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CERTIFIED MAIL - RETURN RECEIPT REQUESTED

July 17, 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 INEEL FINAL AUDIT REPORT, AUDIT A-00-06
WASTE ISOLATION PILOT PLANT
EPA I.D. NUMBER NM4890139088**

Dear Dr. Triay and Mr. Epstein:

On May 31, 2000, NMED received the Final Audit Report of the Idaho National Engineering and Environmental Laboratory (INEEL), Audit Number A-00-06 (**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 INEEL 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

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- real time radiography
- visual examination
- corrective action reports
- final INEEL 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). NMED observed the initial INEEL audit on April 24-28, 2000 as well as the follow-up corrective action report (CAR) closeout verification on May 17, 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.

The Audit Report included Corrective Action Supporting Documentation in Attachment 2. CAR 00-025 in this attachment (labeled as Tab CAR 1) documents INEEL's calculation of the miscertification rate using pre-existing data. CAO had previously issued a clarification (CAO-00-022, "Miscertification Rate Calculation") stating that historical (i.e., pre-existing) data could be used to calculate the miscertification rate. NMED agrees that use of pre-existing data should be considered to avoid unnecessary and costly re-characterization, but the site must demonstrate that pre-existing data was collected and characterized in accordance with the WAP in order to be used for this purpose. CAO recently issued guidance to generator sites regarding use of pre-existing data ("Requirements for Evaluating and Documenting Waste Analysis Plan Compliance for Testing Batch Data Collected Prior to November 26, 1999," DOE/CAO-00-3175 Rev. 0, July 11, 2000). Rather than evaluating the INEEL pre-existing data package provided in the Audit Report, NMED will defer examining any pre-existing data information until after data packages have been

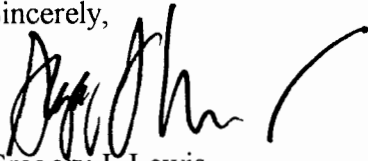
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revised in accordance with CAO guidance. In the future, please limit information in the Audit Report to a demonstration of how the characterization requirements are implemented at a generator site, and submit any request for review of pre-existing data separately.

Attached are NMED's general comments based upon observation of the INEEL audit and review of the submitted information. NMED concludes that the Audit Report adequately demonstrates that INEEL has implemented the applicable characterization requirements of the WAP for retrievably stored contact-handled debris waste. Therefore, NMED approves the Permittees' Final Audit Report for INEEL Audit A-00-06, except for the use of pre-existing data which will be evaluated after the INEEL data package has been revised in accordance with CAO guidance.

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

Sincerely,



Gregory J. Lewis
Director
Water and Waste Management Division

GJL:soz

Attachment

cc: James Bearzi, NMED HWB
John Kieling, NMED HWB
Steve Zappe, NMED HWB
Susan McMichael, NMED OGC
C. Steven Allred, ID DEQ
Kathleen Trever, INEEL Oversight
David Neleigh, EPA Region 6
Mary Kruger, EPA ORIA
Connie Walker, TechLaw
Don Hancock, SRIC
Joni Arends, CCNS

[REDACTED]

OVERVIEW COMMENTS ON THE
INEEL FINAL AUDIT REPORT

Overall Assessment of Audit Report Acceptability

NMED has examined the INEEL Final Audit Report (**Audit Report**) received May 31, 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 INEEL retrievably stored contact-handled debris waste.

NMED has a general concern regarding site training and identification of prohibited items by radiography and visual examination. For example, real time radiography (**RTR**) training documentation for identifying prohibited items is not included in the Audit Report, and PCB identification issues raised during the audit regarding RTR and visual examination (**VE**) are not as thoroughly documented in the Audit Report as NMED expected. NMED's observation of audit activities showed that INEEL identification of prohibited items is an important element of the

program and can be accomplished in accordance with the WAP. However, INEEL should ensure that prohibited item training and identification are thorough and well documented, and CAO should likewise carefully document prohibited item-related audit elements. NMED expects that prohibited items will be emphasized by the Permittees at the next annual INEEL audit.

During the RFETS audit late last year and earlier this year, NMED and CAO agreed that data usability criteria should be established to ensure consistent data use among DOE sites. NMED has not observed the use of CAO-developed data usability at generator site audits (although site-specific data usability is addressed), but expects that CAO-developed data usability criteria will be established and implemented in the near future.

Overview Comments

1. The Body of the Audit Report is, in general, complete and well written. NMED offers the following observations which, if remedied, would improve the quality of subsequent Audit Reports:

- Ensure all TAB references are complete and accurate (e.g., reference all applicable TABs). Also ensure that documents referenced and included as TABs are referenced as those TABs (i.e., not by document title alone).
- Audit activities and results, as presented on the checklists and TABs, did not always reflect the thoroughness of events as observed by NMED. Additional detail should be provided, including thorough CAR, observation, CDA, and recommendation references, along with issue resolution. For example, Checklist Element 194 could have presented more detail regarding canister identification, field blank process collection, drum numbers examined, and needle assembly cleaning.
- Checklist references to other applicable checklist elements could simplify the audit and NMED review process (i.e., reference applicable checklist element numbers in the B6-1 and B6-3 checklists).
- Ensure that checklist elements identify all items for which an example of implementation could not be observed. CAO may observe “mock” examples of implementation if an example of implementation is unavailable due to program status, but this should be clearly indicated on the checklist.

NMED was present during the INEEL 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 INEEL 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 checklist should address each sub-item separately to ensure a complete response. For example, the checklist does not adequately address elements B, C, D, F, and H of Checklist Item 12. The referenced headspace gas (HSG), RTR and VE procedures address those elements observed through these methods, but the response should have provided more documented procedure references and relevant examples of implementation.
- The Audit Report should reflect any observations and additional recommendations that were addressed following the audit that are not reflected in CAR closure documentation.
- Staff training is a major element of the WIPP permit and is included in several locations in the B6 checklist, but should be better supported through references and checklist/report discussions. For example, radiography operator training records indicated that one individual was not qualified at the time of audit because of a failure to satisfactorily pass the semi-annual test drum examination. The Audit Report notes this, but did not indicate (and NMED was unable to determine from the Audit Report) whether this individual had examined any drums prior to being reauthorized to perform radiography. The Audit Report should indicate that the observed training records were for a currently non-qualified operator and that the non-qualified operator did not perform any examinations prior to being requalified.
- 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 site has not yet generated completeness rates for analytical and testing procedures, although review of the available batch reports for HSG, RTR, and VE indicate that completeness quality assurance objective (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 regarding WAP compliance. Examples include, but are not limited to, the following issues:

- Future Audit Reports should more thoroughly discuss how waste incompatibilities were addressed by the specified nonconformance reports (NCRs) and TABs. Incompatibility criteria are presented in Condition II.C.3.d of the Permit; CAO issued a clarification (CAO-00-014, "Prohibited Items") stating that "compatibility issues are handled through the use of approved TRUCON codes." Furthermore, the Audit Report should more thoroughly discuss how WIPP TSDF waste acceptance criteria (WAC) are addressed by site procedures and how compliance is ensured through the examples of implementation examined during the audit (see Checklist Item 12).
- Even though NMED observed systems operations, a relatively detailed description of system operations (i.e., VE, RTR, HSG) should also be included in future Audit Reports (either in the body of the text, on checklists, or in references). Using RTR as an example, the Audit Report should describe or reference the container handling system, the audio/visual system, the imaging system, the data acquisition and operator control stations, and equipment location. Pertinent information need not be included in the body of the report text or on checklists, but can be identified in references or applicable procedures. These descriptions are relevant for the following reasons:
 - Without documentation of these operations in the Audit Report, NMED would be unable to fully evaluate the adequacy of this requirement in the event that NMED was unable to observe the audited activity.
 - Future inspectors would be unable to readily assess if any of the radiography system components had changed, or if the system had been moved, potentially impacting the audit process.
- While the Audit Report headspace gas, acceptable knowledge, and general permit application requirement discussions are generally very thorough, RTR and VE portions of future Audit Reports could be improved to better reflect actual audit activities observed by NMED. Such observations/results would include but not be limited to discussion of system operations (i.e., Kv values observed), videotape storage, TRIPS data entry and security, lookup table use, training, UCL₉₀ calculations (VE), drum number documentation, recordkeeping, prohibited item identification, and RTR data sharing with the VE expert.

- NMED has not been provided results of the adequacy review performed prior to the audit, and NMED assumes that the Permittees' auditors have determined, prior to audit, that each procedure meets applicable WAP requirements. Documentation or statements to this end should be clearly included in future audit reports so it is evident that each procedure has been examined for WAP compliance prior to audit.
4. The Permittees' auditors used both the B6 and procedure-specific checklists during the INEEL 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]

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, if possible, to facilitate NMED observation of the audit.