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**Subject:** Daily Technical Call Submission - June 10, 2014

EP2014-5165

**Date:** Tuesday, June 10, 2014 5:41:17 PM MT

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Attached is the written daily submission from today's pre-scheduled technical call. The Permittees are submitting this pursuant to Section 19 of the May 19, 2014, *Administrative Order*, and Section VIII of the May 29, 2014, *Revised LANL Nitrate Salt-Bearing Waste Container Isolation Plan*.

If you have any revisions, please let me know.

We will talk with you on tomorrow's call.

Thank you

Tori

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Tori George

Program Director for Regulatory Management  
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# NMED / LANL Technical Call

June 10, 2014

## Participation:

- New Mexico Environment Department: John Kieling, Steve Pullen, Tim Hall, Siona Briley, Cole Smith, Steve Holmes, Ricardo Maestas.
- LANL – Los Alamos Field Office: Dave Nickless, Silas DeRoma, Gene Turner.
- LANL - Los Alamos National Security: Tori George, Mark Haagenstad.

## LANL Technical Update:

- **Location of Nitrate Salt-Bearing Wastes**
  - Remediated nitrate salt-bearing waste containers.
    - All containers remain in the 375 Permacon.
  - Unremediated nitrate salt-bearing waste containers.
    - All containers remain in the 231 Permacon.
- **Monitoring - Daily Temperature**
  - Temperatures remain below 90°F.
- **Monitoring – Visual Inspections**
  - No abnormal conditions.
- **Additional measures currently underway**
  - As a conservative measure, LANL is currently conducting additional monitoring on container 68685. This additional monitoring includes:
    - Collecting a daily head space gas sample.
      - CO<sub>2</sub> - Moving towards equilibrium between SWB and drum. The Permittees are working with LANL chemistry SMEs, and will continue to watch this trend.
      - H<sub>2</sub>, CH<sub>4</sub>, and VOCs - all below LFLs.
      - LANL also conducting *solid phase micro-extraction* technique as recommended by chemistry peer review.
    - Hourly temperature measurements.
      - Temperatures remain below 90°F.
- **Anticipated Changes to Nitrate Salt-Bearing Waste Containers (e.g. movement, re-packaging).**
  - Currently, no further movements or re-packaging are planned.

**Other:**

- **Sampling Procedures**

- LANL is developing procedures for possible future sampling of empty parent containers and unremediated nitrate salt-bearing containers at LANL. NMED (Tim Hall) provided information from the LANL Hazardous Waste Facility Permit for LANL to consider in developing these procedures. LANL ENV will follow up with Mr. Hall.

**Requested Information / Pending Issues:**

- **Summary Input for Periodic WIPP Discussions**

- LANL drafts an information summary for these discussions (currently bi-weekly, but frequency can change). Per NMED's request, LANL will provide a copy directly to NMED.
- The June 10, 2014, LANL *Summary Providing Input* is attached.

- **2014 Annual TRU Waste Management Certification Audit**

- In response to NMED's question on access to facilities, all LANL waste facilities have been, and will continue to be, open to NMED, EPA and the Carlsbad Technical Assistance Contractor (CTAC). This includes entry for audits such as the Annual TRU Waste Management Recertification Audit.
- For entry into WCRRF during the upcoming 2014 Audit, escorted visitors will need to listen to a short on-site facility briefing and don appropriate PPE (LANL will provide facility-specific PPE).
- If NMED has any questions or issues regarding access, please contact LANL Environmental Programs.

- **NMED Request for Information**

- NMED informed LANL that they will send an email requesting LANL to provide information associated with the nitrate salt-bearing parent and daughter waste containers.

**Summary Chart - Requested Information / Pending Issues:**

	<b>Requested Information</b>	<b>Actionee</b>	<b>Status</b>	<b>Completion Date</b>
1.	NMED contact / process for LANL to notify NMED under the Revised Isolation Plan (e.g., 24 hour notices).	NMED	Provided in June 5 NMED email.	Complete June 5, 2014

2.	Keep NMED informed on the status of on-going chemistry / analytical work.	LANL	Current information provided to NMED in June 9 meeting.	Complete June 9, 2014
3.	On upcoming daily call, provide additional discussion on the potential for liquids in the 378 post-1991 cemented containers (including a discussion of the review of RTR tapes).	LANL	In progress.  Provided additional discussion on June 6, 2014 call.	
4.	On upcoming call, provide additional discussion on why 231 and 375 Permacon fire suppression systems are not part of the LANL RCRA Hazardous Waste Facility Permit Contingency Plan.	LANL	Discussed June 5, 2014 tech call  Action: Include information discussed in June 5 tech call in written daily submission.	Complete June 5, 2014  Included in this written submission.
5.	Send copy of June 4, 2014 written daily submission to Trais Kliphuis. Also, include her on future daily submissions.	LANL	---	Complete June 5, 2014
6.	Provide LANL procedures and example records associated with post-1991 TA-55 cementation process discussed on June 6.	LANL	In progress.	
7.	Provide information on numbers of containers in the post-1991 cemented waste streams from the TA-55 process discussed on June 6. This should include numbers regarding RTR status (RTR'd, meet WIPP criteria, requiring remediation).	LANL	In progress.	
8.	Provide RTR video and pre-screening information associated with those containers requiring remediation from the post-1991 cemented waste streams from the TA-55 process discussed on June 6.	LANL	In progress.	
9.	Provide copy of CCP/LANL Interface Document.	LANL	Provided to Trais Kliphuis by NWP/CCP via email on June 9.	Complete June 9, 2014
10.	Provide a list of the analytes for which LANL is sampling HSG.	LANL		
11.	Discuss potential sampling of HSG for NO <sub>x</sub> .	LANL		
12.	Follow-up with Tim Hall regarding LANL Hazardous Waste Facility Permit and procedures that LANL is developing for possible future sampling of empty parent containers and unremediated nitrate salt-bearing containers at LANL.	LANL		
13.	Respond to NMED email request for information associated with the nitrate salt-bearing parent and daughter waste containers.			

**Next Call:** Wednesday, June 10, 2014 - at 10 am.

## Attachment

### WIPP Event Investigation LANL Summary Providing Input for WIPP Daily Meeting on 6/10

#### *LANL Scientific and Operational Activities*

- Completed hourly visual inspections and daily thermography inspections of nitrate salt bearing waste containers since previously reported on 6/5. No issues or anomalies were identified in any of the inspections.
- Daily headspace gas sampling through the filter on the SWB containing drum 68685 was taken. On Monday (6/9) the CO<sub>2</sub> measured at 13,213 ppm, and H<sub>2</sub> measured at 114 ppm. The CO<sub>2</sub> increased slightly from 12,602 ppm and the H<sub>2</sub> increased slightly from 111 ppm the previous day (6/8). Data is being trended and evaluated by the chemist.
- Solid phase micro-extraction (SPME) technique is now also being performed as recommended by the chemistry peer review on drum 68685. There were no detects on the SPME sample on 6/9. On 6/6, SPME analysis of 68685 indicated 2ug/L (2 ppb) of N,N dimethyl 2-Propenamide, and on 6/8 SPME analysis detected 2 noteworthy peaks: N, N-dimethyl-2-Propenamide and methyl nitrate. Both were reported at the limit of detection (~1ppb). This is currently being evaluated by the Chemistry Division personnel.
- Filters on the SWB containing drum 68685 were changed on 6/9 as required for maintenance to continue headspace gas sampling.
- Working to identify and install a wireless thermocouple with remote readout for attaching to drum 68685.
- Preparing empty nitrate salt waste parent container sampling plan. The plan is currently in USQ review. Four drums have been selected for initial sampling.
- Planning and preparation for remediation is continuing.
- Chemistry investigations and lab tests are continuing. A briefing on results of the testing to date was provided to the NMED on 6/9.
- A LANL team has been established to conduct independent review of transuranic waste management procedures, process flow, and roles and responsibilities.

#### *Coordination and Communications*

- Coordinating documents and personnel interviews with the AIB team at LANL.