

# CCP-QP-002

Revision 39

## CCP Training and Qualification Plan

EFFECTIVE DATE: 04/14/2015

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Mike Ramirez

PRINTED NAME

APPROVED FOR USE

RECORD OF REVISION

Revision Number	Date Approved	Description of Revision
9	02/20/2002	Major rewrite to streamline and create a more concise procedure. Document reduced from 57 pages to 16 pages.
10	06/05/2002	Added References. Changes to CCP Technical Supervisor responsibilities. Added Training Evaluations to Records section. Deleted 4.2.5 Audit Personnel Qualifications. Other changes for clarification and consistency.
11	09/12/2002	Deleted Sections 3.3.2 and 3.3.3.
12	10/24/2002	Added Steps 3.8.2 and 3.8.3 in response to SRS Recertification Audit.
13	06/30/2003	Added NDE RTR Section, revised qualification letter and other minor editorial changes. Separated electronically fillable forms and updated references in procedure.
14	12/02/2003	Revision initiated to address CAR# 04-002 identified during CBFO audit A-04-03 and CAR# CCP-0009-03. Added information about RTR audio/videotapes and Capability Demonstrations. Added paragraph 4.2.3[A.5] discussing qualification card addenda. Added section 4.2.4[C] discussing FQAO appointment requirements.
15	03/10/2004	Added Capability Demonstration Instructions (Attachment 2) and CCP Capability Demonstration Data Sheet (Attachment 3 or CCP-QP-002-A1).
16	12/07/2004	Deleted the Technical Supervisor responsibilities section and incorporated them into the Vendor Project Manager responsibilities. Added partial qualification section. Removed requirement for the Site Project Manager to appoint the Facility Quality Assurance Officer by letter.
17	06/06/2005	Addressed CAR 05-029 and CAR 05-033 identified during Carlsbad Field Office (CBFO) Audits A-05-09 and A-05-12. Areas modified were qualification requirements for Nondestructive Assay (NDA) Expert Analyst and examination requirements for Central Characterization Project (CCP) Helium Leak Detection (HLD) Level III.
18	12/13/2005	Clarified roles and responsibilities in reviewing Capability Demonstration training audio/video media and modified Attachment 3 – CCP Capability Demonstration Data Sheet.
19	12/15/2005	Clarification for Level of Qualification in step 4.2.2[B.1].

RECORD OF REVISION (Continued)

Revision Number	Date Approved	Description of Revision
20	05/03/2006	Addressed CAR-RHINL-0001-06. Incorporated Remote-Handled waste training and position requirements. Restructured for improved flow.
21	06/13/2006	Updated step 4.2.5 to delete the word "training" from the requirements for VE Operator/ITR/TS/FQAO.
22	11/16/2006	Revised to implement the Waste Isolation Pilot Plant Hazardous Waste Facility Permit requirements resulting from the Section 311/Remote-Handled (RH) Permit Modification Request (PMR). Addressed Carlsbad Field Office (CBFO) Document Review Record (DRR) comments.
23	02/01/2007	Revised to address CCP Quality Assurance Surveillance Number SUR-CCP-0005-06.
24	02/27/2007	Revised to address concern raised during Surveillance #S-07-18.
25	05/08/2007	Revised to address Corrective Action Report (CAR) SRS-0002-07.
26	02/07/2008	Revised to address U.S. Department of Energy (DOE) Carlsbad Field Office (CBFO) Corrective Action Report (CAR) 08-004.
27	09/30/2008	Revised to change nondestructive examination (NDE) to comply with Management Assessment MA-CCP-0023-08. Also revised Section 5.1.1[J] in response to Carlsbad Field Office (CBFO) Corrective Action Report (CAR) 08-036.
28	05/26/2010	Revised to address Corrective Action Report (CAR)-CCP-0012-09, to clarify Acceptable Knowledge (AK) briefings, training for solids lab, and approval process for training material. References to Central Characterization Project (CCP) Program Manager/Project Manager were removed and the responsibilities assigned to the Lead Site Project Manager and CCP Manager responsible for Training.
29	07/08/2010	Revised to incorporate changes into Attachment 4, CCP Test Drum Data Sheet for Contact-Handled Waste, and other minor editorial changes.
30	12/29/2010	Revised to bring into compliance with the revision of the Waste Isolation Pilot Plant Hazardous Waste Facility Permit.

RECORD OF REVISION (Continued)

Revision Number	Date Approved	Description of Revision
31	04/21/2011	Revised based on Revision 2 of the DOE/WIPP 02-3214, <i>Remote-Handled TRU Waste Characterization Program Implementation Plan</i> .
32	04/03/2012	Revised to simplify the process for tracking waste stream Summary Training in Section 4.2. Added full requalification as an option in Section 4.1.2 [I]. Added the Training Module in Integrated Data Center (IDC) as a source of Training information to the note in Section 4.1. Incorporated Standing Orders CCP-SO-051 in Section 4.4.1[C], CCP-SO-069 in Section 4.2, and CCP-SO-078 in Section 4.1.2[F]. Expanded Section 4.1.1 to add a documented analysis of positions requiring qualification, in response to Carlsbad Field Office (CBFO) Corrective Action Report (CAR) 12-010.
33	08/30/2012	As a corrective action in response to CBFO CAR 12-033, revised the document to remove references to Lead SPMs and Alternate SPMs, so that any qualified SPM may perform the actions in Section 3.1.
34	01/30/2013	Revised to incorporate Standing Order CCP-SO-086, <i>Clarification of the Time Period for Performance of the RTR Semiannual Training Container Required by CCP-QP-002</i> ; incorporate changes to DOE/WIPP-02-3214, <i>Remote-Handled TRU Waste Characterization Program Implementation Plan</i> ; update the title of the organization, as appropriate; and minor editorial changes.
35	06/06/2013	Revised to implement the Permit Modification Request Class 2 approved by New Mexico Environment Department (NMED) dated March 13, 2013 and CAR-CCP-0003-13.
36	03/31/2014	Revised to incorporate changes in response to U.S. Environmental Protection Agency (EPA) Issue Tracking Form ORNL-CCP-CC-RTR-2014-02CR: adding a requirement for a written record for the Training Container, to be filled out by the operator for the review by the Cognizant Engineer (CE), and adding a place on the Training Container evaluation sheet for operator acknowledgement of counseling for any missed items. Also incorporated Standing Order CCP-SO-110.

RECORD OF REVISION (Continued)

Revision Number	Date Approved	Description of Revision
37	05/12/2014	In response to Carlsbad Field Office of the Department of Energy (CBFO) corrective active report (CAR) 14-030, revised the NOTE in Section 3.4 to clarify that the preferred method for determining an Subject Matter Expert (SME)/On-the-Job Training (OJT) candidate's education and experience is by reviewing the individual's resume, but whatever method is used must be explicitly stated in the documentation provided to Training by the site project manager (SPM). Also added a new Attachment 7 as a template for appointment letters to be issued by the SPM, which may be customized as necessary.
38	08/07/2014	Update the title of the organization from National TRU Program Certification (NTPC) to Central Characterization Program (CCP), clarify when Attachment 7, SPM Appointed Letter, is to be used, allow the acceptable knowledge expert (AKE) to give the waste stream summary training in addition to the Site Project Manager (SPM), add written notifications to the Records Section, delete the Operator/Independent Technical Reviewer (ITR) box in Attachment 7. Reorganized Section 4.3.2 to improve the flow of the sequence in steps.
39	04/14/2015	Revised to expand the section on training material, which now requires prior Central Characterization Program (CCP) Training review of training materials developed in response to conditions adverse to quality identified in Carlsbad Field Office (CBFO) Corrective Action Reports (CARs) and Nuclear Waste Partnership (NWP) Waste Isolation Pilot Plant (WIPP) Forms. Revised Attachment 1, Minimum Training and Education Requirements, to reflect upper-tier documents governing training-related requirements. Re-organized Sections 4.3 and 4.4 to improve process flow.

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## 1.0 PURPOSE

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### NOTE

CCP-QP-040, *Support Training*, applies to those activities that do not fall under the scope of CCP-QP-002, *CCP Training and Qualification Plan* as defined herein. CCP-QP-040 applies to those positions which are not covered by the baseline documents listed in Section 2.1 of this document.

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This plan describes the responsibilities of personnel involved in the Central Characterization Program (CCP) Qualification and Training Program. This plan also describes the process for identifying qualification and training requirements for all personnel and technical support personnel, who perform characterization, packaging, certification, and activities.

### 1.1 Scope

This plan applies to all personnel who conduct quality-affecting activities associated with transuranic (TRU) waste under the CCP, including characterization, packaging, certification, and transportation.

Personnel under this plan are qualified and trained to ensure suitable proficiency is achieved and maintained for assigned tasks. Training and qualification requirements are commensurate with the nature of the activities and level of responsibility.

Training will emphasize the correct performance of work, provide a description of why quality, safety, and TRU waste characterization and certification requirements exist, and describe the fundamentals of the work and its context.

Training will be subject to an on-going evaluation to determine instruction and training program effectiveness and will be upgraded whenever needed improvements or enhancements are identified.

## 2.0 REQUIREMENTS

### 2.1 References

#### Baseline Documents

- DOE/WIPP 02-3183, *CH Packaging Program Guidance*
- DOE/WIPP 02-3184, *CH Packaging Operations Manual*
- DOE/WIPP 02-3185, *CH Packaging Maintenance Manual*
- NRC Docket 71-9212, *RH-TRU 72-B Safety Analysis Report*, Rev. 3, November 2002
- CCP-PO-001, *CCP Transuranic Waste Characterization Quality Assurance Project Plan*
- CCP-PO-003, *CCP Transuranic Authorized Methods For Payload Control (CCP CH-TRAMPAC)*

#### Referenced Documents

- DOE/WIPP 02-3214, *Remote-Handled TRU Waste Characterization Program Implementation Plan*
- ASNT SNT-TC-1A, *Recommended Practice for Personnel Qualification and Certification in Nondestructive Testing*, American Society for Nondestructive Testing (1980 Edition)
- ASTM C1490, *Standard Guide for the Selection, Training, and Qualification of Nondestructive Assay (NDA) Personnel*
- CCP-PO-002, *CCP Transuranic Waste Certification Plan*
- CCP-QP-005, *CCP TRU Nonconforming Item Reporting and Control*
- CCP-QP-008, *CCP Records Management*
- CCP-QP-030, *CCP Written Practice for the Qualification of CCP Helium Leak Detection Personnel*
- CCP-QP-032, *CCP Written Practice for the Qualification of CCP Pressure Change Leak Testing Personnel*

- CCP-QP-040, *Support Training*
- CCP-TP-028, *CCP Radiographic Test Drum and Training Container Construction*
- WP 15-GM1002, *Issues Management Processing of WIPP Forms, Management Control Procedure*

### 3.0 RESPONSIBILITIES

#### 3.1 Site Project Manager (SPM)

- 3.1.1 Oversees planning, characterization, and certification activities.
- 3.1.2 Ensures personnel are qualified and trained to perform their assigned job functions.
- 3.1.3 Determines initial and continuing qualification and training requirements in cooperation with appropriate Cognizant Engineer (CE), Manager Responsible for Training, and Training to ensure job proficiency is maintained.

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#### NOTE

Staffing changes includes situations where individuals are brought into or re-assigned in the program (these qualified positions can be either project level or operational level).

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- 3.1.4 Notifies Training of staffing changes and candidates for job positions and provides supporting documentation (e.g., resumes, certificates, diplomas, training records).
- 3.1.5 Verifies education/experience requirements for Nondestructive Assay (NDA) Expert Analysts (EA).

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#### NOTE

Attachment 7, SPM Appointment, is a template to be used by the Site Project Manager (SPM) when appointing NDA EA(s), Remote-Handled (RH) Technical Staff, Subject Matter Experts (SME), or Visual Examination Experts (VEE). As a template/outline, it may be customized by the SPM, as necessary.

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- 3.1.6 Using Attachment 7, appoints the following based on education and experience, as applicable:
  - [A] NDA EA
  - [B] RH Technical Staff
  - [C] Qualified personnel as SME/On-the-Job Training (OJT) Instructors
  - [D] VEE

- 3.1.7 Reviews and approves qualification cards.
- 3.1.8 Ensures project personnel who are assigned to perform project activities that affect quality:
  - [A] Are cognizant of the qualification and training requirements of this plan.
  - [B] Satisfy qualification and training requirements for the tasks associated with their assigned job classification(s).
- 3.1.9 Ensures the requirements of this plan are implemented, as follows:
  - [A] Personnel receive training and qualification, as necessary, to achieve initial proficiency, maintain proficiency, and adapt to changes in technology, methods, job responsibilities, and quality implementing procedures, prior to performing or verifying any waste characterization, certification, or transportation activities.
- 3.1.10 Ensures qualification and training documentation is complete and is submitted to Training.
- 3.1.11 Evaluates and documents personnel job performance at periodic intervals (as a minimum, during requalification).
- 3.1.12 Notifies the Manager Responsible for Training when full requalification is required (e.g., when an individual has been disqualified for unsatisfactory performance).
- 3.1.13 Analyzes positions to determine major job/task responsibilities as a basis for preparation of qualifications cards (shared responsibility).

3.2 Vendor Project Manager (VPM)

- 3.2.1 May administer the annual eye examination.
- 3.2.2 Ensures Training will be notified when qualified operations personnel leave the program (e.g., a subcontractor's employment has been terminated).

### 3.3 Training

- 3.3.1 Determines initial and continuing qualification and training requirements for positions in cooperation with an appropriate SME/OJT Instructor, the CE, a SPM, and the Manager Responsible for Training using a graded approach that is commensurate with scope, complexity, and nature of the work to include:
- [A] Descriptions of the fundamentals of the work and the context in which the work is performed.
  - [B] Identification of the applicable quality and safety requirements related to job performance.
  - [C] Emphasis on the correct performance of work in accordance with established procedures and/or other relevant technical documents.
  - [D] Inclusion of education in both principles and enhancement of skills.
- 3.3.2 Supports an SPM in evaluating training and qualification requirements of each position. This may be done by, but is not limited to, evaluating training requirements using a training analysis. The analysis will result in an approved task list from which tasks may or may not be selected for training. When completed, the analysis will be signed by participants.
- 3.3.3 Develops, implements, and monitors training required to maintain qualification of personnel.
- 3.3.4 Ensures project-required training effectiveness is reviewed when the need for improvements or enhancements is identified, and ensures the training program is updated.
- 3.3.5 Maintains documentation of current personnel training status.
- 3.3.6 Issues approved training materials and assists in the completion of qualifications and training activities.
- 3.3.7 Prepares qualification cards.
- 3.3.8 Returns incomplete/incorrect training materials to candidate's manager, as applicable.
- 3.3.9 Provides qualification cards to an SPM for review and approval.

3.3.10 Ensures qualification/training records and supporting documentation (including audio/video recorded media for test drums and training containers) are maintained, secured, and controlled in accordance with CCP-QP-008, *CCP Records Management*.

3.3.11 Prepares list of qualified individuals (LOQIs) delineating those individuals who have completed qualification cards, and distributes to the applicable site.

3.3.12 Reviews, develops, and approves Comprehensive Examinations for thoroughness and adequacy.

3.3.13 Analyzes positions to determine major job/task responsibilities as a basis for preparation of Qualifications Cards (shared responsibility).

3.4 SME/OJT Instructor

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**NOTE**

Before any OJT can be performed, it is necessary to initially qualify one SME/OJT Instructor for each discipline based on education and experience. The basis for SME/OJT Instructor qualification will be provided by an SPM and documented in the applicable Training files. The normal and preferred method for determining an SME/OJT candidate's education and experience is by reviewing the individual's resume, but whatever the method, it must be explicitly stated on Attachment 7, which is provided to Training by the SPM. The qualification is by discipline and is non-site specific. The basis for qualification will be used to complete a qualification card for the candidate as an SME/OJT Instructor. The successful candidate will be added to the appropriate LOQI(s) once the qualification card is complete.

The SME/OJT Instructor will have adequate education and/or technical knowledge in the applicable discipline, communication skills, and ability to provide trainees with hands-on experience, as determined by an SPM. Technical knowledge may be based on experience with the applicable process or involvement in development of operational procedures or qualification requirements for the applicable process.

The Mobile Loading Unit (MLU) Field Operations Manager (or designee) will appoint SME/OJTs for Transportation activities.

All SME/OJT candidates must complete the SME/OJT briefing and pass the SME/OJT exam.

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- 3.4.1 Provides supervised hands-on training in the work environment to accomplish performance objectives of the training tasks.
- 3.4.2 Determines initial and continuing qualification and training requirements for CCP positions in cooperation with an SPM, the CE, the Manager Responsible for Training, and Training.
- 3.4.3 Ensures trainee(s) have satisfactory knowledge of and competence in skills requirements, as defined on the qualification card.
- 3.4.4 Verifies the correct revision of the qualification card is being used.
- 3.4.5 Signs and dates qualification card, indicating acceptable performance levels are met.
- 3.4.6 Provides all training documentation generated to Training in accordance with CCP-QP-008.

- 3.4.7 Analyzes positions to determine major job/task responsibilities as a basis for preparation of Qualifications Cards (shared responsibility).
- 3.5 Personnel
  - 3.5.1 Provides copies of their qualification documents (e.g., resumes, education, and experience) to an SPM or Training, as applicable.
  - 3.5.2 Completes initial training in accordance with this procedure, as stated on each individual's qualification card.
  - 3.5.3 Ensures qualification requirements are completed and signed off before performing assigned tasks without supervision.
  - 3.5.4 Maintains requisite qualifications throughout the duration of work.
  - 3.5.5 Attends CCP and site-specific training, as necessary.
- 3.6 Trainee
  - 3.6.1 Completes qualification card(s) in a timely manner.
  - 3.6.2 Works only under the supervision of a qualified operator or a SME/OJT Instructor.
- 3.7 Manager Responsible for Training
  - 3.7.1 Reviews and approves all training material for applicability and technical content.
  - 3.7.2 Determines when full requalification is required.
- 3.8 Cognizant Engineer (CE)

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**NOTE**

A CE is not required for Transportation or acceptable knowledge (AK).

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- 3.8.1 The CE is designated for each specific process by the CCP Manager based on their education, knowledge, and experience for the characterization process.
- 3.8.2 The CE has overall responsibility for the implementation and quality of the characterization activity.

- 3.8.3 The CE reviews material developed by Training for applicability and technical content.
- 3.8.4 Analyzes positions to determine major job/task responsibilities as a basis for preparation of qualifications cards (shared responsibility).
- 3.8.5 Reviews and evaluates training containers for real-time radiography (RTR) personnel, as applicable.
- 3.8.6 Evaluates the training documentation for RTR personnel and determines if they meet the requirements for certification, as applicable.

## 4.0 PROCEDURE

### 4.1 General Training Requirements

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#### **NOTE**

The Training Module in the Integrated Data Center (IDC) provides information that may be used to update and maintain the information in documents provided by training, such as the LOQI. Such usage will be described in the applicable sections of this procedure.

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4.1.1 Personnel selected to perform or verify CCP activities will have the education, experience, and training commensurate with job position requirements. The need for job position qualification cards will be determined by an SPM, the CE (if applicable), and Training.

4.1.2 Job position requirements will be analyzed and documented to determine the major duties and tasks associated with the position, as a basis for developing the qualification card for each activity requiring qualification. The analyses will be performed by an SPM, a SME/OJT Instructor, the CE (if applicable), and Training.

4.1.3 A separate analysis may not be required for new positions where the major duties and tasks are closely-related to those for an existing, already-analyzed position. This determination will be made and documented by the performers identified above.

### 4.2 Qualification Cards

4.2.1 For those positions that require a qualification card, training candidates are required to complete a qualification card to verify they possess the knowledge and skills necessary to competently perform specified tasks.

4.2.2 Qualification cards technical content will be determined by a SME/OJT Instructor, the CE (if applicable), the Manager Responsible for Training, and an SPM based on project requirements and federal and state regulations to verify training candidates possess the knowledge and skills necessary to competently perform specified tasks.

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**NOTE**

The qualification cards for Helium Leak Detection Personnel are issued in accordance with CCP-QP-030, *CCP Written Practice for the Qualification of CCP Helium Leak Detection Personnel*. The qualification cards for Pressure Change Leak Testing (PCLT) personnel are issued in accordance with CCP-QP-032, *CCP Written Practice for the Qualification of CCP Pressure Change Leak Testing Personnel*.

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4.2.3 All qualification cards shall be issued by Training.

4.2.4 The SME will verify current revision.

4.2.5 Training will verify that prerequisites are met.

4.2.6 Upon completion of the qualification card, candidates are considered qualified to perform their respective duties.

4.2.7 The qualification cards will contain the following information:

[A] Name of job position.

[B] Revision number and effective date.

[C] Trainee's name.

[D] Signature spaces for approvals of format, technical content, and use by a SME/OJT, the CE, an SPM, and the Manager Responsible for Training, as applicable.

4.2.8 The qualification card will be divided into the following parts, as applicable:

[A] Education/Experience.

[B] Job Specific Training (which may include):

- Indoctrination/Orientation
- Initial Reading
- Formal Training
- National Standards Certifications
- OJT
- Signature line and date for trainee
- Approval section for a SME/OJT
- Approval section for an SPM

4.2.9 If a qualification card requires changes, the following is performed:

- [A] Training, prepare the revised qualification card, using the next sequential revision number.
- [B] Training, route the revised qualification card to the following for review and approval: a SME/OJT, the CE (if applicable), an SPM, and the Manager Responsible for Training.
- [C] Training, upon approval, place a new effective date on the qualification card and issue the qualification card.

#### 4.3 Requalification

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##### **NOTE**

Requalifications are due by the end of the month in which the qualification period falls, unless a specific date is listed on the qualification card.

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4.3.1 Operational Positions (e.g., RTR, NDA, etc.) require requalification every two (2) years. Exceptions are: Helium Leak Detection (HLD) Level III (Limited) and Pressure Change Leak Testing (PCLT) Level III (Limited) have a three year requalification requirement. If necessary, additional training may be required by an SPM, or the Manager Responsible for Training. The sections of the qualification card that must be performed during each requalification are identified on the qualification cards.

4.3.2 Requalification of Project Office positions is not required.

#### 4.4 Disqualification

4.4.1 Unsatisfactory performance will result in disqualification by the SPM.

4.4.2 The SPM will notify the Manager Responsible for Training.

4.4.3 The Manager Responsible for Training will direct CCP Training to remove the individual from the LOQI (if required) and to update the training file and IDC.

#### 4.5 Requalification after Disqualification or Extended Absence

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**NOTE**

Full requalification is required when an individual has not been performing the qualified function for a significant period of time, or has been disqualified. Typically, full requalification would apply after an absence from the position of more than one year; however, there may be extenuating circumstances and each occurrence is reviewed and documented on a case-by-case basis by the SPM and the Manager Responsible for Training.

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4.5.1 The SPM notifies training to issue the qualification card.

4.5.2 The trainee must successfully complete a full requalification (i.e., repeat the entire qualification card) to re-establish qualification.

4.6 Training Material

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**NOTE**

Completion of the Waste Isolation Pilot Plant (WIPP) Waste Acceptance Plan (WAP)/Quality Assurance Project Plan (QAPjP) Briefing is a pre-requisite for all personnel before they perform *Waste Isolation Pilot Plan-Waste Analysis Plan* (WIPP-WAP) specific tasks.

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4.6.1 Approved training material shall be maintained, secured, and controlled by Training.

4.6.2 New or revised formal training materials, (e.g., the WAP/QAPjP Briefing) shall be approved for format, technical content, and use by an SPM, the Manager Responsible for Training, and the CE, if applicable.

4.6.3 Training material required as a result of a condition adverse to qualify identified in Carlsbad Field Office (CBFO) Corrective Action Reports (CARs) or Nuclear Waste Partnership (NWP) WIPP Forms shall be reviewed by CCP Training prior to being approved by the assigned Responsible Manager.

4.6.4 Informal briefings and waste stream summary training briefings do not require prior review or approval.

#### 4.7 Waste Stream Summary Training

**NOTE**

RTR and visual examination (VE) personnel shall be trained on newly developed and revised waste stream reports which change the waste generating processes, packaging, and waste material parameters (WMP) expected to be found in each Waste Matrix.

- 4.7.1 SPM, forward the newly-issued or revised AK to the Vendor Project Manager (VPM) at the Host location where the AK applies.
- 4.7.2 SPM, in conjunction with Acceptable Knowledge Expert (AKE), develop the AK training in the form of a briefing which identifies as a minimum the following:
  - Specific waste generating processes
  - Packaging
  - WMP for the waste matrix code
- 4.7.3 SPM or AKE, provide the briefing to the required RTR and VE personnel.
- 4.7.4 SPM or AKE, submit the briefing materials and the completed briefing sheet(s) (or personnel can send individual e-mail acknowledgements) to Training.
- 4.7.5 Training, update the LOQI for all personnel who received the briefing, showing that they are qualified to perform work on the identified waste stream.
  - [A] Remove the qualified status for the identified waste stream from the LOQI when either:
    - [A.1] The SPM so directs, because the waste stream is no longer active, or
    - [A.2] The Training Module in the IDC shows that the waste stream is no longer active.

4.8 Specific Training, Qualification and Requalification (if applicable) Requirements.

4.8.1 AKE's are personnel assigned to compile, evaluate, and resolve discrepancies associated with AK information. AKE's require the following:

[A] WIPP-WAP Briefing.

[B] CCP-PO-002, *CCP Transuranic Waste Certification Plan* knowledge.

[C] DOE/WIPP 02-3214, *Remote-Handled TRU Waste Characterization Program Implementation Plan* knowledge.

[D] Training on Federal and State Resource Conservation and Recovery Act (RCRA) regulations associated with solid and hazardous waste determinations. Training requirement will be satisfied by documented completion of a formal RCRA training program (e.g., a commercially available RCRA seminar), or an SPM's documented evaluation of adequate training and/or experience.

[E] Knowledge of procedures associated with:

(a) Waste characterization using AK.

(b) AK records development including AK discrepancy resolution.

(c) Nonconformance Report (NCR) process in accordance with CCP-QP-005, *CCP TRU Nonconforming Item Reporting and Control*.

(d) WIPP Form process, in accordance with WP 15-GM1002, *Issues Management Processing of WIPP Forms, Management Control Procedure*.

[F] Knowledge of resolving and managing prohibited items as noted in nonconformance reporting.

4.8.2 RTR Operator/Independent Technical Reviewer (ITR)

- [A] Personnel considered for qualification in RTR must have sufficient education, training, and experience to ensure understanding of the principles and procedures.
- [B] Education requirements are listed in Attachment 1, Minimum Training and Education Requirements. Personnel being considered for qualification as an RTR Operator/Independent Technical Reviewer (ITR) will complete training to become familiar with the principles and practices of the applicable RTR method.
- [C] Any previous training and experience gained in a position similar to the RTR Operator/ITR position may be considered in satisfying the qualification criteria of this procedure and shall be documented in the Training file (i.e., resume).
- [D] All RTR personnel will be trained to the guidance of American Society for Nondestructive Testing (ASNT) Recommended Practice Number SNT-TC-1A, *Recommended Practice for Personnel Qualification and Certification in Nondestructive Testing*, modified to suit the RTR application/method.
  - [D.1] A certificate from an approved vendor, stating that the individual operator is a certified RTR operator Level II (L) SNT-TC-1A, will be provided to Training.
- [E] An individual qualifying as an RTR Operator/ITR is considered a trainee. A trainee will work only under the supervision of a qualified operator or SME/OJT Instructor.
- [F] To be considered for qualification as an RTR Operator/ITR, the trainee must pass the required examinations (as listed in Section 4.8.2 [G]below) and complete the qualification card.
- [G] Examinations

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**NOTE**

Eye Exams are due by the end of the month in which the examination was given.

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- [G.1] Eye Examination: All trainees will pass an initial eye examination to ensure natural or corrected near-distance acuity in at least one eye.
  - (a) The trainee must be capable of reading Jaeger Number 2 at a distance of not less than twelve (12) inches on a standard Jaeger test chart.
  - (b) The eye examination will demonstrate the capability of distinguishing and differentiating contrast used in RTR.
  - (c) The eye examination will be administered on an annual basis and the results maintained in the Training files.
  - (d) VPMs at each site may administer the eye examination.
  
- [G.2] Comprehensive Examination: Pass a program-specific comprehensive exam with an 80 percent or better grade that addresses radiography operations, documentation, characterization, and procedural elements.

[G.3] Training Container

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**NOTE**

A Training Container is required by contact-handled (CH) and RH operators at initial qualification, requalification, and semi-annually. The nominal period for performance of the Training Container is every six months, due by the end of the month of the sixth month from the date the Training Container was successfully passed.

The Training Container will contain items which can be identified by RTR, are representative of the physical properties of the waste based on AK documentation reviewed, and prohibited items.

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- (a) At initial qualification, requalification, and semiannually, successfully examine a Training Container and identify 100 percent of the items required to meet the Data Quality Objectives (DQO's). The Nondestructive Examination (NDE) CE will review the audio/video recording to ensure the operator's interpretations remain consistent and accurate.
- (b) Instructions and documentation required for Training Containers is as follows:
  - (b.1) Attachment 4, Training Container Instructions
  - (b.2) Attachment 2, CCP NDE Training Container Inventory Sheet (from CCP-TP-028, *CCP Radiographic Test Drum and Training Container Construction*)
  - (b.3) Attachment 5, Training Container Data & Evaluation Sheet
  - (b.4) Audio/video recorded media of the Training Container

- (c) The NDE CE or an SPM may request an extension of the period between performances of the Training Container for up to one additional month (for a total of seven months between Training Containers, beginning with the date the examination was reviewed and approved by the CE).
  - (c.1) Upon receipt of a written request from the SPM or NDE CE, Training will extend the Training Container due date for the operator on the LOQI.
  - (c.2) The request will be retained by Training.
  - (c.3) When Training receives evidence the operator has satisfactorily completed the Training Container, Training will enter a due date for the next Training Container that takes into account the earlier extension (e.g., five month due date, not six month).
  - (c.4) If the operator exceeds the one month extension due date on the LOQI, Training will remove the individual from the LOQI until the Training Container has been successfully completed.
  - (c.5) Extension is not permitted at the time of requalification.

[G.4] Test Drum

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**NOTE**

The requirement for completing the test drum defined in the Waste Characterization Program Implementation Plan (WCPIP) is met by successfully completing the Training Container.

Test Drums are due by the end of the month in which the qualification period falls.

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- (a) At initial qualification and subsequent requalification, successfully examine a test drum that includes items common to the waste

streams and is representative of the waste matrix codes and WAC required items.

- (b) Instructions and documentation required for test drums are as follows:
  - (b.1) Attachment 2, Test Drum Instructions for Contact-Handled Waste Drums.
  - (b.2) Attachment 1, CCP NDE Test Drum Inventory Sheet (from CCP-TP-028).
  - (b.3) Attachment 3, Test Drum Data Sheet for Contact-Handled Waste.
  - (b.4) Audio/video recorded media of the test drum.

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**NOTE**

Certification of RTR Operator/ITR personnel is documented on the completed qualification card.

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[H] Qualification

- [H.1] Successful qualification of the RTR Operator/ITR is documented by completing the qualification card.
- [H.2] To maintain qualifications, the CH and RH RTR Operator/ITR must:
  - (a) Successfully perform a Training Container semiannually, documented on Attachment 5.
  - (b) Successfully complete an annual eye examination.

[I] Requalification

- [I.1] Requalification is based on evidence of satisfactory performance of a test drum, a training container, and passing a comprehensive exam with a grade of 80 percent or better once every two years.
- [I.2] If necessary, additional training may be required by a SME/OJT, an SPM, the CE, or the Manager Responsible for Training.

- [J] Upon successful qualification, an RTR Operator/ITR will:
  - [J.1] Be able to set up and operate equipment, and be qualified to interpret and evaluate results with respect to applicable codes, standards, and specifications.
  - [J.2] Be thoroughly familiar with the scope and limitations of RTR.
  - [J.3] Exercise the responsibility for OJT and apprenticeship of trainees.
  - [J.4] Be able to prepare written instructions.
  - [J.5] Be able to organize Batch Data Reports (BDRs) with the results of RTR.

4.8.3 Transportation personnel who require qualification in HLD are trained in accordance with CCP-QP-030 and documented on Attachment 1, CCP HLD Qualification Card of CCP-QP-030.

4.8.4 Transportation personnel who require qualification in PCLT are trained in accordance with CCP-QP-032 and documented on Attachment 1, CCP PCLT Qualification Card of CCP-QP-032.

4.8.5 VE Operator/ITR

- [A] For the initial qualification and subsequent requalification, the Operator/ITR must:
  - [A.1] Pass comprehensive exam with an 80 percent or better grade that addresses VE operations, documentation, characterization, formal training elements, and procedural elements.
  - [A.2] Demonstrate capability in the presence of the VEE during OJT. However, the formal and OJT training is conducted by a qualified SME.

4.9 Appointments

4.9.1 For NDA EA candidate(s), an SPM will perform the following:

- [A] Review the training files for an undergraduate degree in physical science or engineering and five years NDA experience; or ten equivalent years of experience in the NDA field, in accordance with ASTM C1940, *Standard Guide for*

*the Selection, Training and Qualification of Nondestructive Assay (NDA) Personnel.*

- [B] Provide written notification to Training delineating the candidate's qualifications and experience, using Attachment 7.

4.9.2 For RH Technical Staff candidate(s), an SPM will perform the following:

- [A] Provide written notification to Training delineating the candidate's qualifications and experience, using Attachment 7.

4.9.3 For SME candidate(s), an SPM will perform the following:

- [A] Review the training files for education and experience.
- [B] Provide written notification to Training delineating the candidate's qualifications and experience, using Attachment 7.

4.9.4 For VEE candidate(s), an SPM will performs the following:

- [A] Review the training files for qualification/familiarity to waste stream, experience handling TRU waste, and VE Operator qualifications.
- [B] Provide written notification to Training delineating the candidate's qualifications and experience, using Attachment 7.
- [C] Ensures that the appointments are facility-specific.

## 5.0 RECORDS

5.1 Records generated during the performance of this plan are maintained as quality assurance (QA) records in accordance with CCP-QP-008. The records are the following:

### 5.1.1 QA/Nonpermanent Records

- [A] Written Notifications
- [B] Attachment 7, SPM Appointment
- [C] Letters to Training
- [D] Certificates of Completion
- [E] Training Analysis
- [F] Qualification and training records
  - [F.1] OJT records
  - [F.2] Completed exams
  - [F.3] Qualification Card
- [G] Training materials (e.g., course presentation, exam)
- [H] Completed attendance/briefing forms,
- [I] Attachment 3, Test Drum Data Sheet for Contact-Handled Waste
  - [I.1] Audio/video recording media (primary and backup)
- [J] Attachment 5, Training Container Data & Evaluation Sheet
  - [J.1] Audio/video recording media (primary and backup)
- [K] Resumes as applicable
- [L] Comprehensive Examinations
- [M] WAP Briefing

[N] Eye Examination (Medical)

[N.1] Attachment 6, Annual Record of Eye Examination,  
when applicable

[N.2] Independent Eye Examination (from medical facility),  
when applicable

[O] Training Module (Electronic)

Attachment 1 – Minimum Training and Education Requirements

<b>Nondestructive Assay (NDA)</b>	
NDA Personnel	In accordance with ASTM C1490, <i>Standard Guide for Selection, Training, and Qualification of Nondestructive Assay (NDA) Personnel</i> .
<b>Nondestructive Examination (NDE)</b>	
Helium Leak Detection Operators	In accordance with ASNT SNT-TC-1A, June 1980 edition. See CCP-QP-030.
Pressure Change Leak Testing Operators	In accordance with ASNT SNT-TC-1A, June 1980 edition. See CCP-QP-032.
Radiography Operators/ITRs	Site specific training based on waste matrix codes, waste material parameters, and packaging configurations; requalification every two years. Certification in accordance with ASNT SNT-TC-1A, June 1980 edition.
Visual Examination Operators/ITRs	Site specific training based on waste matrix codes, waste material parameters, and packaging configurations; requalification every two years.

Attachment 2 – Test Drum Instructions for Contact-Handled Waste Drums

**OPERATOR**

- 1.0 In the presence of an RTR SME/OJT Instructor, perform the following:
  - 1.1 Pre-start operations and audio/video recording media system setup of the RTR equipment per site approved radiography operating procedure.
  - 1.2 Load the test drum into the RTR unit.
  - 1.3 Ensure the audio/video recording identifies the following information:
    - [A] The identifying test drum container (e.g., NDE-TEST-01)
    - [B] Exam date
    - [C] Operator's name
  - 1.4 Complete Blocks 1 through 4 of Attachment 3.
  - 1.5 Perform scan of the test drum, identifying test drum container, and complete Block 5 of Attachment 3. Provide a detailed description (including content) of all items found within the container.
  - 1.6 Complete Block 6 of Attachment 3.
  - 1.7 Label the audio/video media with the following information:
    - [A] The identifying training container (e.g., NDE-TEST-01)
    - [B] Exam date
    - [C] Operator's name
    - [D] "A" for primary or "B" for backup
  - 1.8 Provide the audio/video recording media and Attachment 3 to an RTR SME/OJT Instructor.

**SME/OJT INSTRUCTOR**

- 2.0 Observe the test drum and complete Attachment 3 as follows:
  - 2.1 Complete Blocks 7 and 8 of Attachment 3.
  - 2.2 **IF** the Operator has correctly identified the items within the test drum, **THEN** perform the following:
    - 2.2.1 Enter N/A in Block 9 of Attachment 3.
    - 2.2.2 Check PASS in Block 10 of Attachment 3.

Attachment 2 – Test Drum Instructions for Contact-Handled Waste Drums (Continued)

- 2.2.3 Print name, sign, and date in Block 11 of Attachment 3.
- 2.2.4 Forward the audio/video recording media and Attachment 3 to Training in accordance with CCP-QP-008.
- 2.3 **IF** the Operator **DOES NOT** identify all WAC required items in Block 8 of Attachment 3 correctly,  
**THEN** perform the following:
  - 2.3.1 If applicable, document unidentified non-WAC required items in Block 9 of Attachment 3, **ELSE** enter N/A.
  - 2.3.2 Check FAIL in Block 10 of Attachment 3.
  - 2.3.3 Print name, sign, and date in Block 11 of Attachment 3.
  - 2.3.4 Notify an SPM and Training.
  - 2.3.5 Forward Attachment 3 and the audio/video recording media to Training in accordance with CCP-QP-008.

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**NOTE**

RTR Personnel who fail the test drum will be requalified after meeting initial qualification requirements.

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- 2.4 **IF** any items (other than WAC-required items) were not identified,  
**THEN** discuss and document the noted discrepancies with the Operator.
  - 2.4.1 Document unidentified items in Block 9 of Attachment 3, **AND** discuss with the Operator.
  - 2.4.2 Check PASS in Block 10 of Attachment 3.
  - 2.4.3 Print name, sign, and date in Block 11 of Attachment 3.
  - 2.4.4 Forward Attachment 3 with the audio/video recording media to Training in accordance with CCP-QP-008.

Attachment 2 – Test Drum Instructions for Contact-Handled Waste Drums (Continued)

**TRAINING**

- 3.0 Ensure receipt of all required test drum documentation.
- 4.0 **IF** notified by the RTR SME/OJT Instructor that a currently qualified Operator has failed the test drum,  
**THEN** remove the Operator from the LOQI **AND** update the Training files.
- 5.0 **IF** Attachment 3 indicates PASS,  
**THEN** update the LOQI and the Training files.

Attachment 3 – Test Drum Data Sheet for Contact-Handled Waste

Page 1 of 2

1. Operator Name:	
2. Test Drum #:	3. Date of Demonstration:
4. Audio/Video Recording Media Label:	
5. Container Inventory (Provide detailed description)	
6. Operator Signature: _____ Date: _____	

Attachment 3 – Test Drum Data Sheet for Contact-Handled Waste (Continued)

<b>7. Operator Name:</b>			
<b>8. WAC Required Items (SME check items identified by operator)</b>			
	Aerosol can with puncture		Full container
	Horsetail bag		Aerosol can with fluid
	Pair of coveralls		One gallon bottle with three tablespoons of fluid
	Empty bottle		One gallon bottle with one cup of fluid (upside down)
	Irregular shaped pieces of wood		Leaded glove or leaded apron
	Empty one gallon paint can		Wrench
<b>9. Additional items not identified:</b>			
<b>10.</b> As SME/OJT Instructor, I observed the above demonstration and have discussed any missed items with the Operator. I have assigned a grade based on the review above.		<b>PASS</b>	<b>FAIL</b>
<b>11. SME Printed Name:</b> _____			
<b>SME Signature:</b> _____		<b>Date:</b> _____	

Attachment 4 – Training Container Instructions

**OPERATOR**

- 1.0 Perform the following:
  - 1.1 Complete Blocks 1 through 4 of Attachment 5.
  - 1.2 Verify the RTR unit and audio/video system is configured to run the training container.
  - 1.3 Load the training container into the RTR unit.
  - 1.4 Ensure the audio/video recording identifies the following information:
    - [A] The identifying training container (e.g., NDE-TRAINING-01)
    - [B] Exam date
    - [C] Operator's name
  - 1.5 Perform scan of the training container, identifying training container, detailed description of contents including container sizes and volumes of liquid.
  - 1.6 Document the scan information in Block 5 of Attachment 5.
  - 1.7 Complete Block 6 of Attachment 5.
  - 1.8 Label the audio/video media with the following information:
    - [A] The identifying training container (e.g., NDE-TRAINING-01)
    - [B] Exam date
    - [C] Operator's name
    - [D] "A" for primary or "B" for backup
  - 1.9 Make a copy of training audio/video for the NDE CE. (Labeled the same add "Copy".)
- 2.0 Forward the audio/video (primary and backup) recording media and Attachment 5 to Training, in accordance with CCP-QP-008.
- 3.0 Forward the copy of the training audio/video to the NDE CE.

Attachment 4 – Training Container Instruction (Continued)

**Training**

4.0 Provide Attachment 5 to the NDE CE.

**NDE CE**

5.0 Review the Training Container scan and document discrepancies (accuracy and consistency) in Block 5 of Attachment 5.

6.0 Record in Block 8 of Attachment 5 if the operator passed or failed based on identification of the DQOs.

7.0 Print name, sign, and date in Block 9, of Attachment 5.

8.0 If the Operator fails to identify an item that is not a DQO, counsel the operator on the item(s) missed.

8.1 If counseling was required, have the operator acknowledge receipt of the counseling in Block 10 of Attachment 5. The acknowledgement can be either with the operator signature, or via Telecon.

9.0 If additional actions are required in response to an operator's performance, the CE will coordinate with Manager Responsible for Training.

10.0 Forward Attachment 5 to Training in accordance with CCP-QP-008.

**TRAINING**

11.0 Ensure receipt of all required documentation,  
**THEN** update the LOQI and the Training files.

Attachment 5 – Training Container Data & Evaluation Sheet

1. Operator Name:	2. Demonstration Date:	
3. Training Container #: <span style="float: right;"><input type="checkbox"/> Box      <input type="checkbox"/> Drum</span>		
4. Audio/Video Recording Media Label:		
5. Container Inventory (Provide detailed description)		
6. Operator Signature: _____ Date: _____		
7. I have counseled the operator on the following interpretation issues:		
8. I have assigned a grade based on the review above.	<b>PASS</b>	<b>FAIL</b>
9. NDE CE Printed Name: _____		
NDE CE Signature: _____ Date: _____		
10. Acknowledgement by the Operator of Counseling Received (if required):		
Operator Printed Name: _____		
Operator Signature: _____ Date: _____		

Attachment 6 – Annual Record of Eye Examination

<b>Employee Name:</b>		
<b>Examination Date:</b>		
<b>Examined By:</b>	<b>Printed Name and Title</b>	
	<b>Signature</b>	
<b>Examination Type:</b>	<b>Jaeger-near acuity</b>	
<b>Jaeger Level Tested:</b>	<b>J-2</b>	
<b>Results:</b>	<b>Pass</b>	<b>Fail</b>
	(circle one)	
<b>Contrast Proficient: (circle one)</b>	<b>Yes</b>	<b>No</b>
<p>Note:</p> <p>A visual acuity examination shall be administered to the candidate prior to the initial qualification and annually thereafter.</p> <p>A professional optometrist, medical doctor, nurse, or personnel designee by procedure shall administer this examination.</p> <p>The candidates shall have natural or corrected near-distance acuity in at least one eye, capable of reading J-2 letters on a standard Jaeger test chart at a distance of not less than 30.5 centimeters (12 inches).</p> <p>The examination shall demonstrate the capability of distinguishing and differentiating contrast between colors used in the method.</p>		

| Attachment 7 – SPM Appointment

Date:

| Subject: Appointment for (candidate's name) for the position of (name of position)

Based on (candidate's name) resume and/or personal knowledge of (name's) work history, I have determined (he/she) has suitable education and experience in accordance with CCP-QP-002, *CCP Training and Qualification Plan*, for the position of:

- |  Expert Analyst for (insert specific NDA equipment and Host site)
- RH Technical Staff
- (Initial) Subject Matter Expert (SME) for (insert operation or NDA unit).
- |  Visual Examination Expert (VEE) for the (name facility and Host site). This is a (CH or RH) function. I have reviewed (candidate's name) training file for qualification/familiarity to the applicable waste streams, experience handling TRU waste, and VE Operator qualifications.

**For Initial SMEs:** (Candidate's Name) will assist (assisted) with the set-up of (equipment name) at (site). As the initial SME, (Name) will assist (also assisted) with the development of procedures and a qualification card specific to the (unit/site).

Please initiate, as applicable, the CCP-specific training. (Candidate's name) will not be considered qualified for this(these) position(s) until all applicable/required training is complete, on file with CCP Training, and listed on the applicable LOQI(s).

If you have any questions, please contact me.

Thank you,

(SPM Name)  
Site Project Manager