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Date: **NOV 08 2016**  
 Symbol: EPC-DO-16-316  
 LA-UR: 16-26708  
 Locates Action No.: U1602130

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



Dear Mr. Kieling:

**Subject: Replacement Page for the Los Alamos National Laboratory Nitrate Salt-Bearing Waste Container Isolation Plan, Revision 7**

The purpose of this letter is to submit replacement pages for the *Los Alamos National Laboratory (LANL) Nitrate Salt-Bearing Waste Container Isolation Plan, Revision 7* (Isolation Plan) as directed by the New Mexico Environment Department (NMED) in a letter dated October 17, 2016. The Los Alamos National Security, LLC (LANS) and the U.S. Department of Energy (DOE), collectively the Permittees, submitted the original draft of the Isolation Plan as required by the May 19, 2014, *Administrative Order*, which was then modified by letters on July 10, 2014; April 27, 2015; May 8, 2015; and August 12, 2015.

The Permittees have made the following changes to Revision 7 of the Isolation Plan:

**1. Part II.11, page 7:**

The extra deletion was corrected and the sentence now reads: "The Permittees received copies of corrected manifests from WCS and WIPP and the Permittees have subsequently provided copies of the corrected manifests to NMED."

Copies of the revised page of the *LANL Nitrate Salt-Bearing Waste Container Isolation Plan, Revision 7*, with editing marks and without, are included as Enclosures 1 and 2 to this letter as replacements for the September 30, 2016 submittal. The remainder of the document has not been provided with this submittal. Also, please note that the unlimited release number for the replacement pages was not revised and remains LA-UR-16-26708.



If you have comments/questions or would like to meet regarding this submittal, please contact Mark P. Haagenstad at (505) 665-2014 or Karen E. Armijo at (505) 665-7314.

Sincerely,



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

Sincerely,



Karen E. Armijo  
Permitting and Compliance Program Manager  
National Nuclear Security Administration  
Los Alamos Field Office  
U.S. Department of Energy

JCB:KEA:MPH:LVH/lm

- Enclosures: (1) Replacement page for LANL Nitrate Salt-Bearing Waste Container Isolation Plan Revision 7 with Editing Marks  
(2) Replacement page for Clean-Copy LANL Nitrate Salt-Bearing Waste Container Isolation Plan Revision 7

Cy: Butch Tongate, NMED, Santa Fe, NM, (E-File)  
Kathryn Roberts, NMED, Santa Fe, NM, (E-File)  
Dave Cobrain, NMED/HWB, Santa Fe, NM, (E-File)  
Neelam Dhawan, NMED/HWB, Santa Fe, NM, (E-File)  
Siona Briley, NMED/HWB, Santa Fe, NM, (E-File)  
Douglas E. Hintze, EM-LA, (E-File)  
Kimberly Davis Lebak, NA-LA, (E-File)  
David J. Nickless, EM-WM, (E-File)  
Peter Maggiore, NA-LA, (E-File)  
Lisa K. Cummings, LASO-OC, (E-File)  
Jody M. Pugh, NA-LA, (E-File)  
Karen E. Armijo, NA-LA, (E-File)  
Kirsten M. Laskey, EM-LA, (E-File)  
Craig S. Leasure, PADOPS, (E-File)  
William R. Mairson, PADOPS, (E-File)  
Randall M. Erickson, ADEM, (E-File)  
Cheryl D. Cabbil, ADNHHO, (E-File)  
Michael T. Brandt, ADESH, (E-File)  
Raeanna Sharp-Geiger, ADESH, (E-File)  
Enrique Torres, ADEM, (E-File)  
David J. Funk, ADEM, (E-File)  
Andrew R. Baumer, ADEM,-PO, (E-File)  
Stephanie Q. Griego, EWMO-DO, (E-File)  
Paul N. Newberry, WD-SRS, (E-File)  
David E. Frederici, WD-WPE, (E-File)

Mr. John Kieling  
EPC-DO-16-316

- 3 -

Cy (continued):

Deborah K. Woitte, LC-ESH, (E-File)  
Kenneth M. Hargis, WD-WPE, (E-File)  
Mark P. Haagenstad, EPC-CP, (E-File)  
Deborah L. Guffee, SI-DC, (E-File)  
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# ENCLOSURE 1

Replacement page for LANL Nitrate Salt-Bearing Waste  
Container Isolation Plan Revision 7 with Editing Marks

EPC-DO-16-316

LA-UR-16-26708

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846, Method 1040. The surrogates for the remediated nitrate salt waste were comprised of a mixture of sWheat Scoop® Swheat™ kitty litter and sodium nitrate in a ratio of 3:1. This mixture represents the main components of interest in the remediated waste, i.e., the **organic sWheat Scoop®** kitty litter and the principal nitrate salt as indicated by the May 22, 2014 analysis. The additional testing determined that the surrogate mixture was a DOT Oxidizer, Packing Group II by the DOT test and a Category II oxidizer by Method 1040. Additional analytical tests for ignitability have also been conducted on various surrogates related the investigation of nitrate-salt bearing wastes.

- 11) The Permittees have finalized correspondence with Waste Control Specialists (WCS), the ~~Waste Isolation Pilot Plant (WIPP)~~, and any other agencies related to the assignment of EPA Hazardous Waste Number D001 to containers that were shipped to WCS and/or WIPP. The Permittees received copies of corrected manifests from WCS and, but not WIPP to date and the ~~The~~ Permittees have subsequently provided copies of the corrected manifests to NMED ~~with WCS corrected manifests and will provide the WIPP corrected manifests within 15 business days of receipt~~. Additionally, the Permittees have provided NMED with all of the Permittees' other correspondence on this issue within Isolation Plan Revisions 2 & 3, and by letters dated October 22, 2015 and September 26, 2016 (ENV-DO-15-0293 and EPC-DO-16-282).
- 12) In late February 2015, the Permittees identified an additional 3 parent containers designated as within waste stream LA-MIN04 to be suspect nitrate salt-bearing waste containers. The 3 parent containers produced 10 daughter waste containers: 3 daughters are designated as LA-MDH01 (i.e., debris) and 7 daughters are designated as LA-MIN04. The 10 daughter waste containers are located at Waste Control Specialists (WCS) (2 containers), WIPP (4 containers), and LANL (4 containers). All 4 containers located at LANL were in 55-gallon Pipe Overpack Containers (POCs). These containers are 55-gallon waste containers that house a closed pipe component containing remediated nitrate salt-bearing waste. As a result of this reevaluation, the Permittees determined that the 10 daughter waste containers are suspected to hold nitrate salt-bearing waste.
- 13) On March 12, 2015, the Permittees identified an additional 2 parent waste containers designated as LA-MDH01 (i.e., debris) to be suspect nitrate salt-bearing waste containers. The parent waste containers produced 3 daughter waste containers also designated as LA-MDH01. The Permittees and CCP reviewed generator AK documentation, RTR videos, and conducted interviews with SMEs to determine if these 3 daughter waste containers held any nitrate-salt bearing wastes. As a result of this reevaluation, the Permittees determined that the 3 daughter waste containers, located at WIPP, were suspected to hold nitrate salt-bearing waste.
- 14) On March 27, 2015, the Permittees placed the POCs in the TA-54-375 Perma-Con®.

## **ENCLOSURE 2**

**Replacement page for Clean-Copy LANL Nitrate Salt-Bearing  
Waste Container Isolation Plan Revision 7**

**EPC-DO-16-316**

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mixture of *sWheat Scoop*® kitty litter and sodium nitrate in a ratio of 3:1. This mixture represents the main components of interest in the remediated waste, i.e., the *sWheat Scoop*® kitty litter and the principal nitrate salt as indicated by the May 22, 2014 analysis. The additional testing determined that the surrogate mixture was a DOT Oxidizer, Packing Group II by the DOT test and a Category II oxidizer by Method 1040. Additional analytical tests for ignitability have also been conducted on various surrogates related the investigation of nitrate-salt bearing wastes.

- 11) The Permittees have finalized correspondence with Waste Control Specialists (WCS), the WIPP, and any other agencies related to the assignment of EPA Hazardous Waste Number D001 to containers that were shipped to WCS and/or WIPP. The Permittees received copies of corrected manifests from WCS and WIPP and the Permittees have subsequently provided copies of the corrected manifests to NMED. Additionally, the Permittees have provided NMED with all of the Permittees' other correspondence on this issue within Isolation Plan Revisions 2 & 3, and by letters dated October 22, 2015 and September 26, 2016 (ENV-DO-15-0293 and EPC-DO-16-282).
- 12) In late February 2015, the Permittees identified an additional 3 parent containers designated as within waste stream LA-MIN04 to be suspect nitrate salt-bearing waste containers. The 3 parent containers produced 10 daughter waste containers: 3 daughters are designated as LA-MDH01 (i.e., debris) and 7 daughters are designated as LA-MIN04. The 10 daughter waste containers are located at Waste Control Specialists (WCS) (2 containers), WIPP (4 containers), and LANL (4 containers). All 4 containers located at LANL were in 55-gallon Pipe Overpack Containers (POCs). These containers are 55-gallon waste containers that house a closed pipe component containing remediated nitrate salt-bearing waste. As a result of this reevaluation, the Permittees determined that the 10 daughter waste containers are suspected to hold nitrate salt-bearing waste.
- 13) On March 12, 2015, the Permittees identified an additional 2 parent waste containers designated as LA-MDH01 (i.e., debris) to be suspect nitrate salt-bearing waste containers. The parent waste containers produced 3 daughter waste containers also designated as LA-MDH01. The Permittees and CCP reviewed generator AK documentation, RTR videos, and conducted interviews with SMEs to determine if these 3 daughter waste containers held any nitrate-salt bearing wastes. As a result of this reevaluation, the Permittees determined that the 3 daughter waste containers, located at WIPP, were suspected to hold nitrate salt-bearing waste.
- 14) On March 27, 2015, the Permittees placed the POCs in the TA-54-375 Perma-Con®.
- 15) After the approval of LANL Isolation Plan, Revision 3 on April 27, 2015, the Permittees discontinued visual and temperature monitoring of unremediated nitrate salt waste containers and removed them from isolation and into compliant storage within another permitted unit.