From: Haagenstad, Mark P

Sent: Wednesday, October 01, 2014 6:13 PM

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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
Subject: Daily Technical Submission - October 1, 2014

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 me if additional information would be helpful. Thank you.

Mark Haagenstad Environmental Protection Division Compliance and Permitting Group Los Alamos National Laboratory

Office: (505) 665-2014 Mobile: (505) 699-1733

# NMED / LANL Technical Summary

## October 1, 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 days' daily temperature data attached.
- Monitoring Visual Inspections
  - No abnormal conditions.
- Monitoring headspace gas (HSG)
  - o Containers (SWBs) 68685 and SB50522.
    - Continue daily head space gas (HSG) sample collection.
      - October 1, 2014 HSG data attached
        - o  $H_2$ , CO, CO<sub>2</sub> and N<sub>2</sub>O
  - Other containers
    - A minimum of once per month HSG sampling will be conducted.
      - To date in October, LANL has conducted HSG sampling on 7 SWBs.
      - 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.
      - Continue hourly temperature measurements.
        - o Previous days' hourly temperature data attached. Temperatures remain below 90°F.

- 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:

- August 26, 2014 information request from NMED (with a due date of September 30, 2014) was delivered to NMED on September 30, 2014. Electronic files will be distributed.
- The U.S. Department of Energy, Office of Inspector General released a Management Alert on Remediation of Selected Transuranic Waste Drums at Los Alamos National Laboratory – Potential Impact on the Shutdown of the Department's Waste Isolation Pilot Plant.

## **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.,	NMED		Complete
	24 hour notices).			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	LANL		Complete
6.	her on future daily submissions.  Provide LANL procedures and example	LANL		June 5, 2014
0.	records associated with post-1991 TA-55	LANL		Complete
7.	cementation process discussed on June 6.  Provide information on numbers of containers	LANL		July 3, 2014 Complete
7.	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		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 <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

	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 saltbearing 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 saltbearing 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)
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

	Requested Information	Actionee	Status	Completion Date
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
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)

	Requested Information	Actionee	Status	Completion Date
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		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	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
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	In progress.Currently scheduled for October 20, 2014	

	Requested Information	Actionee	Status	Completion Date
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 anticipates submitting the first 100 out of 586 RTRs and documentation by Friday October 3, 2014	

Next Call: Thursday October 2, 2014

### **Remediated Nitrate Salt Container Headspace Gas Analysis**

		680	685			SB5	0522			69	630			690	637			690	638	
Date	H <sub>2</sub> ppm	CO ppm	CO <sub>2</sub> ppm	N₂O ppm	H <sub>2</sub> ppm	CO ppm	CO <sub>2</sub> ppm	N <sub>2</sub> O ppm	H <sub>2</sub> ppm	CO ppm	CO <sub>2</sub> ppm	N <sub>2</sub> O ppm	H <sub>2</sub> ppm	CO ppm	CO <sub>2</sub> ppm	N <sub>2</sub> O ppm	H <sub>2</sub> ppm	CO ppm	CO <sub>2</sub> ppm	N <sub>2</sub> O ppm
10/01/14	132	1093	23124	7206	6017	503	53487	907	360	606	13076	815	84	263	2677	594	478	484	8434	649

### **Remediated Nitrate Salt Container Headspace Gas Analysis**

		690	642		SB50443			
Date	H <sub>2</sub> ppm	CO ppm	CO <sub>2</sub> ppm	N₂O ppm	H <sub>2</sub> ppm	CO ppm	CO <sub>2</sub> ppm	N <sub>2</sub> O ppm
10/01/14	53	67	1932	127	631	820	12676	1879

Document No.:

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### **ATTACHMENT 2**

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

6.[6] Date: From <u>19/29/14</u> to <u>10/05/14</u>

UET

	Monday	Tuesday	777 1 1	Tri t			
	6.[6]	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
	Start Time: <u>0950</u>	6.[6] Start Time: <u>0943</u>	6.[6]	6.[6]	6.[6]	6.[6]	6.[6]
	Start Time: D 150	Start Time: 1943	Start Time:	Start Time:	Start Time:	_ Start Time:	_ Start Time:
TA-54-231							
Calibrated Infrared	Brand: Fluce	Brand: Fluck Model: 50	Brand:	Brand:	Brand:	Brand:	Brand:
Thermometer	Model: 50	Model:	Model:	Model:	Model:	Model:	Model:
(6.[7])	Cal. Due Date: 7/29/15	Cal. Due Date: 7/29/15	Cal. Due Date:	Cal. Due Date:	Cal. Due Date:	Cal. Due Date:	Cal. Due Date:
	File Number/01974	File Number 101974	File Number	File Number	File Number	File Number	File Number
Ambient Temperature (6.[9])	63.6°F	50.9 °F	°F	°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)	Temp (°F)	Temp (°F)
S818435	63.2	58.6	(0.[10]/0.[11])	(0.[10]/0.[11])	(6.[10]/6.[11])	(6.[10]/6.[11])	(6.[10]/6.[11])
S802833	43.0						
		56.3					
S801676	42.9	55.7					
S816810	62.6	55.5					
70069	622	54.3					
S822844	102.8	54.8					
S825879	627	53.9					
S793724	62.6	55.					
S813545	62.4	55.7					
S822713	(03.)	56.8					
S802739	63.2	55.9					
69907	62.9	56.2					
S804995	(03.0	56.1					
S816434	103.2	57.0					

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Revision: Effective Date:

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6.[6] Date: From <u>89/29/14</u> to 10/05/14

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Container ID #	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])					
TA-54-231 (continued	1)						
S805289	63.5	57.0					
S862888	(03.0	56.3					
70072	62.9	55.8					
S823184	103.3	54.8					
S822599	63.	56.4					
69904	67.5	55.3					
S805051	62.4	54.7					
S864213	62.5	54.9					
S853714	62.8	55.8					
S803078	63.0	<b>55.5</b>					
S825878	62.9	55.8					
S823124	63.0	56.1					
S804948	63.2	57.5					
S813385	(03.4	56.6					
S842446	(03.7	57.3				,	
Ambient Temperature 6.[14])	63.9°F	<i>57.8</i> °F	°F	°F	°F	oF	oF
End Time (6.[15])	0959	1955 .					
6.[15]	Operator:	Operator:	Operator:	Operator:	Operator:	Operator:	Operator:
	Operator: 1V	Operator:	Operator:	Operator:	Operator:	Operator:	Operator:

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Operator (print)	Signature	Z# Initials Date	Operator (print)	Signature	Z#	Initials	Date
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Operator (print)	Signature	Z# Initials Date	Operator (print)	Signature	Z#	Initials	Date
	ar I Agn	ulu>123/18/ St. 19/39/14	Operator (print)	<u></u>	/		/
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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 9.29-14 to 40-5-14 was

UET

	Monday 6.[6] Start Time: 10:45	Tuesday 6.[6] Start Time: \2-25	Wednesday 6.[6] Start Time:	Thursday 6.[6] Start Time:	Friday 6.[6] Start Time:	Saturday 6.[6] Start Time:	Sunday 6.[6] Start Time:
TA-54-375 Cell 1							
Calibrated Infrared Thermometer (6.[7])	Brand: <u>F/c/CT</u> Model: <u>56/</u> Cal. Due Date: <u>6/2/5</u> File Number <u>10/9/6</u>	Brand: Puke Model: 5101 Cal. Due Date: 6-12-15 File Number 101215	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])	64.7°F	65.3 °F	°F	°F	°F	°F	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	63.8	63.9					
68540	64.9	638					
68553	45.0	63.5					
69445	64.3	64,4					
69618	64.4	64.0					
69013	64.0	63.5					
LASB50522	63.9	63.8					
LASB50452	64.0	63.8					
LASB50431	67.7	63.5					
LASB50069	63.8	63.4					
LASB50073	64.0	64.3					
69636	63-6	63.1					
69616	63.3	63.1					
69417	67.8	63.6					

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6.[6] Date: From <u>9-29-14</u> td <u>9-5-14</u>

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	
Container 1D #	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)		Erician de la					
69620	63.8	63.9						
69520	64.4	63.5						
69641	63.6	64.0						
69298	63.7	63,8						
LASB02203	63.6	63.3						
Ambient Temperature (6.[14])	64.3°F	65.5 °F	°F	°F	oF	°F	°F	
End Time (6.[15])	10:50	1231						
6.[15]	Operator: SC	Operator:	Operator:Operator:	Operator:	Operator:	Operator:	Operator:Operator:	

6.[2] Comments:	

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6.[6] Date: From 9-29-14 to 10,5-14

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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 9-29-14 to 10,5-14

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
	6.[6]	6.[6]	6.[6]	6.[6]	6.[6]	6.[6]	6.[6]
	Start Time: 15 31	Start Time: 1232	Start Time:	Start Time:	Start Time:	Start Time:	Start Time:
TA-54-375 Cell 2							
Calibrated Infrared	Brand: Fluke	Brand: Fleke	Brand:	Brand:	Brand:	Brand:	Brand:
Thermometer	Model: <u>561</u>	Model: 561	Model:	Model:	Model:	Model:	Model:
(6.[7])		Cal. Due Date: 6-12-15	Cal. Due Date:	Cal. Due Date:	Cal. Due Date:	Cal. Due Date:	Cal. Due Date:
	File Number 101712	File Number 101912	File Number	File Number	File Number	File Number	File Number
Ambient Temperature (6.[9])	<b>62.5</b> ∘ <sub>F</sub>	619°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	67-6	61.7				2 2 2	( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( (
68638	63.2	62.9	<del>-</del>				
69615	63.5	62.4					
69635	67.4	63.0					
69642	63.3	63.4					
69630	63.2	63.3					
69633	63.1	62.8	*				
68430	45.7	62.5					
68631	62.8	62.2					
69634	62.6	62.1					
68567	62.7	61.7					
94227	62.8	61.8					
LASB50442	63.0	62.6					
69644	67.2	62.7					
LASB50443	63.3	624					
69638	62.8	62.3					

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6.[6] Date: From <u>9-79-14</u> to <u>(0.5.14</u>

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Container 1D #	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 2 (cor	ntinued)						
68624	67.5	62.5					
68507	67.0	61.8					
69568	63.5	61.9					
69553	62.8	62.0					
69598	62.9	62.6					
LASB50559	62.5	62.1					
69015	62.8	62.8					
69639	62.6	61.3					
69637	62.7	62.7					
Ambient Temperature (6.[14])	60.1°F	62.1°F	°F	°F	°F	°F	°F
End Time (6.[15])	10:55						
6.[15]	Operator: 5C	Operator: Operator:	Operator:	Operator:	Operator:Operator:	Operator:	Operator:Operator:

6.[2] Comments:	 	 		 		
	 		2			

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6.[6] Date: From 9-29-14 to 10-5-14

6.[19] Performed by:						
willian Juanz hulling	20458 wo 79-29-14			/	/	/
Operator (print) Signature	Z# Initials Date	Operator (print)	Signature	Z#	Initials	Date
Jege Chaves Ja Cz	1214578 50 19-29-14		/		/	/
Operator (print) Signature	Z# Initials Date	Operator (print)	Signature	Z#	Initials	Date
Ina Harrisone April & Street	= 6749771A 19-29-14		/	/	/	/
Operator (p(in)) Signature	Z# Initials Date	Operator (print)	Signature	Z#	Initials	Date
Cua Facirve Also Aces	Mygn + 19-30-14			/		/
Operator (print) Signature	Z# Initials Date	Operator (print)	Signature	Z#	Initials	Date
William June youll the	- 201457 wy 9-80'V	Υ	/	/	/	/
Operator (print) Signature	Z# Initials Date	Operator (print)	Signature	Z#	Initials	Date
Jose Chaver I fallen	121457813C 19-30-14	_				/
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						
8.1[2] Reviewed by:						

.1[2] Reviewed by:				
	/		/	/
SOM or designee (print)	Signature	Z#	Initials	Date

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### **ATTACHMENT 5**

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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 979-14 to 10-5-14

UET

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
	6.[6]	6.[6]	6.[6]	6.[6]	6.[6]	6.[6]	6.[6]
	Start Time: (0:58	Start Time: 1239	Start Time:	Start Time:	Start Time:	Start Time:	Start Time:
TA-54-375 Cell 3							
Calibrated Infrared	Brand: Fluke	Brand: Fluke	Brand:	Brand:	Brand:	Brand:	Brand:
Thermometer	Model: 541	Model: 56	Model:	Model:	Model:	Model:	Model:
(6.[7])	Cal. Due Date: 61215	Cal. Due Date: 6-12-15	Cal. Due Date:	Cal. Due Date:	Cal. Due Date:	Cal. Due Date:	Cal. Due Date:
	File Number 10/216	File Number 101916	File Number	File Number	File Number	File Number	File Number
Ambient Temperature (6.[9])	63.9°F	63.6°F	°F	°F	°F	oF	°F
Container ID #	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])				
69519	633	63.1					
69645	67.5	63.2					
94068	63.6	63.3					
93605	63.7	63,6					
69548	63.6	63.7					
69604	64.0	64.4					
LASB50529	63.7	63,9	<del></del>				
LASB50418	63.6	62.8					
69036	64./	63.5					
LASB50451	63.8	63.4					
69559	64.4	63.7					
LASB50448	64.7	63.8					
Ambient Temperature (6.[14])	64.2 °F	63.6°F	°F	oF	°F	°F	°F
End Time (6.[15])	11:00	1241					
6.[15]	Operator: 7C	Operator:	Operator:	Operator:	Operator:	Operator:	Operator:
	Operator:	Operator:	Operator:	Operator:	Operator:	Operator:	Operator:

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UET

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[2] Comments:					
			*****		
5101 D. S					
[19] Performed by:	- DOLALS MY 6-56-16	1	/	/	/ /
Operator (print) Signature	Z# Initials Date	Operator (print)	Signature	Z#	Initials D
5-35c Chavez ( Infly	121457856 19-29-14	<u> </u>	/		/ /
Operator (print) Signature	Z# Initials Date	Operator (print)	Signature	Z#	Initials D
Tina Aguirre Alua De es	- e mon A 9-29-14		/	/	/ /
Operator (prin) Signature	Z# Initials Date	Operator (print)	Signature	Z#	Initials D
Tina Aguirra Arin Are	- 174977 AA 9-30-14		/	/	
Operator (print) Signature Signature	Z# Initials Date	Operator (print)	Signature	Z#	Initials Da
william Tu cree trulled	201458 -7 / 9-30.14			/	
Operator (print) Signature	Z# Initials Date	Operator (print)	Signature	Z#	Initials Da
sexellara Ish ling	R1459813C 19-30-14		/	/	//_
Operator (print) Signature	Z# Initials Date	Operator (print)	Signature	Z#	Initials Da
	/ / /			/	
Operator (print) Signature	Z# Initials Date	Operator (print)	Signature	Z#	Initials Da
1[2] Reviewed by:					
[2] Reviewed by.					
SOM or designee (print) Signature	Z# Initials Date				

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Revision:

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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 <u>9-30-14</u> to <u>9-30-14</u> Location: 375 Start Time: 6.[6] 6.[6] 6.[6] 6.[6] 6.[6] 6.[6] 1079 22 Calibrated Brand: Brand Fluid Model: 5 E I Infrared Model:
561
Cal. Due Date:
6-12-15 Model:

Sal. Due Date:

File Number Model: Model: Model: Model Thermometer (6.[7])Cal. Due Date: Cal. Due Date: Cal Due Date Cal Due Date: Cal Due Date 6-12-15 File Number File Number File Number 101915 TO 1915 File Number File Number File Number Ambient 94.9 of 51.0 °F 65.1 ºF 66,5°F 50,0F 57.8°F 67.7 Temperature (6.[9])Temp (°F) (6.[10]/6.[11]) Temp (°F) (6/10]/6.[11]) Container ID# Temp (°F) Temp (°k) (6.[10]/6.[11]) (6.[10]/6.[11]) (6.[10]/6.[11]) (6.[10]/6.[11]) (6.[10]/6.[11]) (6.[10]/6.[11]) (6.[10]/6.[11]) (6.[10]/6.[1(]) (6.[10]/6.[11]) 503 64.5 62.2 60,1 65,5 60.4 64,0 66,4

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Page 2 of 3

6.[6] Date: From 9-30-14 to 9-30-14 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])								
						X								
								1						
							V_	1					\	
				* d1 *. g										H
			_										M	
Ambient Temperature (6.[14])	49.8°F	49.94	51.0°F	<u>4.8.</u>	<u>57.6</u> ° <sub>F</sub>	6211°F	<u>68.3</u> °F	65.5°F	67.2	681F	683	66.5F	ok	•F
(0.[13])	637		0830	0931	1030	1128	1225	1331	1427	1527	1627	1725		
6.[15]	Operator:	Operator:	Operator:	Operator:	Operator:	Operato Coperato	Operator:							

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			ATTACHM Page 3 o	IENT 6		
6.[6] Date: From 9-36	0-140 9-30-10	Location: 375	_	11.5		
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			1)			
***						
				7		
		<u> </u>				
6.[19] Performed by:						
	AR Han	Myon Ast 19-30-1	U	/	/ / /	
Operator (print)	Signature	7.# Initials Date	Operator (print)	Signature	Z# Initials Date	
Jesse Chanks		2145765 (19-30"	14	/	1 1 1	
Operator (print)	Signature	7# Initials Date	· Operator (print)	Signature	Z# Initials Date	
William Dorer	leulten	-201458 WJ9-30	14	Ci	Z# Initials Date	
Operator (print)	Signature	Z# Initials Date	Operator (print)	Signature	Z# Initials Date	
	/	711	Operator (print)	Signature	Z# Initials Date	
Operator (print)	Signatore	7# Initials Date	- France (France)			
Operator (print)	Signature	Z# Initials Date	Operator (print)	Signature	Z# Initials Date	
Орегию (рине)	+ 1			/	/ / / /	
Operator (print)	Signature	Z# Initials Date	Operator (print)	Signature	Z# Initials Date	
	1	1 1 1	- 0	/ P:	Z# Initials Date	
Operator (print)	Signature	Z# Initials Date '	Operator (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 9-30-14 to 10-1-14 Location: Dome 375 CELL1

	Start Time:	Start Time:	Start Time:	Start Time:	Start Time:	Start Time:	Start Time:	Start Time:	Start Time:	Start Time:	Start Time:	Start Time:	Start Time:	Start Time:
	Start Time: 6.[6] 1430	6.[6] / /930	6.[6]	6.[6] 2129	6.[6] 2229	6.[6] 2329	6.[6] 0029	6.[6]	6.[6]	6.[6]	6.[6]	6.[6] 0526	6.[6]	6.[6]
Calibrated Infrared Thermometer (6.[7])	Brand: FLUKB Model: 576/ Gal. Due Date: 6-13-15 File Number / 01915	Brand: FLMK Model: ST Cal. Due Date: GG-GG File Number	Brand: ELNER Model: SG/ Cal. Due Date: D-2-SFile Number	Brand:	Brand:    PANKA   Model:   State   Model	Brand:	Brand: FLUKE Model: Sal Cal. Due Date: 612-15 File Number	Brand:	Brand: Flat La. Model: Scal. Due Date: File Number	Brand:  FLAFE  Model:  Sel  Cal. Due Date:  6-12-15  File Number	Brand: FUK Model: 5-61 Cal. Due Date: 6-12-15 File Number	Brand:	Brand: Model: Cal. Due Date: File Number	Brand Model Cal Due Date File Number
Ambient Temperature (6.[9])	63.9 °F	61.8°F	60.4 °F	59.0 °F	57.6°F	56-6 °F	<u>55.</u>   ∘ <sub>F</sub>	54. 2 of	53.3 °F	52.6°F	51.6 °F	51.1 °F	MA	°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)	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	63.7	61.3	60.0	58.7	57.0	56.1	55.0	53.7	52.8	52.1	50.8	50.3		
50522	63.3	61.4	60.3	59.1	57.6	56.8	55.9	54.6	53.7	53./	52.0	51.6		
					^	/								
				N	A									
														\

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Container ID # (6.[10]/6.[11])	Temp (°F) (6.[10]/6.[11])													
							NA							
Ambient Temperature (6 [14])	64.1 of	61.9 °F	60.4°F	59.0 o <sub>F</sub>	57.4°F	567°F	55.3 °F	54.2 °F	53.2 <sub>°F</sub>	52.3 °F	51.4 of	50.5° <sub>F</sub>	°F	°F
End Time (6.[15])	1867831	1931	+42031 EC9.30.14	2130	2230	2370	0030	0131	0231	033/	0430	0527		
6.[15]	Operator:													
	Operator:													

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6.[6] Date: From <u>9-5</u>	0-14 to 10-1-14	Location: Oun £ 37	5 CEU-1			
6.[2] Comments:						
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				.1		
			1	109		
	-					
6.[19] Performed by:  GAM MAWY  Operator (print)	Ohn Mally Signature	7262317 Day 19-30-14	Operator (print)	/ Signature	/ / / Z# Initials Date	
Elor D. Cordu A		1114188184 110-1.14		1	/ /	
Eloy D. Corder A Operator (print)	Signature	Z# Initials Date	Operator (print)	Signature	Z# Initials Date	
Operator (print)	/ Signature	Z# Initials Date	Operator (print)	Signature A	Z# Initials Date	
Operator (print)	Signature A	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	Z# Initials Date	

8.1[2] Reviewed by: Ausart Uharde	mht V Has	1 1249	¥ 40	11	10-1	~/	٤
SOM or designee (print)	Signature	Z#	Initials	Date			-