



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

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JAN 15 2004

OFFICE OF AIR AND RADIATION

Lloyd L. Piper, Acting Manager
Carlsbad Field Office
U.S. Department of Energy
P.O. Box 3090
Carlsbad, NM 88221-3090



Dear Mr. Piper:

I am writing in response to a letter from Dr. Inés Triay dated November 12, 2003. In that letter, Dr. Triay discusses the Los Alamos National Laboratory (LANL) investigation of the condition adverse to quality documented in CBFO Corrective Action Report (CAR) 03-083. In the course of that investigation, LANL has identified two additional drums as individual payload containers that were measured to be below the instrument's calibrated range and below the lower limit of detection, and were subsequently disposed of at the Waste Isolation Pilot Plant (WIPP). Your letter also describes the course of action the Carlsbad Field Office (CBFO) requires LANL to pursue in response to the laboratory's failure to close CAR 03-083, requiring accelerated corrective action.

The disposal of waste drums with transuranic alpha activity below the lower limit of detection of the radioassay system is similar to problems CBFO discovered during its last LANL audit (A-03-27, September 22-26, 2003) and which led to the condition adverse to quality documented in CAR 03-083. During the September audit, CBFO discovered that ninety-eight (98) drums disposed at the WIPP over a six week period in August and September 2003 were assayed below the established calibration range of the Combined Thermal/Epithermal Neutron (CTEN) assay system. The disposal of these drums violated LANL's own operating procedures as well as multiple provisions of the Waste Acceptance Criteria for Contact-Handled Waste (CH-WAC) approved by the Environmental Protection Agency (EPA). It also violated the requirements of the CBFO Quality Assurance Program Document.

The EPA responded to these violations in a letter from Frank Marcinowski to Dr. Triay dated October 27, 2003. In our response, we did not require the retrieval of the 98 drums from the repository and their return to LANL because we concurred with CBFO's assessment that there is no reasonable basis to expect that these drums would adversely affect WIPP's long-term performance, and also agreed that their retrieval could pose significant operational difficulties

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and lead to unnecessary worker exposures. For the same reasons, we believe that the two additional LANL waste drums subject to the faulty practices and already emplaced in the WIPP disposal system need not be retrieved.

As noted in our earlier letter, we view the infractions at LANL as very serious and believe that a high level of scrutiny is warranted at the site. We find that the course of action described in your letter and imposed by CBFO on LANL is both necessary and appropriate in light of LANL's failure to complete corrective actions for CAR 03-083. Before resuming shipments of transuranic waste, LANL must:

- complete correction actions and achieve closure of CAR 03-083,
- complete restart activities,
- obtain written authorization from CBFO to initiate non-destructive assay activities in preparation for an audit,
- undergo a full certification audit by CBFO,
- undergo an EPA inspection under 194.8, and
- receive written approval from both CBFO and EPA following completion of the on-site audit and inspection.

These requirements are fully consistent with the conditions laid out in our October response. During our inspection, we expect to examine all aspects of alpha activity measurements and calculations, including NDA processes, consideration of transuranic radionuclides, and use of this data in overpacking situations.

We appreciate your ongoing attention to these important issues. If you have any questions, please contact Rajani Joglekar at (202) 343-9462.

Sincerely,



Frank Marcinowski, Director
Radiation Protection Division

cc: Lynne Smith, DOE-EM
Kerry Watson, CBFO
Ava Holland, CBFO
Matthew Silva, EEG
✓ Steve Zappe, NMED
Don Hancock, SRIC