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Subject: Daily Technical Call Submission - June 16, 2014

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

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# NMED / LANL Technical Call

**June 16, 2014**

## **Participation:**

- New Mexico Environment Department: Tom Blaine, John Kieling, Trais Kliphuis, Steve Pullen, Tim Hall, Siona Briley, Steve Holmes, Coleman Smith, Ricardo Maestas.
- LANL – Los Alamos Field Office: Dave Nickless, Silas DeRoma, Gene Turner.
- LANL - Los Alamos National Security: Tori George, Kathy Johns-Hughes, Steve Clemmons, Alison Dorries, Mark Haagenstad, Kiki Torres.

## **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 continuing *solid phase micro-extraction* technique.
    - 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:**
  - Updates to Additional Measures underway.
    - 68685.
      - Continue a daily head space gas sample.
        - Revise analytical to focus on chemical indicators of degradation or reaction.
        - Continue CO<sub>2</sub>, N<sub>2</sub>O and H<sub>2</sub>.
        - Continue solid phase micro-extraction.
        - Cease other CCP LFL constituents (including CH<sub>4</sub>).
      - Continue hourly temperature measurements.
    - Additional SWB overpacks (containing 55-gallon drums of remediated nitrate salt-bearing waste).
      - Selecting other SWBs based on a number of factors (including parent pH and free liquid quantities).
      - Collect a daily head space gas sample.
        - Analyze for CO<sub>2</sub>, N<sub>2</sub>O and H<sub>2</sub>.
        - Conduct solid phase micro-extraction.
    - NO<sub>x</sub>
      - LANL chemists have looked into analyzing head-space gas samples for NO<sub>x</sub>.
      - These gasses are short-lived in nature (especially NO<sub>2</sub>).
      - We believe that solid phase micro-extraction will provide better indicators of degradation or reaction.
  - Current TRU operations at TA-54 and WCRRF.
    - These operations are limited as described in the 2 Standing Orders provided on June 13 (EP-DIV-SO-20222-1, dated May 30, 2014; and EP-DIV-SO-1241-4, dated May 8, 2014).
    - Current work includes:
      - Compliance Work – including RCRA inspections, Revised Container Isolation Plan monitoring (both temperature and visual inspection), and additional measures currently underway.
      - Characterization Work – including RTR and Super HENC.
      - Venting Operations – for example, LANL is venting certain 55-gallon containers that are overpacked in vented 85-gallon containers.
      - Non-intrusive Work – such as over-packing.
  - Emergency Preparedness
    - An emergency exercise is planned for this week.
  - Procedure Revision
    - *Nitrate Salt-bearing TRU Waste Container Monitoring*, EP-AREAG-FO-DOP-1246.
      - LANL is making minor revisions, including listing container numbers in certain attachments. The new procedure will be R.2 (R.1 was not issued).
      - This procedure is Attachment 5 to the Revised Container Isolation Plan.

- *TA-54 Area G Nitrate Salt Waste Container Response Instructions*, EP-AREAG-PLAN-1248.
      - LANL is making minor revisions, including addition of a storage diagram of 231.
      - This procedure is Attachment 4 to the Revised Container Isolation Plan.
    - LANL will submit both revised procedures to NMED via a letter, and post the letter in the Information Repository.
- Location of drums 68327 and 68328
  - They are both disposed at WIPP. Drum 68327 is in Panel 6, and Drum 68328 is in Panel 7 (15, 5, Middle). (Information originally provided via email on June 14.)

**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 (CO <sub>2</sub> and LFL analytes).	LANL	---	Complete June 11, 2014
11.	Discuss potential sampling of HSG for NO <sub>x</sub> .	LANL	---	Complete June 16, 2014
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	Unremediated Parent In progress.	Empty Parent Complete June 16, 2014
13.	Respond to NMED email request for information associated with the nitrate salt-bearing parent and daughter waste containers.	LANL	In progress. Will obtain estimated delivery date.	
14.	NMED will review the Round Sheets (provided in June 11 summary) and inform LANL if these should be attachments to the Revised Plan, or if they fall under the provision in Section I of the Revised Isolation Plan and their identification during this technical call is sufficient.	NMED	NMED reviewing	
15.	NMED has requested 'copies of any waste processing, treatment, characterization stop orders issued since Feb 14, 2014.'	LANL	In progress.	Complete June 13, 2014 (Included w/ daily summary.)  Complete June 16, 2014 (Discussed current TA-54 & WCRRF operations)
16.	NMED requested information on the location of drums 68327 and 68328. Request made June 14.	LANL	---	Complete June 14, 2014

**Next Call:** Tuesday, June 17, 2014 - at 10 am.