



GARY E. JOHNSON
GOVERNOR

State of New Mexico
ENVIRONMENT DEPARTMENT

Water and Waste Management Division

Harold Runnels Building

1190 St. Francis Drive, P.O. Box 26110

Santa Fe, New Mexico 87502-6110

Telephone (505) 827-1758

Fax (505) 827-0310

www.nmenv.state.nm.us



PETER MAGGIORE
SECRETARY

PAUL R. RITZMA
DEPUTY SECRETARY

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

June 5, 2001

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

Mr. John Lee, General Manager
Westinghouse TRU Solutions, LLC
P.O. Box 2078
Carlsbad, New Mexico 88221-5608

**RE: NMED APPROVAL OF RFETS REVISED FINAL AUDIT REPORT, AUDIT A-01-05
(HOMOGENEOUS SOLIDS)
WASTE ISOLATION PILOT PLANT
EPA I.D. NUMBER NM4890139088**

Dear Dr. Triay and Mr. Lee:

On April 17, 2001, NMED received the Final Audit Report of the Rocky Flats Environmental Technology Site (RFETS), Audit Number A-01-05 (**Audit Report**), from the Department of Energy's Carlsbad Field Office (CBFO). CBFO and Westinghouse TRU Solutions (**the Permittees**) submitted this Audit Report under the Waste Isolation Pilot Plant (WIPP) Hazardous Waste Facility Permit as specified in Permit Condition II.C.2.c. This audit was originally included in the scope of an earlier audit (A-00-12) in September 2000 which intended to evaluate the adequacy, implementation, and effectiveness of the RFETS waste characterization processes for homogeneous waste relative to the requirements of the WIPP Permit. However, the audit team was unable to complete the checklist for a number of items, including confirmatory testing for headspace gas, comparison of validated headspace gas results with acceptable knowledge, and traceability analysis for a container of homogeneous waste. The Audit Report states that the satisfactory completion of these activities was verified during Audit Number A-01-05.



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

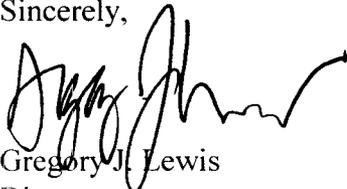
- a narrative report
- completed copies of relevant Permit Attachment B6 checklists
- items corrected during the audit (CDAs)
- objective evidence examined during the audit
 - general information
 - solids and soils/gravel sampling
 - acceptable knowledge
 - visual examination
- final RFETS standard operating procedures

NMED and its contractors observed the initial RFETS audit on September 18 - 22, 2000 and the follow-up audit on March 26 - 28, 2001, and have 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). 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 a subset of retrievably stored homogeneous solid (S3000) wastes. This subset includes only those wastes that are amenable to either the "cone and quarter method" or the "grid method" of sampling. Therefore, NMED approves the Permittees' Final Audit Report for RFETS Audit A-01-05, and amends the previous Audit Report approvals for Audit A-00-08 issued on March 9, 2000 and for Audit A-00-12 issued on February 7, 2001 to include procedures for the aforementioned subset of retrievably stored homogeneous solid wastes.

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

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cc: James Bearzi, NMED HWB
John Kieling, NMED HWB
~~Steve Zappo, NMED HWB~~
Susan McMichael, NMED OGC
Howard Roitman, CDPHE HMWMD
David Neleigh, EPA Region 6
Mary Kruger, EPA ORIA
Connie Walker, TechLaw
Matthew Silva, EEG
Don Hancock, SRIC
Joni Arends, CCNS
File: Red WIPP '01

NMED COMMENTS ON THE
ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE (RFETS)
FINAL AUDIT REPORT A-01-05

1. The RFETS Solids Sampling Audit Report (Audit Report) states that the scope of the Audit includes “Summary Category Group S3000 solids; in particular, sampling and analysis processes for homogenous solid, salt, and ash wastes.” The audit examined solid sampling techniques including repackaging; the repackaging visual verification process for debris waste was previously examined during Audit Number A-00-12 and the associated Audit Report was approved by NMED on February 7, 2001. This Audit Report apparently requests approval of both newly generated and retrievably stored Summary Waste Category Group S3000. However, NMED observers believe the audit scope was limited to retrievably stored and repackaged S3000 wastes sampled by the observed process (with the understanding that limited newly generated waste processes had to be considered as part of the repackaging process); this is confirmed by the checklist provided with the Audit Report (e.g., see Item 27). The Audit scope must be clearly transmitted during the audit, and any “expansion” of the audit scope beyond that sought during the audit must be clearly delineated and justified.
2. As the number and scope of audits increase, NMED finds that keeping track of specific site approvals is becoming increasingly challenging. It would be helpful if each Audit Report included a brief paragraph summarizing previous site audit results to the extent that the unindoctrinated reader can determine what a site has been approved to ship by both EPA and NMED (e.g., a simple statement such as “Site X is currently approved to ship retrievably stored repackaged and non-repackaged debris waste and this Audit Report seeks to expand this approval to retrievably stored Summary Waste Category Group S3000 repackaged waste” would suffice). Supporting information to this end is typically presented in the executive summary, but a clear summary statement would be useful.
3. Portions of recent audits rely on previous audit results to address certain technical issues. However, it does not appear that appropriate “credit” is taken for some elements, while others are left somewhat “open ended” because inappropriate credit is taken for previous audit results. NMED highly recommends that the Permittees implement a course of action to determine specific audit contents for future audits, identifying the exact audit elements to be addressed and elements for which previous audit results are relied upon. This information should be addressed and mutually agreed upon prior to initiating subsequent audits to ensure that the audit scope is sufficient.
4. As audit complexity increases with the implementation of new permit modifications and the introduction of S3000, S4000, repackaged, and newly

generated waste, the information that must be examined on audit likewise increases. Each Audit Report must include, in the text of the Audit Report (i.e., not just in the checklist), a thorough discussion of these elements, as well as resolution of any technical issues associated with these elements. Items that must be examined, as applicable, and discussed in the Audit Report text and checklist include but are not limited to:

- Evidence in support of headspace gas sampling reduction must be included in the auditable record and must be examined by the auditor for technical merit. In the case of RFETS, the auditor did examine documentation concerning thermally treated waste, and found the information to be technically satisfactory. The Audit Report should include the specific wastes for which reduced headspace gas sampling was examined, and each audit should examine the auditable record for all wastes for which reduced headspace gas sampling is proposed to ensure that sound judgment was used by the site in their determination (e.g., include a reference such as TAB AK23, VSS-002-01, 1/24/01, “Pyrochemical Salts High-Temperature Thermal Process Documentation”). Auditors should limit approval for reduced sampling to wastes that include sufficient technical justification in the auditable record, particularly if sites (such as RFETS) do not have specific, detailed procedures for determining thermal processes and other headspace gas sampling reduction criteria. That is, it may not be possible for the Audit Report to provide a blanket approval of reduced headspace gas sampling if sufficiently detailed procedures with specific reduction criteria are not provided, thus limiting approval to only those wastes that have been individually assessed.
- Use and justification of solid sampling methodologies must be included in the auditable record and must be addressed in the Audit Report text and checklists. NMED observers noted that the chosen RFETS sampling methods (the “cone and quarter method” and the “grid method”) allowed loss of volatile constituents, but the body of the Audit Report does not address or discuss this occurrence. Because maintenance of sample integrity is a key element in EPA approved sampling methodologies, this observation should be thoroughly and adequately addressed in the body of the report (i.e., not just addressed as part of checklist completion).
- Assessments performed to meet permit requirements for newly generated waste that are performed as part of the repackaged waste assessment process should be included and explained in the body of the Audit Report. For example, AK auditors examined documentation justifying why control charting is not appropriate for S3000 repackaged waste. Control charting is required of newly generated waste, but was assessed for this retrievably stored waste because the permit requires that repackaged waste be characterized in the same manner as newly generated waste (it is not, however, *considered* newly generated waste). RFETS concluded that the data were

not suitable to control charting, and therefore sample number determination in accordance with retrievably stored procedures was more appropriate. NMED concurs with the analysis presented by RFETS, but this information should have been included and/or adequately referenced somewhere in the Audit Report.

- Requirements for visual examination, visual verification, and radiographic examination must be thoroughly examined and explained in the Audit Report text and checklists, because it appears that various combinations of these methods are being considered for some wastes. While the permit allows this, the Audit Report should provide a better justification for the procedures implemented to ensure that sites are completely and adequately addressing the issue. For example, NMED observers noted that the Waste Stream Profile Form (WSPF) for the examined S3000 waste stream included both radiography and visual examination (technique). The Audit Report should explain why the use of both methods was implemented for the subject waste stream.
- Ensure that all quality assurance requirements are thoroughly addressed in both the Audit Report and checklists. For example, the Audit Report and checklists should have better addressed why the solid sampling methods used resulted in representative sample collection (see Checklist Element 23). Also, the checklist (e.g., Checklist Elements 30 and 31) should have addressed VOC loss during sampling and why this did not impact QAOs, such as completeness.
- If different sample amounts are used in the procedure than what is specified in the checklist, the facility must show (and the Auditor must confirm) that the minimum detection limits specified in the permit can be met using the smaller sampling volume (amount). The audit should have evaluated this issue and it should have been included in the Audit Report.