

Sent: Tuesday, June 17, 2014 3:21 PM

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Subject: Daily Technical Call Submission -June 17, 2014

Importance: High

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

Tori George

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NMED / LANL Technical Call

June 17, 2014

Participation:

- New Mexico Environment Department: Steve Pullen, Tim Hall, Siona Briley, Ricardo Maestas.
- LANL – Los Alamos Field Office: Gene Turner, Karen Armijo.
- LANL - Los Alamos National Security: Jeff Mousseau, Tori George, Alison Dorries, 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.
 - CO₂ - Moving towards equilibrium between SWB and drum. The Permittees are working with LANL chemistry SMEs, and will continue to watch this trend.
 - H₂, CH₄, 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:**

- Summary Input for Periodic WIPP Discussions
 - The June 17, 2014, LANL Summary is attached (Attachment 1)
- Post-1991 cemented waste streams from TA-55
 - Numbers of containers, including RTR status, attached (Attachment 2)

Summary Chart - Requested Information / Pending Issues:

	Requested Information	Actionee	Status	Completion Date
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.	Complete June 17, 2014 Included in this written submission.
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 ₂ and LFL analytes).	LANL	---	Complete June 11, 2014
11.	Discuss potential sampling of HSG for NO _x .	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.

Attachment 1

WIPP Event Investigation

LANL Summary Providing Input for WIPP Meeting on 6/17

LANL Scientific and Operational Activities

- Completed hourly visual inspections and daily thermography inspections of nitrate salt bearing waste containers since previously reported on 6/12. 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 (6/16) the CO₂ measured at 16,205 ppm, and H₂ measured at 113 ppm. These are in the range of readings observed over the last week. Solid phase micro-extraction (SPME) technique results are being evaluated by the Chemistry Division personnel. Data is being trended.
- Daily headspace gas sampling will be performed on eight additional SWBs to better be able to compare and evaluate results against the SWB containing drum 68685.
- Working to identify and install a wireless thermocouple with remote readout for attaching to drum 68685.
- The empty nitrate salt waste parent container sampling procedure has been approved internally by LANL, awaiting TAT and AIB approvals. Four drums have been selected for initial sampling. These four do not include the parent container S855793, parent of the breached drum at WIPP – 68660. Field sampling is planned for the week of 6/23.
- Planning and preparing of recommendations for waste remediation and treatment is continuing.
- Reviewing operator records for waste containers disposed in WIPP Panel 6 to determine any additional low pH liquids that resided in parent containers.
- Chemistry investigations and lab tests are continuing. Areas being reviewed include nitration of organics by metal ions, radiolysis, and wheat enzymes.
- The causal analysis of the LANL TRU waste processing has started.

Coordination and Communications

- Conducting daily calls with NMED on *the LANL Nitrate Bearing Salt Waste Container Isolation Plan*

Attachment 2

**LANL Post-1991 Cemented TRU Waste Containers from TA-55 (LA-CIN-01.001)
Both Cemented Monoliths and Cemented Cans**

LA-CIN01.001	Cement Type – Gypsum or Portland 1991-1996	Cement Type – Portland 1997-Present	Total
Shipped	142	194	336
On-site at Area G	225	125	350
Total	367	319	686
RTR performed (certified or pre-screen)	351	319	670
Passed	333	317	650
Requires Remediation (liquids)	4	2	6
Requires Remediation (other than liquids)	14	0	14
RTR Pending	16	0	16
Total	367	319	686

**LANL Post-1991 Cemented TRU Waste Containers from TA-55 (LA-CIN-01.001)
Cemented Monoliths Only**

LA-CIN01.001 - Monoliths	Cement Type – Gypsum or Portland 1991-1996	Cement Type – Portland 1997-Present	Total
Shipped	125	194	319
On-site at Area G	155	125	280
Total	280	319	599
RTR performed (certified or pre-screen)	264	319	583
Passed	262	317	579
Requires Remediation (liquids)	1	2	3
Requires Remediation (other than liquids)	1	0	1
RTR Pending	16	0	16
Total	280	319	599

**LANL Post-1991 Cemented TRU Waste Containers from TA-55 (LA-CIN-01.001)
Cemented Cans Only**

LA-CIN01.001 - Cans	Cement Type – Gypsum or Portland 1991-1996	Cement Type – Portland 1997-Present	Total
Shipped	17	0	17
On-site at Area G	70	0	70
Total	87	0	87
RTR performed (certified or pre-screen)	87	0	87
Passed	71	0	71
Requires Remediation (Liquids)	3	0	3
Requires Remediation (other than Liquids)	13	0	13
RTR Pending	0	0	0
Total	87	0	87