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**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

May 1, 2013

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M. Farok Sharif, Project Manager  
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**RE: NMED APPROVAL OF FINAL AUDIT REPORT, ARGONNE NATIONAL  
LABORATORY/CENTRAL CHARACTERIZATION PROJECT AUDIT A-12-16  
WASTE ISOLATION PILOT PLANT  
EPA I.D. NUMBER NM4890139088**

Dear Messrs. Franco and Sharif:

On December 20, 2012, The New Mexico Environment Department (NMED) received the Final Audit Report of the Argonne National Laboratory/Central Characterization Project (ANL/CCP) Audit Number A-12-16 (**Audit Report**), from the Department of Energy's Carlsbad Field Office (CBFO). CBFO and Nuclear Waste Partnership, 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 Section 2.3.2.3. The intended scope of this final audit was to ensure the adequacy, implementation, and effectiveness of the ANL/CCP waste characterization processes of remote handled (RH) Summary Category Group (SCG) S5000 debris waste.

The Audit Report consisted of the following items:

- A narrative report (hardcopy and electronic)
- Copies of relevant Permit Attachment C6 checklists (hardcopy and electronic)



- Final ANL/CCP standard operating procedures for characterization of the waste category listed above (hardcopy and electronic)
- Objective evidence examined during the audit:
  - General information
  - Acceptable Knowledge (AK)
  - Headspace Gas Sampling (HSG)
  - Visual Examination (VE)

NMED representatives observed the audit on August 28-30, 2012. NMED has examined the Audit Report for evidence of compliance with the requirements of Permit Sections 2.3.2 (Audit and Surveillance Program) and 2.3.1 (Waste Analysis Plan [**WAP**]). The audit report indicates that there were two Conditions Adverse to Quality (**CAQ**) resulting in Corrective Action Reports (CARs); two Observations (conditions that, if not controlled, could result in conditions adverse to quality); and two Recommendations (suggestions that are directed toward identifying opportunities for improvement and enhancing methods of implementing requirements). These are listed below.

- CBFO CAR 12-039: CCP-TP-513, Rev. 1, CCP Procedure for Dimensional or Gravimetric Measurements for Radiological Characterization of Remote-Handled Transuranic Waste, references a non-number-controlled Argonne Intra-Laboratory memorandum to define the Acceptable Difference limit criteria for differences in Fuel Examination Waste (**FEW**) segment lengths described in the AK and the actual length derived during the measurement at VE. [This CAR, CBFO CAR 12-039 is not a WAP related CAR and falls outside of NMED's regulatory purview.]
- CBFO CAR 12-040: The Chain of Custody (**COC**) for HSG sampling Batch Data Reports (**BDRs**) ANHSG1201 and ANHSG1202 were incorrect; both were numbered 0001. The COC number for ANHSG1201 was corrected only after the BDR had successfully passed both Independent Technical Review (**ITR**) and SPM reviews. The error was discovered upon the review of ANHSG1202, when the COCs were corrected to 0006 and 0007, respectively. The COC number corresponding with Environmental Chemistry Laboratory BDR ECL12014M (corresponding to the new COC 0006) was not corrected. A Non-Conformance Report (**NCR**) was not generated as required by CCP procedures, which resulted in discrepancies between ANL/CCP BDR ANHSG1201 and the corresponding ECL BDR field COC documentation.
- Observation 1: This observation consists of three similar instances involving CCP management inattention to detail and failure to follow established procedures as described below.

1. Although the SPM review was completed for BDR RHANLDG12004, it was completed and documented using CCP-TP-513, Attachment 3, Dimensional/Gravimetric ITR Checklist. The information and questions on the two checklists are the same; however, the checklists are not interchangeable.
2. During the review of BDR ANLRHVE12008, it was discovered that the VE operators listed items in the Waste Description section of Attachment 1, Visual Examination Data Form, that are not identified in the AK Summary Report (CCP-AK-ANLE-500, Rev. 10). The VE operators listed the subject items as "Clearboy" containers; however, the AK Summary Report only lists these containers as Chemical Waste Processing Containers (CWPCs), carboys, and liquid bulking containers (LBCs).

Additionally, the audit team found two instances of different Waste Material Parameters (WMPs) being recorded for the "Clearboy" containers on Attachment 1, Visual Examination Data Form, for container RW 48260. Further interviews with VE personnel disclosed that these containers should be listed as "Plastics (P)."

3. The SPM checklist for VE BDR RHANLVE 100015 was not complete. For Question 3, "Is the BDR complete (appropriately filled in forms for each container)?" neither "No" nor "Yes" was checked.

These instances reflect similar management issues identified during the recertification audit recently performed at INL/CCP (Audit A-12-13, June 11-14, 2012). The conditions identified during Audit A-12-13 were documented in CBFO CARs 12-026 and 12-027, which are in the process of being resolved.

Because the response, extent-of-condition evaluation, and corrective actions to address and correct this issue are being developed by CCP management, the conditions identified during this audit are being classified as Observations. The evaluation of the corrective action plans to address CARs 12-026 and 12-027 will be evaluated to ensure that they include an adequate extent-of-condition evaluation for CCP management at each host site location.

- Observation 2: During the review of the ANL/CCP qualification cards, it was identified that the SPM signature approving the operator to perform the duties of the qualification card is dated prior to the verification performed by CCP training for completion of briefings, comprehensive exams, and educational requirements. There were two instances in the objective evidence found (1 VE and 1 HSG qualification card).

This concern was previously identified during Audits A-12-15 and A-12-12, and is documented as CBFO CAR 12-033. This concern appears to be programmatic, and not just specific to ANL/CCP.

Because the response, extent-of-condition evaluation, and corrective actions to address and correct this issue are being developed by CCP management, this condition is being classified as an Observation. The evaluation of the corrective action plan to address CBFO CAR 12-033 will be evaluated to ensure that it includes an adequate extent-of-condition evaluation for CCP management at each host site location.

- Recommendation 1: The language in AK Summary Report CCP-AK-ANLE-500, Rev. 10, pages 15 and 46, that reads: "the WIPP-WAP requires the assignment of hazardous waste numbers (HWNs) to TRU waste streams that lack analytical evidence demonstrating that these constituents would have not exceeded the regulatory thresholds," should be revised to remove the reference to the WIPP WAP. This text would then be consistent with the language and intent of the WAP.
- Recommendation 2: CCP is approved by EPA for dimensional measurement only, not for gravimetric measurement. CCP-TP-513, CCP Procedure for Dimensional or Gravimetric Measurements for Radiological Characterization of Remote Handled Transuranic Waste, provides guidance in performing both processes. CCP-TP-513 should address only the EPA-approved dimensional testing and be revised when gravimetric measurement is approved by EPA at a later date. The circumstance of having one procedure covering both approved and unapproved processes could lead to confusion by the performers of the procedure.

Attached are NMED's general comments based upon review of the Audit Report. These are provided to guide future audit report preparation and to assist the Permittees in understanding NMED's concerns.

On January 18, 2013 NMED submitted a letter to the Permittees requesting additional information and, in accordance with 20.4.2.201.B (5) NMAC, the review of ANL/CCP Final Audit Report was put on hold. Specifically, NMED requested documentation that the actions to address and correct concerns from Idaho National Lab/CCP A-12-13 audit adequately addressed concerns from the LANL/CCP A-12-12 and Argonne National Lab/CCP A-12-16 audits.

NMED received a written response, dated April 12, 2013, from the Permittees on April 18, 2013. The response states "... it has been determined that the extent-of-condition did not adequately address each identified management-related concern in the LANL/CCP and ANL/CCP recertification audits... the individual concerns identified in the two Observations were not documented as being specifically addressed. Accordingly, the Carlsbad Field Office is now in the process of evaluating the additional information and documented Observations raised in other

recent recertification audits to determine appropriateness of categorization and whether additional corrective action is necessary.”

The response goes on to state, “For the two Observations identified at the LANL/CCP and ANL/CCP and questioned in your [January 18, 2013] letter, the evaluations have determined that none of the concerns resulted in any non-compliance with the Hazardous Waste Facility Permit Waste Analysis Plan (WAP). The following table displays the ANL and LANL WAP applicability determinations.” Under the Description of Concern column in the referenced table each concern states, “Rationale: This concern does not violate a specific WAP requirement, therefore it is not WAP related.”

The WIPP Permit WAP consists of Permit Attachment C through Attachment C7. Permit Section C3-4b(1), Site Project Manager Review, states, “The Site Project Manager Review is the final validation that all of the data contained in Batch Data Reports from the data generation level are complete and have been properly reviewed as evidenced by signature release and completed checklists. One hundred percent of the Batch Data Reports must have Site Project Manager signature release. At a minimum, the Site Project Manager signature release must be performed before any waste associated with the data reviewed is managed, stored, or disposed at WIPP. This signature release must ensure the following:

- Batch Data Review Checklists are complete
- Batch Data Reports are complete and data are properly reported (e.g., data are reported in the correct units, and with the correct number of significant figures).

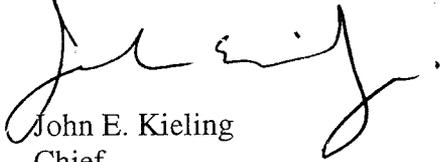
NMED concludes that this Audit Report demonstrates that ANL/CCP has implemented the applicable characterization requirements of the WAP. Therefore, NMED approves the Permittee’s Final Audit Report for ANL/CCP Audit A-12-16 for certification RH S5000 debris waste and amends Audit Report A-11-20, issued by NMED on December 9, 2011, to include the waste forms and processes evaluated by this final audit.

This Audit Report approval is for the broad programmatic implementation of waste characterization requirements at ANL/CCP, and does not constitute approval of individual waste characterization procedures, nor condone inappropriate applications of those procedures. This approval does not relieve the Permittees of their obligation to comply with the requirements of the permit or other applicable laws and regulations.

Franco and Sharif  
May 1, 2013  
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If you have any questions regarding this matter, please contact Trais Kliphuis at (505) 476-6051.

Sincerely,



John E. Kieling  
Chief  
Hazardous Waste Bureau

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File: Red WIPP '13

NMED COMMENTS ON THE  
ARGONNE NATIONAL LABORATORY /CENTRAL CHARACTERIZATION  
PROJECT (ANL/CCP) FINAL AUDIT REPORT A-12-16

NMED's review indicated that the body of the Audit Report and the C6 checklists generally appear to address the applicable elements. NMED provides the following comments for the Permittees consideration and action:

1. Question 144 of the C6 Checklist has nine parts (A-I). Part D was not addressed. In the comments column, there should be an explanation stating that ANL/CCP only performs sampling. The analysis is performed at INL/CCP labs. Part F was also not addressed and could have the citation CCP-TP-500 (All) to fully answer the question.
2. The Permittees must make careful WAP compliance determinations that are thoroughly justified. The Permittees must expand their April 12, 2013 response to address Permit Section C3-4b(1) in regards to the concern from BDRs ANLRHVE12008 and RHANLVE100015. The Permittees must submit their expanded response to NMED within 90 days from receipt of this letter.