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Certified Mail – Return Receipt Requested

March 9, 2000

Dr. Inés Triay, Manager
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P.O. Box 2078
Carlsbad, New Mexico 88221-5608

**RE: NMED Approval of RFETS Final Audit Report, Audit A-00-08
EPA I.D. Number NM4890139088**

Dear Dr. Triay and Mr. Epstein:

On January 28, 2000, NMED received the Final Audit Report of the Rocky Flats Environmental Technology Site (**RFETS**), Audit Number A-00-08, from the Department of Energy's Carlsbad Area Office (**CAO**). CAO and Westinghouse (**the Permittees**) were required to submit this Audit Report under the Waste Isolation Pilot Plant (**WIPP**) Hazardous Waste Facility Permit as specified in Permit Condition II.C.2.c. The scope of this audit was to evaluate the adequacy, implementation, and effectiveness of the RFETS waste characterization processes for retrievably stored contact-handled debris waste relative to the requirements of the WIPP Permit.

The Audit Report documentation submitted to NMED consisted of the following items:

- a narrative report
- completed copies of relevant Permit Attachment B6 checklists
- objective evidence examined during the audit
 - general information
 - acceptable knowledge
 - headspace gas
 - real time radiography
 - visual examination
- corrective action reports
- final RFETS standard operating procedures

NMED has examined the Audit Report for evidence of compliance with the requirements of Permit Conditions II.C.2 (Audit and Surveillance Program) and II.C.1 (Waste Analysis Plan).

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Specifically, NMED observed the RFETS audit on December 13 - 17, 1999 and January 18 - 20, 2000 and evaluated the Audit Report for compliance with the following permit requirements:

- Permit Condition II.C.2.a (*Requirement to Audit*) - the Permittees shall demonstrate to the Secretary that the generator/storage sites have implemented and comply with applicable requirements of the WAP by conducting an audit of the generator/storage sites as specified in Permit Attachment B, Section B-4b(1)(iii), and Permit Attachment B6 (Waste Isolation Pilot Plant Permittees' Audit and Surveillance Program), and as required by 20 NMAC 4.1.500 (incorporating 40 CFR §264.13).
- Permit Condition II.C.2.c (*Final audit report*) - the Permittees shall provide the Secretary a final audit report as specified in Permit Attachment B6. The final audit report shall include all information specified in Permit Attachment B6, Section B6-4, and: (i) A detailed description of all corrective actions and the resolution of any corrective action applicable to WAP requirements, including re-audits if required; (ii) documentation necessary for the Secretary to determine if the corrective action was resolved.

Attached are NMED's general comments based upon observation of the RFETS audits and review of the submitted information. NMED concludes that the Audit Report adequately demonstrates that the applicable characterization requirements of the WAP have been implemented at RFETS for retrievably stored contact-handled debris waste. Therefore, NMED approves the Permittees' Final Audit Report for RFETS Audit A-00-08.

If you have any questions regarding this matter, please contact me at (505) 827-1758.

Sincerely,



Gregory C. Lewis

Director

Water and Waste Management Division

Attachment

cc: James Bearzi, HRMB
Susan McMichael, NMED OGC
Howard Roitman, CDPHE HMWMD
David Neleigh, EPA Region 6
Mary Kruger, EPA ORIA
Connie Walker, TechLaw
File: Red WIPP '00

**OVERVIEW COMMENTS ON THE
ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE
FINAL AUDIT REPORT**

Overall Assessment of Audit Report Acceptability

NMED has examined the Rocky Flats Environmental Technology Site Final Audit Report (**Audit Report**) received January 28, 2000, and the Attachments (including objective evidence examined during the audit (**TAB references**), corrective action reports (**CARs**), items corrected during the audit (**CDAs**), and audited standard operating procedures (**SOPs**)). The WIPP Hazardous Waste Facility Permit references the Permittees' Audit and Surveillance Program and states, in part:

The Waste Isolation Pilot Plant (**WIPP**) Permittees' Audit and Surveillance Program shall ensure that: 1) the operators of each generator/storage site (**site**) that plan to transport transuranic (**TRU**) mixed waste to the WIPP facility conduct sampling and analysis of wastes in accordance with the current WIPP Waste Analysis Plan (**WAP**) (Permit Attachment B), and 2) the information supplied by each site to satisfy the [applicable] waste screening and acceptability requirements of Section B-4 of the WAP is being managed properly. [Attachment B6-1, Introduction]

The Permittees shall perform audits of the generator/storage site waste characterization programs to verify compliance with the WAP and that generator/storage site sampling, data collection, data validation, and reporting practices, as implemented by the generator/storage site QAPjPs, will meet DQOs in this WAP (Permittees' Audit and Surveillance Program). ...audits are to review... adherence to the requirements of this WAP and assure adherence to the WAP characterization program... [Attachment B-4(a)(4), Data Generation]

The Permittees demonstrate compliance with these requirements by determining that: a) sites develop adequate procedures to characterize waste in accordance with the WAP, and b) sites effectively implement these procedures as shown by examples of implementation. In general, the Audit Report is sufficiently thorough and demonstrates that the Permittees' audit program has addressed applicable Permit requirements, specified in Permit Condition II.C.2 and Permit Attachments B and B1-B6, for RFETS retrievably stored contact-handled debris waste. However, NMED offers the following comments to improve the quality of subsequent Audit Reports.

Overview Comments

1. NMED identified numerous typographical errors, omissions, misreferences, and clarifications necessary in the Audit Report, including but not limited to:

- TAB and procedural references were sometimes incorrect or incomplete.
- Audit activities and results, as presented on the checklists and TAB references, did not always reflect the thoroughness of events as observed by NMED.
- Examples of implementation were sometimes ambiguous.

- CAR/CDA/Observation/Recommendation discussion, and referencing of CARs/CDAs/Observations/Recommendations on checklists and within the body of the text (i.e., Section 5), could be more thorough.
- Terminology was sometimes used inconsistently or inappropriately (e.g., QAOs vs. DQOs).
- The Permittees should ensure that site procedures are consistent with Permit requirements, and recommend modifications to procedures prior to or during the audit. While it appears that applicable Permit requirements are adequately implemented in RFETS procedures, NMED noted a few instances of ambiguous language (e.g., miscertification rate, visual examination videotaping, etc.) that could have been better addressed in the Audit Report.

NMED was present during the RFETS audit and observed the Permittees' audit protocol and activities. While the issues identified above impact the readability and apparent thoroughness of the audit, the balance of the Audit Report is appropriately thorough and accurately reflects audit activities and results.

2. NMED independently observed the following aspects of the RFETS audit which, although addressed in the Audit Report, could have been expanded to provide a more complete description of audit activities and conclusions. NMED does not expect revision of the Audit Report to address these observations, but does expect a more thorough discussion of these and other technical elements as applicable in subsequent audit reports:

- RFETS presented information quantifying the amount of toluene that may be present in waste due to tape degassing (outgassing). The Audit Report or checklists could have discussed the audit conclusions regarding the appropriateness and applicability of this qualification (i.e., that the information would apply only to containers with said tape).
- The Audit Report could have better summarized why the initial batch data report was rejected (i.e., due to high methanol recoveries). The associated CAR discussion focused on the failure of the independent technical reviewer to identify the elevated methanol recovery in the Field Reference Sample, rather than on the issue of high methanol recovery and whether it was appropriate to reject the batch report because of this.
- The Audit Report could have discussed how the actual statistical process associated with calculation of the miscertification rate was observed and assessed.

3. Several issues should be more thoroughly discussed within future audit reports to better present how the Permittees assess the issues and audit results with respect to WAP compliance. Examples include but are not limited to:

- Future audit reports and checklists should include more thorough technical audit observations and/or results. Using headspace gas sampling and analysis as an example, such observations/results would include but not be limited to an overview of the headspace gas sampling procedure, a description of the observed field QC

sample collection, verification of equipment and instrumentation specifications, a description of the canister cleaning process, observation of sample storage areas, descriptions of procedural operations that are not typically reported in field sampling or analytical documentation, sampling documentation accuracy with respect to observed conditions, the drum breach processes, and the manifold purge process.

- Future audit reports should more thoroughly discuss how waste incompatibilities are addressed by specific nonconformance reports (NCRs) and TAB references. Incompatibility criteria are presented in condition II.C.3.d of the Permit; the Permittees (Clarification 14) stated that “compatibility issues are handled through the use of approved TRUCON codes”.
- Future audit reports should more thoroughly discuss how WIPP TSDF WAC (Permit Condition II.C.3) are addressed by site procedures and how compliance is ensured through the example of implementation examined (see checklist item 12).
- Future audit reports (checklist B3 and/or Section 5.2.3) should more thoroughly discuss how the Permittees assess the hazardous waste code assignments given by the site, and should better describe the site Acceptable Knowledge (AK) roadmap.
- Future audit reports should clarify how site auditors determine whether the Hazardous Waste Manifest-related processes are adequate, and should state whether a hypothetical manifest was examined and assessed for accuracy, even if no actual manifest had yet been prepared.

4. The Permittees’ auditors used both the B6 and procedure-specific checklists during the RFETS audit. The WIPP Hazardous Waste Facility Permit requires:

... Audits shall be performed using approved audit checklists that include the checklists in Tables B6-1 to B6-6 for the summary category groups undergoing audit. [Attachment B6-4, Audit Conduct]

Because omissions and errors were noted (see comments 1, 2, and 3 above), NMED suggests that the Permittees modify site-specific checklists in forthcoming audits either to include the appropriate B6 checklist elements, or to cross reference all appropriate B6 checklist element numbers on the procedure-specific checklists. These procedure-specific checklists should then be provided to NMED prior to the audit to facilitate NMED observation of the audit.

5. Future audit reports should better explain the distinctions between CARs, CDAs, Observations, and Recommendations (**concerns**), including why specific concerns are designated to the different categories and the criteria for these designations. These audit reports should also state how Permit compliance is taken into account when the auditors assess these concerns, noting that some CAR elements are not applicable to Permit requirements (e.g., CAR 00-011 Element 2), while others are (e.g., CAR 00-011 Element 9). In addition, references to pertinent concerns should be included in Section 5 of the audit report and on the B6 checklists, and the checklists

themselves should reference each applicable concern and include more discussion about that concern.

6. The CAR discussions in Section 6.1 and Attachment 2 of the Audit Report do not correlate well in some instances. It appears that information in Attachment 2 provides fundamental information regarding CAR issues and resolution, while Section 6.1 includes, in some cases, more supplemental information. NMED suggests that the CAR write-ups in future audit reports follow the actual CARs more precisely. The write-up should include each issue cited in the reports for each CAR, followed by the resolution of those issues as proposed by the site. The write-up should then focus on why the proposed resolution is acceptable to the Permittees.

7. More thorough cross referencing of applicable B6 checklist elements should be provided, when the reader is referenced to other checklists for information. While it is appropriate to reference other checklists for applicable information (e.g., checklist B6-1 requires cross referencing to other checklists in many instances), the specific checklist element numbers should be provided.