

US EPA ARCHIVE DOCUMENT



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUL 14 2008

OFFICE OF
AIR AND RADIATION

Dr. Dave Moody
Manager, Carlsbad Field Office
U.S. Department of Energy
P.O. Box 3090
Carlsbad, NM 88221

Dear Dr. Moody:

I am writing in regard to the drum (# LAS817174) of transuranic (TRU) waste with an open non-conformance report (NCR) that was emplaced at WIPP from the Central Characterization Project (CCP) at Los Alamos National Laboratory (LANL). On June 25, 2008, the Agency conducted an on-site investigation to better understand how this waste drum was overpacked, shipped, and emplaced at WIPP, as well as to evaluate corrective actions that have been put into place to prevent similar recurrences in the future. In addition, on July 2, 2008, along with the New Mexico Environment Department staff, Carlsbad Field Office (CBFO), CCP and LANL personnel, EPA staff observed the opening of the standard waste box (# LASB0041) that contained the drum in question. This observation was performed to verify whether the HOLD tag attached to this non-conformant drum was indeed missing as hypothesized by CBFO/CCP in its draft root cause analysis (RCA) report. As we are continuing our investigation, we cannot yet concur with the resumption of shipment and disposal of contact-handled (CH) TRU waste containers from LANL.


In your June 13, 2008 letter, CBFO had concluded from the available evidence that the error in the drum shipment was limited to LANL operations and that sufficient controls were in place to allow shipments at other sites. Some evidence does suggest that the problem at LANL may stem, in part, from possibly unique circumstances at LANL which are associated with differing radiography and visual examination characterization results that have occurred with a limited number of containers. We are nevertheless concerned that what happened at LANL could potentially occur at other CCP sites for containers that have an NCR, since the same processes, procedures, and many of the same personnel are involved at all CCP-managed site waste characterization programs. We request that CBFO perform a thorough review of CCP's TRU waste handling, shipment, and disposal activities to identify and address any potential system-wide shortcomings.

EPA will continue to investigate this issue and review information as it becomes available. The Agency's investigation will include an independent analysis of what happened, why it happened, and whether CBFO/CCP's proposed corrective actions adequately address all

issues at LANL and program-wide. We have included some questions and concerns in the attached enclosure that we need DOE to address as quickly as possible. EPA plans to continue its investigation at the LANL site after we receive the RCA and updated corrective actions.

If you have any questions regarding this issue, please contact Tom Peake at (202) 343-9765.

Sincerely,



Jonathan D. Edwards, Acting Director
Radiation Protection Division

Enclosure

cc: Electronic Distribution
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Steve Zappe, NMED
James Bearzi, NMED
Nick Stone, EPA Region 6
EPA Docket

bcc: WIPP Team
WIPP Docket

Enclosure A

LANL-Specific Container HOLD Tag Issues

- During the July 2nd inspection; EPA staff observed that the nonconforming drum from LANL had no HOLD tag attached. The plastic tie and the brass ring of the HOLD tag were still affixed to the drum, while the HOLD tag itself had detached from its brass ring. This evidence indicates that the initial RCA was premature and the resulting corrective actions may not be appropriate. The RCA also focuses on the quality assurance (QA) aspects of the incident instead of the root cause, which lies with the operational staff and decision-making errors. While useful in understanding the event chronology and potentially improving future procedures, the actions of the QA staff could not have been the root cause of the problem. It appears that it may have been a QA staff member who eventually identified the problem drum, albeit too late to prevent emplacement.
- Based on EPA's observations, the initial RCA and corrective actions are no longer valid. CBFO/CCP must develop a new RCA and corrective action plan. The Agency understands that a new RCA is being developed now and EPA looks forward to receiving it.
- During the June 25th EPA inspection, EPA was informed that CCP has decided to attach new HOLD tags of a different design (made of plastic instead of paper, and attached using a metal clip instead of a plastic loop) to all TRU waste containers with open/unresolved NCRs at all CCP sites. This action was initiated due to CBFO/CCP's assumption that the plastic loop may have fallen off of the container due to the environmental conditions (e.g., HOLD tag breaking due to UV exposure) at LANL. However, this assumption was proven incorrect due to the presence of an intact plastic loop with remnant paper on the subject container.
- DOE needs to provide EPA with information on physical durability of the new HOLD tags and any other relevant information. Assurance must also be given that all paper tags have been replaced with the new design at all CCP sites. In addition, please provide both old and new HOLD tag configurations and characteristics so that we may compare the two.
- DOE should also provide information that 1) discusses the CCP-implemented processes associated with placement and removal of HOLD tags on TRU waste containers with NCRs and 2) identifies the personnel (e.g., transportation certifying official) responsible for making decisions and taking relevant actions. For example, is the paper tag cut, or ripped off?
- At the June 25 inspection, EPA staff observed new HOLD tags on TRU waste containers stored in Dome 49 at LANL. EPA-requested photos from this inspection have yet to be

submitted by DOE. These need to be provided promptly.

Management of TRU Waste Containers with NCRs at CCP Sites

- Based on the information available about the aforementioned LANL HOLD tag issue, EPA believes that this problem may not be unique to LANL. EPA is concerned about CCP's TRU waste container tagging process and its ability to differentiate between containers with unresolved/open NCRs, as well as those with closed/resolved NCRs.
- Based on EPA observations from the two LANL inspections, EPA notes deficiencies in coordination and communication between CCP Carlsbad staff and CCP personnel at different CCP sites. EPA is concerned about the processes implemented at CCP sites for selection, certification, verification, and loading of TRU waste containers for WIPP disposal.