

# CCP-TP-404

Revision 4

CCP

## Contact-Handled Transuranic Waste Certification and Data Entry for Intersite Shipments

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PRINTED NAME

APPROVED FOR USE

RECORD OF REVISION

Revision Number	Date Approved	Description of Revision
0	10/27/2008	Initial issue.
1	04/22/2009	Removed step 4.5.2 to clarify that this is not a transportation requirement.
2	12/18/2009	Revised to incorporate changes to the Waste Data System (WDS).
3	05/26/2010	Revised section 4.3 to remove the confirmation that the TRU Alpha activity concentration is greater than 100 nCi/g.
4	12/13/2010	Revised to incorporate changes into Table 1, Data Sources for the SQS WDS Master Template.

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## 1.0 PURPOSE

The purpose of this procedure is to describe the steps the Central Characterization Project (CCP) uses for certifying contact-handled (CH) transuranic (TRU) waste for Intersite shipments. This procedure also describes the process for entering and submitting data on containers into the Waste Data System (WDS).

Intersite waste shipments are defined as shipments with destinations to sites other than the Waste Isolation Pilot Plant (WIPP) (e.g., for the transport of CH TRU waste for consolidation at a designated facility where WIPP disposal characterization activities may be performed).

### 1.1 Scope

This procedure defines the parameters necessary for certification of CH TRU waste for Intersite waste shipments. This procedure includes the records that are generated to document that the Small Quantity Site (SQS) CCP Waste Certification Official (WCO) has performed the necessary verifications and has certified the waste for shipment.

This procedure also describes how to obtain, access, and enter data into the WDS for containers to be certified for Intersite shipment.

## 2.0 REQUIREMENTS

### 2.1 References

#### Referenced Documents

- DOE/WIPP-09-3427, *Waste Data Systems User's Manual*
- DOE/WIPP-01-3194, *CH-TRU Waste Content Codes (CH-TRUCON)*
- CCP-PO-002, *CCP Transuranic Waste Certification Plan*
- CCP-QP-002, *CCP Training and Qualification Plan*
- CCP-QP-005, *CCP TRU Nonconforming Item Reporting and Control*
- CCP-QP-008, *CCP Records Management*

### 2.2 Training Requirements

2.2.1 Personnel who use this procedure to certify waste will be trained and qualified to the requirements for the SQS WCO in accordance with CCP-QP-002, *CCP Training and Qualification Plan*.

2.2.2 Personnel who use this procedure to enter data will be trained and qualified to the requirements for the SQS Waste Certification Assistant (WCA) in accordance with CCP-QP-002.

2.2.3 Personnel who use this procedure to enter data into the WDS will be trained to DOE/WIPP-09-3472, *Waste Data System User's Guide*.

### 2.3 Equipment List

2.3.1 None

### 2.4 Software

2.4.1 SQS WDS Master Template.xls

2.4.2 HSGNDATTRANSFER.xls

2.4.3 concat\_wds\_Files.bat

2.4.4 clean\_container\_Files.bat

2.5 Precautions and Limitations

2.5.1 None

2.6 Prerequisite Actions

2.6.1 None

2.7 Definitions

2.7.1 None

### 3.0 RESPONSIBILITIES

#### 3.1 Small Quantity Site (SQS) Waste Certification Official (WCO)

3.1.1 Confirms that SQS WCOs and SQS WCAs are granted access to the WDS and the CCP Access List is updated, as necessary.

3.1.2 Certifies the data for the container to be certified as identified on the CCP WDS Data Spreadsheets (SS) (SQS WDS Master Template).

3.1.3 Notifies Transportation Certification Official (TCO) of the WDS Certification Module approval, if necessary.

3.1.4 Serves as point of contact between shipping site and receiving site for approval of waste streams and containers prior to shipment.

#### 3.2 Acceptable Knowledge Expert (AKE)

3.2.1 Extracts the necessary information for Intersite waste shipments.

3.2.2 Works with the SQS WCA and SQS WCO for WDS data input.

#### 3.3 Small Quantity Site (SQS) Waste Certification Assistant (WCA)

3.3.1 Works with the SQS WCO to obtain access to the WDS.

3.3.2 Gathers copies of data sheets for each container from CCP Records, SQS WCO, or Acceptable Knowledge Expert (AKE) that show data to be entered into the SQS WDS Master Template.

3.3.3 Populates the WDS Data SS and has a second SQS WCA confirm the data is transferred correctly to the SQS WDS Master Template. The second SQS WCA verifies the information and places initials in the SQS WDS Master Template prior to certification by the SQS WCO.

3.3.4 Forwards the SQS WDS Master Template to the SQS WCO for shipping certification.

3.3.5 Submits the container data from the SQS WDS Master Template to the WDS Intersite Shipping Module, as applicable.

#### 4.0 PROCEDURE

##### 4.1 Obtaining and Changing Access to the WDS

###### SQS WCO

4.1.1 Determine which personnel need access to the WDS.

4.1.2 Request WDS access for each person by contacting the WDS Data Administrator.

4.1.3 Notify the Data Administrator when personnel who have received WDS access:

[A] Leave the project;

[B] No longer need WDS access; **OR**

[C] Need to change the type of WDS access.

###### CCP Personnel

4.1.4 Once the Data Administrator has been notified by the SQS WCO that access has been granted, CCP personnel will contact the Data Administrator to receive WDS training and a WDS username.

##### 4.2 Entering and Verifying Characterization Data Using the SQS WDS Master Template

###### SQS WCA

4.2.1 Obtain, from CCP Records, SQS WCO, or AKE, a copy of the appropriate Data sheets, Packaging Records, Process Knowledge (PK) Summary Report, PK Tracking Spreadsheet, and radiological survey data as applicable.

4.2.2 Use copies of appropriate Data sheets or other data sources, from CCP Records or AKE, as listed in Table 1, Data Sources for the SQS WDS Master Template, to enter shipping characterization data into the SQS WDS Master Template for each container record being used to support the Intersite waste shipment.

4.2.3 Enter CH TRU Waste Content Codes (CH-TRUCON) as described in Attachment 1, Entering of Content Codes and Shipping Category into WDS.

- 4.2.4 Enter shipping categories as described in Attachment 1, if necessary.
- 4.2.5 Enter initials and submit the completed SQS WDS Master Template to a second SQS WCA for verification.

**SQS WCA (Verifier)**

- 4.2.6 Confirm the data entered into the WDS Data SQS WDS Master Template for each container record by checking the data to confirm the accuracy and completeness of the data.
- 4.2.7 **IF** there are any discrepancies,  
**THEN** the correction must be made by a SQS WCA.
- 4.2.8 **IF** the discrepancies **CAN NOT** be resolved,  
**THEN** provide the SQS WDS Master Template to the SQS WCO for resolution.
- 4.2.9 **WHEN** the SQS WDS Master Template is complete **AND** verified,  
**THEN** enter initials and date verified in the SQS WDS Master Template, print, **AND** submit to the SQS WCO.
- 4.3 Waste Certification (By Container of Waste) Records

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**NOTE**

Steps 4.3.1 through 4.3.6 can be performed in any order.

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**SQS WCO**

- 4.3.1 Verify the current SQS WDS Master Template is being used.
- 4.3.2 Confirm that the TRU alpha activity concentration is greater than 100 nanocuries per gram (nCi/g) for each payload container or that payload container is being shipped for confirmation sampling.
- 4.3.3 Confirm that the SQS WDS Master Template contains accurate **AND** complete information for the container by checking both SQS WCAs have completed their input and review.
- 4.3.4 **IF** there are any open Nonconformance Reports(NCRs)/Corrective Action Requests (CARs),  
**THEN** confirm, for the container being certified, that all issues associated with the open NCR/CARs have been resolved.

- 4.3.5 Review the waste stream information against the applicable Content Code and data sources to confirm the waste is **NOT** an incompatible waste.
- 4.3.6 **IF** the Methane concentration is less than the minimum detectable limit (MDL) as indicated by a "U" flag, **THEN** adjust the Methane concentration to 2.5 percent of the Hydrogen concentration, as appropriate.
- 4.3.7 **IF** the container is certifiable, **THEN** sign and date the SQS WDS Master Template **AND** forward to SQS WCA for submittal to WDS Intersite Shipping Module.
- 4.3.8 **IF** container is **NOT** certifiable, **THEN** proceed to step 4.3.9.

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**NOTE**

To remove the hold on a Container Data Folder, a SQS WCO shall confirm deficiencies no longer exist.

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- 4.3.9 **IF** there is an issue with data, **THEN** attempt to resolve the issue with AKE or CCP Management.
- 4.3.10 **IF** a deficiency in data is identified after a Container Data Folder is created and before submittal to the WDS, **THEN** perform the following:
- [A] Write a description of the deficiency near the top of Page 1 of the SQS WDS Master Template.
  - [B] Place the container folder, if available, in hold drawer.
  - [C] Initiate an NCR in accordance with CCP-QP-005, *CCP TRU Nonconforming Item Reporting and Control*, as necessary.

4.4 Waste Certification Data Submittal

**SQS WCA**

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**NOTE**

The SQS WCA uses a macro (CreateTmpTables) and ancillary worksheets that are part of the SQS WDS Master Template.

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- 4.4.1 Generate tab-delimited files from the electronic SQS WDS Master Template corresponding to the WDS Temporary Database Tables by selecting the Create Tmp Tables.
- 4.4.2 OPEN TmpTables Folder to run batch programs, **AND** OPEN concat\_wds\_files.bat to copy all containers into temp tables readable by WDS.
- 4.4.3 Logon to the WDS.
- [A] Select Data Upload Function.
  - [B] Select Browse to open Temp Tables Folder.
  - [C] Select the .txt file to be loaded.
  - [D] Select Intersite Shipping Module.
  - [E] Check Perform Evaluations and DO NOT save if FAIL, as applicable.
  - [F] Select the Upload Containers.
    - [F.1] **IF** container upload fails,  
**THEN** return folder to SQS WCO for resolution.
  - [G] Inform SQS WCO of containers uploaded into WDS.
  - [H] **WHEN** complete,  
**THEN** OPEN clean\_container\_files.bat to clear the TempTables Folder of all unused data that is **NOT** in useable WDS format.

**SQS WCO**

4.4.4 **IF** a deficiency is identified after the container data is approved in the WDS,

**THEN:**

- [A] Initiate an NCR in accordance with CCP-QP-005, as necessary.
- [B] Request in writing (e.g., e-mail) that CCP Management approves the rejection of the container from the WDS, if applicable, **AND** obtain confirmation (e.g., e-mail) from CCP Management of the approval for rejection.
- [C] Place the confirmation in the Container Data Folder, if available, **AND** write a description of the deficiency near the top of page 1 of the SQS WDS Master Template, if available.
- [D] Contact WDS Data Administrator to remove container from WDS.

4.4.5 Compile the following items used in the submission of data to the WDS, **AND** submit to CCP Records in accordance with CCP-QP-008, *CCP Records Management*.

- [A] The completed SQS WDS Master Template for each CH Packaging Payload Container submitted to and approved by the WDS.
- [B] Any correspondence (e.g., memorandum/e-mail notifications) associated.
- [C] Copies of Radiological Survey Information, if applicable.

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**NOTE**

The WDS Overpack Planning and Completion Module utilizes edit and limit checks when data is entered and selected. The WDS steps in the following section may be repeated until Overpack compliance is satisfied.

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**SQS WCO**

4.5 Container Selection for Overpacks

4.5.1 Logon to the WDS in accordance with DOE/WIPP-09-3427.

- 4.5.2 Select "Overpack Planning and Completion."
- 4.5.3 Select "New."
- 4.5.4 Select Overpack Configuration from Type drop down menu.
- 4.5.5 Select Certification Program ID from drop down menu.
- 4.5.6 Select Current Location from the drop down menu.
- 4.5.7 Select Destination Site from the drop down menu.
- 4.5.8 Select Shipping Program ID from the drop down menu.
- 4.5.9 Select "Search."
- 4.5.10 Select containers to be overpacked.
- 4.5.11 Select "Save."
- 4.5.12 Enter filter model number, number of filters, and date of filter installation, **AND** select add as applicable.
- 4.5.13 Select "Accept".
- 4.5.14 Enter Container Number.

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**NOTE**

In order for the WDS to operate, some default data may be entered in the section prior to running CH-TRAMPAC Evaluation Software (CHTES) checks. If default data is used, the correct data shall be entered as it becomes available, prior to submitting the Overpack to the WDS.

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- 4.5.15 Enter Neutron Dose Rate.
- 4.5.16 Enter Beta/Gamma Dose Rate.
- 4.5.17 Enter Shipping Purpose.
- 4.5.18 Enter Closure and Vent Dates.
- 4.5.19 Enter Filter Information, as applicable.
- 4.5.20 Perform applicable evaluations and **IF** fail,  
**THEN** repeat steps 4.5.2 through 4.5.20 as applicable

4.5.21 Generate Overpack Build List.

4.5.22 Send Overpack Build List to applicable TCOs.

4.5.23 Select Save.

4.6 Overpack Approval.

4.6.1 Sign on to WDS.

4.6.2 Select Overpack Planning and Completion.

4.6.3 Enter Overpack number.

4.6.4 Select Search.

4.6.5 Select Plan ID.

4.6.6 Enter correct data for Neutron and Beta/Gamma dose rates.

4.6.7 Enter correct Closure and Vent dates.

4.6.8 Enter Certification Date.

4.6.9 Enter correct Alpha Surface contamination.

4.6.10 Enter correct Beta/Gamma Surface Contamination.

4.6.11 Enter correct filter information.

4.6.12 Run Data Integrity and CHTES Checks, as applicable.

4.6.13 Save and Submit the Overpack for final approval.

4.6.14 Print Overpack Data Report, **AND** print name, title, sign, and date on front page.

4.6.15 Compile the following items used in the submission of the data to the WDS, **AND** submit to the CCP Records Custodian:

[A] The Overpack Data Report (for Overpacks only).

[B] Copies of the data containing the Overpack container information, radiological survey, and filter information used to enter data above.

[C] Correspondence (e.g., memorandum/e-mail notifications).

## 5.0 RECORDS

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

### 5.1.1 QA/Lifetime

[A] Container Certification:

[A.1] SQS WDS Master Template(s)

[A.2] Correspondence (memorandum/e-mail notifications)

[A.3] Copies of Radiological Survey Information, if applicable

[B] Overpack Certification:

[B.1] Overpack Data Report (for Overpacks only)

[B.2] Copies of the data containing the Overpack container, radiological survey, and filter information

[B.3] Correspondence (memorandum/e-mail notifications)

Table 1. Data Sources for the SQS WDS Master Template

Field Label	Source
<b><u>Characterization, Certification, and Shipping Data</u></b>	
Shipper Site ID or Site ID Location ID Destination ID Shipping Purpose	PK Summary Report Waste-specific data CH-TRAMPAC
Container ID Number or Container Number	PK Tracking SS Waste-specific data CH-TRAMPAC
Cert Site	Packaging records; visual inspection; PK Summary Report; PK Tracking Spreadsheet; CCP NDE Review and Validation Report; or designate for Overpacking Waste-specific data CH-TRAMPAC
Cert Date or Certification Date	Date SQS WCO certifies payload container Waste-specific data CH-TRAMPAC
Waste Handling Code or Handling Code	AKE, Data Sheets Waste-specific data CH-TRAMPAC
Waste Stream Baseline Inventory Report (BIR) ID	PK Summary Report (if no Hazardous Waste Numbers, enter TRU) TRU or mixed-TRU (MTRU) Waste-specific data CH-TRAMPAC
Generator Site ID or Generator Site Item Description Code (IDC) or IDC Waste Matrix (parameter) Code or Matrix Code	PK Summary Report PK Summary Report (not applicable [NA] if no IDC available) Waste-specific data CH-TRAMPAC
Content Code	TRAMPAC, PK Summary Report, Waste Stream Profile Form (WSPF), Characterization Info. Summary. See Attachment 1 Waste-specific data CH-TRAMPAC
Shipping Category	CH-TRUCON Waste-specific data CH-TRAMPAC
TRU Alpha Act TRU Alpha Act Uncertainty TRU Alpha Act Concentration (conc.) TRU Alpha Act Conc. Uncertainty Pu-239 Fissile Gram Equivalent Pu-239 Fissile Gram Equivalent Uncertainty Pu-239 eq. act. Decay Heat Decay Heat Uncertainty	Radioassay Data Sheets; Radiological Characterization Data Sheets  Note – Nondestructive Assay (NDA) uncertainties must be reported to the WDS at 1-sigma. Verify the data to be submitted to WDS is at 1-sigma. Waste-specific data CH-TRAMPAC
Layers of Packaging	Nondestructive Examination (NDE) Data Sheet; PK Summary Report; CCP NDE Review and Validation Report. Waste-specific data CH-TRAMPAC
Fill Factor	NDE Data Sheet; PK Summary Report; CCP NDE Review and Validation Report. Waste-specific data CH-TRAMPAC
Liner Lid Present	NDE Data Sheet; PK Summary Report; CCP NDE Review and Validation Report. Waste-specific data CH-TRAMPAC

Table 1. Data Sources for the SQS WDS Master Template (Continued)

Field Label	Source
<b><u>Characterization, Certification, and Shipping Data</u></b>	
Liner Punctured or Liner Hole Size	NDE Data Sheet; PK Summary Report; CCP NDE Review and Validation Report. Waste-specific data CH-TRAMPAC
PCB Waste PCB Concentration PCB Mass PCB Out-Of-Service Date	NDE Data Sheet; PK Summary Report; CCP NDE Review and Validation Report. Waste-specific data CH-TRAMPAC
Aqueous Material Beryllium less than or equal to 100 kg Beryllium less than or equal to 5 kg Beryllium less than or equal to 1% Beryllium shavings or fines Compacted Waste or Machine Compacted	PK Tracking Spreadsheet or PK Summary Report Waste-specific data CH-TRAMPAC
Closure Date	PK Tracking Spreadsheet, Remediated Drum Spreadsheet, or PK Summary Report Waste-specific data CH-TRAMPAC
Vent Date	PK Tracking Spreadsheet, Remediated Drum Spreadsheet, or PK Summary Report Waste-specific data CH-TRAMPAC
Filter Install Date Filter Model Quantity	Flammable Gas Analysis (FGA) Basic Data Report (BDR), Visual Examination (VE) Data Sheet, PK Tracking Spreadsheet, Remediated Drum Sheet, Drum Filter Change Out Form, or Container Inspection Report Waste-specific data CH-TRAMPAC
Aspiration Method ID	PK Tracking Spreadsheet, Remediated Drum Spreadsheet, PK Summary Report FGA BDR, Off-site Sealed Source Recovery (OSR) Project, PK Summary Report Waste-specific data CH-TRAMPAC
Gas Generation Rate Hydrogen/Methane Gen. Rate Gas Generation Completion Date	Gas Generation Testing (GGT) BDR Waste-specific data CH-TRAMPAC
Gross Weight	VE Data Sheet, Radiography Data Sheet, CCP NDE Review and Validation Report, CCP-TP-120, <i>CCP Container Management</i> , (OSR only), or Scale Certification Data Waste-specific data CH-TRAMPAC
Gross Weight Uncertainty	VE Data Sheet, CCP NDE Review and Validation Report, Radiography Data Sheet, or Scale Certification Data, 2.3 kg may be entered as the bounding case where actual measurement data is not readily available Waste-specific data CH-TRAMPAC
Alpha Surf Cont Beta/Gamma Surf Cont Neutron Dose Rate Beta/Gamma Dose Rate	RCT Report Waste-specific data CH-TRAMPAC
Radionuclide Data Radionuclide Activity (Ci) Activity Uncertainty (Ci) Mass Mass Uncertainty Assay Method Data Radioassay Method Data Package Number Assay Date (actual assay date)	Radioassay data sheet,  Note – NDA uncertainties must be reported to the WDS at 1-sigma. Verify the data to be submitted to WDS is at 1-sigma. Waste-specific data CH-TRAMPAC
Material Parameter Data Waste Material Parameter Weight of Material Parameter	VE Data Sheet or Radiography Data Sheet, PK Summary Report Waste-specific data CH-TRAMPAC

Table 1. Data Sources for the SQS WDS Master Template (Continued)

Field Label	Source
<b><u>Characterization, Certification, and Shipping Data</u></b>	
<u>Hazardous Waste Numbers Data</u> Hazardous Waste Numbers	PK Summary Report Waste-specific data CH-TRAMPAC
Date Sampled	Headspace Gas or Solids Analytical BDR, FGA BDR, OSR PK Summary Report Waste-specific data CH-TRAMPAC
Method ID Analyte	Headspace Gas for CCP-PO-002, <i>CCP Transuranic Waste Certification Plan</i> , or Transportation, Headspace Gas or Solids Analytical BDR, FGA BDR, OSR PK Summary Report Analytical BDR Waste-specific data CH-TRAMPAC
Concentration (% volume [vol.], milligram/kilogram [mg/kg], parts per million [ppm]) Date Analyzed	Headspace Gas or Solids Analytical BDR, FGA BDR, OSR PK Summary Report Waste-specific data CH-TRAMPAC
Reporting Flag B Reporting Flag D Reporting Flag E Reporting Flag J Reporting Flag U Reporting Flag Z* Reporting Flag N/A	Headspace Gas or Solids Analytical BDR, FGA BDR, OSR PK Summary Report *Record in comment field of SQS WDS Master Template until WDS allows Z flag Waste-specific data CH-TRAMPAC

Attachment 1 – Entering of Content Codes and Shipping Category into WDS

**1. INTRODUCTION**

This appendix describes the steps used to enter assigned Content Codes into the SQS WDS Master Template using various sources of characterization data. Entering the Content Code is performed by the waste certification staff based on the waste material contents and the layers of packaging used for each container. Content Code assignment is reviewed and approved by the SQS WCO during container certification.

**2. ASSIGNING THE NUMERIC VALUE**

Assign the Content Code based on the container waste stream assignment. The Content Code identified in PK will be confirmed by Real-Time Radiography (RTR) and VE when performed, and to confirm the absence of incompatible waste in the waste stream. Enter the Content Code in SQS WDS Master Template.

**3. ASSIGNING A LETTER DESIGNATOR FOR LEGACY WASTE**

For retrievably-stored waste, the letter designator of the Content Code is assigned using packaging information from the following sources, which are listed in order of priority of usage:

- VE BDRs, if available
- **IF** RTR information is undetermined,  
**THEN** use the default assignment given in (or determined from) the PK Summary Report for the applicable waste stream.

**4. OTHER**

For waste packaged under a U.S. Department of Energy (DOE) Carlsbad Field Office (CBFO) audited and approved certification program (newly generated waste exempted from RTR), use the Content Code assigned in the packaging documents.

**5. SHIPPING CATEGORY**

After selection of appropriate Content Code, using DOE/WIPP-01-3194, *CH-TRU Waste Content Codes (CH-TRUCON)*, assign the Shipping Category number and document on the SQS WDS Master Template.