From: Juarez, Catherine L

Sent: Wednesday, October 22, 2014 3:21 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; Gregory.Lauer@state.nm.us; steve.holmes@state.nm.us; coleman.smith@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; Torres, Enrique; Woitte, Deborah Kay; Clemmons, Steve; Allen, Don; Roberts, Kathryn
Margaret; Brandt, Michael Thomas; Sharp-Geiger, Raeanna Racine; Dorries, Alison Marie; Grieggs, Tony; Bacigalupa,
Gian A; Vigil-Holterman, Luciana R; Alexander, Rick A; Baumer, Andy; Martinez, Saundra; Sauer, Selena Z; Wood, Yvonne
Barbara; Schreiber, Arleen Thorn; Maestas, Pamela Therese; Hargis, Kenneth Marshall; Diaz, Tammy; Juarez, Catherine L;
Beard, Carl Allen; Cabbil, Cheryl Denise; Young, Steven L; Erickson, Randy; Funk, David John; Alexander, Rick A; Frederici,
Dave; Haagenstad, Mark P

Subject: Daily Technical Submission- October 22, 2014

Sent on behalf of Mark Haagenstad.

Attached is the written daily technical submission for today. The Permittees are submitting the attached information 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 IX of the September 19, 2014, *LANL Nitrate Salt-Bearing Waste Container Isolation Plan, Revision 2.*

Please contact Mark at 505-665-2014 or mph@lanl.gov if additional information would be helpful. Thank you.

Catherine Juarez
Los Alamos National Laboratory
Environmental Compliance Group
cjuarez@lanl.gov
505-667-4961

NMED / LANL Technical Summary

October 22, 2014

LANL Technical Update:

- Location of Nitrate Salt-Bearing Wastes
 - o Remediated nitrate salt-bearing waste containers.
 - All containers remain in the 375 Permacon.
 - o Unremediated nitrate salt-bearing waste containers.
 - All containers remain in the 231 Permacon.
- Monitoring Daily Temperature
 - o Temperatures remain below 90°F.
 - Previous day's daily temperature data attached.
- Monitoring Visual Inspections
 - o No abnormal conditions were observed.
- Monitoring headspace gas (HSG)
 - o Containers (SWBs) 68685 and SB50522.
 - Continue daily head space gas (HSG) sample collection.
 - October 22, 2014 HSG data attached.
 - o H₂, CO, CO₂ and N₂O
 - Other containers
 - A minimum of once per month HSG sampling will be conducted.
 - To date in October, LANL has conducted HSG sampling on 55 SWBs.
 - o October 22, 2014 HSG data attached.
 - Note: LANL previously conducted HSG sampling on each of the 55 SWBs that contain 55-gallon drums of remediated nitrate salt-bearing waste (under Section I of the Isolation Plan).
- Additional measures currently underway
 - As a conservative measure, LANL is currently conducting additional monitoring. This additional monitoring includes:
 - Containers (SWB) 68685 and SB50522.
 - LANL continuing solid phase micro-extraction.
 - Hourly temperature measurements are currently being performed on SWB 68685 and SB50522.
 - Five (5) other SWB overpacks (containing 55-gallon drums of remediated nitrate salt-bearing waste).
 - Continue twice-weekly HSG sample collection.

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

• Other:

Revised October 21, 2014 HSG data is attached for container 68685 because the SWB was resampled to double check the initial analysis.

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		Complete June 5, 2014
2.	Keep NMED informed on the status of ongoing 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 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

	Requested Information	Actionee	Status	Completion
				Date
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		Complete Empty Parent June 16, 2014 Unremediated August 14, 2014 (Supplemental information discussed on sampling of parent containers) August 26, 2014 (Letter on applicability of LANL HWFP for opening waste containers)

	Requested Information	Actionee	Status	Completion Date
13.	Respond to NMED email request for information associated with the nitrate salt-bearing parent and daughter waste containers. WIPP Recovery Daily Meeting Action List item #84 – NMED requested a copy of the LANL remediation records for waste stored in Panel 6 (Trais Kliphuis) – is a subset of the information in item 5 of this action.	LANL	In progress – remaining are portions of item 5	Partially Complete July 9, 2014 (Letter sent addressing items 1-4 and 6-9 of the email request) July 17, 2014 (Letter sent with updated spreadsheet) August 7, 2014 (First submittal in response to item 5) August 14, 2014 (Letter addressing items 2 & 8 - Second submittal in response to item 5) August 18, 2014 (Third submittal in response to item 5) August 21, 2014 (Fourth submittal in response to item 5) August 27, 2014 (Fourth submittal in response to item 5) September 4, 2014 (Sixth submittal in response to item 5) September 9, 2014 (Seventh submittal in response to item 5) September 11, 2014 (Eighth submittal in response to item 5) September 22, 2014 (Ninth submittal in response to item 5) September 23, 2014 (Tenth submittal in response to item 5) September 23, 2014 (Tenth submittal in response to item 5) October 1, 2014 (Eleventh submittal in response to item 5) October 8, 2014 (Twelfth submittal in response to item 5) October 16, 2014 (Thirteenth submittal in response to item 5)

	Requested Information	Actionee	Status	Completion 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 has reviewed Round Sheets – no comments / direction at this time. NMED will address any comments in their formal response to Revised Container Isolation Plan.	Complete June 23, 2014
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		Complete September 30, 2014 (with August 26, 2014 response)
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

	Requested Information	Actionee	Status	Completion Date
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 ₂ , including data.	LANL		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 rd 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	Presentation is a pre- decisional draft/working document not for external release	August 25, 2014
31.	Respond to NMED email request dated 8/12/2014 for information associated with the nitrate salt-bearing waste containers.	LANL		Complete September 11, 2014
32.	NMED request regarding technical presentation.	LANL	Presentation is a pre- decisional draft/working document not for external release	August 25, 2014
33.	NMED request regarding literature review of catalytic reactions.	LANL	Literature review is a pre-decisional draft/working document not for external release	August 25, 2014

	Requested Information	Actionee	Status	Completion Date
34.	LANL requested to schedule a meeting with NMED on remediation planning and schedules.	LANL / NMED	In Progress Meeting scheduled for Monday September 29th	Complete September 29, 2014 (meeting held)
35.	Schedule a third update on LANL efforts – including teams.	LANL / NMED		Complete October 20, 2014
36.	NMED request regarding LANL Causal Analysis associated with processing of nitrate salt-bearing waste at WCRRF – when document is Final.	LANL	Document is currently Draft.	
37.	NMED requested a diagram illustrating the current locations within the 375 Permacon of the 55 SWBs that contain the 57 remediated nitrate salt-bearing waste containers. NMED also requested a list of these 55 SWBs and the waste drums within each SWB (including the container numbers and waste stream type).	LANL	In progress	
38.	NMED requested documentation regarding CIN01.001 waste containers that are not part of the September 19, 2014 Nitrate Salts-Bearing Waste Container Isolation Plan, Revision 2.	LANL	In Progress LANL will submit this documentation in batches as it is becomes available.	Submitted 100 out of 586 RTRs and documentation on October 3, 2014. Submitted documentation for 101-200 containers on October 10, 2014. Submitted documentation for 201-300 containers on October 16, 2014.
39.	NMED requested a diagram of the location of the thermocouples on 68685 and SB50522.	LANL	In progress	,
40.	NMED requested a copy of the safety basis document for remediation planning when it is finalized.	LANL	Document is currently in Draft.	
41.	Trending and correlation of temperature and HSG monitoring data.	LANL	In progress	
42.	Schedule a fourth update on LANL efforts – including teams.	LANL/ NMED	In progress	

Next Call: Thursday, October 23, 2014

Remediated Nitrate Salt Container Headspace Gas Analysis

		68685			SB50522			69036					
	Date	H ₂ ppm	CO ppm	CO ₂ ppm	N ₂ O ppm	H ₂ ppm	CO ppm	CO ₂ ppm	N ₂ O ppm	H ₂ ppm	CO ppm	CO ₂ ppm	N ₂ O ppm
ĺ	10/22/14	122	720	19404	5908	4001	448	54311	975	66	0	882	198

Remediated Nitrate Salt Container Headspace Gas Analysis

	69519				SB50418			
Date	H ₂ ppm	CO ppm	CO ₂ ppm	N ₂ O ppm	H ₂ ppm	CO ppm	CO ₂ ppm	N ₂ O ppm
10/22/14	274	287	4001	1664	380	555	8896	2795

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TA-54 AREA G TA-54-231 NITRATE SALT TRU WASTE CONTAINER DAILY TEMPERATURE DATA SHEET

6.[6] Date: From 10.20.19 to 10-26.14

	Monday 6.[6]	Tuesday 6.[6]	Wednesday 6.[6]	Thursday 6.[6] ·	Friday 6.[6]	Saturday 6.[6]	Sunday 6.[6]
	Start Time: <u>0928</u>	Start Time: <u>0937</u>	Start Time:	Start Time:	Start Time:	Start Time:	Start Time:
TA-54-231							
Calibrated Infrared Thermometer (6.[7])	Brand: Flore Model: 50 Cal. Due Date: 72915 File Number 101974	Brand: Fluck Model: Stal Cal. Due Date: 1/29/15 File Number 101974	Brand: Model: Cal. Due Date: File Number	Brand: Model: Cal. Due Date: File Number	Brand: Model: Cal. Due Date: File Number	Brand: Model: Cal. Due Date: File Number	Brand:
Ambient Temperature (6.[9])	64.2 °F	55.4°F	°F	°F	°F	°F	°F
Container ID#	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])
S818435	54.0	56.8					
S802833	53.8	56.4					
S801676	53.4	30.0					
S816810	52,1	54.8					
70069	51.5	54.3					
S822844	52.0	54.7					
S825879	52,1	54.4					
S793724	52.2	54.7					
S813545	52.2	54.8					
S822713	53.6	56.1					
S802739	53,7	56.3					
69907	53,9	36.4					
S804995	540	56.8					
S816434	54.9	57.5					

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6.[6] Date: From 10.20.14 to 10.26.14

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Container ID #	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])
A-54-231 (continue	d)						
S805289	54.8	57.4					
S862888	54.4	56.8					
70072	53.8	56.4					
S823184	54.0	56.7					
S822599	53,5	55.					
69904	52.6	55.0					
S805051	52,3	55.					
S864213	52.3	54.9					
S853714	52.3	55.0					
S803078 £ 2	1452.5 52.4	55.1	·				
S825878 \$0.20	527 52.5	55.3					
S823124 10.00	54.0 527	JU5					
S804948 2/0-2	54.4 540	56.9					
S813385 10.	20155-6 54.4	568					
S842446	55.6	58.8					
mbient Temperature	56.7°F	Do.Z of	oF.	or	oÈ	oF.	°F
5.[14])		40.10					
nd Time (6.[15])	0927	0943.					
6.[15]	Operator: &C	Operator:	Operator:	Operator:	Operator:	Operator:	Operator:
	Operator: 2	Operator:	Operator:	Operator:	Operator:	Operator:	Operator:

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6.[6] Date: From <u>10.3</u>						
6.[2] Comments:						
1177						-
		<u></u>				
6.[19] Performed by:						
Elord Corder A	16431	1114188186 110.20.14	Operator (print)	/ Signature	/ 	/ / / / Initials Date
Operator (print)	Signature	Z# Initials Date	Operator (print)	/	/	/ / /
Operator (print)	Signature	79/526 10-20-14 Z# Initials Date	Operator (print)	Signature	Z#	Initials Date
Josephins Duras	1/20	157971/00/10/21/14		/	/	/ /
Operator (print)	Signature	Z# Initials Date	Operator (print)	Signature	Z#	Initials Date
Operator (print)	Signature	/236382 / t /10 21/14 Z# Initials Date	Operator (print)	Signature	/ Z#	/ / / / / / Initials Date
operator (p.m.t)				/	/	/ /
Operator (print)	Signature	Z# Initials Date	Operator (print)	Signature	Z#	Initials Date
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Operator (print)	Signature /	Z# Initials Date	openiio. (p)	/	/	/ /
Operator (print)	Signature	Z# Initials Date	Operator (print)	Signature	Z#	Initials Date
.1[2] Reviewed by:						
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ATTACHMENT 3

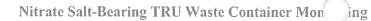
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TA-54 AREA G TA-54-375 CELL 1 NITRATE SALT TRU WASTE CONTAINER DAILY TEMPERATURE DATA SHEET

6.[6] Date: From 10.20.14 to 10.2614

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
	6.[6]	6.[6]	6.[6]	6.[6]	6.[6]	6.[6]	6.[6]
	Start Time: 0854	Start Time: 1166	Start Time:				
TA-54-375 Cell 1							
Calibrated Infrared	Brand: Fluke	Brand: Fyke	Brand:	Brand:	Brand:	Brand:	Brand:
Thermometer	Model: 561	Model: 56),	Model:	Model:	Model:	Model:	Model:
(6.[7])	Cal. Due Date: 6/2/5	Cal. Due Date: C/12/15	Cal. Due Date:				
	File Number 101915	File Number /6/9/S	File Number				
Ambient Temperature (6.[9])	54.5 °F	58.4 °F	oF	°F	°F	oF	oF
Container ID#	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])
68685	54.0	28.3					
68540	54.2	58.7					
68553	54.3	58.7					
69445	54.6	58.8					
69618	54.8	58.7					
69013	55.1	58.9					
LASB50522	55.6	59.1					
LASB50452	55.4	39.0					
LASB50431	55.4	59.1					
LASB50069	55.2	59.1					
LASB50073	55.5	59.2					
69636	55.4	39.2					
1	51-55.1	59.1					
69417	55.2	58.7					

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6.[6] Date: From 10.2014 to 10.2614

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Container ID#	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])
TA-54-375 Cell 1 (con	tinued)						
69620	55.6	51.0					
69520	55.9	59.4					
69641	55.9	59.9					
69298	56.1	59,7					
LASB02203	55.7	59.3					
Ambient Temperature (6.[14])	54.7 of	5a.0 ∘F	oF	°F	oE	oF	oF
End Time (6.[15])	0859	1112					
6.[15]	Operator:	Operator: Operator:	Operator:Operator:	Operator:	Operator:Operator:	Operator:Operator:	Operator:

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6.[6] Date: From <u>10-2</u>	to 10.26.14	-						
6.[19] Performed by:	h - a							
EloTD. Cordova	1500	1114188 186 1	10.20.14		/	/	/	/
Operator (print)	Signature		Date	Operator (print)	Signature	Z#	Initials	Da
Lean montage	1.	1/9/526/1-1	10-20-14			/	/	
Operator (print)	Signature	Z# Initials	Date	Operator (print)	Signature	Z# /	Initials	Da /
Operator (print)	Signature		10 21 14 Date	Operator (print)	Signature	Z#	Initials	Da
() OS ma Loos	Signature Signature	/ / 11	102114 Date	Operator (print)	/ Signature	/ 	/ Initials	/ Da
Operator (print)	Signature 0 7	/ / / /	Date		/	/	/	/
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TA-54 AREA G TA-54-375 CELL 2 NITRATE SALT TRU WASTE CONTAINER DAILY TEMPERATURE DATA SHEET

6.[6] Date: From 10.20.14 to 10.26.14

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
	6.[6]	6.[6]	6.[6]	6.[6]	6.[6]	6.[6]	6.[6]
	Start Time: 0900	Start Time: 1113	Start Time:	Start Time:	Start Time:	Start Time:	Start Time:
TA-54-375 Cell 2							
Calibrated Infrared Thermometer (6.[7])	Brand: Floke Model: 56/ Cal. Due Date: 61215 File Number 101912	Brand: Fluke Model: 561 Cal. Due Date: 61215 File Number 101917	Brand: Model: Cal. Due Date: File Number	Brand: Model: Cal. Due Date: File Number	Brand: Model: Cal. Due Date: File Number	Brand: Model: Cal. Due Date: File Number	Brand: Model: Cal. Due Date: File Number
Ambient Temperature (6.[9])	562°F		°F	°F	°F	°F	°F
Container ID#	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])
LASB02198	56-0	59.9					
68638	55.6	59.5					
69615	55.9	59.7					
69635	56.8	60.0					
69642	55.6	59.6					
69630	55.9	59.7					
69633	56.3	Ço.0					
68430	55.7	60.1					
68631	55.3	59.5					
69634	56.0	39.7					
68567	56.0	59.5					
94227	55-7	60.0					
LASB50442	56.5	Sa.8					
69644	56.5	59.7					
LASB50443	56.0	59.7					
69638	56-3	59.9					

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6.[6] Date: From 10.20.14 to 10.26.14

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Container ID#	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])
ΓA-54-375 Cell 2 (con	itinued)						
68624	56.2	60.0					
68507	56.7	66.0					
69568	57.0	60.0					
69553	560	39.5					
69598	56.2	59.8					
LASB50559	56.2	59.9					
69015	56.7	60.3					
69639	57.1	20.2					
69637	57.2	59.8					
Ambient Temperature 6.[14])	56.0 °F	59.6°F	°F	°F	°F	°F	°F
End Time (6.[15])	0905	1119					
6.[15]	Operator: 8C	Operator:	Operator:	Operator:Operator:	Operator:	Operator:	Operator:

6.[2] Comments:		

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6.[6] Date: From 10.2014 to 10.26.14 6.[19] Performed by: Eloy D. Gilva A 1114188 150 110.20.14 Operator (print) Signature Z# Initials Date Operator (print) Signature Initials Date Lean Montoya 19526 1de 110-20-14 Operator (print) Signature Z#Initials Date Operator (print) Z# Initials Date Signature, t /10/21/14 1236382 / THOMAS / (IGH) Operator (print) Signature Ζ# Operator (print) Initials Initials Date Signature Z# aug Operator (print) Signature Z#Initials Date Operator (print) Signature Operator (print) Signature Ζ# Operator (print) Initials Date Signature Z# Initials Date Z# Operator (print) Signature Initials Date Operator (print) Signature **Z**# Initials Date Operator (print) Signature Z# Operator (print) Initials Date Signature $\mathbb{Z}^{\#}$ Initials Date 8.1[2] Reviewed by: SOM or designee (print) Signature Z# Initials Date



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TA-54 AREA G TA-54-375 CELL 3 NITRATE SALT TRU WASTE CONTAINER DAILY TEMPERATURE DATA SHEET

6.[6] Date: From 10.20.19 to 10.26.14

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	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
	6.[6] Start Time: \$249	6.[6]	6.[6]	6.[6]	6.[6]	6.[6]	6.[6]
	Start Time: 2011	Start Time: 1100	Start Time:	Start Time:	Start Time:	Start Time:	Start Time:
TA-54-375 Cell 3							
Calibrated Infrared	Brand: Fluke	Brand: Flyke	Brand:	Brand:	Brand:	Brand:	Brand:
Thermometer	Model: 561	Model: 561	Model:	Model:	Model:	Model:	Model:
(6.[7])	Cal. Due Date: 6 12 15	Cal. Due Date: 6 12 15	Cal. Due Date:	Cal. Due Date:	Cal. Due Date:	Cal. Due Date:	Cal. Due Date:
	File Number 101916	File Number 141916	File Number	File Number	File Number	File Number	File Number
Ambient Temperature (6.[9])	56.4 °F	60.2°F	°F	°F	°F	°F	°F
Container ID#	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])
69519	57.2	59.7					
69645	57.2	61.2					
94068	57.8	60.9					
93605	57.6	61.0					
69548	57.4	8.00					
69604	57.3	607					
LASB50529	56.9	60.6					
LASB50418	56.9	60.4					
69036	56.6	66.1					
LASB50451	57.0	GO .3					
69559	57.6	60 8					
LASB50448	57.2	60.7					
Ambient Temperature 6.[14])	56.7°F	Go.1 °F	°F	°F	°F	oF	°F
End Time (6.[15])	0852	1105					
6.[15]	Operator: 2C	Operator:	Operator:	Operator:	Operator:	Operator:	Operator:
	Operator:	Operator:	Operator:	Operator:	Operator:	Operator:	Operator:

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ATTACHMENT 5 Page 2 of 2

6.[6] Date: From 10.2	014 to 10.26.14						
6.[2] Comments:							
		-					
6 [10] Denfermed by							
6.[19] Performed by: <i>[1075. Colder A</i>	1260 4	1114188190 110.20		/	/	/ /	
Operator (print)	Signature	Z# Initials Date	Operator (print)	Signature	Z#	Initials I	Date
from mont ofa		191526 10-20	Operator (print)	/	/	/ /	
Operator (print)	Signature	Z# Initials Date		Signature	Z#	Initials I	Date
Operator (print)	Signature	/ 236382 / 4/ / 15 21 1 Z# Initials Date	Operator (print)	/ Signature	/ Z#	/ / / Initials I	Date
) os wat oper	Signature Signature	/16598/ Ja / 1021		/	/	/ /	Jaic
Operator (print)	Signature	Z# Initials Date	Operator (print)	Signature	Z#	Initials [Date
	/	//		/	/	/ /	
Operator (print)	Signature	Z# Initials Date	Operator (print)	Signature	Z#	Initials D	Date
	/	/ /	Operator (print)	/ C:	/	/ /	
Operator (print)	Signature	Z# Initials Date	Operator (print)	Signature	Z#	Initials D	Date
Operator (print)	/ Signature	Z# Initials Date	Operator (print)	Signature	/ Z#	Initials D	Date
3.1[2] Reviewed by:							
COM di (- ' ' ')	/	/ / /	_				
SOM or designee (print)	Signature	Z# Initials Date					

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ATTACHMENT 6 Page 1 of 3

TA-54 AREA G NITRATE SALT TRU WASTE CONTAINER HOURLY TEMPERATURE DATA SHEET

6.[6] Date: From 10-21-14 to 10-21-14 Location: 375

	Start Time: 6.[6] 0634	Start Time: 6.[6]	Start Time: 6.[6]	Start Time: 6.[6]	Start Time: 6.[6]	Start Time: 6.[6]	Start Time: 6.[6]	Start Time: 6.[6]	Start Time: 6.[6]	Start Time: 6.[6]	Start Time: [6.[6]	Start Time: 6.[6] /732	Start Time: 6.[6]	Start Time: 6.[6]
Calibrated	Brand:	Brand:	Brand.	Brand:	Brand									
Infrared Thermometer	Model:	Model:	Model:	Model:	Model:	Model	Model:	Model:	Model	Model:	Model:	Model:	Model:	Model
(6,[7])	Cal. Due Date:	Cal Due Date	Cal. Due Date:	Cal. Due Date:	Cal. Due Date:	Cal. Due Date:	Cal. Due Date.	Cal Due Date:	Cal. Due Date:	Cal Due Date				
	File Number	Eile Number												
Ambient Temperature (6.[9])	55,6/ °F	53.67°F	55.82F	56./ °F	57.36°F	58.38	60.06F	59 .9 ∘ _F	60.23°F	62.05°F	63.07°F	62.20°F	°F	°F
Container ID # (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])													
68685T-1	55.46	55.54	55.71	56.0	57.25	5823		59.54	59.75	61.38	62.50	61.87		
58685 T-2	55.18	55.22	55-37	55.63	56.92			59.04	59.28	60.82	41.87	W.24		
60522 T-4	56.06	56.11	55:82	56.4	57.27		59.33	59.26	59.4	60.60	61.55	41.25		
5052275	56.08	56-13	56.18	56.43	5736	68.13	59.33	59.19	59.36	60.63	61.55	61.16		
													N)	A
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						N								
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6.[6] Date: From 10-21-14 to 10-21-14 Location: 375

Container 1D # (6,[10]/6,[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6,[10]/6,[11])	Temp (°F) (6 [10]/6 [11])	Temp (°F) (6 [10]/6 [11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6_[10]/6_[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])
								-						
						WI								
													1	A
														10
Ambient	_													
Temperature (6.[14]) End Time	50.59 °F	<i>5</i> 57.67°F	55:82°F	56.15 F			60.06°F	59.9 °F	60.23°F			62.2°F	°F	→°F
(6.[15]) 6.[15]	Oberator:	Operator:	Operator:	Operator:	Operator:	Operator:	Operator:	1329 Operator:	1437 Operator:	0perator:	1638 Operator:	1733 Operator:	Operator:	Operator:
	Operator: Operator:	Operator:	Operator:	Operator:	Operator:	Operator:	Operator:	Operator:	Operator:	Operator:	Operator:	Operator:	Operator:	Operator:
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	rage 5 0r5					
6.[6] Date: From 10-21-14 to 10-21-14 Location: 325						
6.[2] Comments: DID NOT ENTER PERMACUN PER S DATA LOGGER IN CONNOCROOM.	STANDING OR	DER 1247 R.	2 42	14 7	EMPS TAREN AT	
	NA					
Operator (print) Signature Operator (print) Operator (print) Signature Z# Initials Date Operator (print) Signature Z# Initials Date Operator (print) Signature Z# Initials Date Operator (print) Operator (print) Signature Z# Initials Date Operator (print) Signature Z# Initials Date Operator (print) Signature Z# Initials Date	Operator (print)	Signature Signature Signature Signature Signature Signature Signature Signature	/	/ Initials I I I Initials I I I Initials I I I I I I I I I I I I I I I I I I I	Date Date Date Date	
8.1[2] Reviewed by: / / / SOM or designee (print) Signature Z# Initials Date						

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TA-54 AREA G NITRATE SALT TRU WASTE CONTAINER HOURLY TEMPERATURE DATA SHEET

6.[6] Date: From 10-21-14 to 10-22-14 Location: 375

				1	20727				T			- 8		
	Start Time: 6.[6]	Start Time; 6.[6]	Start Time: 6.[6]	Start Time:	Start Time:	Start Time:	Start Time:	Start Time:	Start Time:	Start Time:	Start Time:	Start Time:	Start Time:	Start Time:
	1830	1933	2030	2130	2228 2228	2328	0032	0.[6]	0.230	6.[6] 0.32.8	6.[6]	6.[6]	6.[6]	6.[6]
Calibrated	Brand	Brand:	Brand:	Brand:	Brand:	Brand:	Brand:	Brand:	Brand:	Brand:	Brand:	0530 Brand:	Daniel .	Post I
Infrared									Diana.	Dianu.	Dianu.	Dranu.	Brand:	Brand:
Thermometer (6.[7])	Model:	Model:	Model:	Model:	Model	Model:	Model:	Model:	Model:	Model:	Model:	Model:	Model:	Model:
(0,[7])	Cal. Due Date:	Cal. Due Date:	Cal. Due Date:	Cal. Due Date:	Cal. Due Date:	Cal. Due Date:	Cal. Due Date:	Cal. Due Date.	Cal. Due Date:	Cal. Due Date:	Cal. Due Date:	Cal. Due Date:	Cal. Due Date:	Cal. Due Date:
	File Number	File Number	File Number	File Number	File Number	File Number	File Number	File Number	File Number	File Number	File Number	File Number	File Number	File Number
Ambient Temperature (6.[9])	61,02°F	<i>60.0</i> °F	58.95°F	57.94°F	52./6°F	56.97 °F	57.12°F	57.12 °F	56.96°F	56.18 °F	55,36 _{°F}	54,55 °F	•F	°F
Container ID # (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])				
686857-1	60.53	59.45	58.47	57.51	56.85	57.51	56.85	56,90	56.74	55.98	55.19	54.45		
686857-2	59.94	58.95.	58.02	57.13	56.43	56.35	56.53	56.56	56,39	55.61	54.84	54.41		
505227-4	60.24		58.57	57.84	57.28	57.11	57.2	57.22	57.1	56.56	55.96	55.34	2	
505227-5	60.09	59.19	58.45	57.72	57.20	57,08	57.2	57.21	57:05	56.45	55.9	55.31	7	7
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6.[6] Date: From 10-21-14 to 10-22-14 Location: ____

Container ID # (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F)											
						MA								
					0° be 4 v									
Ambient Temperature (6,[14])	61.01°F	<i>59.98</i> °F	<i>5</i> 2.39 °F	<i>57.92</i> °F	57,16°F	56.96 °F	57.12 F	57,12°F	56.95F	56.11 °F	<i>5536</i> ∘ _F	54.55 TR 10/22/14	°F	°F
End Time (6.[15])	1832	1934	2031	2131	2229	2329	0032	0129	0231	0329	0428	0531		
6.[15]	Operator:	Operator:	Operator:	Operator: Operator	Operator:	Operator:	Operator:							
	Operator:	Operator:	7702		Operator:	Operator:	Operator:							

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ATTACHMENT 6

	Page 3			
6.[6] Date: From 10-21-14 to 10-22-14 Local	tion:375			
6.[2] Comments: DID NOT ENTER PERM		- 021 AREAG - 1247 R.	2- ALL TEMPS MIKEN	OFF
DATA LOGGER IN CONMOLIRORA	~			
	1			
Operator (print) Signature Z#	1 Jln 10 - 21 - 14 Operator (print) 3 TR 10 - 22 - 14	/ / Signature Z# /	/ / Initials Date	
Operator (print) Signature Z#	Initials Date Operator (print)	Signature Z#	Initials Date	
Operator (print) Signature Z#	/ Initials Date Operator (print)	Signature Z#	/ / Initials Date	
Operator (print) Signature Z#	Initials Date Operator (print)	Signature Z#	Initials Date	
Operator (print) Signature	Initials Date Operator (print)	Signature Z#	Initials Date	
Operator (print) Signature Z#	Initials Date Operator (print)	Signature Z#	Initials Date	
Operator (print) Signature Z#	Initials Date Operator (print)	Signature Z#	Initials Date	
A				