSAT	
		☐ YES ☐ NO	☐ SAT ☐ UNSAT	
		☐ YES ☐ NO	☐ SAT ☐ UNSAT	
		☐ YES ☐ NO	☐ SAT ☐ UNSAT	
		☐ YES ☐ NO	☐ SAT ☐ UNSAT	

ATTACHMENT 1
Page 2 of 2

5.[5] Date: From _____ to _____

5.[2]/[3]/[4] Comments: _____

5.[14] Performed by:

	/		/	/
Operator (print)	Signature	Z #	Initials	Date
	/		/	/
Operator (print)	Signature	Z #	Initials	Date
	/		/	/
Operator (print)	Signature	Z #	Initials	Date
	/		/	/
Operator (print)	Signature	Z #	Initials	Date
	/		/	/
Operator (print)	Signature	Z #	Initials	Date
	/		/	/
Operator (print)	Signature	Z #	Initials	Date
	/		/	/
Operator (print)	Signature	Z #	Initials	Date
	/		/	/
Operator (print)	Signature	Z #	Initials	Date

8.1[2] Reviewed By:

	/		/	/
SOM or designee (print)	Signature	Z #	Initials	Date

ATTACHMENT 2
Page 1 of 3

TA-54 AREA G TA-54-231 NITRATE SALT TRU WASTE CONTAINER DAILY TEMPERATURE DATA SHEET

6.[6] Date: From _____ to _____

	Monday 6.[6] Start Time: _____	Tuesday 6.[6] Start Time: _____	Wednesday 6.[6] Start Time: _____	Thursday 6.[6] Start Time: _____	Friday 6.[6] Start Time: _____	Saturday 6.[6] Start Time: _____	Sunday 6.[6] Start Time: _____
TA-54-231							
Calibrated Infrared Thermometer (4.2.1[1][B])	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.[7])	_____°F	_____°F	_____°F	_____°F	_____°F	_____°F	_____°F
Container ID #	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])
S818435							
S802833							
S801676							
S816810							
70069							
S822844							
S825879							
S793724							
S813545							
S822713							
S802739							
69907							
S804995							
S816434							

ATTACHMENT 2
Page 2 of 3

6.[6] Date: From _____ to _____

Container ID #	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])
TA-54-231 (continued)							
S805289							
S862888							
70072							
S823184							
S822599							
69904							
S805051							
S864213							
S853714							
S803078							
S825878							
S823124							
S804948							
S813385							
S842446							
Ambient Temperature (6.[12])	_____°F	_____°F	_____°F	_____°F	_____°F	_____°F	_____°F
End Time (6.[13])	_____	_____	_____	_____	_____	_____	_____
6.[13]	Operator: _____ Operator: _____	Operator: _____ Operator: _____	Operator: _____ Operator: _____	Operator: _____ Operator: _____	Operator: _____ Operator: _____	Operator: _____ Operator: _____	Operator: _____ Operator: _____

ATTACHMENT 2
Page 3 of 3

6.[6] Date: From _____ to _____

6.[2] Comments: _____

6.[17] Performed by:

Operator (print)	Signature	Z#	Initials	Date
	/	/	/	/
	/	/	/	/
	/	/	/	/
	/	/	/	/
	/	/	/	/
	/	/	/	/
	/	/	/	/
	/	/	/	/
	/	/	/	/
	/	/	/	/
	/	/	/	/
	/	/	/	/
	/	/	/	/
	/	/	/	/

8.1[2] Reviewed by:

SOM or designee (print)	Signature	Z#	Initials	Date
	/	/	/	/

ATTACHMENT 3
Page 1 of 3

TA-54 AREA G TA-54-375 CELL 1 NITRATE SALT TRU WASTE CONTAINER DAILY TEMPERATURE DATA SHEET

6.[6] Date: From _____ to _____

	Monday 6.[6] Start Time: _____	Tuesday 6.[6] Start Time: _____	Wednesday 6.[6] Start Time: _____	Thursday 6.[6] Start Time: _____	Friday 6.[6] Start Time: _____	Saturday 6.[6] Start Time: _____	Sunday 6.[6] Start Time: _____
TA-54-375 Cell 1							
Calibrated Infrared Thermometer (4.2.1[1][B])	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.[7])	_____°F	_____°F	_____°F	_____°F	_____°F	_____°F	_____°F
Container ID #	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])
68685							
68540							
LA00000070503 68553							
LA00000070503 69445							
69618							
69013							
LASB50522							
LASB50452							
LASB50431							
LASB50069							
LASB50073							
69636							
69616							
69417							

ATTACHMENT 3
Page 2 of 3

6.[6] Date: From _____ to _____

Container ID #	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])
TA-54-375 Cell 1 (continued)							
69620							
69520							
69641							
69298							
LASB02203							
Ambient Temperature (6.[12])	_____°F	_____°F	_____°F	_____°F	_____°F	_____°F	_____°F
End Time (6.[13])	_____	_____	_____	_____	_____	_____	_____
6.[13]	Operator: _____ Operator:_____	Operator: _____ Operator:_____	Operator: _____ Operator:_____	Operator: _____ Operator:_____	Operator: _____ Operator:_____	Operator: _____ Operator:_____	Operator: _____ Operator:_____

6.[2] Comments:

ATTACHMENT 3
Page 3 of 3

6.[6] Date: From _____ to _____

6.[17] Performed by:

Operator (print)	/ Signature	Z#	Initials	/ / Date
Operator (print)	/ Signature	Z#	Initials	/ / Date
Operator (print)	/ Signature	Z#	Initials	/ / Date
Operator (print)	/ Signature	Z#	Initials	/ / Date
Operator (print)	/ Signature	Z#	Initials	/ / Date
Operator (print)	/ Signature	Z#	Initials	/ / Date
Operator (print)	/ Signature	Z#	Initials	/ / Date
Operator (print)	/ Signature	Z#	Initials	/ / Date
Operator (print)	/ Signature	Z#	Initials	/ / Date
Operator (print)	/ Signature	Z#	Initials	/ / Date
Operator (print)	/ Signature	Z#	Initials	/ / Date
Operator (print)	/ Signature	Z#	Initials	/ / Date
Operator (print)	/ Signature	Z#	Initials	/ / Date
Operator (print)	/ Signature	Z#	Initials	/ / Date
Operator (print)	/ Signature	Z#	Initials	/ / Date

8.1[2] Reviewed by:

SOM or designee (print)	/ Signature	Z#	Initials	/ / Date

ATTACHMENT 4
Page 1 of 3

TA-54 AREA G TA-54-375 CELL 2 NITRATE SALT TRU WASTE CONTAINER DAILY TEMPERATURE DATA SHEET

6.[6] Date: From _____ to _____

	Monday 6.[6] Start Time: _____	Tuesday 6.[6] Start Time: _____	Wednesday 6.[6] Start Time: _____	Thursday 6.[6] Start Time: _____	Friday 6.[6] Start Time: _____	Saturday 6.[6] Start Time: _____	Sunday 6.[6] Start Time: _____
TA-54-375 Cell 2							
Calibrated Infrared Thermometer (4.2.1[1][B])	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.[7])	_____°F	_____°F	_____°F	_____°F	_____°F	_____°F	_____°F
Container ID #	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])
LASB02198							
68638							
69615							
69635							
69642							
69630							
69633							
68430							
68631							
69634							
68567							
94227							
LASB50442							
69644							
LASB50443							
69638							

ATTACHMENT 4
Page 2 of 3

6.[6] Date: From _____ to _____

Container ID #	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])
TA-54-375 Cell 2 (continued)							
68624							
68507							
69568							
69553							
69598							
LASB50559							
69015							
69639							
69637							
Ambient Temperature (6.[12])	_____°F	_____°F	_____°F	_____°F	_____°F	_____°F	_____°F
End Time (6.[13])	_____	_____	_____	_____	_____	_____	_____
6.[13]	Operator: _____ Operator:_____	Operator: _____ Operator:_____	Operator: _____ Operator:_____	Operator: _____ Operator:_____	Operator: _____ Operator:_____	Operator: _____ Operator:_____	Operator: _____ Operator:_____

6.[2] Comments:

ATTACHMENT 4
Page 3 of 3

6.[6] Date: From _____ to _____

6.[17] Performed by:

Operator (print)	/ Signature	Z#	Initials	/ Date
Operator (print)	/ Signature	Z#	Initials	/ Date
Operator (print)	/ Signature	Z#	Initials	/ Date
Operator (print)	/ Signature	Z#	Initials	/ Date
Operator (print)	/ Signature	Z#	Initials	/ Date
Operator (print)	/ Signature	Z#	Initials	/ Date
Operator (print)	/ Signature	Z#	Initials	/ Date
Operator (print)	/ Signature	Z#	Initials	/ Date
Operator (print)	/ Signature	Z#	Initials	/ Date
Operator (print)	/ Signature	Z#	Initials	/ Date
Operator (print)	/ Signature	Z#	Initials	/ Date
Operator (print)	/ Signature	Z#	Initials	/ Date
Operator (print)	/ Signature	Z#	Initials	/ Date
Operator (print)	/ Signature	Z#	Initials	/ Date
Operator (print)	/ Signature	Z#	Initials	/ Date
Operator (print)	/ Signature	Z#	Initials	/ Date

8.1[2] Reviewed by:

SOM or designee (print)	/ Signature	Z#	Initials	/ Date

ATTACHMENT 5
Page 1 of 2

TA-54 AREA G TA-54-375 CELL 3 NITRATE SALT TRU WASTE CONTAINER DAILY TEMPERATURE DATA SHEET

6.[6] Date: From _____ to _____

	Monday 6.[6] Start Time: _____	Tuesday 6.[6] Start Time: _____	Wednesday 6.[6] Start Time: _____	Thursday 6.[6] Start Time: _____	Friday 6.[6] Start Time: _____	Saturday 6.[6] Start Time: _____	Sunday 6.[6] Start Time: _____
TA-54-375 Cell 3							
Calibrated Infrared Thermometer (4.2.1[1][B])	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.[7])	_____°F	_____°F	_____°F	_____°F	_____°F	_____°F	_____°F
Container ID #	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])
69519							
69645							
94068							
93605							
69548							
69604							
LASB50529							
LASB50418							
69036							
LASB50451							
69559							
LASB50448							
Ambient Temperature (6.[12])	_____°F	_____°F	_____°F	_____°F	_____°F	_____°F	_____°F
End Time (6.[13])	_____	_____	_____	_____	_____	_____	_____
6.[13]	Operator: _____ Operator:_____	Operator: _____ Operator:_____	Operator: _____ Operator:_____	Operator: _____ Operator:_____	Operator: _____ Operator:_____	Operator: _____ Operator:_____	Operator: _____ Operator:_____

ATTACHMENT 5
Page 2 of 2

6.[6] Date: From _____ to _____

6.[2] Comments:

6.[17] Performed by:

Operator (print)	Signature	Z#	Initials	Date
	/		/	/
Operator (print)	Signature	Z#	Initials	Date
	/		/	/
Operator (print)	Signature	Z#	Initials	Date
	/		/	/
Operator (print)	Signature	Z#	Initials	Date
	/		/	/
Operator (print)	Signature	Z#	Initials	Date
	/		/	/
Operator (print)	Signature	Z#	Initials	Date
	/		/	/
Operator (print)	Signature	Z#	Initials	Date

Operator (print)	Signature	Z#	Initials	Date
	/		/	/
Operator (print)	Signature	Z#	Initials	Date
	/		/	/
Operator (print)	Signature	Z#	Initials	Date
	/		/	/
Operator (print)	Signature	Z#	Initials	Date
	/		/	/
Operator (print)	Signature	Z#	Initials	Date
	/		/	/
Operator (print)	Signature	Z#	Initials	Date
	/		/	/
Operator (print)	Signature	Z#	Initials	Date

8.1[2] Reviewed by:

SOM or designee (print)	Signature	Z#	Initials	Date
	/		/	/

ATTACHMENT 6
Page 1 of 3

TA-54 AREA G NITRATE SALT TRU WASTE CONTAINER HOURLY TEMPERATURE DATA SHEET

6.[6] Date: From ___________ to ____________ Location: ____________________

	Start Time: 6.[6] ________	Start Time: 6.[6] ________	Start Time: 6.[6] ________	Start Time: 6.[6] ________	Start Time: 6.[6] ________	Start Time: 6.[6] ________	Start Time: 6.[6] ________	Start Time: 6.[6] ________	Start Time: 6.[6] ________	Start Time: 6.[6] ________	Start Time: 6.[6] ________	Start Time: 6.[6] ________	Start Time: 6.[6] ________	Start Time: 6.[6] ________
Calibrated Infrared Thermometer (4.2.1[1][B])	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 ________	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.[7])	________°F	________°F	________°F	________°F	________°F	________°F	________°F	________°F	________°F	________°F	________°F	________°F	________°F	________°F
Container ID # (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])

ATTACHMENT 6
Page 2 of 3

6.[6] Date: From _____ to _____ Location: _____

Container ID # (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])	Temp (°F) (6.[8]/6.[9])
Ambient Temperature (6.[12])	_____°F	_____°F	_____°F	_____°F	_____°F	_____°F	_____°F	_____°F	_____°F	_____°F	_____°F	_____°F	_____°F	_____°F
End Time (6.[13])	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
6.[13]	Operator: _____ Operator: _____	Operator: _____ Operator: _____	Operator: _____ Operator: _____	Operator: _____ Operator: _____	Operator: _____ Operator: _____	Operator: _____ Operator: _____	Operator: _____ Operator: _____	Operator: _____ Operator: _____	Operator: _____ Operator: _____	Operator: _____ Operator: _____	Operator: _____ Operator: _____	Operator: _____ Operator: _____	Operator: _____ Operator: _____	Operator: _____ Operator: _____

ATTACHMENT 6
Page 3 of 3

6.[6] Date: From _____ to _____ Location: _____

6.[2] Comments:

6.[17] Performed by:

Operator (print)	Signature	Z#	Initials	Date
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8.1[2] Reviewed by:

SOM or designee (print)	Signature	Z#	Initials	Date
				/ /

ENCLOSURE 2

EWMO-AREAG-SO-1247, R.2: TA-54 Area G Domes TA-54-231 and TA-54-375 PermaCon Access Restrictions

ENV-DO-14-0346

LA-UR-14-28602

Date: NOV 1 2 2014

STANDING ORDER

1. Standing Order Number: EWMO-AREAG-SO-1247, R.2

2. Standing Order Type: (check one) ☐ **Division** ☒ **Facility**

3. Applicable Facilities: TA-54 Area G

4. Standing Order Title: TA-54 Area G Domes TA-54-231 and TA-54-375 PermaCon Access Restrictions

5. Distribution List: (By Functional Title): TA-54 Timely Order Book and Environmental Programs (EP) Document Control

6. Approval:

Gail Welsh	/s/ Gail Welsh	10/15/14
Print name	Signature	Date

(Approval Authority for division-level standing orders is the FOD, for facility-level, the OM or designee.)

Standing Order Effective Date: 10/15/14

Convert this Standing Order to a procedure? ☐ Yes, by _____ (Date) ☒ No

7. Purpose:

This standing order restricts access to the PermaCons in Domes TA-54-231 and TA-54-375 to prevent workers from coming into unnecessary contact with the waste containers and establishes restrictions for the entry into the TA-54-375 PermaCon [e.g., personal protective equipment (PPE) and waste container temperature].

Background: Monitoring requirements of LA-UR-14-23820, LANL Nitrate Salt-Bearing Waste Container Isolation Plan, (i.e., Isolation Plan) is accomplished by the performance of EWMO-AREAG-FO-DOP-1246, Nitrate Salt-Bearing TRU Waste Container Monitoring. The required monitoring performed includes hourly visual inspection and daily temperature measurements of all waste containers within the TA-54-231 and TA-54-375 PermaCon. Additionally, hourly temperature measurements are obtained for waste containers within the TA-54-375 PermaCon that have attached thermocouples, using computer located inside of the TA-54-375 PermaCon Control Room. Daily head-space gas sampling is performed for containers 68685 and LASB50522. Biweekly head space gas sampling is also performed for five additional waste containers.

The following personnel are affected by this standing order: EWMO Operations Manager, Shift Operations Managers, Nuclear Operators, Radiological Control Technicians, and Operations Center Operators.

8. Actions and Duration:

8.1 Requirement

Shift Operations Manager (SOM) approval is required to access the PermaCons in Domes TA-54-231 and TA-54-375, except for inspections performed in accordance with EWMO-AREAG-FO-DOP-1246.

The PermaCons in Domes TA-54-231 and TA-54-375 **SHALL** be posted on the outside of each access point instructing personnel to obtain SOM approval before entering the PermaCon, unless they are performing EWMO-AREAG-FO-DOP-1246.

8.1 Requirement (continued)

Additional Dome TA-54-375 PermaCon access requirements:

- Entry into any cell requires Level I PPE (coveralls, booties, hood, and gloves) and Air Purifying Respirators with a dual GMC-P100 cartridge, in addition to the applicable Radiological Work Permit.
- Before entry the temperature of Standard Waste Box (SWB) 68685 **SHALL** be verified to be is less than or equal to 10 °F above ambient using the computer in the TA-54-375 PermaCon Control Room.

8.2 Action(s) to be taken

8.2.1 TA-54-231 PermaCon Entry

[1] **OBTAIN** SOM approval for entry except to perform EWMO-AREAG-FO-DOP-1246 inspections.

8.2.2 TA-54-375 PermaCon Entry

[1] **OBTAIN** SOM approval for entry except to perform EWMO-AREAG-FO-DOP-1246 inspections.

NOTE *The following action is performed using the computer located inside of the TA-54-375 PermaCon Control Room and receiving input from SWB 68685 using three thermocouples (T1 – SWB top, T2 – SWB side, and T3 – ambient).*

[2] **DETERMINE** whether the T1 (SWB top thermocouple) and T2 (SWB side thermocouple) indicated temperatures are less than or equal to 10 °F above the T3 (ambient thermocouple) indicated temperature.

[3] **IF** either the T1 or T2 indicated temperature is greater than 10 °F above than the T3 (ambient) temperature,
THEN STOP activities associated with the entry into the TA-54-375 PermaCon and **NOTIFY** the TA-54 Operations Center of the discrepancy.

[4] **IF** both the T1 and T2 indicated temperatures satisfy either of the following:
- Less than the T3 (ambient temperature
- Less than or equal to 10 °F above the T3 (ambient) temperature,

THEN OBTAIN and **DON** level I PPE and Air Purifying Respirator with a dual GMC-P100 cartridge for the TA-54-375 PermaCon entry.

8.2.3 EWMO-AREAG-FO-DOP-1246 Inspections

Hourly visual inspections will be conducted from outside of the PermaCon through the windows into the cells and hourly temperature measurements will be obtained from using the TA-54-375 PermaCon control Room computer. Daily head-space gas sampling will be conducted as required by the Isolation Plan. Temperature measurements of the exterior of the waste containers and visual inspection of the waste containers by personnel within the PermaCon will also be performed daily.

8.3 Duration

This standing order will remain in effect until cancelled or superseded.

9. Unreviewed Safety Question (USQ) Review:

USQ process complete? ☒ Yes ☐ N/A

USQ No. (if applicable): AREAG-14-441-C

If "N/A" is checked, then justify below:

USQ Qualified Evaluator (QEV)

Lawrence Garcia	/ /s/ Lawrence Garcia	/ 10/14/14
Print name	Signature	Date

10. Derivative Classifier Review:

This document was reviewed to ensure proper classification and is classified as:

☒ Unclassified ☐ Unclassified Controlled Nuclear Information (UCNI)

☐ Official Use Only (OUO) ☐ Classified

NOTE: If this document is OUO, UCNI, and/or classified, add the appropriate markings, distribution limitation statement, and guidance data block(s).

Derivative Classifier (DC)

Art Crawford	/ /s/ Art Crawford	/ 10/15/14
Print name	Signature	Date

11. Standing Order Cancellation:

Choose one of the following: ☐ USQ complete ☐ N/A

USQ No. (if applicable): _____

Responsible Manager (FOD for division-level standing orders, OM or designee for facility-level)

Print name	Signature	Date

(Attach Attachment 2, Timely Order Reviewer Signoff Sheet, to document reviews of this standing order.)