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 ENV-DO-14-0265

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 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

The purpose of this letter is to transmit a procedure that has 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 (EP-AREAG-FO-DOP-1246, R.0) to the NMED originally on May 29, 2014, as Attachment 5 of the *Revised LANL Nitrate Salt-Bearing Waste Container Isolation Plan.* Additionally, revisions of EP-AREAG-FO-DOP-1246, were submitted to the NMED on July 23, 2014, August 25, 2014, and September 19, 2014 (as an attachment to the *LANL Nitrate Salt-Bearing Waste Container Waste Container Isolation Pla, Revision 2*). The current update of the procedure changes the name of the procedure to: EWMO-AREAG-FO-DOP-1246, R.4: *Nitrate Salt-Bearing TRU Waste Container Monitoring.* 

As discussed within the twice weekly technical phone calls held between the NMED and the Permittees as stipulated by the modification to Administrative Order No. 5-19001 issued by the NMED, the procedure, *Nitrate Salt-Bearing TRU Waste Container Monitoring*, has been revised and the updated procedure (Enclosure 1) is provided as stated within the *Revised LANL Nitrate Salt-Bearing Waste Container Isolation Plan*.



Mr. John E. Kieling ENV-DO-14-0265

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,

R6neggs for

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

Sincerely,

There E Turnel

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

AMD:GET:MPH:LVH/kt

Enclosures: (1) EWMO-AREAG-FO-DOP-1246, R.4: Nitrate Salt-Bearing TRU Waste Container Monitoring

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### **ENCLOSURE 1**

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### EWMO-AREAG-FO-DOP-1246, R.4: Nitrate Salt-Bearing TRU Waste Container Monitoring

### ENV-DO-14-0265

LA-UR-14-27200

Date: \_\_\_\_\_ SEP 3 0 2014

## EWMO-AREAG-FO-DOP-1246, R.4

## Nitrate Salt-Bearing TRU Waste Container Monitoring

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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.

### Nitrate Salt-Bearing TRU Waste Container Monitoring

Document No.:EWMO-AREAG-FO-DOP-1246Revision:4Effective Date:9-11-2014Page:2 of 37

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**

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#### Nitrate Salt-Bearing TRU Waste Container Monitoring

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# Document No.:EWMO-AREAG-FO-DOP-1246Revision:4Effective Date:9-11-2014Page:3 of 37

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.

#### **REVISION HISTORY (continued)**

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#### 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 Shipment and Safe Storage Project (LTP-SSS) Project 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 Environmental and Waste Management Facility Operations Director (EWMO FOD) and the Associate Director of Environmental Programs (ADEP).

Inspections required by Attachment E, Inspection Plan, of the LANL Hazardous Waste Permit are performed in accordance with EP-DIV-DOP-0102, EWMO RCRA Inspections.

#### 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 <u>not</u> 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 <u>not</u> 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 <u>not</u> allow eyes of user or observers to become exposed to the beam.
- Waste containers with liquids (any amount or configuration) that have <u>not</u> 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**

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

#### 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 sections of this procedure.

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**

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- [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 Contamination Area (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** ( $\sqrt{}$ ) YES or NO on Attachment 1:

TA-54-231

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- 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 <u>not</u> 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 <u>not</u> 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** ( $\sqrt{}$ ) 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.
    - <u>MOVE-AWAY</u> upwind from the area of concern.
    - MAKE Notifications (e.g., TA-54 Operations Center).
  - [B] **CHECK** ( $\sqrt{1}$ ) 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 ( $\sqrt{}$ ) 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.

### **NOTE 2** 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 <u>Cell 1</u> Nitrate Salt TRU Waste Container Daily Temperature Data Sheet
- Attachment 4, TA-54 Area G TA-54-375 <u>Cell 2</u> Nitrate Salt TRU Waste Container Daily Temperature Data Sheet
- Attachment 5, TA-54 Area G TA-54-375 <u>Cell 3</u> Nitrate Salt TRU Waste Container Daily Temperature Data Sheet
- **NOTE 3** 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.
- [2] **PROVIDE** a description of any unsatisfactory conditions, notifications, and corrective actions in the Comments section of Attachments 2–6, 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.

- [5] **DETERMINE** whether the daily or hourly temperature readings are to be conducted as directed by the SOM.
- [6] **RECORD** the date range and start time on the applicable attachment.
- [7] **RECORD** the following infrared calibration information on the applicable attachment:
  - Brand name
  - Model number
  - Calibration due date
  - File number
- [8] **IF** the infrared thermometer has exceeded the calibration due date, **THEN:** 
  - [A] **NOTIFY** the TA-54 Operations Center of the discrepancy.
  - [B] **OBTAIN** another infrared thermometer that is within the calibration due date.
  - [C] **GO** to Step 6.[7].
- [9] **MEASURE** the ambient temperature (e.g., the wall of the contamination control enclosure or designated location) using an infrared thermometer, and **RECORD** the ambient temperature (in °F) on the applicable attachment.

- **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 <u>were not</u> packaged for Waste Isolation Pilot Plant (WIPP) shipment (<u>without</u> 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 <u>were</u> packaged for WIPP shipment (<u>with</u> a LASBxxxxx number) do <u>not</u> have the location of the nitrate salt-bearing drum identified on the outside of the SWB.
- [10] IF the nitrate salt-bearing drum location within the SWB is known, THEN MEASURE the temperature (in °F) on the top approximate center of each nitrate salt drum, through the SWB lid, using an infrared thermometer, and RECORD the container number, as applicable, and temperature on the applicable attachment.
- [11] 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 <u>highest</u> temperature measurement on the applicable attachment.
- [12] **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.

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

#### **TA-54 Operations Center**

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- [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**

- [13] 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.
- [14] **MEASURE** the ambient temperature of the contamination control enclosure, using an infrared thermometer, and **RECORD** the temperature on the applicable attachment.
- [15] **RECORD** the end time and **INITIAL** on the applicable attachment.
- [16] RECORD "N/A" (not applicable) for temperature readings that were <u>not</u> recorded and DOCUMENT an explanation in the Comments section of the applicable attachment.
- [17] IF a temperature is recorded incorrectly, THEN RECONCILE the discrepancy and INITIAL on the applicable attachment.

- [18] **REPEAT** Steps 6.[2] through 6.[17] for TA-54-231 and TA-54-375 until all of the nitrate salt drum temperatures to be measured have been recorded.
- [19] **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

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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 <u>http://int.lanl.gov/safety/iwmc/</u> [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 <u>Records Processing</u>

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#### **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 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 <u>not</u> 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.
Salt TRU Waste Container Daily Temperature Data Sheet			
Attachment 6, TA-54 Area G Nitrate Salt TRU Waste Container Hourly Temperature Data Sheet			

#### 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)

EP-DIV-DOP-0102, EWMO RCRA Inspections

#### 9. **REFERENCES** (continued)

LANL Hazardous Waste Facility Permit

P101-18, Procedure for Pause/Stop Work

P300, Integrated Work Management

P330-6, Nonconformance Reporting

Nitrate Salt-Bearing TRU Waste **Container Monitoring** 

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### ATTACHMENT 1 Page 1 of 2

#### NITRATE SALT TRU WASTE CONTAINER VISUAL INSPECTION DATA SHEET

5.[5] Date: From \_\_\_\_\_ to \_\_\_\_\_ Location: \_\_\_\_\_

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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])
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Nitrate Salt-Bearing TRU Waste Container Monitoring Document No.:EWMO-AREAG-FO-DOP-1246Revision:4Effective Date:9-11-2014Page:23 of 37

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#### 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							and a second
Calibrated Infrared Thermometer (6.[7])	Brand: Model: Cal. Due Date: File Number						
Ambient Temperature (6.[9])	°F						
Container ID #	Temp (°F) (6.[10]/6.[11])						
S818435							
\$802833							
S801676							
S816810							
70069							
S822844							
S825879							
\$793724							
S813545							
S822713							
S802739							
69907							
S804995							
S816434							

### ATTACHMENT 2 Page 2 of 3

6.[6] Date: From \_\_\_\_\_ to \_\_\_\_

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Container ID #	Temp (°F) (6.[10]/6.[11])						
TA-54-231 (continued	)						
S805289							
S862888							
70072							
S823184							
S822599							
69904							
S805051							
S864213							
S853714							
S803078							
S825878							
S823124				-			
S804948							
\$813385							
S842446							
Ambient Temperature (6.[14])	°F						
End Time (6.[15])							
6.[15]	Operator:						
5(10)	Operator:						

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 Signature
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#### **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 (6.[7])	Brand: Model: Cal. Due Date: File Number						
Ambient Temperature (6.[9])	°F						
Container ID #	Temp (°F) (6.[10]/6.[11])						
68685							
68540							
68553							
69445							
69618							
69013							
LASB50522							
LASB50452							
LASB50431							
LASB50069							
LASB50073							
69636							
69616							
69417							

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### ATTACHMENT 3 Page 2 of 3

6.[6] Date: From \_\_\_\_\_\_ to \_\_\_\_\_

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Container 1D #	Temp (°F) (6.[10]/6.[11])						
TA-54-375 Cell 1 (con	tinued)						
69620							
69520							
69641							
69298							
LASB02203							
Ambient Temperature (6.[14])	°F						
End Time (6.[15])							
6.[15]	Operator: Operator:						

6.[2] Comments:

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### ATTACHMENT 3 Page 3 of 3

6.[6] Date: From \_\_\_\_\_\_ to \_\_\_\_\_

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SOM or designee (print) Signature

Initials Date

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#### **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	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
	6.[6]	6.[6]	6.[6]	6.[6]	6.[6]	6.[6]	6.[6]
	Start Time:	Start Time:	Start Time:	Start Time:	Start Time:	Start Time:	Start Time:
TA-54-375 Cell 2	an an tha an an an an Arthrean. An anns an Arthrean Arthrean an Arthrean						
Calibrated Infrared	Brand:	Brand:	Brand:	Brand:	Brand:	Brand:	Brand:
Thermometer	Model:	Model:	Model:	Model:	Model:	Model:	Model:
(6.[7])	Cal. Due Date:	Cal. Due Date:	Cal. Due Date:	Cal. Due Date:	Cal. Due Date:	Cal. Due Date:	Cal. Due Date:
	File Number	File Number	File Number	File Number	File Number	File Number	File Number
Ambient Temperature (6.[9])	°F	°F	°F	°F	°F	°F	°F
Container ID #	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])
LASB02198							
68638							
69615							
69635							
69642							
69630							
69633							
68430							
68631							
69634							
68567							
94227							
LASB50442							
69644							
LASB50443							
69638							

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### ATTACHMENT 4 Page 2 of 3

6.[6] Date: From to

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Container 1D #	Temp (°F) (6.[10]/6.[11])						
TA-54-375 Cell 2 (con	tinued)						
68624							
68507							
69568							
69553							
69598							
LASB50559							
69015							
69639							
69637							
Ambient Temperature (6.[14])	°F						
End Time (6.[15])							
6.[15]	Operator: Operator:						

6.[2] Comments:

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### ATTACHMENT 4 Page 3 of 3

6.[6] Date: From \_\_\_\_\_ to \_\_\_\_\_

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#### 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 \_\_\_\_\_

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	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 (6.[7])	Brand: Model: Cal. Due Date: File Number						
Ambient Temperature (6.[9])	°F						
Container ID #	Temp (°F) (6.[10]/6.[11])						
69519							
69645							
94068							
93605							
69548							
69604							
LASB50529							
LASB50418							
69036							
LASB50451							
69559							
LASB50448							
Ambient Temperature (6.[14])	°F						
End Time (6.[15])							
6.[15]	Operator: Operator:						

UET	Nitrate Salt-Bearing TRU Waste Container Monitoring	Document No.: Revision: Effective Date: Page:	EWMO-AREAG-FO-DOP-1246 4 9-11-2014 34 of 37
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Nitrate Salt-Bearing TRU Waste Container Monitoring	Revision:	4
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### 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]													
Calibrated	Brand:	Brand:	Brand:	Brand:	Brand	Brand:								
Infrared Thermometer	Model	Model:	Model:	Model:	Model:	Model	Model:	Model	Model:	Model	Model:	Model:	Model	Model:
(6.[7])	Cal. Due Date:													
	File Number													
Ambient Temperature (6.[9])	°F													
Container ID # (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])													

Nitrate Salt-Bearing TRU Waste Container Monitoring	Document No.: Revision: Effective Date: Page:	EWMO-AREAG-FO-DOP-1246 4 9-11-2014 36 of 37

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6.[6] Date: From \_\_\_\_\_\_ to \_\_\_\_\_ Location: \_\_\_\_\_

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Container ID #	Temp (°F)	Temp (°F)	Temp (°F)	Temp (°F)	Temp (°F)	Temp (°F)	Temp (°F)	Temp (°F)	Temp (°F)					
(0.[10]/0.[11])	(0.[10]/0.[11])	(0.[10]/0.[11])	(0.[10]/0.[11])	(0.[10]/0.[11])	(0.[10]/0.[11])	(0.[10]/0.[11])		(0.[10]/0.[11]/	(0.[10]/0.[11])	(0.[10]/0.[11]/	(0.[10]/0.[11])	(0.[10]0.[11])		
	•													
Ambient Temperature (6.[14])	•F	°F	°F	°F	°F	°F	°F	°F	°F	°F	°F	°F	°F	°F
End Time (6.[15])														
6.[15]	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

UET	Nitrate Salt-Bearing TRU Waste Container Monitoring	Document No.: Revision: Effective Date: Page:	EWMO-AREAG-FO-DOP-1246 4 9-11-2014 37 of 37
	ATTACHMENT 6 Page 3 of 3		
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