

# CCP-PO-030

Revision 1

## CCP/Battelle Energy Alliance Analytical Chemistry & Instrument Department Interface Document

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RECORD OF REVISION

Revision Number	Date Approved	Description of Revision
0	05/03/2007	Initial issue.
1	12/29/2010	Minor revision to update references to the <i>Waste Isolation Pilot Plant Hazardous Waste Facility Permit</i> .

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## 1.0 PURPOSE

The Central Characterization Project (CCP) is a mobile program designed to characterize, certify, and transport Transuranic (TRU) waste from various U.S. Department of Energy (DOE) sites to the Waste Isolation Pilot Plant (WIPP) in New Mexico. The CCP is operated by Washington TRU Solutions (WTS), at the direction of the DOE/Carlsbad Field Office (DOE/CBFO).

Battelle Energy Alliance (BEA) Analytical Chemistry & Instrumentation Department (AC&ID) Environmental Chemistry Laboratory (ECL) provides the service of Headspace Gas (HSG) analysis and the submittal of results in the form of validated batch data reports (BDRs).

The previously certified Idaho National Laboratory (INL) TRU Waste Characterization Program (TWCP) Characterization Program at ECL will be integrated into and become part of the CCP WIPP certified Quality Assurance (QA) program.

This document defines the interfaces between the CCP and BEA AC&ID ECL necessary to perform this work. This document is intended to clarify and expand on details contained in the upper tier Memorandum of Understanding (MOU). These services shall be performed in accordance with the CCP WIPP certified QA Program that complies with the WIPP permit and other regulatory requirements, including the DOE/WIPP-02-3122, *Transuranic Waste Acceptance Criteria for the Waste Isolation Pilot Plant (WIPP WAC)*; CCP-PO-003, *CCP Contact-Handled Transuranic Waste Authorized Methods for Payload Control (CH-TRAMPAC)*; and NM4890139088-TSDF, *Waste Isolation Pilot Plant Hazardous Waste Facility Permit (HWFP)*, Attachment C-C6, *Waste Analysis Plan (WAP)*. All processes and systems comprising the services delivered during the characterization of TRU waste will be certified by the DOE/CBFO.

BEA has primary responsibility for assuring that facility requirements for safety (e.g. Emergency Management, Industrial Safety and Hygiene [IS&H]) security, safety basis, and environmental permits) are met.

This document addresses specific programmatic requirements in the following areas:

- Training and qualification
- Deficiencies and nonconformances
- Headspace gas analysis
- Data validation and reconciliation
- Measuring and Test Equipment (M&TE)
- Quality Assurance (QA)
- Documents and Procedures

- Procurements
- Software
- Equipment
- Records

## 2.0 REQUIREMENTS

2.1 This document implements the applicable requirements of the following:

- CCP-PO-001, CCP Transuranic Waste Characterization Quality Assurance Project Plan
- CCP-PO-002, CCP Transuranic Waste Certification Plan
- CCP-PO-003, CCP Transuranic Authorized Methods for Payload Control (CCP CH-TRAMPAC)

2.2 INL TWCP program level documents; CBFO SOW; Attachment PLN-1258, *Quality Program Plan for the TWCP*; PLN-600, *Analytical Laboratories Quality Assurance Plan for the TWCP*; and MCP-2610, *QA Program Administrative Controls for the TWCP*, were cross-walked with the superseding CCP program level documents. Implementation of Data Generation Level (DGL) requirements that were in PLN-600 were transferred to CCP-TP-188, *CCP Analytical Data Recording, Review, and Reporting or to this interface document*.

### 3.0 RESPONSIBILITIES

#### 3.1 Certification Transition

3.1.1 CCP Subcontract Technical Representative (STR)/Designee is responsible for the following during certification transition:

- [A] Providing information and procedures to the ECL Technical Leader.
- [B] Providing project support to complete administrative reviews and approvals of technical and administrative procedures or processes.
- [C] Responding to and resolving audit findings for certification activities to ensure successful completion of DOE/CBFO Certification Audit.

3.1.2 ECL Technical Leader/Designee is responsible for the following during certification transition:

- [A] Providing information and procedures to the CCP Subcontract Technical Representative (STR)/Designee.
- [B] Providing project support to complete administrative reviews and approvals of technical and administrative procedures or processes.
- [C] Responding to and resolving audit findings for certification activities to ensure successful completion of DOE/CBFO Certification Audit.

#### 3.2 CCP Site Project Manager (SPM)

3.2.1 Functions as CCP's primary interface and point-of-contact between CCP and ECL for waste characterization and certification activities.

3.2.2 Ensures ECL personnel are trained and qualified to perform WIPP-compliant TRU waste characterization activities.

3.2.3 Works in conjunction with ECL and generator-site customers to establish and maintain scheduled throughput of waste samples.

3.2.4 Ensures that project level verification and validation of BDRs is completed.

- 3.2.5 Conducts periodic management assessments in accordance with CCP-QP-018, *CCP Management Assessment*.
- 3.2.6 Reviews required software QA per CCP-QP-022, *CCP Software Quality Assurance Plan*.
- 3.2.7 Ensures that headspace samples contained in SUMMA® canisters that are shipped to ECL are not radiological contaminated and can be analyzed on the laboratory bench in a non-nuclear facility.
- 3.2.8 Authorizes the ECL Technical Leader to dispose of generator-site samples at the completion of DGL review.
- 3.3 CCP Quality Assurance (QA) Manager/Designee
  - 3.3.1 Functions as CCP's primary interface and point-of-contact for QA matters between CCP, ECL, DOE-Idaho (ID), and DOE/CBFO.
  - 3.3.2 Develops, directs, and maintains the QA Program and assures and verifies its implementation.
  - 3.3.3 Provides the ECL Technical Leader with a copy of the semi-annual trending summary reports per CCP-QP-014, *CCP Data Analysis and Trending*.
- 3.4 ECL Technical Leader or Designee.
  - 3.4.1 Functions as the ECL primary interface and point-of-contact between ECL and the CCP SPM.
  - 3.4.2 Carries out the duties of the Host site STR and the Host site Facility Safety Representative (FSR) as assigned in CCP procedures.
  - 3.4.3 Coordinates review, provides comments, and approves comment resolutions on procedures identified in Section 4.7.1 for the purpose of ensuring technical adequacy and operational feasibility.
  - 3.4.4 Reviews per CCP-QP-010, *CCP Document Preparation, Approval and Control*, documents identified in sections 4.7.1 and 4.7.2 of this interface document.

## 4.0 INTERFACE

### 4.1 Training and Qualification

4.1.1 ECL personnel who perform work under the CCP certified QA program will be trained and qualified to WIPP requirements in accordance with CCP-QP-002, *CCP Training and Qualification Plan*.

4.1.2 The Lead Operator (LO) title as used in the CCP procedures is derived from CCP-PO-005, *CCP Conduct of Operations* (not applicable to ECL). ECL has sole responsibility of their facility and CP-PO-005 does not apply except the Required Reading for Indoctrination and Required Reading for Continuous Work Performance sections as they apply to continuing training requirements. The LO title is not used by ECL, but is the equivalent to a supervisory position for ECL (e.g., Technical Leader).

4.1.3 The Equipment Operator title as used in CCP procedures is a generic title derived from CCP's various TRU waste characterization and certification operations. The equipment operator title is not used by ECL, but is equivalent to their analytical personnel (e.g., BEA staff).

### 4.2 Deficiencies and Nonconformances

4.2.1 ECL personnel who identify deficiencies or nonconformances which affect waste characterization or certification activities, will ensure that a nonconformance report (NCR) is initiated in accordance with, CCP-QP-005, *CCP TRU Nonconforming Item Reporting and Control*.

### 4.3 Headspace Gas (HSG) Analysis

4.3.1 ECL will perform HSG Analysis using SUMMA® or equivalent sample canisters.

4.3.2 ECL will perform the cleaning and certification of sample canisters and provide certified clean sample canisters to generator-site customers.

4.3.3 ECL will certify needle assembly equipment blanks submitted by TRU client sites.

4.4 Data Validation and Reconciliation

4.4.1 ECL will provide data generation level, validated data packages for HSG in accordance with CCP-TP-188.

4.5 Measuring and Test Equipment (M&TE)

4.5.1 ECL will maintain M&TE calibration in accordance with CCP-QP-016, *CCP Control of Measuring, Testing, and Data Collection Equipment*.

4.6 CCP Quality Assurance (QA)

4.6.1 CCP will conduct periodic QA surveillances to assess compliance with applicable WIPP requirements in accordance with CCP-QP-021, *CCP Surveillance Program*.

4.6.2 Independent Assessments of the CCP QA Program are currently performed by WTS QA personnel, to meet program requirements for independence of personnel and qualification of lead auditors. The process for scheduling and performing audits of the CCP QA Program is defined in CCP-PO-008, *CCP Quality Assurance Interface with WTS QA Program*.

4.7 Documents and Procedures

4.7.1 ECL will work to the following program procedures and be notified of changes, provide reviews and comments of program procedures in accordance with CCP-QP-010.

- CCP-PO-030. *CCP/Battelle Energy Alliance Analytical Chemistry & Instrumentation Department Interface Document*
- CCP-TP-173, *CCP Analysis of Gas Samples for VOCs by GC/FID*
- CCP-TP-174, *CCP Analysis of Gas Samples for Hydrogen and Methane by Micro GC/TCS*
- CCP-TP-175, *CCP Analysis of Gas Samples for VOCs by GC/MS*
- CCP-TP-176, *CCP Determination of Method Detection Limits for Gas Analysis*

- CCP-TP-177, *CCP Sample Receipt, Custody, and Storage*
- CCP-TP-178, *CCP SUMMA Canister Cleaning*
- CCP-TP-179, *CCP Gas Transfer Manifold Systems and Sample Compositing*
- CCP-TP-188, *CCP Analytical Data Recording, Review, and Reporting*

4.7.2 ECL will work to the following program procedures.

- CCP-PO-001, *CCP TRU Waste Characterization Quality Assurance Project Plan*
- CCP-PO-002, *CCP Transuranic Waste Certification Plan*
- CCP-PO-005, *CCP Conduct of Operations* (Required Reading for Indoctrination and Required Reading for Continuous Work Performance sections only)
- CCP-QP-002, *CCP Training and Qualification Plan*
- CCP-QP-005, *CCP TRU Nonconforming Item Reporting and Control*
- CCP-QP-006, *CCP Corrective Action Reporting and Control*
- CCP-QP-008, *CCP Records Management*
- CCP-QP-010, *CCP Document Preparation, Approval and Control*
- CCP-QP-011, *CCP Notebooks and Logbooks*
- CCP-QP-016, *CCP Control of Measuring, Testing, and Data Collection Equipment*
- CCP-QP-022, *CCP Software Quality Assurance Plan*
- CCP-TP-056, *CCP Performance Demonstration Plan*

- 4.7.3 CCP will maintain control of documents and procedures listed in Section 4.7.1 and 4.7.2 in accordance with CCP-QP-010.
- 4.7.4 CCP will coordinate issuance/effective dates of procedures with ECL to ensure minimum impact to in process samples.
- 4.7.5 CCP will control this interface agreement.
- 4.8 Procurement
  - 4.8.1 BEA ECL has been added to the WTS/CCP Qualified Suppliers List (QSL) according to CCP-QP-015, *CCP Procurement*.
  - 4.8.2 As a WTS Qualified Supplier, ECL is authorized for procurement of items and services as listed in the WTS QSL database.
- 4.9 Software
  - 4.9.1 ECL has been added to the WTS QSL for software.
  - 4.9.2 All software developed or procured must be entered into the CCP software configuration management program in accordance with CCP-QP-022.
  - 4.9.3 As a WTS Qualified Supplier, ECL is authorized for procurement of software and software services as listed in the WTS QSL database. This qualification includes use of internally developed software, such as instrument operating software/firmware, spreadsheets, data management, and reporting software.
- 4.10 Equipment
  - 4.10.1 ECL will maintain ownership of all laboratory equipment.
  - 4.10.2 ECL will notify the SPM of new equipment to be evaluated for certification and or certified equipment being retired.
  - 4.10.3 The current ECL WIPP-certified equipment is listed and maintained on the CCP site <ftp://q.wipp.ws>.

4.11 Occurrence Reporting and Processing System (ORPS) and Price-Anderson Amendments Act (PAAA)

4.11.1 With respect to potentially reportable events/issues concerning waste certification or safe operation of characterization activities (e.g., Technical Safety Requirements, Radiation Safety, Industrial Safety, Industrial Hygiene, Maintenance, Lockout/Tagout, Conduct of Operations), both CCP and ECL reserve the right to file ORPS and PAAA reports as they deem appropriate after reviewing the pertinent facts and upon coordination and consultation with one another and their respective internal practices and procedures.

4.11.2 BEA has sole responsibility for their facility and CCP-PO-005 does not apply except the Required Reading for Indoctrination and Required Reading for Continuous Work Performance sections as they apply to continuing training requirements.

5.0 RECORDS

5.1 Records generated during the performance of the waste characterization and certification scope are controlled by CCP.

5.2 QA records generated by CCP documents referenced in this plan are maintained in accordance with CCP-QP-008.

5.3 ECL will have access to CCP records in case corrections to QA records are needed. Corrections to QA records will be performed in accordance with CCP-QP-008.

5.4 ECL BDRs may be transmitted to CCP records as a hardcopy or electronically in accordance with CCP-QP-008.

Figure 1 – CCP Organization

