

United States Government


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 Department of Energy

# memorandum

 Carlsbad Field Office  
 Carlsbad, New Mexico 88221

DATE: APR 12 2013


 REPLY TO  
 ATTN OF: CBFO:NTP:JRS:PG:13-0458:UFC 5900.00

SUBJECT: AMWTP Project Expansion to Recertification Audit A-12-03 to Include the EPA Tier 1 Approvals Adding ANL-E and MFC Waste and Surveillance S-13-21 AMWTP Compacted Waste Process for CH SCG S5000 Debris Waste

TO: Benjamin Roberts, DOE-ID

The Carlsbad Field Office (CBFO) is expanding the certification of the Idaho National Laboratory (INL) Advanced Mixed Waste Treatment Project's (AMWTP) contact-handled (CH) certification memorandum CBFO:NTP:NC:GL:12-0612 dated September 17, 2012. This expansion reflects the following at the AMWTP:

- The U.S. Environmental Protection Agency (EPA) inspection report dated January 29, 2013, (Docket No. A-98-49, II-A4-169) for the Tier 1 changes to include the CH homogeneous solids (S3000) and CH debris (S5000) from the Argonne National Laboratory-East (ANL-E); and the CH debris (S5000) from the INL Materials and Fuels Complex (MFC). The EPA provided approval via email on February 27, 2013;
- The Surveillance S-13-21 evaluating the use of the Supercompactor to breach prohibited containers and remove prohibited items from 55-gallon drums of CH S5000 (debris) waste through the compaction process.

The CBFO completed the annual recertification audit A-12-03 of the AMWTP's transuranic (TRU) waste characterization activities at the INL conducted November 1-3, 2011. The characterization and certification activities were determined to be adequate, satisfactorily implemented, and effective.

The audit team determined that the AMWTP TRU program was in compliance with the *Waste Analysis Plan (WAP)* of the Waste Isolation Pilot Plant (WIPP) Hazardous Waste Facility Permit (HWFP), the *CBFO Quality Assurance Program Document (QAPD)*, and the *TRU Waste Acceptance Criteria for the Waste Isolation Pilot Plant (WIPP WAC)*. The audit team determined that the procedures/documents were effectively implemented.

Based on the results of the CBFO Audits/Surveillances (See Attachment 1), and conditions and limitations provided by the New Mexico Environment Department (NMED) and the EPA, the CBFO is authorizing the AMWTP to include the CH homogeneous solids (S3000) and CH debris (S5000) from the ANL-E; the CH debris (S5000) from the MFC; and the process for the use of the Supercompactor to breach prohibited containers and remove prohibited items from 55-gallon drums of CH debris (S5000) waste through the compaction process (i.e., Surveillance S-13-21). The CBFO grants continued authority at the AMWTP for TRU waste characterization and certification activities as identified in Table 1, Page 4 of this memorandum.

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TRU waste characterization and certification activities, using significantly revised or new processes, procedures, or systems must be evaluated by the CBFO prior to their implementation. Included in this memorandum are the following attachments:

- *Attachment 1* describes the certification program status;
- *Attachment 2* contains the list of processes/equipment from Table 1 of this memorandum certified at the site;
- *Attachment 3* contains the list of certified procedures/documents; and
- *Attachment 4* describes specific waste characterization process elements that must be reported to the EPA. These process elements are identified as Tier 1 changes and Tier 2 changes. The AMWTP shall not ship for disposal at the WIPP any wastes affected by a Tier 1 process element change without prior CBFO approval, and the AMWTP shall report Tier 2 changes to CBFO on a quarterly basis.

If you have any questions, please contact the Director of the Office of National TRU Program, Mr. J.R. Stroble, at (575) 234-7313.

  
Jose R. Franco, Manager  
Carlsbad Field Office

Attachments (4)

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cc: w/attachments

G. Basabilvazo, CBFO	*ED
N. Castaneda, CBFO	ED
B. Mackie, CBFO	ED
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D. Miehls, CBFO	ED
T. Morgan, CBFO	ED
M. Navarrete, CBFO	ED
M. Pinzel, CBFO	ED
J.R. Stroble, CBFO	ED
J. Malmo, DOE-ID	ED
J. Wells, DOE-ID	ED
D. Haar, ITG	ED
S. Peterman, ITG	ED
G. Tedford, ITG	ED
E. Feltcorn, EPA	ED
R. Joglekar, EPA	ED
T. Peake, EPA	ED
S. Holmes, NMED	ED
J. Kieling, NMED	ED
T. Kliphuis, NMED	ED
C. Chester, NWP	ED
K. Guillermo, NWP	ED
E. Gulbransen, NWP	ED
C. Luoma, NWP	ED
R. McGinnis, NWP	ED
L. Oberbeck, NWP	ED
R. Reeves, NWP	ED
M. Strum, NWP	ED
J. Vernon, NWP	ED
M. Valentine, NWP	ED
C. Castillo, CTAC	ED
J. Harvill, CTAC	ED
P. Martinez, CTAC	ED
D. Sellmer, CTAC	ED
M. Carter, LANL-CO	ED
P. Gilbert, LANL-CO	ED
G. Lyshik, LANL-CO	ED
W. Weyerman, LANL-CO	ED
S. Percy, SM Stoller	ED
WIPP Operating Record	ED
CBFO M&RC	

\*ED denotes electronic distribution

<b>Table 1-Approved Waste Characterization Processes</b>				
Characterization Process <sup>3</sup>	CH S3000 Homogeneous solids		CH S5000 Debris	
	Newly generated	Retrievably- Stored	Newly generated	Retrievably- Stored
Acceptable Knowledge	N/A	Approved	Approved	Approved
Load Management	N/A	Approved	Approved	Approved
Data Validation & Verification (V&V)	Approved	Approved	Approved	Approved
Visual Examination (VE)	Approved	Approved	Approved	Approved
Solid Sampling <sup>1</sup>	Approved	Approved	N/A	N/A
Headspace Gas Sampling & Analysis	Approved	Approved	Approved	Approved
Nondestructive Assay (NDA)	Approved <sup>2</sup>	Approved	Approved	Approved
Real-time Radiography (RTR)	Approved	Approved	Approved	Approved
WIPP Waste Information System (WWIS)	Approved	Approved	Approved	Approved

<sup>1</sup>Solid Sampling Analysis is performed at the INL TWCP.

<sup>2</sup>Nondestructive Assay (NDA) of newly generated S3000 waste is authorized for assaying using **ONLY** IWAS units Z-211-102 and Z-211-103.

<sup>3</sup>Characterization Processes in this table may not be completely listed in Attachment 2.

## **CERTIFICATION PROGRAM STATUS at the Advance Mixed Waste Treatment Project**

The Carlsbad Field Office (CBFO) Director of the Office of the National Transuranic (TRU) Program and the CBFO Director of the Office of Quality Assurance has evaluated the documentation supporting the compliance of the Advanced Mixed Waste Treatment Project (AMWTP) TRU waste program.

### **PROGRAM STATUS**

All program elements remain complete.

- The following site documents are current and complies with the CBFO requirements:
  - **MP-TRUW-8.1, Revision 23** – *Certification Plan for INL Transuranic Waste*, Approved March 14, 2013 - CBFO:NTP:NC:GL:13-0455:UFC 5822.00
  - **MP-TRUW-8.2, Revision 16** – *Quality Assurance Project Plan*, Approved June 14, 2012 - CBFO:NTP:NC:GL:12-0510:UFC 5822.00
- Certified Systems - see Attachment 2 List of Processes/Equipment from Table 1 of this Memorandum that is certified and used by the AMWTP.
- Standard operating procedures - see Attachment 3 for the complete list of certified procedures/documents used by the AMWTP.
- Tiering of the contact-handled (CH) TRU Waste Characterization Processes – see Attachment 4 for the implementation by AMWTP (based on Environmental Protection Agency [EPA] Baseline Inspections).
- AMWTP participated in the following performance demonstration programs (PDPs):
  - **HSG PDP – Cycle 26A approved** for analysis of Volatile Organic Compounds (VOCs) in headspace gas samples (HSG) using the GC/MS analytical method on the analytical system identified as Z-221-001-A.  
Memo CBFO:NTP:MRB:GL:12-0505:UFC 5822.00 dated June 4, 2012.
  - **NDA PDP – Cycle 19A approved** analysis of TRU waste drums using the DAS-100 (AM03/AMN3), DAS-101 (AM04/AMN4), DAS-102 (AM01/AMN1), and DAS-103 (AM02/AMN2)  
Memo CBFO:NTP:MRB:GL:12-0550:UFC 5822.00 dated June 25, 2012.

- The CBFO conducted recertification audit A-12-03 of the AMWTP on November 1-3, 2011.
  - No Corrective Action Reports (CARs) were issued.
  - Interim Audit Report was issued on November 30, 2011.
  - Final Audit Report was issued to the New Mexico Environment Department (NMED) on March 16, 2012.
  - NMED issued approval of the Final Audit Report on May 1, 2012.
  - EPA concurred on May 23, 2012.
- The CBFO submitted a request to the New Mexico Environment Department (NMED) to terminate the Settlement Agreement and Stipulated Final Order, No. HWB 04-07 (CO) on July 6, 2012.
  - NMED agreed to the termination of the Settlement Agreement and Stipulated Final Order No. HWB 04-07 (CO) on August 16, 2012.
  - EPA concurred on August 30, 2012.
- The CBFO requested Tier 1 changes adding Materials and Fuels complex (MFC) waste and the Argonne National Laboratory East (ANL-E) waste.
  - EPA issued an inspection report on January 29, 2013 (DOCKET No: A-98-49, II-A4-169) and provided approval via email on February 27, 2013.
- The CBFO conducted Surveillance S-13-21 using the Supercompactor to breach prohibited containers and remove prohibited items from 55-gallon drums of CH S5000 (debris) on March 20-21, 2013.
  - Surveillance report was issued on March 27, 2013.
- The EPA concurred with the CBFO expansion to include the MFC and ANL-E waste approvals on March 19, 2013.
- The EPA concurred with the CBFO expansion to include the Surveillance S-13-21 on March 28, 2013.

**RECOMMENDATION**

The recommendation to the CBFO Manager is for the Advanced Mixed Waste Treatment Project (AMWTP) to include the CH homogeneous solids (S3000) and the CH debris (S5000) from the Argonne National Laboratory-East (ANL-E); and the CH debris (S5000) from the INL Materials and Fuels Complex (MFC); and the S-13-21 reviewed the process for the use of the Supercompactor to breach prohibited containers and remove prohibited items from 55-gallon drums of CH S5000 debris waste through the compaction process at AMWTP into their certified program and to continue the authority for characterization and certification activities. Attachments 2 and 3 list the systems and procedures that constitute the bounds of this authority. Attachment 4 is the CH Tiering of TRU Waste Characterization Processes Implemented by the AMWTP.

**CONCURRENCE**



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Dennis Miehl, Acting Director  
Office of Quality Assurance

4-2-13

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Date



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J. R. Stroble, Director  
Office of the National TRU Program

4-2-13

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Date

<b>AMWTP LIST OF CERTIFIED EQUIPMENT AND PROCESSES</b>					
WIPP #	Site Equipment #	Equipment Description	Components	Software	NDA Calibrated Range, Operating Range and TMU
<b>HEADSPACE GAS</b>					
9HG4	Z-221-001-A	Consonant Technology Inc. (CTI) –Gas Chromatography/Mass Spectrometry (GC/MS) System  PDP ID # CTI-HGAS-A-001 Method described in procedure INST-OI-43	Agilent 5973N Network Mass Selective Detector – Unit 001	HGAS Software, Version 1.23	N/A
<b>NONDESTRUCTIVE ASSAY</b>					
9DA1	Z-211-102	Canberra Integrated Waste Assay System (IWAS) for assay and isotopics on 55-gallon and 83/85-gallon drums  DAS –102 - PDP Registration # AM01/AMN1 Method described in procedure INST-OI-14	<ul style="list-style-type: none"> <li>• Broad Energy Germanium (BEGe) gamma detectors</li> <li>• 122 helium-3 tubes used in passive neutron coincidence counting modality and the active neutron differential die-away modality</li> <li>• Cf-252/Cs-137 Add-A-Source (AAS) correction source</li> <li>• 14 MeV neutron generator</li> <li>• Fast Neutron Detector Packs (FNDP)</li> </ul>	<ul style="list-style-type: none"> <li>• NDA 2000</li> <li>• Canberra's Genie 2000</li> <li>• Multi-Group Analysis (MGA)</li> <li>• Multi-Group Analysis-Uranium (MGA-U)</li> </ul>	<p>The calibration of IWAS system was verified and documented in the site acceptance reports CI-IDA-NDA-0051 through CI-IDA-NDA-0054</p> <p>The determination of TMU for the IWAS unit is documented in CI-IDA-NDA-0055, Total Measurement Uncertainty for the AMWTP Integrated Waste Assay Systems, Revision 1, July 30, 2003.</p>
9DA2	Z-211-103	Canberra Integrated Waste Assay System (IWAS) for assay and isotopics on 55-gallon and 83/85-gallon drums  DAS-103 - PDP Registration # AM02/AMN2 Method described in procedure INST-OI-14	<ul style="list-style-type: none"> <li>• Broad Energy Germanium (BEGe) gamma detectors</li> <li>• 122 helium-3 tubes used in passive neutron coincidence counting modality and the active neutron differential die-away modality</li> <li>• Cf-252/Cs-137 Add-A-Source (AAS) correction source</li> <li>• 14 MeV neutron generator</li> <li>• Fast Neutron Detector Packs (FNDP)</li> </ul>	<ul style="list-style-type: none"> <li>• NDA 2000</li> <li>• Canberra's Genie 2000</li> <li>• Multi-Group Analysis (MGA)</li> <li>• Multi-Group Analysis-Uranium (MGA-U)</li> </ul>	<p>The calibration of IWAS system was verified and documented in the site acceptance reports CI-IDA-NDA-0051 through CI-IDA-NDA-0054</p> <p>The determination of TMU for the IWAS unit is documented in CI-IDA-NDA-0055, "Total Measurement Uncertainty for the AMWTP Integrated Waste Assay Systems", Revision 1, July 30, 2003.</p>

<b>AMWTP LIST OF CERTIFIED EQUIPMENT AND PROCESSES</b>					
WIPP #	Site Equipment #	Equipment Description	Components	Software	NDA Calibrated Range, Operating Range and TMU
9DA3	Z-390-100	Canberra Integrated Waste Assay System (IWAS) - DAS3 – 55 gallon drums  DAS-100 – PDP Registration # AM03/AMN3 Method described in INST-FOI-01	<ul style="list-style-type: none"> <li>• Broad Energy Germanium (BEGe) gamma detectors</li> <li>• 122 helium-3 tubes used in passive neutron coincidence counting modality and the active neutron differential die-away modality</li> <li>• Cf-252/Cs-137 Add-A-Source (AAS) correction source</li> <li>• 14 MeV neutron generator</li> <li>• Fast Neutron Detector Packs (FNDP)</li> </ul>	<ul style="list-style-type: none"> <li>• NDA 2000</li> <li>• Canberra's Genie 2000</li> <li>• Multi-Group Analysis (MGA)</li> <li>• Multi-Group Analysis-Uranium (MGA-U)</li> </ul>	<p>The calibration of IWAS system was verified and documented in the site acceptance reports CI-IDA-NDA-0051 through CI-IDA-NDA-0054</p> <p>The determination of TMU for the IWAS unit is documented in CI-IDA-NDA-0055, Total Measurement Uncertainty for the AMWTP Integrated Waste Assay Systems, Revision 1, July 30, 2003.</p>
9DA4	Z-390-101	Canberra Integrated Waste Assay System (IWAS) - DAS4 – 55 gallon drums  DAS-101 – PDP Registration # AM04/AMN4 (Approved) Method described in INST-FOI-01	<ul style="list-style-type: none"> <li>• Broad Energy Germanium (BEGe) gamma detectors</li> <li>• 122 helium-3 tubes used in passive neutron coincidence counting modality and the active neutron differential die-away modality</li> <li>• Cf-252/Cs-137 Add-A-Source (AAS) correction source</li> <li>• 14 MeV neutron generator</li> <li>• Fast Neutron Detector Packs (FNDP)</li> </ul>	<ul style="list-style-type: none"> <li>• NDA 2000</li> <li>• Canberra's Genie 2000</li> <li>• Multi-Group Analysis (MGA)</li> <li>• Multi-Group Analysis-Uranium (MGA-U)</li> </ul>	<p>The calibration of IWAS system was verified and documented in the site acceptance reports CI-IDA-NDA-0051 through CI-IDA-NDA-0054</p> <p>The determination of TMU for the IWAS unit is documented in CI-IDA-NDA-0055, Total Measurement Uncertainty for the AMWTP Integrated Waste Assay Systems, Revision 1, July 30, 2003.</p>
<b>NON-DESTRUCTIVE EXAMINATION</b>					
9RR1	Z-213-101	Real Time Radiography System  Method described in INST-OI-12 and INST-OI-81	RTR System	Waste Tracking System (WTS)	N/A

<b>AMWTP LIST OF CERTIFIED EQUIPMENT AND PROCESSES</b>					
WIPP #	Site Equipment #	Equipment Description	Components	Software	NDA Callibrated Range, Operating Range and TMU
9RR2	Z-213-106	Real Time Radiography System  Method described in procedure INST-OI-12 and INST-OI-81	RTR System	Waste Tracking System (WTS)	N/A
<b>SOLIDS</b>					
9DC1	Z-250-802	Drum Coring and Sample Collection Glove Box  Method – BN-MDC  Method described in procedure INST-OI-16, INST-OI-73, and INST-OI-75	Drum Coring and Sample Collection Glove Box	Waste Tracking System (WTS)	N/A
<b>VISUAL EXAMINATION</b>					
9VE2	N/A	Visual Examination (in lieu of RTR) (VEC)  Method described in INST-OI-34	N/A	Waste Tracking System (WTS)	N/A
9VE3	N/A	Newly Generated Waste Visual Examination Closure (VNC)  Method described in INST-OI-34	N/A	Waste Tracking System (WTS)	N/A
9VE5	N/A	Visual Examination (in lieu of RTR) (VEC)  Method described in INST-FOI-17	N/A	Waste Tracking System (WTS)	N/A
9VE6	N/A	Newly Generated Waste Visual Examination Closure (VNC)  Method described in INST-FOI-17	N/A	Waste Tracking System (WTS)	N/A
9VE7	N/A	Box Line Visual Examination (VEB) – Box to drum repackaging  Method described in INST-FOI-17	N/A	Waste Tracking System (WTS)	N/A
9VE8	N/A	Box Line Visual Examination (VEB) – Drum to new drum repackaging  Method described in INST-FOI-17	N/A	Waste Tracking System (WTS)	N/A

<b>AMWTP LIST OF CERTIFIED EQUIPMENT AND PROCESSES</b>					
<b>WIPP #</b>	<b>Site Equipment #</b>	<b>Equipment Description</b>	<b>Components</b>	<b>Software</b>	<b>NDA Calibrated Range, Operating Range and TMU</b>
9VE10	N/A	Box Line Visual Examination (VEB) – Drum to new drum repackaging  Method described in INST-OI-34	N/A	Waste Tracking System (WTS)	N/A

<b>AMWTP DEACTIVATED EQUIPMENT LIST</b>			
<b>WIPP #</b>	<b>Site Equipment #</b>	<b>Equipment Description</b>	<b>Date Deactivated</b>
<b>HEADSPACE GAS</b>			
9HG1	Z-220-001A	Nuclear Filter Technology Drum Vent System – Mass Spectrometer, Unit A	8/6/06
9HG2	Z-220-001B	Nuclear Filter Technology Drum Vent System – Mass Spectrometer, Unit B	8/6/06
9HG3	Z-220-001C	Nuclear Filter Technology Drum Vent System – Mass Spectrometer, Unit C	8/6/06
9HG7	Z-221-001D	Consonant Technology Inc. (CTI) –Gas Chromatography/Mass Spectrometry (GC/MS) System	Used for spare parts
9HG6	Z-221-001C	Consonant Technology Inc. (CTI) –Gas Chromatography/Mass Spectrometry (GC/MS) System	4/14/08
9HG5	Z-221-001B	Consonant Technology Inc. (CTI) –Gas Chromatography/Mass Spectrometry (GC/MS) System	4/14/08
<b>VISUAL EXAMINATION</b>			
9VE9	N/A	Box Line Visual Examination (VEB) – Box to Drum Repackaging	Expired in WDS February 23, 2011
9VE11	N/A	Sludge Visual Examination Closure (VSC) – S3000 to a new container Method described in INST-FOI-22	2/6/12

<b>AMWTP LIST OF CERTIFIED PROCEDURES</b>		
#	Procedure Number	Procedure Title
1.	AMWTP-RPT-TRUW-03	Drum Assay Technical Review Report
2.	CI-IDA-NDA-0035	Calibration Verification & Confirmation Procedure for the Integrated Waste Assay (IWAS) at AMWTP, Canberra Industries
3.	CI-IDA-NDA-0055	Total Measurement Uncertainty for the AMWTP Integrated Waste Assay Systems, Canberra Industries
4.	INST-CD&M-11.1.2	Facility Modification Proposal Preparation
5.	INST-CD&M-11.2.1	Software Version Control
6.	INST-CD&M-11.2.2	Software Inventory Classification
7.	INST-CD&M-11.2.3	System Data Change Request
8.	INST-CMNT-10.5.1	Calibration and Control of Measuring and Test Equipment
9.	INST-CMNT-10.14.1	Testing In-Plant and Process Instrumentation
10.	INST-FOI-01	In-Plant Drum Assay Operations
11.	INST-FOI-17	Facility Visual Examination Operations
12.	INST-FOI-20	Supercompactor and Post-Compaction Operations
13.	INST-OI-09	Retrieval Inspection Station Operations
14.	INST-OI-11	Waste Container Handling
15.	INST-OI-12	Real-Time Radiography Operations (Drum)
16.	INST-OI-14	Drum Assay Operations
17.	INST-OI-16	Drum Coring Operations
18.	INST-OI-34	Non-Facility Visual Examination Operations
19.	INST-OI-43	HGAS Sampling and Analysis Operations
20.	INST-OI-45	Drum Filter Installation
21.	INST-OI-50	WMF-615 Filter Insertion Operation
22.	INST-OI-73	Manual Drum Coring Operations
23.	INST-OI-75	Container-in-Container Sampling
24.	INST-OI-81	Real-Time Radiography Operations (For WIPP Certification Boxes)
25.	INST-TRUW-8.1.1	Drum Assay Post Maintenance Calibration & Verification
26.	MP-CD&M-11.1	Change Control
27.	MP-CD&M-11.2	Software Quality Assurance
28.	MP-CMNT-10.5	Measuring and Test Equipment Program
29.	MP-CMNT-10.14	In-Plant and Process Instrumentation Testing Program
30.	MP-DOCS-18.1	Developing Written Work Instructions
31.	MP-DOCS-18.2	Records Management
32.	MP-DOCS-18.3	Developing Management Procedures
33.	MP-DOCS-18.4	Document Control
34.	MP-M&IA-17.1	Management Assessment
35.	MP-M&IA-17.2	Independent Assessment
36.	MP-M&IA-17.3	Quality Assurance Surveillance
37.	MP-PCMT-15.1	Acquisition of Material and Services
38.	MP-PCMT-15.21	Material Management
39.	MP-Q&SI-5.1	Investigation and Root Cause Analysis

<b>AMWTP LIST OF CERTIFIED PROCEDURES</b>		
#	Procedure Number	Procedure Title
40.	MP-Q&SI-5.3	Corrective Action
41.	MP-Q&SI-5.4	Identification of Nonconforming Conditions
42.	MP-Q&SI-5.6	Graded Approach
43.	MP-Q&SI-5.8	Qualifying Supply Chain Inspectors, Auditors, Lead Auditors and Technical Specialists
44.	MP-RTQP-14.4	Personnel Qualification and Certification
45.	MP-RTQP-14.6	Job Analysis
46.	MP-RTQP-14.16	Training Program Evaluation
47.	MP-RTQP-14.19	Training Records Administration
48.	MP-RTQP-14.20	Training Implementation Matrix
49.	MP-TRUW-8.1	Certification Plan for INL Transuranic Waste
50.	MP-TRUW-8.2	Quality Assurance Project Plan
51.	MP-TRUW-8.5	TRU Waste Certification
52.	MP-TRUW-8.8	Level I Data Validation
53.	MP-TRUW-8.9	Level II Data Validation
54.	MP-TRUW-8.11	Data Reconciliation
55.	MP-TRUW-8.12	Waste Receipt and Shipping Inspection
56.	MP-TRUW-8.13	Collection, Review, and Management of Acceptable Knowledge Documentation
57.	MP-TRUW-8.14	Preparation of Waste Stream Profile Forms
58.	MP-TRUW-8.17	Co-located Core Sampling Control Charts
59.	MP-TRUW-8.25	Random Selection of Containers for Headspace Gas and Solids Sampling Analysis
60.	MP-TRUW-8.26	Reports to Management
61.	MP-TRUW-8.34	WIPP Sample Transfer

<b>AMWTP LIST OF CANCELLED/DEACTIVATED PROCEDURES</b>			
#	Procedure Number	Procedure Title	Deactivation Date
1.	MP-TRUW-8.6	Contact-Handled Transuranic Waste Authorized Methods for Payload Control (CH TRAMPAC) for HalfPACT (Incorporated into MP-TRUW-8.3)	12/04
2.	INST-OI-44	Sampling Port Installation	1/26/06
3.	INST-OI-48	Electronic TRUPACT-II Operations	2/2/06
4.	INST-CD&M-11.1.1	Facility Modification Screening	6/5/06
5.	MP-PCMT-15.4	Evaluation of Proposals (Superceded by MP-PCMT-15.21)	6/30/06
6.	MP-CMNT-10.3	Supply Chain Management (Superceded by MP-PCMT-15.21)	7/12/06
7.	MP-PCMT-15.6	Acceptance of Items and Services (Superceded by MP-PCMT-15.21)	7/12/06
8.	MP-Q&SI-5.7	Quality Inspections	7/12/06
9.	INST-OI-18	Gas Generation Testing Operations	8/15/06
10.	MP-TRUW-04-IM	TRU Waste Program Procedures Matrix for DOE-CBFO QAP	11/2/06
11.	INST-OI-49	Electronic Payload Assembly	12/11/06
12.	INST-TRUW-8.2.1	HSG Calibration	12/11/06
13.	MP-TRUW-8.19	RTR/VE Drum Selection	1/23/07
14.	MP-TRUW-8.16	WWIS Data Transfer (Incorporated into MP-TRUW-8.5)	7/3/07
15.	INST-OI-13	Drum Vent/Headspace Gas Sample Operations	8/07
16.	INST-OI-20	TRUPACT-II Operations	4/08
17.	INST-OI-21	Payload Assembly	4/08
18.	INST-OI-52	Re-Lidding and Over-pack Reconfiguration Operations	3/08
19.	MP-TRUW-8.3	Contact-Handled Transuranic Waste Authorized Methods for Payload Control (CH-TRAMPAC)	3/08
20.	MP-TRUW-8.4	Quality Assurance Project Plan for Gas Generation Testing Program	3/08
21.	MP-CMNT-10.10	TRUPACT-II Maintenance Program	4/08
22.	MP-TRUW-8.27	CH-TRUCON Management	3/08
23.	MP-TRUW-8.37	Long-Term Objective for Unified Flammable Gas Determination	3/08
24.	MP-PCMT-15.7	Vendor Qualification and Performance Evaluation	12/18/08
25.	INST-FOI-22	Visual Examination of S3000 Waste in the Facility	2/6/12

## EPA Tiering of Contact-Handled Transuranic Waste Characterization Processes Implemented by AMWTP

**Table 1. Tiering of CH TRU Waste Characterization Processes Implemented by AMWTP**  
(Based on March 28-30 and April 11-13, 2006 Baseline Inspection and Subsequent T1 Evaluations, Updated January 2013)

Process Elements	AMWTP CH Waste Characterization Processes – T1 Changes	AMWTP CH Waste Characterization Processes – T2 Changes*
Acceptable Knowledge, including Load Management	<p>Any new waste category</p> <p>Any waste from sources other than Mound, RFETS, Battelle Columbus, Bettis, ANLE and MFC</p> <p>Load management of any new or unapproved waste stream</p>	<p>Notification to EPA upon completion of or substantive modification** to:</p> <ul style="list-style-type: none"> <li>• Site procedures requiring CBFO approval</li> <li>• Load management status of approved waste streams</li> <li>• All final WSPFs with related attachments (e.g., CIS), including updates or additions to waste streams within approved SCGs and summaries of radiological data for those containers included on the CIS drum list</li> <li>• AK accuracy reports (annually, at a minimum)</li> <li>• All new and revised AKSRs and generator-site-specific summary AK reports (e.g., RPT-TRUW-79 and RPT-TRUW-89)</li> <li>• Any waste identified outside of the waste profiles included in the 2002 TWBIR, when applicable</li> <li>• Implementation of procedures and related documentation that formalize NDA-AK communication requirements</li> <li>• RPT-TRUW-05, RPT-TRUW-07 and RPT-TRUW-12</li> </ul>
Nondestructive Assay	<p>New equipment or physical modifications to approved equipment***</p> <p>Extension or changes to approved calibration range for approved equipment</p>	<p>Notification to EPA upon substantive modification** to:</p> <ul style="list-style-type: none"> <li>• Site procedures requiring CBFO approval</li> <li>• Software for approved equipment</li> <li>• Operating ranges upon CBFO approval</li> </ul>
Real-Time Radiography	None	<p>Notification to EPA upon substantive modification** to:</p> <ul style="list-style-type: none"> <li>• Site procedures requiring CBFO approval</li> <li>• New equipment or physical modifications to approved equipment***</li> </ul>
Visual Examination and Visual Examination Technique	Changes in vendor performing VE and/or VET	<p>Notification to EPA upon:</p> <ul style="list-style-type: none"> <li>• Substantive modification** to site procedures requiring CBFO approval</li> <li>• Addition of new waste category</li> <li>• Addition of new procedure or site equipment identifier</li> </ul>
WIPP Waste Data System	Changes to WDS algorithms specific to load management	<p>Notification to EPA upon substantive modification** to:</p> <ul style="list-style-type: none"> <li>• Site procedures requiring CBFO approval</li> <li>• Load management status of approved waste streams</li> </ul>

New T1s, T2s and significant modifications to existing T1s or T2s are in bold text; T1s or T2s that were only revised for style are not shown in bold.

\* AMWTP will report all T2 changes to EPA every three months.

\*\* "Substantive modification" refers to a change with the potential to impact AMWTP's CH waste characterization processes or documentation thereof, excluding changes that are solely related to environment, safety and health; nuclear safety; or the Resource Conservation and Recovery Act, or that are editorial in nature or are required to address administrative concerns. New references that are included as part of the document revision may be requested by EPA.

\*\*\* Modifications to approved equipment include all changes with the potential to affect data relative to waste isolation and exclude minor changes, such as the addition of safety-related equipment.