Allen, Pam, NMENV

From: Maestas, Ricardo, NMENV
Sent: Friday, May 02, 2014 9:43 AM
To: Allen, Pam, NMENV
Subject: FW: Response to Information Request to Terminate Compliance Order HWB 09-31
Attachments: Analysis of Request to Terminate CO HWB 09-31 8-21-2013.docx

Email and attachment for WIPP file.

From: Kliphuis, Trais, NMENV
Sent: Monday, February 03, 2014 4:17 PM
To: Kendall, Jeff, NMENV; Blaine, Tom, NMENV; Kieling, John, NMENV
Cc: Hower, Jennifer, NMENV; Flynn, Ryan, NMENV
Subject: RE: Response to Information Request to Terminate Compliance Order HWB 09-31

Attached is another document that summarizes the situation and what NMED asked for. The conclusion of the memo reads:

In general principle, the HWB WIPP group agrees that the compliance order should be terminated as mandating unnecessary and invasive processing is contrary to NMED’s mission. However, the underlying concern that RTR does not adequately show observable liquid was not addressed in the Permittees draft response. I believe the heart of the issue is that RTR does not show liquid “in the matrix”. This is not observable liquid as the permit prohibits but upon agitation may become observable. The Permittees believe that the Permit only requires identification of “observable liquid” at the time of RTR and if liquid comes out of the matrix during shipping that is not of concern and not a permit requirement. I believe this should be clearly stated in their request letter instead of NMED left to infer this.

Once again, please feel free to contact me if you have questions.

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New Mexico Environment Department
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From: Kendall, Jeff, NMENV
Sent: Monday, February 03, 2014 3:17 PM
To: Blaine, Tom, NMENV; Kliphuis, Trais, NMENV; Kieling, John, NMENV
Cc: Hower, Jennifer, NMENV; Flynn, Ryan, NMENV
Subject: FW: Response to Information Request to Terminate Compliance Order HWB 09-31

Can I get some background context on this? Perhaps a copy of the Information Request to Terminate Compliance Order HWB 09-31?

Thanks in advance,

Jeff
From: Michelle Navarrete [mailto:Michelle.Navarrete@cbfo.doe.gov]
Sent: Monday, February 03, 2014 3:05 PM
To: Kendall, Jeff, NMENV
Cc: Flynn, Ryan, NMENV; Blaine, Tom, NMENV; Kieling, John, NMENV; Kliphuis, Trais, NMENV
Subject: Response to Information Request to Terminate Compliance Order HWB 09-31

If you have any questions, please contact George T. Basabilvazo at (575)234-7488.

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DOE and NWP submitted a letter on March 28, 2013 to Ryan Flynn requesting to terminate Compliance Order 09-31. They stated that they have fully complied with the Schedule of Compliance and Other Terms and Conditions of both the Partial Stipulated Final Order dated December 21, 2009 and the Compliance Order dated HWB 09-31 dated May 21, 2012.

**History:** The Permit in place at the time required that a portion of the waste containers processed through RTR must also be processed through VE. A drum was selected from waste stream LA-MIN03-NC.001 for VE and during the VE liquid in excess of 1% of the waste container volume was identified. An NCR was issued and the drum was tagged and sent aside for remediation. Three years later the NCR was mistakenly dismissed. The container was then determined to be acceptable for WIPP. The drum was then overpacked with three other drums from the same waste stream into a SWB. It was emplaced at WIPP on May 28, 2008. The Permittees became aware of the problem on June 6, 2008 when a check for unresolved NCR’s identified the drum as emplaced. CBFO retrieved the SWB and returned it to LANL for remediation. EPA Radiation Protection Division was notified of the event on June 11, 2008 by phone with a follow up letter dated June 12, 2008. The letter describes the circumstances above and also states “It should be noted that the prohibition on liquids is based on the volume of the payload container. Thus, even though the drum was overpacked for container integrity reasons, the overpacking resolved the prohibition condition.” and “The decisions to retrieve the SWB was based on the fact that it was emplaced at WIPP with an unresolved NCR in an active disposal room.”

NMED did not agree with these statements and as a result NMED issued the partial SFO and a SFO that required modification of the Permit to clarify language. The alleged violations are listed in those documents. Briefly, they include several violations of the WAP “the Permittees shall require that generator/storage sites implement applicable waste characterization requirements of the WAP, specified in Permit Attachment B, prior to the Permittees’ receipt of TRU missed waste at WIPP.

The PSFO and SFO required that the Permittees submit a Class 2 PMR that clarified the liquid prohibition, stated that overpacking into larger containers does not constitute remediation and prohibits redistribution of untreated liquid as a form of remediation. It also required that every container remaining from the waste stream be remediated and prior to shipment of any remediated container from that waste stream the Permittees submit for each container evidence that the container has been remediated including data sheets and video for RTR.

Tim Hall believes that the reason NMED had LANL remediate every drum in the waste stream was because it was a “problematic waste stream” concerning liquids and liquid in excess amounts is prohibited from WIPP.” He also said that RTR would pick up liquids that were outside of the matrix (top, bottom sides of the sludge) and the problem was that RTR was not seeing free liquids within the matrix.
Tim viewed countless hours of video of LANL personnel remediating those drums and said that after they would drill holes in the drums they would let the drums bleed out. After the drums were done bleeding, they would hook up a vacuum and suck out even more liquids. The vacuum was sucking out liquids from the matrix meaning that the liquid was not locked in or stabilized with in the matrix (more like wet clay). He believes NMED has LANL remediating all the drums because that is the only sure way not to ship drums that contain prohibited amounts of liquid. NMED did not want to risk liquid coming out of the matrix during transport.

The Permittees believe the requirement to be unnecessary/overly burdensome and unnecessarily costly. In addition, they state that the requirements of the SFO have been fully complied with.

The Permit language at that time read:

B-1c Waste Prohibited at the WIPP Facility

The following TRU mixed waste are prohibited at the WIPP facility:

- liquid waste (waste shall contain as little residual liquid as is reasonably achievable by pouring, pumping and/or aspirating, and internal containers shall contain less than 1 inch or 2.5 centimeters of liquid in the bottom of the container. Total residual liquid in any payload container (e.g. 55 gallon drum or standard waste box) may not exceed 1 percent volume of that container. Payload containers with U134 waste shall have no detectable liquid)

Current Relevant Conditions in WIPP Permit:

1.5.18. Observable Liquid

“Observable liquid” means liquid that is observable using radiography or VE as specified in Permit Attachment C (Waste Analysis Plan).

2.3.3 Treatment, Storage, and Disposal Facility Waste Acceptance Criteria (TSDF-WAC)

The Permittees shall not accept TRU mixed wastes at WIPP for storage, management, or disposal which fail to meet the treatment, storage, and disposal facility waste acceptance criteria as presented in Permit Sections 2.3.3.1 through 2.3.3.10 of this Permit.

2.3.3.1 Liquid

Liquid waste is not acceptable at WIPP. Liquid in the quantities delineated below is acceptable.

- Observable liquid shall be no more than 1 percent by volume of the outermost container at the time of radiography or visual examination.

- Internal containers with more than 60 milliliters or 3 percent by volume observable liquid, whichever is greater, are prohibited.
• Containers with Hazardous Waste Number U134 (hydrofluoric acid) assigned shall have no observable liquid.

• Overpacking the outermost container that was examined during radiography or visual examination or redistributing untreated liquid within the container shall not be used to meet the liquid volume limits.

Requests:

1. The HWB WIPP group would like to review the current and proposed training material to ensure that RTR and VE examination operators adequately determine if liquid in containers meet the WAP criteria.

2. The HWB WIPP group does not agree that Item 16 (page 2), Item 10 (page 3) or Item 11 (page 3) are complete. These requirements still apply to the existing drums. In a phone call the Permittees explained that they believed the intent of the language was for only a portion of the waste stream that was being held. We did not agree with this as the SFO language clearly states “All remaining containers from waste stream LA-MIN03-NC.001 shall be remediated in accordance with approved LANL procedures prior to shipment to WIPP.” The Permittees still need to adequately explain how and why this status is considered complete.

3. The HWB WIPP group would also like further and substantiated information regarding the basis for the estimate that 110 of the remaining 550 drums would require remediation.

4. The Permittees also explained by phone that once the permit was revised as required by the SFO, the remaining requirements of the SFO for the remediation become effectively obsolete. See below for additional discussion on this.

Notes/Recommendations:

In the revised Permit language the Permittees are required to ensure that “Observable liquid shall be no more than 1 percent by volume of the outermost container at the time of radiography or visual examination.” NMED’s concern about liquid coming out of the matrix during transport is not supported by permit language/requirement as the requirement clearly states “at the time of radiography or visual examination”. In addition, if liquid in the matrix that is not “observable liquid” as defined by the permit exists, there is no permit language to require mediation.

Upon successful response to requested documents and clarifications, the HWB WIPP group might recommend granting the termination.

8-21-2013: The Permittees submitted a draft response to the requested information.

Responses to NMED Requests listed above and NMED WIPP Group conclusion:

1. RTR training and qualification records are discussed in Section 5.2, pages 5 and 6 of the Final Audit Report of the LANL CCP (Audit A-12-12). The WIPP group needs to review this.
2. The HWB WIPP group understands that requirements from the PSFO were superseded by the SFO and therefore agrees that Item 16 is no longer applicable or relevant.

3. Item 10: NMED agrees that the current LANL procedures are probably adequate for all waste streams and that there is no need to manage the subject waste stream differently. To verify, NMED would like to observe a self-selected set of drums as they are processed through the RTR. See final conclusion for additional information.

4. Item 11: See conclusion directly above this.

5. The basis for the 110 drum estimate was an assumed 20% failure rate that is based on past experience from previous remediation. This is difficult to verify but ultimately not necessary information for the decision.

6. The Permittees explain that the permit was revised and became effective April 1, 2010 and includes language that "observable liquid shall be no more than 1 percent by volume of the outermost container at the time of radiography or visual examination". The Permittees are asking to operate as described by the permit rather than remediate every drum prior to radiography. The NMED WIPP group agrees that mandatory remediation and associated handling and processing for drums that do not require remediation is not reasonable and poses unnecessary and increased risk to workers. There is no provision in the Permit that requires this.

**Conclusion:**

In general principle, the HWB WIPP group agrees that the compliance order should be terminated as mandating unnecessary and invasive processing is contrary to NMED's mission. However, the underlying concern that RTR does not adequately show observable liquid was not addressed in the Permittees draft response. I believe the heart of the issue is that RTR does not show liquid "in the matrix". This is not observable liquid as the permit prohibits but upon agitation may become observable. The Permittees believe that the Permit only requires identification of observable liquid" at the time of RTR and if liquid comes out of the matrix during shipping, that is not of concern and not a permit requirement. I believe this should be clearly stated in their request letter instead of NMED left to infer this.