From: George, Victoria A
Sent: Wednesday, August 20, 2014 5:25 PM
To: Ryan.Flynn@state.nm.us; Jeff.Kendall@state.nm.us; tom.blaine@state.nm.us; John Kieling; steve.pullen@state.nm.us; Kliphuis, Trais, NMENV; Timothy.Hall@state.nm.us; siona.briley@state.nm.us; ricardo.maestas@state.nm.us
Cc: Pete Maggiore; Silas DeRoma; Cummings, Lisa K; Nickless, David J; Bishop, M. Lee; Turner, Gene E; Armijo, Karen

(CONTR); Wallace, Terry C; Mousseau, Jeffrey David; Cox, Daniel Ray; Torres, Enrique; Woitte, Deborah Kay; Johns-Hughes, Kathryn W; Clemmons, Steve; Roberts, Kathryn Margaret; Brandt, Michael Thomas; Sharp-Geiger, Raeanna Racine; Dorries, Alison Marie; Grieggs, Tony; Haagenstad, Mark P; Bacigalupa, Gian A; Vigil-Holterman, Luciana R; Alexander, Rick A; Allen, Don; Martinez, Saundra; Sauer, Selena Z; Wood, Yvonne Barbara; Schreiber, Arleen Thorn; Maestas, Pamela Therese; Hargis, Kenneth Marshall; George, Victoria A **Subject:** Daily Technical Submission - August 20, 2014

Attached is the written daily technical submission for today. The Permittees are submitting this pursuant to: Section 19 of the May 19, 2014, *Administrative Order; the* July 10, 2014 letter from NMED regarding *Modification to 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.

Thank you

Tori

Tori George Program Director Los Alamos National Laboratory 505.606.2337 505.695.4347

# NMED / LANL Technical Summary

## August 20, 2014

#### LANL Technical Update:

#### • Location of Nitrate Salt-Bearing Wastes

- o 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. This additional monitoring includes:
  - Container 68685.
    - Collecting a daily head space gas sample.
      - $\circ$  CO<sub>2</sub>, H<sub>2</sub> and N<sub>2</sub>O continuing analytical.
      - LANL also continuing *solid phase micro-extraction*.
    - Hourly temperature measurements.
      - Temperatures remain below 90°F.
  - Other SWB overpacks (containing 55-gallon drums of remediated nitrate salt-bearing waste).
    - Collecting a daily head space gas sample for 6 additional SWBs.
      - $\circ$  CO<sub>2</sub>, H<sub>2</sub> and N<sub>2</sub>O continuing analytical.
    - 1 of these 6 additional SWBs (SB50522) LANL will also:
      - Continue *solid phase micro-extraction*.
      - Continue hourly temperature measurements.
  - LANL has conducted head space gas sampling on each of the 55 SWBs that contain 55-gallon drums of remediated nitrate salt-bearing waste. All of these are located in the 375 Permacon.

- Anticipated Changes to Nitrate Salt-Bearing Waste Containers (e.g. movement, repackaging).
  - Currently, no further movements or re-packaging are planned.

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

	<b>Requested Information</b>	Actionee	Status	Completion Date
1.	NMED contact / process for LANL to notify NMED under the Revised Isolation Plan (e.g., 24 hour notices).	NMED		Complete June 5, 2014
2.	Keep NMED informed on the status of on- going chemistry / analytical work.	LANL		Complete June 9, 2014
3.	On upcoming daily call, provide additional discussion on the potential for liquids in the 350 post-1991 cemented containers (including a discussion of the review of RTR tapes).	LANL		Complete July 6, 2014 (Discussion on call) July 18, 2014 (Meeting held)
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		Complete June 5, 2014
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		Complete July 3, 2014
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		Complete June 17, 2014 (Supplemental Info provided July 3)
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		Complete July 3, 2014
9.	Provide copy of CCP/LANL Interface Document.	LANL		Complete June 9, 2014

10.	Provide a list of the analytes for which LANL	LANL		Complete
	is sampling HSG (CO <sub>2</sub> and LFL analytes).			Lana 11 2014
11		TANT		June 11, 2014
11.	Discuss potential sampling of HSG for NO <sub>x</sub> .	LANL		Complete
				June 16, 2014
12.	Follow up with Tim Holl recording I ANI	LANL	Unremediated Parent	Empty Parent
12.	Follow-up with Tim Hall regarding LANL Hazardous Waste Facility Permit and	LANL	In progress –	Complete
	procedures that LANL is developing for		III progress	June 16, 2014
	possible future sampling of empty parent			vane 10, 2011
	containers and unremediated nitrate salt-			August 14, 2014
	bearing containers at LANL.			(Supplemental
				information discussed
				on sampling of parent
13.	Respond to NMED email request for	LANL	In prograss	containers) Partially Complete
13.	information associated with the nitrate salt-	LAINL	In progress – remaining are portions	r artiany Complete
	bearing parent and daughter waste containers.		of item 5	July 9, 2014
				(Letter sent addressing
	WIPP Recovery Daily Meeting Action List			items 1-4 and 6-9 of
	item #84 – NMED requested a copy of the			the email request)
	LANL remediation records for waste stored in			July 17, 2014
	Panel 6 (Trais Kliphuis) – is a subset of the			(Letter sent with
	information in item 5 of this action.			updated spreadsheet)
				August 7, 2014
				(First submittal in
				response to item 5 sent
				to NMED)
				August 14, 2014
				(- Letter sent addressing
				items 2 & 8
				- Second submittal in
				response to item 5 sent to NMED)
				August 18, 2014
				(Third submittal - binders 3 & 4 - in
				response to item 5 sent
				to NMED)
14.	NMED will review the Round Sheets	NMED	NMED has reviewed	Complete
	(provided in June 11 summary) and inform		Round Sheets – no	
	LANL if these should be attachments to the		comments / direction at this time. NMED will	June 23, 2014
	Revised Plan, or if they fall under the		address any comments	
	provision in Section I of the Revised Isolation		in their formal response	
	Plan and their identification during this technical call is sufficient.		to Revised Container	
			Isolation Plan.	

15.	NMED has requested 'copies of any waste processing, treatment, characterization stop orders issued since Feb 14, 2014.'	LANL		Complete June 13, 2014 (Included w/ daily summary) 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
17.	Update on LANL efforts – including LANL teams. (On June 20 call, LANL offered to schedule an update meeting).	LANL / NMED		Complete July 2, 2014
18.	Neutralizer use in association with container S855793 (parent of 68660 and 68685).	LANL		Complete June 25, 2014
19.	List of nitrate salt-bearing waste containers that LANL records indicate contain absorbed liquids with the same neutralizer, as discussed during June 25 technical call.	LANL	In progress.	
20.	Schedule follow-on update on LANL efforts – including teams.	LANL / NMED		Complete August 14, 2014 (Meeting held)
21.	NMED requested information on document approval / review (as discussed on July 3 call).	LANL		Complete July 29, 2014
22.	What analyses will be conducted on samples taken from empty drums that previously contained nitrate salt-bearing waste.	LANL		Complete July 7, 2014
23.	NMED requested the following information on cemented waste containers generated from TA-55, that are currently stored above-ground at Area G: container id number; location; form (cans or monoliths); and type of concrete. Additionally, NMED requested information on pH adjustment during waste generation process, and information on anticipated pH of free liquids (and rationale).	LANL		Complete July 17, 2014 (Letter sent w/ information) July 18, 2014 (Meeting held)
24.	NMED requested the procedure for sampling empty parent drums that previously contained nitrate salt-bearing waste.	LANL	EP-AREAG-WO- DOP-1245 is included in Enclosure 1 to LANL's July 3, 2014 Response to Request for Information on Management of Waste at LANL.	Complete July 8, 2014

25.	NMED requested an additional discussion on a future technical call regarding CO <sub>2</sub> , including data.	LANL	In progress.	Complete August 14, 2014 (Meeting held)
26.	NMED requested additional discussion on CIN-01 waste containers and absorbent, including confirmation and extent of use.	LANL		Complete July 18, 2014 (Meeting held)
27.	NMED requested historic analytical information on pH of liquids associated with gypsum cemented waste.	LANL		Complete August 7, 2014
28.	NMED requested link to pdf of Actinide Quarterly edition (3 <sup>rd</sup> Q 2008).	LANL		Complete July 21, 2014
29.	NMED requested a copy of lessons learned	LANL		Complete August 11, 2014
30.	NMED request regarding empty drum sampling presentation.	LANL	In review	
31.	Respond to NMED email request dated 8/12/2014 for information associated with the nitrate salt-bearing waste containers.	LANL	In Progress	
32.	NMED request regarding technical presentation.	LANL	In review	
33.	NMED request regarding literature review of catalytic reactions.	LANL	In review	

Next Call: Thursday, August 21, 2014.