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CERTIFIED MAIL - RETURN RECEIPT REQUESTED

June 23, 2000

Dr. Inés Triay, Manager
Carlsbad Area Office
Department of Energy
P. O. Box 3090
Carlsbad, New Mexico 88221-3090

Mr. Joe Epstein, General Manager
Westinghouse Waste Isolation Division
P.O. Box 2078
Carlsbad, New Mexico 88221-5608

**RE: NMED APPROVAL OF HANFORD FINAL AUDIT REPORT, AUDIT A-00-05
EPA I.D. NUMBER NM4890139088**

Dear Dr. Triay and Mr. Epstein:

On May 1, 2000, NMED received the Final Audit Report of the Hanford Site Audit Number A-00-05 (**Audit Report**), 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 Hanford waste characterization processes for contact-handled retrievably-stored 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
 - pre-existing data
- corrective action reports; and
- final Hanford standard operating procedures.

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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, of WAP). NMED observed the initial Hanford audit on January 24-28, 2000 as well as the follow-up CAR closeout verification on April 17-19, 2000, and specifically 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.

Following discussions with your staff, NMED received a request from CAO to review and respond to CAO's determination that real-time radiography and visual examination data collected at the Hanford site prior to the effective date of the WAP ("pre-existing data") now meets the requirements of the WAP. NMED agrees that evaluation of pre-existing data for WAP compliance is a necessary activity to ensure the best use of data generated prior to the effective date of the WIPP WAP. However, review and approval of pre-existing data is inappropriate for this Audit Report. Accordingly, NMED will respond to this request in a separate letter. We also request that CAO limit future Audit Reports to information pertaining to demonstration of implementing characterization requirements at a generator site. CAO should therefore request review of pre-existing data in a separate submittal.

Attached are NMED's general comments based upon observation of the Hanford audit and review of the submitted information. NMED concludes that the Audit Report adequately demonstrates that Hanford has implemented the applicable characterization requirements of the WAP for retrievably stored contact-handled debris waste. NMED therefore approves the Permittees' Final Audit Report for Hanford Site Audit Number A-00-05 for contact-handled retrievably-stored debris waste, exclusive of waste-stream characterization asserted by CAO to be supported by pre-existing data presented in Section 5.2.7 and associated TAB references in the Audit Report. As discussed above, NMED's review of and response to this pre-existing data will be addressed under separate cover.

Dr. Triay and Mr. Epstein

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

Sincerely,



Paul R. Ritzma
Deputy Secretary
New Mexico Environment Department

Attachment

cc: Gregory J. Lewis, NMED WWMD
James Bearzi, NMED HRMB
John Kieling, NMED HRMB
Steve Zappe, NMED HRMB
Susan McMichael, NMED OGC
Tom Fitzsimmons, Director, WA Dept. of Ecology
David Neleigh, EPA Region 6
Mary Kruger, EPA ORIA
Connie Walker, TechLaw
Don Hancock, SRIC
Joni Arends, CCNS
[REDACTED]

OVERVIEW COMMENTS ON THE HANFORD FINAL AUDIT REPORT

Overall Assessment of Audit Report Acceptability

NMED has examined the Hanford Site Final Audit Report (**Audit Report**) received May 1, 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 Hanford retrievably stored contact-handled debris waste. NMED did identify a few discrepancies between WAP requirements and procedures that appear to have been inadvertent. For example, site procedures require verification of Waste Matrix Code Groups with respect to VE and RTR, when procedures require verification by Waste Matrix Code. In this case, the site actually identifies waste by Waste Matrix Code and WAP compliance was demonstrated. However, all discrepancies should be rectified in the future and examined by the Permittees at the next annual Hanford audit.

NMED offers the following comments to improve the quality of subsequent Audit Reports.

Overview Comments

1. While improved with respect to the RFETS report, NMED identified typographical errors, omissions, misreferences, and ambiguities 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 incorrect or unclear.
- Checklist comments sections could be more thorough with respect to explaining the examples of implementation and how they demonstrate WAP compliance.
- Checklist references to other applicable checklist elements were not provided (i.e. reference applicable checklist element numbers in the B6-1 and B6-3 checklists), which could simplify the audit and review processes.
- Procedure references do not always include revision numbers.
- Checklist sub-elements should be addressed specifically enough so that the associated procedure and example of implementation can be ascertained.

NMED was present during the Hanford 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 Hanford 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:

- The Audit Report should have been revised to reflect any observations and recommendations that were addressed between the audit and CAR closure.
- The Audit Report should more thoroughly address drum age determination and documentation, ensuring that procedures examined adequately reflect WAP drum age requirements and that independent technical review has been performed. Meeting drum age criteria is necessary to demonstrate collection of a representative sample in lieu of sampling all inner bags. The Hanford data

evaluated in batch data report SBDR-00017 clearly met the drum age criteria and the lack of independent technical review for drum age criteria did not impact this data package. However, the ages of future drums could require verification.

- Staff training is a major element of the WIPP permit and is included in several locations in the B-6 checklist, but is addressed in only two locations in the Audit Report. The Audit Report should briefly provide a narrative on the procedures for review of training documents, including course content.
- Although the Audit Report states that a CAR is a concern that is not addressed or corrected during the Audit, the Audit Report should specify in greater detail the criteria for designating CARs, observations, and recommendations.
- The Audit Report should be improved by including a more thorough explanation of checklist elements and observed information, keeping in mind that some of those reading the report may not be present during audits. For example, the site has not yet generated completeness rates for analytical and testing procedures, although review of the available batch reports for HSG, radiography, and VE indicate that completeness QAO rates would be met for the reviewed data. The checklist should indicate that the completeness rates have not yet been formally calculated because of the small amount of available data.

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. While much improved over the RFETS report with respect to headspace gas, other areas require additional thoroughness. Using acceptable knowledge as an example, such observations/results would include but not be limited to discussion of waste stream designation and identification, use of supplemental information (e.g., Solid Waste Storage and Disposal Records, or SWSDRs) within overview documentation, differences between AK data discrepancy resolution and AK confirmation, description of how site forms are used and site-specific AK processes augmenting the WIPP WAP, hazardous waste determinations and assessments, determination of waste matrix code and code groups, Performance Report contents and acceptability, etc.
- 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 Number CAO-00 14, "Prohibited Items") stated simply that "compatibility issues are handled through the use of approved TRUCON codes."

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- 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 Hanford checklist item 12, Table B6-1, “Unacceptable Waste”).
- NMED has not been provided results of the adequacy review performed prior to the audit, and NMED assumes that the DOE auditors have determined, prior to audit, that each procedure meets WAP requirements, as applicable. Documentation or statements to this end should be clearly included in future audit reports so it is clearly understood that each procedure is examined for WAP compliance prior to audit. This process is appropriate and necessary to streamline the audit, but documentation of this activity should be included in future audit reports.
- Future audit reports should better distinguish 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 better 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. In addition, ensure that references to pertinent concerns are included in Section 5 of the audit report and on the B6 checklists, and the checklists themselves reference each applicable concern and include more discussion about that concern.

4. The Permittees’ auditors used both the B6 and procedure-specific checklists during the Hanford 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, cross-referenced with B6 requirements, should then be provided to NMED prior to the audit to facilitate NMED observation of the audit.

5. NMED observers noted some issues regarding VE/RTR that were not presented on the checklist. These include the inadvertent omission of a waste material parameter weight and subsequent error in RPD, identification of non-compliant items on drum travelers, consistent application of requirements to visually examine containers with lead liners, etc.. Future audit reports should include issues discovered and subsequent resolution, as applicable.