

Allen, Pam, NMENV

From: Maestas, Ricardo, NMENV
Sent: Thursday, December 18, 2014 8:39 AM
To: Allen, Pam, NMENV
Subject: FW: Response to questions
Attachments: Response to 050814 Kriphuis email.xlsx

May

From: Kliphuis, Trais, NMENV
Sent: Tuesday, May 13, 2014 3:34 PM
To: Maestas, Ricardo, NMENV
Cc: Smith, Coleman, NMENV; Holmes, Steve, NMENV
Subject: FW: Response to questions

Please add this to tomorrow's 1:00 summary that gets sent to the whole group.

Trais Kliphuis
WIPP Staff Manager
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive E, Building 1
Santa Fe, New Mexico 87505

Office: 505-476-6051
Front Desk: 505-476-6000

From: Oba Vincent [<mailto:oba.vincent@cbfo.doe.gov>]
Sent: Tuesday, May 13, 2014 3:31 PM
To: Kliphuis, Trais, NMENV
Subject: Response to questions

Hi Trais

Attached is a response to your questions. Also, I will post these to the ICLN portal.

Have a great evening.

Thanks

Oba



Response to 5/8 Kliphuis to Vincent email and Item 60 from 1300 Meeting Action List

Question	Response	Ref # 5/8 Kliphuis to Vincent email	Ref # - DOE Action Item Log
<p>What is LANL, WCS and WIPP are doing to monitor/ secure the all the nitrate salt containers?</p>	<p>a. NWP does not have any nitrate salt bearing waste containers in the WHB. b. The potential hazards the nitrate salt waste might present are being assessed by NWP prior to the next entry into the panel. c. WCS has single stacked and consolidated the 73 SWBs with LA-Min02-V.001 (nitrate salt) containers, and are taking surface temperatures of containers that might indicate the presence of a potential reaction taking place. The storage area is being monitored using continuous air monitors for potential of a RAD release. WCS have experienced no issues or anomalies. d. With the exception of waste in TRUPACT shipping containers at the RANT transportation center, all remediated waste containers in the MIN02 (contains nitrate salt) waste category have been consolidated in Dome 230 at Area G. Enhanced defense in depth controls include single stacking, daily visual inspections, daily thermography, control of movement, and use of continuous air monitoring are in place. The TRUPACTs at Radioassy and Nondestructive Testing (RANT) are also being visually inspected. We have seen no issues or anomalies.</p>	<p>1</p>	<p>54</p>
<p>Who is responsible for the theory regarding the nitrate salts? Which teams?</p>	<p>NWP with input from Carlsbad-LANL.</p>	<p>2</p>	<p>61</p>
<p>What evidence supports this theory? Do you know what "green" kitty litter was used? Have you been able to re-create this event?</p>	<p>a. There is no physical evidence obtained from the event site. However reviews performed by WIPP personnel by analyzing the radiological footprint of the event show several waste streams that correlate to the radiological footprint. Two generator sites waste shows a correlation, LANL's nitrate salt waste is a potential source. b. I think the answer to the "green" kitty litter is SWHEAT SCOOP. This is the product name. LANL is performing a number of analytical procedures to evaluate reactive properties associated with the SWHEAT scoop absorbent.</p>	<p>3</p>	<p>55, 62</p>

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<p>Assuming the theory is correct, how you explain the fact that the drums were jostled around while being loaded on the truck, unloaded off the truck, and placed in the WIPP. Nothing happens when they were being moved. Then, after the containers are put in place and stabilized, a chemical reaction occurs? How is this explained?</p>	<p>The potential for a delayed reaction is under investigation.</p>	<p>4</p>	<p>63</p>
<p>When are you going to sample and move drums out of the way and access the drums where the release occurred? If you do not have a date, provide a timeline or list of events that need to occur in advance.</p>	<p>Another entry(s) needs to occur, identification of the causal container need to be made, followed by a thorough evaluation of the hazards and development of a retrieval plan. There is not enough known to speculate on a timeline for this to take place.</p>	<p>5</p>	<p>*</p>
<p>How many drums have the post Jan. 2013 cat litter type absorbent? Where are they? Was it used in other waste streams?</p>	<p>The following numbers are only those containers that were evaluated for inclusion on the AK tracking spreadsheet (AKTSS) as of May 1, 2014. Any other containers of nitrate salts that may be at LANL are not accounted for in these numbers. a. Our review of AKTSS shows a total of 432 that could potentially have nitrate salts that were remediated with an organic kitty litter absorbent. b. 299 of these are emplaced at the WIPP facility; 73 of these are currently at the WCS facility near Andrews, Texas; and with the remaining 60 being at LANL.</p>	<p>6</p>	<p>64</p>
<p>What is LANL, WCS and WIPP are doing to monitor/ secure the all the nitrate salt containers?</p>	<p>See question #1</p>	<p>7</p>	<p>54</p>
<p>Why isn't blast shielding being used?</p>	<p>The current hazard assessment is addressing the blast hazard by limiting personnel exposure above the top of the waste face and taking credit for the mass of containers between the waste face and the LA-MIN02-V.001 waste.</p>	<p>8</p>	<p>*</p>

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<p>What about other explosive aspects described in the AK such as plutonium peroxide</p>	<p>Plutonium peroxide is discussed in the AK report in section 4.4.2 Nitrate Operations. This section discusses the processes which generated the waste not the content of the waste itself. Plutonium peroxide was a intermediate product during the production cycle. It was generated as part of the process to aid in the filtration of the plutonium. This was done to eliminate a specific set of metallic impurities from the plutonium. Once the filtration of the plutonium peroxide was completed, it was redissolved in nitric acid and precipitated again as an oxalate. The waste generated from these operations would not contain plutonium peroxide in any amount of significance as it was the product that was being produced during that stage of production and filtration to remove the plutonium peroxide was very effecient.</p>	<p>9</p>	<p>*</p>
<p>What else is being reviewed as “part of the evaluation”? What is the status of those? (e.g. evaluation of other waste streams in the WHB)</p>	<p>Characterization data, Generator site data from current testing, interviews with characterization and remediation personnel, remediation documentation. None of these are completed.</p>	<p>10</p>	<p>*</p>
<p>Please re-explain the reasoning for the HSG analysis and what is being look at. I didn’t understand the response.</p>	<p>HSG is being performed to baseline waste forms and to then identify any differences that might be present as a result of specific remediation techniques. Is there anything present that would indicate a reaction consistent being present that might cause a container to breach . LANL’s input on this would be a good idea.</p>	<p>11</p>	<p>56</p>

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<p>LANL AK6 contains four waste streams, LA-MHD01.001, LA-CIN01.001, LA-MIN02-V.001 and LA-MIN04-S.001. These four waste streams can contain varying amounts of nitrate salts.</p>	<p>LA-MHD01.001 A mixed heterogeneous debris stream. Containers in this stream will be > 50% debris. This stream does have small volumes of nitrate salts, with some of the nitrate salts having been treated with the SWHEAT kitty litter. Containers in this stream that have nitrate salts treated with the SWHEAT kitty litter: zero in the WHB, zero in Panel 7, 8 in panel 6.</p> <p>LA-CIN01.001 A mixed cemented stream. This stream contains nitrate salts that have been cemented. A small fraction of debris waste may be present as well as some secondary waste generated during remediation/repackaging operations may also be add to the waste containers. This may include absorbent. It is currently not known which, if any, containers from this stream contain nitrate salts that have been remediated with the SWHEAT kitty litter. There are no LA-CIN01.001 containers in the WHB.</p> <p>LA-MIN02-V.001 A mixed absorbed waste stream. This stream is largely comprised of TRU waste such as liquids and solids absorbed or mixed with absorbent. This is the primary waste stream that will contain nitrate salts absorbed with SWHEAT kitty litter. All the containers in this stream in panel 7 contain nitrate salts mixed with SWHEAT. There are no LA-MIN02-V.001 containers in the WHB.</p> <p>LA-MIN04-S.001 Inorganic homogeneous solid waste (salt waste), a byproduct from a variety of plutonium metal purification operations. 120 containers from this stream are disposed of in panel 6. There are no containers from this stream in panel 7 or the WHB. It is currently not known which, if any, containers from this stream contain nitrate salts that have been remediated with the SWHEAT kitty litter.</p>		60
<p>* There is not a specific action, only a general reference it item 54 that states, "Additional questions were submitted on 5/8 to which CBFO and NWP will respond in writing."</p>			