

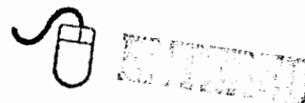


BILL RICHARDSON  
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RON CURRY  
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DERRITH WATCHMAN-MOORE  
DEPUTY SECRETARY

**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

December 9, 2003

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

Dr. Steven Warren, President  
Washington TRU Solutions LLC  
P.O. Box 2078  
Carlsbad, New Mexico 88221-5608

**RE: NMED COMMENTS ON THE ADVANCED MIXED WASTE TREATMENT PROJECT FINAL  
AUDIT REPORT, AUDIT A-03-05  
WASTE ISOLATION PILOT PLANT  
EPA I.D. NUMBER NM4890139088**

Dear Drs. Triay and Warren:

On November 13, 2003, NMED received the Final Audit Report of the Advanced Mixed Waste Treatment Project (AMWTP) Audit Number A-03-05 (**Audit Report**), from the Department of Energy's Carlsbad Field Office (CBFO). CBFO and Washington TRU Solutions LLC (**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 intended scope of this initial certification audit was to ensure the adequacy, implementation, and effectiveness of specific AMWTP waste characterization processes for retrievably stored and newly generated debris, and retrievably stored homogeneous solids, contact-handled waste relative to the requirements of the WIPP Permit. The Audit Report further clarified that approval of debris waste would only be sought after a future audit was performed to evaluate visual examination to confirm radiography and headspace gas sampling and analysis for this Summary Category Group, and that analysis of homogeneous solid samples was contingent on approval of the analytical laboratory program at the Idaho National Engineering and Environmental Laboratory sought during audit A-03-15. The Audit Report consisted of the following items:

- A narrative report
- Completed copies of relevant Permit Attachment B6 checklists

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- Final AMWTP standard operating procedures (hardcopy only)
- Corrective action reports and items corrected during the audit
- Objective evidence examined during the audit
  - General information
  - Solids and soils/gravel sampling
  - Acceptable knowledge
  - Headspace gas
  - Real time radiography
  - Visual examination

NMED representatives observed the initial AMWTP audit on August 18 – 22, 2003 and the follow-up verification visit on October 15 – 16, 2003. 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 [WAP]). The Audit Report indicates that during the initial audit there were six WAP-related conditions adverse to quality requiring the issuance of three CBFO corrective action reports; three deficiencies requiring only remedial actions that were corrected during the audit; seven observations identifying conditions that, if not controlled, could result in conditions adverse to quality; and five recommendations identifying opportunities for improvement. During the follow-up verification visit, the Audit Report states that the conditions adverse to quality were reevaluated and found to be acceptable. Attached are NMED's general comments based upon observation of the AMWTP audit and review of the Audit Report. These are provided to guide future audit report preparation and to assist the Permittees in understanding NMED's concerns.

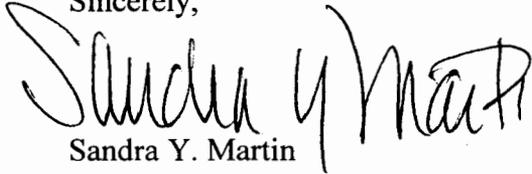
NMED submitted an Observer Inquiry (attached) during the AMWTP audit questioning the applicability of solid sampling data collected by the previous contractor from the 3100 m<sup>3</sup> project to the entire population of the Rocky Flats first and second stage sludge waste stream. NMED was assured during the audit and follow-up verification visit that this issue was being examined and resolved by CBFO and AMWTP staff. However, NMED has not received a response to this Observer Inquiry, a specific sampling plan or protocol to address this issue has not yet been produced, and this issue was not mentioned anywhere in the Audit Report. It was NMED's understanding during the audit that approval of the waste characterization program for homogeneous solids would be limited to only those waste containers included in the original 3100 m<sup>3</sup> sampling "pool", pending receipt, review, and approval of a sampling protocol specific to the remainder of the waste that was not originally considered in the 3100 m<sup>3</sup> randomly sampled population. The Audit Report must address this critical issue before approval by NMED can be considered.

NMED concludes that the Audit Report is incomplete in that it does not adequately address all elements examined during the audit. Because of this incompleteness, NMED is withholding approval of the Permittees' Final Audit Report for AMWTP Audit A-03-05 until the Permittees submit the additional information identified in the paragraph above and in the attached comments that demonstrate full implementation of all relevant permit requirements. Indicate revisions to any text in the Audit Report and checklists with redline/strikeout annotation.

Drs. Triay and Warren  
December 9, 2003  
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If you have any questions regarding this matter, please contact me at (505) 428-2512.

Sincerely,



Sandra Y. Martin  
Acting Chief  
Hazardous Waste Bureau

SYM:soz

Attachment

cc: Charles Lundstrom, NMED WWMD  
~~XXXXXXXXXXXXXXXXXXXX~~  
Tracy Hughes, NMED OGC  
C Steven Allred, ID DEQ  
Kathleen Trever, INEEL Oversight  
Laurie King, EPA Region 6  
Betsy Forinash, EPA ORIA  
Connie Walker, Trinity Engineering  
Matthew Silva, EEG  
Don Hancock, SRIC  
Joni Arends, CCNS  
Lindsay Lovejoy, NMAGO  
File: Red WIPP '03

8/22/03

## Observer Inquiry

NMED observed that INEEL intends to use solid sampling data for the 3100 Cubic Meter program, and included Continuation sheets in the draft WSPF that addressed the hazardous waste code assignments for these wastes. However, this discussion did not address whether the 3100 Cubic Meter samples had been selected with the entire First/Second stage sludge population considered, whether the 3100 Cubic Meter population itself had been randomly selected from the total First/Second stage sludge, etc. It is possible that these samples could be used for preliminary samples, but these preliminary samples can only be substituted for the "n" values if the following requirements in the Permit are met:

### B2-2 Approach for Statistically Selecting Retrievably Stored Waste Containers for Totals Analysis

*The calculated total number of required waste containers will then be randomly sampled and analyzed. Waste container samples from the preliminary mean and variance estimates may be counted as part of the total number of calculated required samples if and only if:*

*XThere is documented evidence that the waste containers for the preliminary estimate samples were selected in the same random manner as is chosen for the required samples.*

*XThere is documented evidence that the method of sample collection in the preliminary estimate samples were identical to the methodology to be employed for the required samples.*

*XThere is documented evidence that the method of sample analysis in the preliminary estimate samples were identical to the analytical methodology employed for the required samples.*

*XThere is documented evidence that the validation of the sample analyses in the preliminary estimate samples were comparable to the validation employed for the required samples. In addition, the validated samples results shall indicate that all sample results were valid according to the analytical methodology.*

Please provide additional supporting information and the status of your considerations in this regard as the request moves forward.

**NMED COMMENTS ON THE  
ADVANCED MIXED WASTE TREATMENT PROJECT (AMWTP)  
FINAL AUDIT REPORT A-03-05**

NMED's review indicated that this Audit Report showed less attention to detail than presented in previous Audit Reports and, unless remedied, this less rigorous approach to preparation could result in significant deficiencies in future Audit Reports. The body of the Audit Report appears to generally address the applicable elements. However, there are some omissions, errors, and inconsistencies including but not limited to the following items:

1. In the Executive Summary, Section 4.0, Audit Participants, page 6 of 21, there is mention of the location of the pre-audit meeting as the Shilo Inn. There must be more specific information as to the city of the meeting.
2. In the Executive Summary, Section 5.2.3, Table B6-3 Acceptable Knowledge Checklist, page 10 of 21, the AK Summary Report for RFETS Waste is incorrectly identified as INEL-95/0280. It should be INEL-96/0280.
3. On every single page of the B6 Checklist there is data missing in the WAP Requirement box. INEEL/AMWTP needs to be inserted in the (*Insert Site*) and A-03-05 needs to be inserted in the (*Insert Audit #*).
4. Also on every single page of the B6 Checklist, the date shown is January 30, 2003. The audit actually was August 18-22, 2003. The date of the report was November 12, 2003.
5. On the B6 Checklist, pertaining to questions 1, 2, 3, 6, 7, 25, 134, 135, 136, 137, 138, 139, 141, 142, 144, 149, 150, and 166, objective evidence document AK Summary Report BNFL-5232-09 is a draft and has a date of August XX, 2003. If a final version exists, CTAC should have provided it in the audit report.
6. On the B6 Checklist, pertaining to question 22, the procedure section cited is possibly a typographical error as it states INST-OI-13, Section 4.13.4.13, when it should be Section 4.13.
7. On the B6 Checklist, pertaining to question number 11, Solids Sampling cites procedure INST-OI-. It is not clear as to what procedure is cited, as there were five procedures with the prefix INST-OI-.
8. On the B6 Checklist, pertaining to question 19, the location of the references to answer the question is listed as "Multiple SOPs and AMWTP QAPjP give required information. All elements met." This listing needs to be more specific as to what exactly the procedures and SOPs answer the question.
9. On the B6 Checklist, pertaining to question 83, the reference, INST-OI-16, Section 4.7.1. Section 4.7.1 doesn't seem to answer the question.

10. On the B6 Checklist, pertaining to question 89, the reference, INST-OI-16 Section 4.7. Section 4.7 does not seem to answer the question. Perhaps QAPjP Section B1-2a(2) bullet 3 should be used instead.
11. On the B6 Checklist, pertaining to question 92, the reference is listed as INST-OI-16 Section 4.6. It seems that what was meant was Section 4.7.
12. On the B6 Checklist, pertaining to question 144, the reference is listed as MP-TRUW-8.14 Section 4.4. Section 4.4 does not exist. It also references INST-OI-12 Section 4.4.2 which doesn't seem to answer the question. Perhaps Section 4.4 as a whole is what was meant.
13. On the B6 Checklist, pertaining to question 155 Comments Section has the word "die". This is probably a typographical error and was meant to be "due".
14. On the B6 Checklist, pertaining to questions 220, 222a, 222b, 228-232, one citation to procedure INST-TRUW-8.8 is referenced. The procedure was not included with the report.
15. On the B6 Checklist, pertaining to question 240, the reference is procedure INST-OI-12 Section 4.1.3. Should the entire Section 4.1 be considered to answer the question?
16. On the B6 Checklist, pertaining to question 278, the procedure MP-TRUW-8.2 Section B3-10 is referenced. Within Section B3-10 there doesn't seem to be a reference to every 10 drums.
17. On the B6 Checklist, pertaining to questions 287, 288, 289, 290, 291, and 293, there is referenced procedure MP-TRUW-8.26, Section 4.4.3.1 stating "Document calculation results of SCG miscertification rate using Appendix 7.2 of MP-TRUW-8.19 in an interoffice memorandum to the SPM." There is no Appendix 7.2 in procedure MP-TRUW-8.19.
18. On the B6 Checklist, pertaining to question 311, procedure INST-OI-34 Section 4.6 is referenced. Section 4.6 does not seem to answer the question.