



Department of Energy
 Carlsbad Field Office
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JUN 11 2010

Mr. Steve Kopp, Senior Manager
 Navarro Research and Engineering, Inc.
 Carlsbad Technical Assistance Contractor
 4021 National Parks Highway
 Carlsbad, NM 88220



Subject: Audit Report for CBFO Audit A-10-22

Dear Mr. Kopp:

The Carlsbad Field Office (CBFO) conducted Audit A-10-22, Peer Review for the Qualification of Historical Radiochemistry Data Analyzed by Battelle Radioanalytical Laboratory, May 4 – June 2, 2010. A copy of the audit report documenting the results is enclosed.

If you have any questions or comments, please contact me at (575) 234-7491.

Sincerely,

Dennis S. Miehlis
 Senior Quality Assurance Specialist

Enclosure

cc: w/enclosure	
A. Holland, CBFO	* ED
D. Gadbury, CBFO	ED
M. Navarrete, CBFO	ED
J. R. Stroble, CBFO	ED
M. Eagle, EPA	ED
E. Felcorn, EPA	ED
R. Joglekar, EPA	ED
R. Lee, EPA	ED
S. Zappe, NMED	ED
S. Holmes, NMED	ED
V. Cannon, WTS/CCP	ED
R. Steger, CTAC	ED
W. Ledford, CTAC	ED
B. Pace, CTAC	ED
R. Garcia, CTAC	ED
A. Pangle, CTAC	ED
WIPP Operating Record	ED
CBFO QA File	
CBFO M&RC	
*ED denotes electronic distribution	



U.S. DEPARTMENT OF ENERGY
CARLSBAD FIELD OFFICE

AUDIT REPORT

OF

NAVARRO RESEARCH AND ENGINEERING, INC.

ALBUQUERQUE AND CARLSBAD, NEW MEXICO

AUDIT NUMBER A-10-22

PEER REVIEW – QUALIFICATION OF HISTORICAL RADIOCHEMISTRY
DATA ANALYZED BY BATTELLE RADIOANALYTICAL LABORATORY

May 4 – June 2, 2010



Prepared by: *Berry D. Pace*
Berry D. Pace, CTAC
Audit Team Leader

Date: 6/3/10

Approved by: *Ava L. Holland*
Ava L. Holland, Director
CBFO Office of Quality Assurance

Date: 6/10/10

1.0 EXECUTIVE SUMMARY

Carlsbad Field Office (CBFO) Audit A-10-22 was conducted at the Nativo Lodge in Albuquerque, New Mexico and at the CBFO American Recovery and Reinvestment Act (ARRA) office in Carlsbad, New Mexico, May 4 – June 2, 2010, to evaluate compliance with CBFO requirements for peer reviews. The peer review evaluated during this audit was performed to qualify historical radiochemistry data analyzed by Battelle Radioanalytical Laboratory. These data were used to establish radiological properties for two waste streams currently residing at the Savannah River Site (SRS). The audit team concluded that the requirements governing the performance of this peer review were adequate, satisfactorily implemented, and effective. The audit team identified one Recommendation regarding the use of CBFO Form 10.5-2 (CBFO Management Procedure (MP) 10.5, *Peer Review*, Attachment III).

2.0 SCOPE AND PURPOSE

2.1 Scope

The scope of the audit included evaluation of MP 10.5, *Peer Review*, Revision 8, established for the performance of peer reviews, as well as observation of peer review proceedings, interviews with responsible personnel, and examination of resulting documents and records.

Audit A-10-22 was based on current revisions of the following documents:

- U. S. Nuclear Regulatory Commission (NRC) NUREG-1297, *Peer Review for High-Level Nuclear Waste Repositories*
- DOE/CBFO-94-1012, *Quality Assurance Program Document (QAPD)*
- MP 10.5, *Peer Review*

2.2 Purpose

The audit was conducted to determine the degree to which the peer review was performed for compliance with the applicable governing documents noted above.

3.0 AUDIT TEAM

AUDITORS

Dennis S. Miehl	Audit Team Management Representative, CBFO Office of Quality Assurance
Berry D. Pace	Audit Team Leader, CBFO Technical Assistance Contractor (CTAC)

4.0 AUDIT PARTICIPANTS

Personnel involved in the audit process are identified in Attachment 1. A pre-audit conference was held at the Nativo Lodge in Albuquerque, New Mexico, on May 4, 2010. Daily audit briefings were held with the peer review manager and peer review panel members on May 4-6, 2010 to discuss issues, potential deficiencies, and audit progress. An audit out-brief meeting was conducted on May 6, 2010 to convey the status and results of the audit up through completion of the peer review proceedings. The audit was concluded on June 2, 2010, with the final review of the peer review record submittal and final report.

5.0 SUMMARY OF AUDIT RESULTS

5.1 Program Adequacy, Implementation, and Effectiveness

The following sections identify each of the peer review program elements evaluated during the course of this audit. For each element, the audit team conducted interviews, reviewed related documents and/or records, and observed the peer review proceedings as they progressed to verify the adequacy and effective implementation of the program.

One concern, not negatively impacting the program, was identified related to CBFO Form 10.5-2 (see Recommendation 1 in section 6). The form lacks a signature and date line for peer review manager review, verification, and approval of peer review panel member independence.

Overall, the audit team concluded that the requirements for the peer review program, proceedings, and resulting records were adequate and effectively implemented for compliance with the applicable upper-tier governing documents.

5.2 Program/Activities Evaluated

Program Adequacy

The audit team conducted a detailed review of CBFO MP 10.5, *Peer Review*. This review was performed to verify the appropriate flow-down of requirements in NUREG-1297, *Peer Review for High-Level Nuclear Waste Repositories*, governing the performance of peer reviews. As a result, the audit team concluded that MP 10.5 adequately addresses the requirements of NUREG-1297. No concerns were identified.

Peer Review Process

Although the audit did not commence until Tuesday, May 4, 2010, the audit team was present on Monday, May 3, 2010, to observe the peer review panel orientation session facilitated by the peer review manager. The orientation included a briefing on the purpose of the peer review and the applicable sections of the requirements documents listed in the orientation section of the peer review procedure. The orientation session was conducted in compliance with procedure and was documented as required.

The audit team observed the peer review process, which commenced on Tuesday, May 4, 2010. The peer review manager began the process with a presentation explaining the purpose of the peer review, the schedule, observer protocols, etc. Attendance sheets were routed and completed by all attendees.

A subcontractor representing Washington TRU Solutions, LLC (WTS) Central Characterization Project (CCP) conducted multiple presentations describing the origin of the waste streams and the radiochemistry sampling and analysis results for the two waste streams evaluated during this peer review. The audit team observed numerous participant interactions throughout the course of the peer review that were necessary for the panel members to make informed judgments of the data presented.

Records reviewed by the audit team during the course of the peer review included completed forms comprised of attachments to CBFO MP 10.5 and various other documentation as follows:

- Peer review panel manager qualification documentation
- Peer review panel member selection
- Resumes and supporting documentation for the qualification of the panel members
- Peer review service acquisition documentation
- Documented meeting minutes associated with the performance of the peer review
- Peer Review Panel Member Verification of Education/Employment Form
- Determination of Peer Review Panel Member Independence Form
- Peer Review Panel Selection Justification/Decision Form
- Peer Review Panel Orientation Form
- Observer Inquiry Form

Observers present during the proceedings included representatives of the Environmental Protection Agency (EPA), CBFO, Southwest Research and Information Center (SRIC), and PECOS Management Services. A number of observer inquiries were submitted and the audit team witnessed the observer inquiry protocols being utilized and adhered to as required by procedure.

During the course of the audit and while reviewing related records, the audit team identified a concern (see Recommendation 1 in section 6). MP 10.5 includes CBFO Form 10.5-2 used to document the independence of the peer review panel members. The procedure requires that the documented rationale for the independence of the peer review panel members be reviewed, verified, and approved by the peer review manager. Although this had been accomplished by way of peer review manager notation and signature/date on the form, the form does not include a signature/date line. The audit team recommended that CBFO add a signature/date line to Form 10.5-2 in the next revision of the procedure.

On June 2, 2010, the audit team reviewed the submittals required by MP 10.5, which includes the forms and other records mentioned above along with the final copy of the peer review report. Based on this review, along with observations of the peer review proceedings, the audit team determined that in this case, the peer review program and process was adequate for compliance with the applicable governing upper-tier documents and the requirements were effectively implemented.

6.0 CORRECTIVE ACTIONS, OBSERVATIONS, AND RECOMMENDATIONS

6.1 Corrective Action Reports

During the audit, the audit team may identify Conditions Adverse to Quality (CAQ) and document such conditions on Corrective Action Reports (CARs).

Condition Adverse to Quality (CAQ) – An all-inclusive term used in reference to any of the following: failures, malfunctions, deficiencies, defective items, nonconformances, and technical inadequacies.

Significant Condition Adverse to Quality (SCAQ) – A condition which, if uncorrected, could have a serious effect on safety, operability, waste confinement, TRU waste site certification, regulatory compliance demonstration, or the effective implementation of the QA program.

No condition adverse to quality necessitating the generation of a CAR was identified as a result of this audit.

6.2 Deficiencies Corrected During the Audit

During the audit, the audit team may identify CAQs. The audit team members and the Audit Team Leader (ATL) evaluate the CAQs to determine if they are significant. Once a determination is made that the CAQ is not significant, the audit team member, in conjunction with the ATL, determines if the CAQ is isolated requiring only remedial action and, therefore, can be Corrected During the Audit (CDA). Deficiencies that can be classified as CDA are those isolated deficiencies that do not require a root cause determination or actions to preclude recurrence, and those for which correction of the deficiency can be verified prior to the end of the audit.

Upon determination that the CAQ is isolated, the audit team member, in conjunction with the ATL, evaluates/verifies any objective evidence/actions submitted or taken by the audited organization and determines if the condition was corrected in an acceptable manner. Once it has been determined that the CAQ has been corrected, the ATL categorizes the condition as a CDA.

No CDAs were identified during the course of this audit.

6.3 Observations

During the audit, the audit team may identify potential problems that should be communicated to the audited organization. The audit team members, in conjunction

with the ATL, evaluate these conditions and classify them as Observations using the following definition.

Observation – A condition that, if left uncorrected, could result in a CAQ.

Once a determination is made, the audit team member, in conjunction with the ATL, categorizes the condition appropriately.

No Observations were identified during the course of this audit.

6.4 Recommendations

During the audit, the audit team may identify suggestions for improvement that should be communicated to the audited organization. The audit team members, in conjunction with the ATL, evaluate these conditions and classify them as Recommendations using the following definition.

Recommendations – Suggestions that are directed toward identifying opportunities for improvement and enhancing methods of implementing requirements.

Once a determination is made, the audit team member, in conjunction with the ATL, categorizes the condition appropriately.

One Recommendation was provided as a result of this audit, as described below.

Recommendation 1

The audit team recommended that during the next revision of MP 10.5, *Peer Review*, CBFO add a signature/date line to CBFO Form 10.5-2 (MP 10.5 Attachment III) for the peer review manager's signature.

7.0 LIST OF ATTACHMENTS

- Attachment 1: Personnel Contacted During the Audit
- Attachment 2: Summary of Audit Results
- Attachment 3: Documents Audited

