

# CCP-PO-500

Revision 1

## CCP/ANL RH-TRU Waste Interface Document

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0	06/01/2006	Initial issue.
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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 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 (CBFO).

CBFO has deployed the CCP to the Argonne National Laboratory (ANL). CCP has been deployed to this site to process remote-handled (RH) TRU waste.

This document defines the interfaces between the CCP and the Host facility organization(s) necessary to perform this work. This document is invoked via a Statement of Work (SOW) between the Host facility organization and WTS. This document is intended to clarify and expand on details contained in the upper tier SOW and program documents. It is not intended to be used in lieu of a task-specific SOW.

CCP has primary responsibility for waste characterization activities. CCP services include compilation, reporting, and confirmation of Acceptable Knowledge (AK), Nondestructive Examination (NDE), Radiological Characterization, Headspace Gas (HSG) Sampling and Analysis, Visual Examination (VE), Data Validation and Verification, Waste Certification, WIPP Waste Information System (WWIS) Data Entry, and Waste Transportation Packaging and Shipment.

In providing these services, CCP may opt to use other CBFO-certified TRU programs. CCP will accept batch data reports (BDRs) validated through the data generation level from these other certified programs and perform all project office activities in accordance with the CCP program.

These services will be performed with CCP and/or Host facility equipment with appropriate DOE/CBFO-certified procedures. All services provided by CCP will comply with RH-TRU requirements delineated in DOE/WIPP-02-3214, *Remote-Handled TRU Waste Characterization Program Implementation Plan (WCPIP)*; DOE/WIPP-02-3122, *Waste Acceptance Criteria for the Waste Isolation Pilot Plant (WAC)*; and NM 4890139088-TSDF, *Waste Isolation Pilot Plant Hazardous Waste Facility Permit*, including those requirements pertaining to waste disposal and transportation. This work will be performed under a DOE/CBFO-certified quality assurance (QA) program that meets requirements defined in DOE/CBFO Quality Assurance Program Document (QAPD).

The Host facility may augment CCP characterization efforts as requested by CCP. Where required, all augmented services provided by the Host facility shall comply with CCP-certified procedures.

The Host facility has primary responsibility for assuring that requirements for safety, (including Radiological Control, Emergency Management, Industrial Safety, and Industrial Hygiene [IH]), security, safety basis, environmental permits, and other areas are met for CCP activities, and that CCP activities support the scheduled objectives.

Throughout this document the Host facility contractors' responsibilities are limited to the specific CCP activities being conducted within their facilities.

The CCP will certify DOE RH-TRU waste at the ANL for disposal in accordance with the certification authority that has been granted by the DOE/CBFO.

This document addresses specific requirements for the following areas:

- Training and Qualification
- Container Management
- Deficiencies and Nonconformances
- VE
- Radiological Characterization (includes dose-to-curie methodology)
- NDE
- HSG Sampling and SUMMA<sup>®</sup> Analysis
- AK
- Data Validation and Reconciliation
- Measuring and Test Equipment (M&TE)
- Work Standards
- QA
- Project Control
- Procedures
- Document Transmittals
- Procurements
- Records
- Waste Certification and WWIS Data Entry
- Transportation
- Authorization Safety Basis and Configuration Management

The Host facility will report conditions or concerns that have or may have safety, health, QA, security, operational or environmental implications to the DOE Argonne Site Office (DOE ASO). CCP shall report their similar issues to the Host facility and to DOE CBFO.

## 2.0 REQUIREMENTS

This document implements the applicable requirements of the following:

DOE/WIPP-02-3214, *Remote-Handled TRU Waste Characterization Program Implementation Plan (WCPIP)*

CCP-PO-001, *CCP Transuranic Waste Characterization Quality Assurance Project Plan*

CCP-PO-002, *CCP Transuranic Waste Certification Plan*

CCP-PO-505, *CCP Remote-Handled Transuranic Waste Authorized Methods for Payload Control (CCP RH-TRAMPAC)*

### 3.0 RESPONSIBILITIES

#### 3.1 Initial Setup

3.1.1 CCP is responsible for the following during initial setup:

- [A] Providing information and procedures to the Host Facility Site Technical Representative (STR)/Designee, who will coordinate facility, QA, and Environmental Safety & Health (ES&H) reviews to determine satisfactory compliance with Host facility safety basis requirements, radiological control requirements, and other safety and operational requirements.
- [B] Completing readiness activities as needed to support authorization of CCP activities at the Host facility.
- [C] Providing project support to complete administrative reviews and approvals of technical and administrative procedures or processes.
- [D] Mobilization of project management and staff.

#### 3.2 Operations

3.2.1 CCP is responsible for the following activities to support operations:

- [A] Performing system start-up and calibration of characterization equipment at the Host facility.
- [B] Performing safety walk-downs, management, and laboratory assessments prior to operation.
- [C] Responding to and resolving assessment and surveillance findings for CCP startup activities.
- [D] Ensuring CCP and Host facility personnel are trained and qualified in accordance with the requirements specified in Section 4.1.
- [E] Successful completion of DOE/CBFO Certification Audit.

- [F] Providing drum tracking support for the drums introduced into characterization activities.
- [G] CCP, through Washington TRU Solution (WTS) established programs, maintains the responsibility for reporting potential Price-Anderson Amendments Act (PAAA) issues resulting from the certification of TRU waste by CCP at ANL. This includes filing any Occurrence Reporting and Processing System (ORPS) reports resulting from the certification of TRU waste by CCP at ANL. CCP shall allow the Host facility to participate in the investigation of any waste certification event that results in an ORPS or PAAA report.
- [H] CCP shall support and participate in Host facility investigations when CCP characterization activities result in a Host facility initiated ORPS or PAAA report.
- [I] CCP shall maintain records in accordance with CCP-QP-008, *CCP Records Management*, and CCP-QP-028, *CCP Records Filing, Inventorying, Scheduling, and Dispositioning*.

3.2.2 The Host facility provides the following support for CCP activities:

- [A] Radiological controls as needed to support characterization activities, including:
  - Radiological postings.
  - Radiation protection surveys, both initial and routine, on characterization equipment and provide approved survey reports to the CCP Site Project Manager (SPM) as required.
  - Personnel dosimetry.
  - Dose assessments and dosimetry reports.
  - Calibrated and source checked survey instrumentation, as required.
  - Radiological Work Permits (RWP) to support CCP activities, as required.

- Bioassay sample collection, evaluation, and reports. Bioassay reports will be provided to the CCP Vendor Project Manager (VPM) within 60 days of sample collection.
  - Radiological source controls.
  - Radiological Technicians for monitoring.
  - Responsible for secondary generated waste.
  - Personal Protective Equipment (PPE), as necessary.
  - Personnel facilities to accommodate the characterization and loading process.
- [B] Provides adequate heated space to be used for HSG sampling.
- [C] Provides site-specific training, as needed, to ensure safe operations within the facility.
- [D] Provides ES&H support, as needed.
- [E] Provides Fire Protection and Emergency Management support, as needed.
- [F] Provides Authorization basis oversight, including Unreviewed Safety Question (USQ) evaluations.
- [G] Provides environmental impact oversight and support, as needed.
- [H] Provides on-site sample and drum transportation.
- [I] Provides drum handling, inventory control, and storage location tracking.
- [J] Provides personnel to be trained and qualified under the CCP program as needed to support CCP activities such as AK, VE, radiological characterization, and solids sample collection.
- [K] Performs document classification reviews as required to allow the public release of documents such as the AK Summary Report.

- [L] The Host facility maintains the responsibility for reporting potential PAAA issues resulting from issues with safe operation of CCP characterization activities (e.g., Technical Safety Requirements, Radiation Safety, Industrial Safety, IH, Maintenance, Lockout/Tagout, Conduct of Operations, etc.) at ANL. This includes filing any ORPS reports resulting from issues with safe operation of CCP characterization activities at ANL. The Host facility shall allow CCP to participate in investigations resulting in ORPS or PAAA reports from issues with safe operation of CCP characterization activities at ANL.
- [M] The Host facility will be allowed to participate in CCP investigations when a waste certification event results in a CCP initiated ORPS or PAAA report.
- [N] Provides adequate space and file storage capacity for CCP personnel to maintain records.

### 3.3 CCP Site Project Manager (SPM)

- 3.3.1 Functions as CCP's primary interface and point-of-contact between CCP and the Host facility for all waste characterization, certification, and transportation activities.
- 3.3.2 Ensures CCP and Host facility personnel are trained and qualified to perform WIPP-compliant TRU waste characterization and transportation activities at the Host facility prior to commencement of work activities.
- 3.3.3 Confirms sufficient characterization equipment is available to perform the required characterization activities at the Host facility.
- 3.3.4 Provides the AK Summary Report for DOE waste characterized by the CCP to the Host facility STR/Designee.
- 3.3.5 Works in conjunction with Host facility operations to establish and maintain reasonable and appropriate throughput of waste containers.
- 3.3.6 Ensures that project level verification and validation of BDRs are completed.
- 3.3.7 Provides status on CCP characterization operations to the Host facility STR/Designee.

- 3.3.8 Reviews required software QA per CCP-QP-022, *CCP Software Quality Assurance Plan*.
- 3.4 CCP Quality Assurance (QA)
  - 3.4.1 Functions as CCP's primary interface and point-of-contact for QA matters between CCP, Host facility, DOE/ASO, and DOE/CBFO.
  - 3.4.2 Validates the Nonconformance Reports (NCRs) generated by CCP personnel performing characterization activities at the Host facility.
  - 3.4.3 Notifies the Host facility STR/Designee of any potential ORPS or Noncompliance Tracking System-Reportable PAAA issues resulting from the certification of TRU waste by CCP at ANL.
  - 3.4.4 Provides copies of NCRs for information to the Host facility STR/Designee, as requested.
  - 3.4.5 Ensures that nonconformances are dispositioned in a timely manner in accordance with CCP-QP-005, *CCP TRU Nonconforming Item Reporting and Control*.
  - 3.4.6 Ensures receipt inspection per CCP-QP-026, *CCP Inspection Control*, of procured items and services is performed.
  - 3.4.7 Provides the Host facility STR/Designee with a copy of the semi-annual trending summary reports per CCP-QP-014, *CCP Data Analysis and Trending*.
- 3.5 Host Facility Subcontract Technical Representative (STR)/Designee (Host Facility Management Position)
  - 3.5.1 Functions as the Host facility's primary interface and point-of-contact between the Host facility and CCP.
  - 3.5.2 Ensures any USQs that may be needed for proposed modifications to CCP hardware, software, or procedures are prepared and approved by the appropriately qualified Host facility personnel prior to CCP implementing the proposed modification.
  - 3.5.3 Ensures needed site infrastructure support, such as radiological, industrial safety and IH, is available for waste characterization.
  - 3.5.4 Ensures documentation of completed Host facility-specific training is delivered to the CCP SPM.

- 3.5.5 Coordinates review, provides comments, and approves comment resolutions on procedures listed in Section 4.17.3 for the purpose of ensuring facility safety requirements are met.
  - 3.5.6 Provides local support to CCP, including but not limited to VE, radiological characterization, and sampling personnel to support characterization operations as needed. Also provides personnel to support the CCP AK Experts in the collection of required documents and procedures as needed.
  - 3.5.7 Ensures that periodic QA surveillances of CCP operations by the Host facility are conducted and reported to CCP.
  - 3.5.8 Distributes the CCP documents listed in Section 4.17.3 to Host facility reviewers as required by the Host facility administrative controls.
  - 3.5.9 Reviews and concurs in accordance with CCP-QP-010, *CCP Document Preparation, Approval and Control*, on documents in Section 4.17.3 of this Interface Document.
  - 3.5.10 Provides facilities, construction services, utilities, phone services, office services, and supplies.
- 3.6 CCP Vendor Project Manager (VPM)
- 3.6.1 Monitors the List of Qualified Individuals (LOQI) daily (when characterization activities are being performed) to confirm that only qualified personnel perform waste characterization activities.
  - 3.6.2 Functions as CCP's primary interface and point-of-contact between CCP and the Host facility STR/Designee for characterization field operations.
  - 3.6.3 Provides pre-operation briefings when activities are being conducted.
  - 3.6.4 Ensures that in-process documents and the documents listed in Section 4.18.2 are transmitted to the CCP Site Project Office as soon as practicable in accordance with CCP-QP-008.
  - 3.6.5 Ensures applicable Material Safety Data Sheets (MSDS) are maintained and available to support operations.

- 3.6.6 Provides oversight of field operations to ensure safe, efficient operations.
- 3.6.7 Supervises day-to-day TRU waste characterization activities.
- 3.6.8 Notifies the CCP Project Manager and the Nuclear Facility Manager of any abnormal events associated with safe operation of CCP characterization activities for reporting purposes.

#### 4.0 PROCEDURE

##### 4.1 Training and Qualification

- 4.1.1 CCP personnel or Host facility personnel who perform work under CCP procedures will be trained and qualified to WIPP requirements according to CCP-QP-002, *CCP Training and Qualification Plan*.
- 4.1.2 Administrative work, such as BDR reviews that require no access to characterization activities or processes, may be completed by personnel who have not completed the Host facility required site-specific training. Personnel who have not completed site-specific training will not be allowed unescorted access to the characterization activities.
- 4.1.3 CCP and Host facility personnel assigned to field operations must complete the Host facility site-specific training. The STR will provide the CCP SPM, in writing, a listing of the site-specific training required for each CCP position.
- 4.1.4 Both the CCP training and Host facility site-specific training must be completed prior to the individual being assigned to perform independent work at the Host facility.
- 4.1.5 An LOQI will be approved by the CCP SPM and will be monitored by the CCP VPM to confirm CCP and Host facility personnel assigned to CCP to perform work are in compliance.
- 4.1.6 Immediate notification, in writing, will be provided by CCP or the Host facility if any required qualification is revoked, suspended, or expires.

##### 4.2 Container Management

- 4.2.1 The Host facility is responsible for drum movement and storage.
- 4.2.2 The Host facility will provide the dose rate and surface contamination information necessary to certify the container or canister for disposal.
- 4.2.3 CCP is responsible for container management throughout the CCP characterization process.
- 4.2.4 The Host facility is responsible for providing documented information to the CCP SPM on any modification to a drum or canister after closure and/or AK has been approved.

4.2.5 The CCP SPM will review the documented information of modified drums and will notify the STR when the drums are approved for entrance into the CCP characterization process.

4.3 Deficiencies and Nonconformances

4.3.1 CCP Identified Deficiencies and Nonconformances

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**NOTE**

The CCP QA will confirm appropriate closure of the deficiencies that are resolved by CCP.

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[A] If CCP personnel identify a nonconformance condition associated with a waste container during the CCP characterization or certification process, CCP personnel will initiate an NCR in accordance with CCP-QP-005.

[B] If the deficiency or nonconformance is an issue that will be resolved by CCP, CCP QA will provide notification (e.g., verbal or e-mail as required by the Host facility) to the Host facility STR/Designee. The Host facility STR/Designee may request any supporting documentation needed by the Host facility. CCP will ensure appropriate closure of the deficiency. A copy of any CCP NCR related to DOE TRU waste at the ANL will be provided to the Host facility STR/Designee upon request.

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**NOTE**

In some cases, ANL may perform the work required to resolve deficiencies identified in CCP NCRs and will initiate internal documentation as required by the ANL program. However, the CCP NCRs will remain open, and CCP NCR Hold Tags will remain on the affected containers until resolution of the NCR condition has been confirmed by CCP under its certified program. At that point, CCP will close the NCRs and remove the NCR tags

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[C] If the deficiency or nonconformance cannot be resolved by the CCP (e.g., does not meet TRU Waste Acceptance Criteria), then the specific drum will be returned with all required documentation to the Host facility for disposition.

[D] CCP personnel will immediately notify the CCP VPM of any abnormal event associated with the safe operation of CCP characterization activities. The CCP VPM will notify the CCP Project Manager and the Nuclear Facility Manager of the abnormal event.

[E] The CCP QA will notify the STR/Designee of potential CCP ORPS and PAAA reports resulting from the certification of waste by CCP at ANL.

#### 4.3.2 Host facility Identified Deficiencies and Nonconformances

[A] Deficiencies or nonconformances identified by the Host facility during this project that affect waste characterization or certification activities shall be promptly identified to the CCP VPM, who will initiate an NCR in accordance with the existing CCP deficiency reporting process in accordance with CCP-QP-005.

#### 4.4 Visual Examination (VE)

4.4.1 CCP will conduct VE at the time of waste packaging or as required by the governing documents in accordance with CCP-TP-500, *CCP Visual Examination and Repackaging of RH-TRU Wastes*, using a facility provided by the Host facility.

4.4.2 Host facility will be responsible for all maintenance and repairs to the facility used for VE and/or repackaging operations.

#### 4.5 Radiological Characterization

4.5.1 The Host Facility will provide a technical lead to support radiological characterization efforts based on the use of AK for stored RH-TRU waste.

4.5.2 CCP will provide qualified personnel, including Host Facility personnel, to perform radiological characterization activities.

4.5.3 The Host facility will provide support for the CCP for performing calibration of Radiological Characterization instrumentation. This support includes delivery of surrogate drums and source control, as needed.

4.5.4 If the preliminary radiological results indicate an individual drum, or suite of RH-TRU drums staged for characterization in the Host facility, contains a  $^{239}\text{Pu}$  fissile gram equivalent (FGE) amount

greater than 100 grams, the appropriate Host facility Shift Supervisor and Facility Manager shall be immediately notified. The Host facility Operations will remove the container(s) and provide storage in a safe configuration. The CCP will provide a finalized Radiological Characterization analysis report to the Host facility STR/Designee within seven days.

#### 4.6 Headspace Gas (HSG) Sampling and Analysis

##### 4.6.1 CCP will perform HSG Sampling and Analysis via :

[A] SUMMA<sup>®</sup> HSG sampling with analysis of the SUMMA<sup>®</sup> samples performed by the ANL Environmental Chemistry Laboratory (ECL), or other CBFO certified laboratory.

4.6.2 The Host facility will provide a temperature-controlled environment at 18°C (65°F) or greater to equilibrate waste drums for a minimum of 72 hours prior to sampling. The temperature must be maintained until the drum is sampled.

4.6.3 CCP will be responsible for providing the calibrated instrumentation needed to monitor the temperature requirements with documentation provided.

4.6.4 CCP will be responsible to replace the filter vent, as needed, to support HSG sampling or transportation.

4.6.5 CCP will participate and provide support to ALARA planning for locating and using the SUMMA HSG in a manner consistent with ALARA.

#### 4.7 Source Control

4.7.1 No Special Nuclear Material (SNM) sources are anticipated to be required to support radiological characterization.

4.7.2 The Host facility will be responsible for management of all Radiological Characterization Non-SNM reference sources. Responsibilities consist of: inventory control, storage, shipment, and usage. CCP will provide the Host site the number of sources and isotopic distribution with activity levels of the sources CCP needs to bring on site. The Host Facility will provide CCP the names of the custodian and authorized users when required or requested by CCP.

- 4.7.3 The Host facility will be responsible for providing radiological control support associated with the CCP non-SNM reference sources. This support consists of maintaining the radioactive materials area (RMA) postings, periodic surveys and performing a semi-annual leak check on the sources as requested by CCP.
- 4.7.4 The Host facility, as custodian of non-SNM sources, will provide to CCP the necessary sources for calibration as requested. Host facility personnel will load the sources into the matrix drums as requested by CCP. CCP personnel will be trained as users of the sources to the Host facility procedures, as required.
- 4.8 Acceptable Knowledge (AK)
- 4.8.1 CCP records personnel will maintain the auditable AK record necessary to support the AK Summary Report in accordance with the WIPP RH-TRU Waste Acceptance Plan (WAP) and DOE/CBFO-94-1012, *Department of Energy Carlsbad Field Office Quality Assurance Program Document* (DOE/CBFO-QAPD).
- 4.8.2 CCP AK personnel will perform and document the AK collection, reporting, and confirmation per the WCPIP and CCP-TP-005, *CCP Acceptable Knowledge Documentation*. CCP shall submit the AK Summary Report for Host facility review and concurrence. As warranted, the Host facility STR/Designee will provide written comments. Upon satisfactory disposition of comments, the Host facility STR/Designee will provide written concurrence of the AK Summary Report.
- 4.8.3 Host facility personnel will assist CCP AK personnel in support of AK compilation, confirmation, discrepancy resolution, or AK reassessment of source documents.
- 4.8.4 CCP will provide training and qualification of Host facility personnel, as necessary, to support AK efforts.
- 4.9 Data Validation and Reconciliation
- 4.9.1 CCP, using CCP-trained Host facility personnel where applicable, will provide data generation level validated data packages for all characterization activities. CCP will provide data generation level validated data packages for NDE, Radiological Characterization, and HSG in accordance with the approved CCP procedures governing these processes.

- 4.9.2 Wherever CCP has obtained the services of another CBFO-certified TRU Waste Program, that program will provide data generation level BDRs to CCP in accordance with their own programmatic documents.
  - 4.9.3 CCP will provide project level validated data packages for NDE, Radiological Characterization, VE, and HSG Sampling and Analysis.
  - 4.9.4 The CCP SPM and AK Expert (AKE) will perform data reconciliation with applicable data quality objectives (QAOs) in accordance with CCP-TP-002, *CCP Reconciliation of DQOs and Reporting Characterization Data*, and/or the Characterization Reconciliation Report.
- 4.10 Measuring and Test Equipment (M&TE)
- 4.10.1 CCP operations personnel will provide a list of equipment that requires calibration to the Host facility STR/Designee.
  - 4.10.2 The Host facility will make available National Institute of Science and Technology (NIST)-traceable calibration services for M&TE to the CCP. The Host facility will maintain records on M&TE calibration in accordance with their Records Inventory and Disposition Schedule (RIDS). Copies of the Certificates of Calibration will be provided to the CCP VPM and CCP M&TE Custodian.
  - 4.10.3 The Host facility will make available national standard-traceable calibration services for gamma and neutron dose measurement instrumentation. The Host facility will maintain records on calibration in accordance with their RIDS. Copies of the Certificates of Calibration will be provided to the CCP VPM and CCP M&TE Custodian.
  - 4.10.4 The Host facility STR/Designee will make calibration documentation and processes accessible as needed for internal and external audits.

#### 4.11 Work Standards

- 4.11.1 CCP operations personnel will work under the Host facility Lockout/Tagout (LO/TO) procedure.
- 4.11.2 CCP and Host facility-provided personnel will perform quality-affecting work under CCP procedures for TRU waste characterization and certification activities. Host facility procedures and work packages will be used for non-waste characterization activities (e.g., equipment repairs).
- 4.11.3 CCP operations personnel will operate in accordance with CCP-PO-005, *CCP Conduct of Operations*.
- 4.11.4 CCP operations personnel will comply with Host facility procedures as they apply to established characterization areas.
- 4.11.5 CCP personnel will work under the Host facility safety basis and work control standards, (i.e., General Employee Radiological Training [GERT]). Maintenance work control activities for CCP supplied equipment will be controlled using CCP-TP-140, *CCP Equipment Maintenance*. Maintenance work control activities on Host facility-supplied equipment will be controlled using Host facility work authorization procedures.
- 4.11.6 As outlined in CCP-CM-001, *CCP Equipment Change Authorization and Documentation*, and CCP-PO-005, it is the responsibility of the CCP VPM to maintain equipment configuration and authorize equipment changes to ensure characterization systems are operated and maintained in accordance with the Host facility safety basis. The CCP VPM will not authorize a change to any characterization system until steps 4.11.6 0 and [B] have occurred:
- [A] The CCP Cognizant Engineer has reviewed and approved the proposed change in writing to the CCP VPM (this may be accomplished via e-mail). In addition, any proposed change to any vendor-supplied characterization system must be reviewed and approved by an appropriate vendor engineer or representative. The vendor engineer or authorized representative must provide written approval to the CCP VPM (this may be accomplished via e-mail) for the proposed change.

- [B] The Host facility STR/Designee must concur with the proposed change in writing (this may be accomplished by e-mail) and provide a copy of the approved USQ, if it is required.
  - [C] The Host facility will manage the configuration of the radiography and assay units in accordance with the appropriate Host facility procedures. Once these systems have been turned over to CCP for operation, no change to the configuration will be approved by the Host facility without CCP's concurrence in writing (this may be accomplished by e-mail) from the CCP VPM.
- 4.11.7 CCP personnel will participate in the Host facility bioassay program. CCP personnel involved in VE of waste will provide routine samples on a monthly basis. All other CCP personnel will provide samples as requested under the routine/random program established by the Host facility. All CCP personnel will submit the bioassay samples required to establish a baseline for activities at the Host facility.
  - 4.11.8 The Host facility will analyze bioassay samples provided by CCP personnel within 60 days of their receipt.
  - 4.11.9 The CCP Project Manager or CCP VPM will be notified if any bioassay sample provided by CCP personnel indicates that an uptake of any radioactive isotopes may have occurred as soon as is reasonably possible.
  - 4.11.10 Host facility radiological controls personnel will perform routine surveys for contamination and radiation as specified in Host facility policies or procedures. The CCP Project Manager or CCP VPM and appropriate Host facility management personnel will be notified immediately upon the discovery of any loose surface contamination in any CCP-occupied buildings or any of the CCP-operated characterization equipment contained in these buildings. Access to and copies of routine survey results will be made available to CCP upon request.
  - 4.11.11 The Host facility will provide the CCP Project Manager or CCP VPM with the results of continuous or fixed air sample filter analysis within 21 days of the removal of the filter from the sampler head, in any monitored area routinely occupied by CCP personnel.

- 4.11.12 The Host facility will provide the necessary dosimetry for CCP personnel. Dosimetry reports will be provided to the CCP Project Manager or CCP VPM.
- 4.11.13 CCP will provide historical information on the operation of any CCP equipment deployed at Host facility for the purpose of lessons learned and the implementation of any mitigating actions from these lessons learned.
- 4.12 Waste Certification and WIPP Waste Information System (WWIS) Data Entry
  - 4.12.1 CCP will prepare Waste Stream Profile Forms (WSPFs) for the subject Host facility waste in accordance with CCP-TP-002.
  - 4.12.2 CCP will transmit characterization and certification data in accordance with WWIS and CCP-TP-030, *CCP TRU Waste Certification and WWIS Data Entry*.
  - 4.12.3 CCP shall submit copies of WSPFs to the Host facility for information before submittal to CBFO. The Host facility will provide written concurrence on the basis of continued compliance with procedures and programs and CBFO certification of the CCP characterization program.
  - 4.12.4 The CCP Waste Certification Officials (WCO) will document and certify that all TRU waste payload containers meet the requirements of the WAC and submit the data to the WWIS for approval.
  - 4.12.5 The CCP WCO will provide listings of drums requiring retrieval from storage for the purposes of loading into RH TRU 72B canisters.
  - 4.12.6 CCP will begin their loading and shipping process using payload containers approved in WWIS.
- 4.13 Transportation
  - 4.13.1 CCP is responsible for meeting all requirements for loading and shipping TRU waste certified by CCP as approved in WWIS.
  - 4.13.2 The Host facility will load drums into canisters according to CCP WCO listings, using approved procedures, and will provide the CCP WCO with the necessary data to complete the process.

- 4.13.3 The CCP WCO will work with the Host facility as necessary to complete the appropriate transportation activities.
  - 4.13.4 The CCP Transportation Certification Official (TCO) will work with the Host facility as necessary to load the canisters into the RH TRU 72B casks.
  - 4.13.5 The CCP TCO will coordinate the completion of the preparations of the RH TRU 72B Cask for shipment in accordance with DOE/CBFO 02-3283 and DOE/CBFO 02-3284.
- 4.14 Quality Assurance (QA)
- 4.14.1 All work performed in the completion of this waste characterization and certification scope will be in compliance with applicable DOE/CBFO-certified CCP procedures.
  - 4.14.2 CCP will conduct periodic QA surveillances to assess compliance with applicable WIPP requirements.
  - 4.14.3 The Host facility will conduct audits/surveillances to assess compliance with applicable procedures.
- 4.15 Procurement
- 4.15.1 All items and services to be purchased under CCP-PO-001, *CCP Transuranic Waste Characterization Quality Assurance Project Plan (QAPjP)*, will be graded by CCP in accordance with CCP-QP-001. The grading will determine whether the items and services are quality-affecting (Quality Level 1 or Quality Level 2) or non quality-affecting (Quality Level 0) for WIPP characterization, certification, and transportation.
    - [A] CCP will procure all quality-affecting items and services in accordance with CCP-QP-015, *CCP Procurement*. These items and services are the sole responsibility of CCP with regard to their quality integrity.
    - [B] Host facility will procure items and services determined by the CCP grading process to be non quality-affecting for WIPP characterization, certification, and transportation. The Host facility will be responsible for verification and compliance for these items and services.

- [C] Items and services that are related to safe operation of the facility, and which do not affect WIPP characterization, certification, and transportation, are not required to be graded by CCP.
- [D] Receipt inspection of quality-affecting items will be performed by personnel trained and qualified to CCP-QP-002.
- [E] CCP will maintain Source/Receipt Inspection Verification Sheets (SRIVS) and associated objective evidence for each shipment in accordance with CCP-QP-026.
- [F] CCP will provide Host facility advance notice (two weeks preferred) regarding anticipated receiving inspections that will be performed by Host facility personnel trained and qualified by CCP.

#### 4.16 Project Control

- 4.16.1 CCP and Host facility will provide weekly status for their respective scheduled activities.
- 4.16.2 CCP will maintain and provide Host facility with an up-to-date organization chart listing CCP personnel, along with associated roles and responsibilities.

#### 4.17 Procedures

- 4.17.1 As defined in CCP-QP-010, editorial or minor changes may be made to all CCP documents except CCP-PO-001; CCP-PO-002, CCP, *Transuranic Waste Certification Plan*; CCP-PO-003, *CCP Transuranic Authorized Methods for Payload Control (CCP CH-TRAMPAC)*; and CCP-QP-001, *CCP Graded Approach* without the same level of review and approval as the original document. CCP will process any required changes in accordance with CCP-QP-010.
- 4.17.2 New Technical Operating Procedures (procedures that operate equipment) developed by CCP scheduled to be used at the host site, shall be evaluated by the Host facility STR/Designee to determine if the procedure shall be added to the Host facility review lists defined below.

4.17.3 The following documents, and all revisions to these documents, will be provided to the Host facility STR/Designee for review:

- CCP AK Reports
- CCP Waste Stream Profile Forms
- CCP Health and Safety Plans, as required
- CCP-PO-500, *CCP/ANL RH-TRU Waste Interface Document*
- CCP-TP-093, *CCP Sampling of TRU Waste Containers*
- CCP-TP-140, *CCP Equipment Maintenance*
- CCP-TP-500, *CCP Remote-Handled Waste Visual Examination*
- CCP-TP-504, *CCP Dose-to-Curie Survey Procedure for Remote-Handled Transuranic Waste*

4.17.4 The following documents, and all revisions to these documents, will be provided to the Host facility STR/Designee as Notify Only for review:

- CCP-PO-001, *CCP Transuranic Waste Characterization Quality Assurance Project Plan*
- CCP-PO-002, *CCP Transuranic Waste Certification Plan*
- CCP-PO-005, *CCP Conduct of Operations*
- CCP-PO-505, *CCP Remote-Handled Transuranic Waste Authorized Methods for Payload Control (CCP RH-TRAMPAC)*
- 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-TP-001, *CCP Project Level Data Validation and Verification*
- CCP-TP-002, *CCP Reconciliation of DQOs and Reporting Characterization Data*
- CCP-TP-043, *CCP Chain of Custody for SUMMA<sup>®</sup> Canister Sampling Using the INEEL Lab*
- CCP-TP-106, *CCP Headspace Gas Sampling Batch Data Report Preparation*
- CCP-TP-509, *CCP Remote-Handled Transuranic Container Tracking*

4.17.5 CCP will maintain control of procedures in accordance with CCP-QP-010.

4.17.6 The Host facility STR/Designee will review or designate the appropriate reviews of the CCP procedures listed in Section 4.17.3 and forward written comments to CCP Document Control in accordance with CCP-QP-010 for resolution.

4.17.7 The CCP SPM will confirm that the Host facility STR/Designee written comments are resolved with the Host facility STR/Designee concurrence prior to proceeding with CCP operations.

#### 4.18 Document Transmittals

4.18.1 Documents listed in this section, which are provided from one organization to the other as information copies, may be transmitted via memo, fax, e-mail, or formal correspondence. Documents identified as QA records will be transmitted in accordance with CCP-QP-008.

4.18.2 Documents to be provided to the Host facility by CCP include:

- [A] List of equipment requiring calibration
- [B] Copies of NCRs and Corrective Action Requests (CARs), as applicable

- [C] Copies of AK Summary Reports
- [D] Copies of AK source documents and source document summaries, as requested
- [E] Copies of semi-annual trending summary reports
- [F] Copies of QA surveillance reports
- [G] Copies of WSPFs
- [H] Copies of VE, NDE, Radiological Characterization, and HSG information and data, as requested
- [I] Copies of SRIVS and associated objective evidence for each shipment
- [J] Information on chemical usage, sources required, and copies of applicable MSDSs as requested for inventory or reporting reasons
- [K] Copies of training requirements and associated training records for CCP personnel supporting the Host facility.
- [L] CCP-PO-001, *CCP Transuranic Waste Characterization Quality Assurance Project Plan*
- [M] CCP-PO-002, *CCP Transuranic Waste Certification Plan*
- [N] Results of all DOE/CBFO/New Mexico Environment Department (NMED)/DEQ/United States Environmental Protection Agency (EPA) or other regulatory audit or compliance/enforcement actions that may impact its ability to characterize and transport TRU waste.
- [O] Copy of final data package to WIPP via Waste Information System, as requested
- [P] Documented evidence of participating in and passing the CBFO PDP, if necessary
- [Q] New Mexico Environment Department (NMED) and United States Environmental Protection Agency (EPA) approval of the CBFO Certification Audit Report
- [R] Documents called out in Section 4.16.

4.18.3 Documents to be provided to CCP by Host facility include:

- [A] Documentation of required training
- [B] Documentation of training completion for CCP and Host facility personnel for training received from the Host facility
- [C] Copies of AK source documentation requested by CCP
- [D] Radiological dose rate and surface contamination results on waste drums as needed to support WWIS data entry
- [E] Radiological information as described per Section 3.2.2[A] of this document
- [F] Copies of NCRs, deficiency reports, or other nonconformance documentation per Section 4.3
- [G] Copies of the results of Host facility assessments pertaining to CCP
- [H] Copies of calibration certifications
- [I] Copies of QA surveillance reports
- [J] Radiological workplace and exposure data including ALARA Planning documents for evaluation of activities.

4.19 Authorization Safety Basis and Configuration Management

4.19.1 The Host site has primary responsibility to ensure that CCP equipment and processes have been appropriately considered within the DOE-approved Host-site documented safety analysis.

4.19.2 CCP has primary responsibility to control operations and equipment configurations to ensure compliance with site procedures that protect the personnel, public, and environment.

4.19.3 For CCP-provided equipment, CCP will provide documentation necessary for the Host site to perform the evaluation against the safety analysis. This documentation may include health and safety plans, hazards assessments, system descriptions, equipment drawings, or other information deemed necessary by the Host site.

- 4.19.4 For Host-site-provided equipment, CCP will review operational and authorization basis documentation to ensure the safety of CCP personnel while operating equipment.
- 4.19.5 All changes to equipment operated by CCP will be controlled by the Host-site work-control program to ensure appropriate authorization basis evaluations are conducted and associated controls are established.
- 4.19.6 The Host site will submit all changes to authorization-basis requirements that affect CCP operations for review and concurrence prior to implementation.

## 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 All QA records generated by CCP documents referenced in this plan shall be maintained by CCP.
- 5.4 All QA records generated by CCP will be maintained and dispositioned in accordance with CCP-QP-028.
- 5.5 Host facility will maintain the following records in accordance with Host facility requirements. The list includes, but is not limited to, the following:
  - 5.5.1 MSDS
  - 5.5.2 Calibration Certifications
  - 5.5.3 Project Control schedules and cost data reports
  - 5.5.4 Radiological records (Exposure records)

## 6.0 OVERSIGHT

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### NOTE

Through the associated SOW, the Host facility has delegated the authority to characterize, certify, and ship TRU waste to the WIPP. Nonetheless, the Host facility retains the responsibility for proper disposal as the waste generator. Accordingly, the following actions will define the level of oversight of the CCP by Host facility personnel.

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- 6.1 The Host facility will accept successful completion of the CBFO certification audit as adequate evidence that the CCP implementation at the Host facility is fully compliant with waste disposal requirements as set forth in the Waste Characterization Program Implementation Plan, WAC and WAP. However, the Host facility may conduct, at their discretion, periodic surveillances of CCP operations.
- 6.2 Following successful completion of the certification audit, the Host facility QA will conduct periodic surveillances to ensure CCP work is conducted in accordance with CCP procedures. These surveillances will be conducted in accordance with the Host facility QA procedures.
- 6.3 The Host facility QA will provide copies of its surveillance reports to the CCP SPM. CCP QA and the SPM will take the following actions:
  - 6.3.1 Review the Host facility surveillance reports for any finding or other deficiencies against the CCP SOW.
  - 6.3.2 If required, prepare and process CARS in accordance with CCP-QP-006, *CCP Corrective Action Reporting and Control*, for deficiencies identified during the review.
  - 6.3.3 Provide Host facility QA with CCP actions to correct the identified deficiencies, as documented in the CCP CAR.
  - 6.3.4 CCP QA will maintain an information file of the Host facility surveillance reports conducted on the CCP SOW.

Figure 1 – CCP Organization

