

Allen, Pam, NMENV



From: Kliphuis, Trais, NMENV
Sent: Friday, August 22, 2014 4:20 PM
To: Flynn, Ryan, NMENV; Kendall, Jeff, NMENV
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Subject: LANL Audit Summary and Possible OI - more info than most of you need....
Attachments: A-14-19 Audit Concerns Summary 8-21.rtf

Attached is final Audit Concern Summary from this week's LANL/CCP Audit, A-14-19. Note concern #4 will need some additional review from Dick Blauvelt, the AK auditor as he developed a health issue at the end of the audit.

As part of the audit, AK summary documents CCP-AK-LANL-004 and CCP-AK-LANL-010 were reviewed by CTAC with Coleman Smith and Ines Triay observing. Visual Examination batch data reports and procedures were reviewed and observed by the audit team and Ricardo Maestas. Steve Holmes observed the audit of Real Time Radiography (RTR). Document CCP-AK-LANL-004 summarizes three waste streams LA-MIN-3-NC.001, LA-CIN02.001 and LA-MHD09.001. Visual Examination batch data reports and procedures were reviewed and observed by the audit team and Ricardo Maestas.

During the first audit caucus on Tuesday, August 19th at 4:00 PM Ricardo Maestas noted that AK Summary CCP-AK-LANL-006 for the waste stream LA-MHD01.001, did not contain mention of Tungsten lined gloves. Only "gloves" and "lead lined gloves" are mentioned in the AK summary document. The WIPP group had been told on several occasions during the recent LANL/NMED meetings that LANL had switched to tungsten gloves. In addition, the presentation given to the Rad and Haz Materials Legislative Committee by Dr. Nan Sauer contained a slide indicating that drum 68680 had a tungsten lined glove and was a likely component of the reaction that cause the drum to breach. Ricardo also asked the CCP AK team about the glove question and the CCP team stated that they were not aware of any changes in gloves. The audit team acknowledged NMED comments and agreed to "pull the string".

Cole conducted a brief literature search on shielded glovebox gloves that do not use lead. The "tungsten" gloves actually contain shielding material consisting of 70-90 mass% bismuth trioxide, 5-15 mass% tungsten trioxide, and 5-15 mass% lanthanum trioxide. The gloves are now commercially available from Piercan USA under part # 8USY4DA. These gloves do not contain any RCRA hazardous materials.

The second day of the audit, Ricardo and I toured Technical Area 55 to observe a visual examination of waste stream LA-MHD01.001 (CCP-AK-LANL-006). They asked operators what kind of gloves they use. They stated that they still used the lead lined gloves. We later learned that tungsten lined gloves are also used in that area.

In the afternoon Cole, Ricardo, Dr. Triay and I toured the WCCRF. We asked about gloves there as well. They showed us a new pair of tungsten lined gloves and stated that those are used exclusively at the WCCRF, primarily because they reduce rad exposure more than the lead lined gloves. We did not observe any procedures there as it is not processing any waste at this time.

At the 4:00 caucus, NMED requested an update from the audit team regarding the glove investigation. CTAC and CBFO responded that they did not believe it was of concern for the following reasons:



- 1) lead had been assigned which is “more conservative” because it is a RCRA material;
- 2) they had reviewed a technical paper about the issue they found on the internet and believed that addressed the issue adequately;
- 3) any chemical compatibility issue with the tungsten gloves (i.e.: the reactivity of Bi, W, and/or La with existing drum contents) would be addressed by the assignment of the RCRA code for lead as a worst-case;
- 4) JR Stroble indicated there is no definitive evidence that implicates any of these three metals in the WIPP drum breach;
- 5) concern about this may be premature as the TAT has not identified the cause (4 above);
- 6) and “gloves” are identified in the AK, tungsten gloves would fall in that category.

NMED did not agree with the explanations and, in general, believes the AK should be complete and accurate. Let me know if you want to discuss why we did not agree with the explanations above.

Permit section C4-2b supports this. For example, “For each TRU mixed waste stream, the Permittees shall require sites to compile all process information and data that support the acceptable knowledge used to characterize that waste stream.” [] At a minimum, the waste process information shall include the following written information: [] *Material inputs or other information that identifies the chemical content of the waste stream and the physical waste form (e.g., glove box materials and chemicals handled during glove box operations; events or processes that may have modified the chemical or physical properties of the waste stream after generation; data obtained through visual examination of newly generated waste that later undergoes radiography; information demonstrating neutralization of U134 [hydrofluoric acid] and waste compatibility).

For this reason, the WIPP group is discussing the need for an Observer Inquiry. This approach would capture NMED’s concerns and would require a response from the Permittees for the record.

In addition to the glove issue described above, we spent time considering what aspects of the audit need clarification and improvement. We identified three major areas and are suggesting the following changes:

- 1) AK communication between CBFO and generators needs to be formalized in the permit.
- 2) Audit Procedures (not procedures being audited) need to be reviewed and approved by NMED
- 3) Site procedures that impact waste must be approved by CBFO, with opportunity for auditing during audits. Changes to waste treatment must be approved by CBFO.

These are long term and as discussed yesterday, could be considered for a compliance order, enforcement action or settlement negotiations.

On Thursday afternoon the Ricardo, Steve and Cole they asked if they could tour any area where work was being done with regard to the Nitrate Salt waste safeing. Ricardo, Steve and Cole met with Scott Miller, Paul Newberry and Gian Bacigalupa in Area L in TA-54. The group toured building 39 where there are surrogate or mock up drums that contain rock salt and wheat kitty litter with water added. There were also 4 SWBs set in the same configuration as the SWBs in the domes in Area G. Work was being performed to look at the amount of swell of the kitty litter, different volumes of water, and water delivery system. These were non-rad, non-nitrate experiments. The team working in this area are helping to develop procedures for safeing the drums. The tour lasted about 30 minutes. Scott Miller and Paul Newberry informed the NMED group that if they or other from NMED would like to get a tour of Mr. Wingo’s lab, where benchscale test of the nitrate salt are taking place, they would be more than happy to set that up. Additional information would need to be provided as Mr. Wingo’s lab is in a secured area.

We have also been offered to attend a “workshop” with CBFO regarding the characterization program as a whole. They are reviewing the program as well so it would be good to hear what they are thinking. This is tentatively scheduled for the week of September 17th but Ricardo will be at the ANL audit so we will probably change this.

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AUDIT A-14-19
LANL/CCP Recertification Audit, August 19-21, 2014

No.	Who	Description of Concern	Requirements Comments
1	Martinez Castillo	<p>It is recommended that CCP consider reintroducing the education level of “high school diploma or equivalent” as a requisite requirement (best management practice) in CCP-QP-002, <i>CCP Training and Qualification Plan</i> for RTR Operators.</p> <p>Revised – the previous concern was based on a requirement in the HWFP Attachment F1, which per the Interpretative Authority is only applicable to Waste Confirmation personnel.</p> <p>Proposed as a Recommendation</p>	N/A
2	Martinez Castillo	<p>It is recommended that CCP consider including DOE/WIPP-02-3122, <i>Transuranic Waste Acceptance Criteria for WIPP</i> (WAC) in the reference section of CCP-QP-002, <i>CCP Training and Qualification Plan</i>, since it is specifically cited a number of times in the document.</p> <p>Revised – After further discussion, it has been determined that CCP-PO-002, is referenced in CCP-QP-002, which provides sufficient “flow-down” demonstrating compliance with the WAC.</p> <p>Proposed as a Recommendation</p>	N/A
3	Blauvelt Riggs	<p>Two AK Accuracy Reports were reviewed for the two waste streams examined during the audit. These included; LA-MSG04.001 (\$4000) and LA-MHD09.001 (\$5000). The review revealed that the Accuracy Reports lacked the identification of one container in each stream that was removed from the waste stream during characterization. It would have appeared that these containers should have been identified as a hit for AK accuracy. However; after discussion with responsible personnel it was determined that the current practice only addresses discrepancies identified after the initial approval of the Waste Stream Profile Form. Section 4.6 of CCP-TP-005, <i>CCP Acceptable Knowledge Documentation</i>, which describes this process, needs to be examined and revised as necessary to more accurately prescribe the current practice used.</p> <p>Proposed as an Observation</p>	N/A

The information contained on this form is preliminary. All results and concerns are subject to final review and validation by the Carlsbad Field Office.

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No.	Who	Description of Concern	Requirements Comments
4	Blauvelt Riggs	Timeliness of "M" designated source document updates to the AK Summary Report (CCP-AK-LANL-008, Revision 9, May 3, 2012.) This concern will be further evaluated when the team can reconvene with the AK Technical Specialist.	???

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