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Department of Energy

MAR 10 2014

memorandumCarlsbad Field Office
Carlsbad, New Mexico 88221**NMED
Hazardous Waste Bureau**

MAR 18 2014

DATE:

REPLY TO
ATTN OF:

CBFO:NTP:JRS:GL:14-1855:UFC 5900.00

SUBJECT:

Advanced Mixed Waste Treatment Project - Recertification Audit A-14-01 and Expansion to Include the EPA Tier 1 Approval to Add INL Contact-Handled Generated Homogenous Solids S3000 and Debris S5000 Waste Streams

TO: Benjamine B. Roberts, DOE-ID

The Carlsbad Field Office (CBFO) has completed the annual Recertification Audit A-14-01 of the Advanced Mixed Waste Treatment Project's (AMWTP) transuranic (TRU) waste certification activities at the Idaho National Laboratory (INL) conducted October 1-3, 2013. The characterization, certification, and quality assurance elements of the contact-handled (CH) Summary Category Groups (SCGs) S3000 homogeneous solids and S5000 debris waste were determined to be adequate, satisfactorily implemented, and effective.

On August 15, 2013, the CBFO requested that the U.S. Environmental Protection Agency (EPA) approve as a Tier 1 change, the addition of INL generated CH TRU S3000 homogenous solids and S5000 debris wastes to the AMWTP waste streams. The EPA issued the approval on February 11, 2014 (Docket No: A-98-49; II-A4-180).

The audit teams 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)*, the *TRU Waste Acceptance Criteria for the Waste Isolation Pilot Plant (WIPP WAC)*, and Safety Analysis Reports. The audit teams 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 addition of INL generated CH TRU S3000 homogenous solids and S5000 debris wastes to the AMWTP waste streams and grants continued authority at the AMWTP for TRU waste characterization and certification activities as identified in Table 1, Page 4 of this memorandum.



Mr. Benjamine B. Roberts

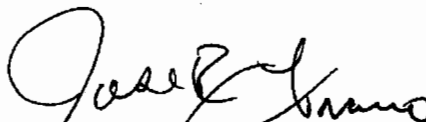
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MAR 18 2014

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 Mr. J.R. Stroble, Director of the Office of National TRU Program, at (575) 234-7313.



Jose R. Franco, Manager
Carlsbad Field Office

Attachments (4)

cc: w/attachments

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K. Guillermo, NWP	ED	S. Percy, Stoller	ED
J. Haschets, NWP	ED	WIPP Operating Record	ED
I. Joo, NWP	ED	CBFO M&RC	
R. Kantrowitz, NWP	ED	*ED denotes electronic distribution	

Table 1 AMWTP Certified Waste Characterization Processes				
Characterization Process ²	CH S3000 Homogenous solids		CH S5000 Debris	
	Newly-generated	Retrievably- Stored	Newly-generated	Retrievably- Stored
Acceptable Knowledge (AK)	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
Nondestructive Assay (NDA)	Approved ¹	Approved	Approved	Approved
Real-time Radiography (RTR)	Approved	Approved	Approved	Approved
WIPP Waste Information System/Waste Data System (WWIS/WDS)	Approved	Approved	Approved	Approved

¹ Nondestructive Assay (NDA) of newly generated S3000 waste is authorized for assaying using ONLY IWAS units Z-211-102 and Z-211-103.

² Characterization Processes in this Table may not be completely listed in Attachment 2.

* EPA Tier 1 approval adding Hanford legacy waste to the existing AMWTP BN-510 Waste Stream dated June 10, 2010, Docket No. A-98-49; II-A4-127.

* EPA Tier 1 approval adding ANL and MFC waste dated February 27, 2013, Docket No. A-98-49; II-A4-169.

* EPA Tier 1 approval adding SDA waste dated July 9, 2013, Docket No. A-98-49; II-A4-174.

* EPA Tier 1 approval adding LANL waste to the supercompacted BN510.2 Waste Stream dated September 16, 2013, Docket No. A-98-49; II-A4-178.

* EPA Tier 1 approval adding the INL Generated CH TRU S3000 Homogenous Solids and S5000 Debris Wastes dated February 11, 2014, Docket No. A-98-49; II-A4-180.

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 have 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 program documents are current and comply with the CBFO requirements*:
 - **MP-TRUW-8.1, Revision 24, Certification Plan for INL Transuranic Waste**, Memorandum CBFO:NTP:JRS:PG:13-0599:UFC 5900.00 approved June 5, 2013; and,
 - **MP-TRUW-8.2, Revision 17, Quality Assurance Project Plan**, Memorandum CBFO:NTP:JRS:PG:13-0603:UFC 5900.00 approved June 11, 2013.

*Note that the program documents listed above are the current revision and may not be the revision that was audited.

- 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 EPA Baseline Inspections).
- AMWTP participated in the following performance demonstration programs (PDPs)*:
 - **NDA PDP – Cycle 20A approval** for analysis of TRU waste drums using the DAS-100 (AM03/AMN3), DAS-101 (AM04/AMN4), DAS-102 (AM01/AMN1), and DAS-103 (AM02/AMN2).
Memorandum CBFO:NTP:MB:CC:13-0641:UFC 5900.00 dated July 8, 2013.

*Note that the PDP cycles listed above are the current revision and may not be the revision that was audited.

- The CBFO conducted recertification audit A-14-01 of the AMWTP on October 1-3, 2013.
 - No Corrective Action Reports (CARs) were issued.
 - The Interim Audit Report was issued on October 24, 2013.
 - The Final Audit Report was issued to NMED on December 9, 2013.
 - The NMED approval of the Final Audit Report was issued on January 27, 2014.

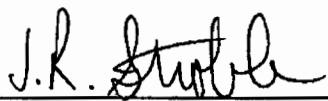
- The CBFO requested a Tier 1 change adding the INL generated CH TRU S3000 homogenous solids and S5000 debris wastes to the AMWTP waste streams on August 15, 2013.
 - The EPA issued approval on February 11, 2014 (Docket No: A-98-49; II-A4-180).

- The EPA issued concurrence on the draft recertification memo on February 27, 2014.

RECOMMENDATION

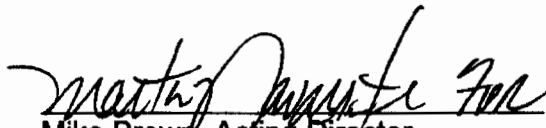
The recommendation to the CBFO Manager is for the AMWTP to include the addition of INL generated CH TRU S3000 homogenous solids and S5000 debris wastes to the AMWTP waste streams into their certified program, and to continue the authority for characterization and certification activities. Attachments 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



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

2-25-14
Date



Mike Brown, Acting Director
Office of Quality Assurance

2-26-14
Date

AMWTP LIST OF CERTIFIED EQUIPMENT/PROCESSES					
WIPP #	Site Equipment #	Equipment Description	Components	Software	NDA Calibrated Range, Operating Range and TMU
NONDESTRUCTIVE ASSAY					
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"> Broad Energy Germanium (BEGe) gamma detectors 122 helium-3 tubes used in passive neutron coincidence counting modality and the active neutron differential die-away modality Cf-252/Cs-137 Add-A-Source (AAS) correction source 14 MeV neutron generator Fast Neutron Detector Packs (FNDP) 	<ul style="list-style-type: none"> NDA 2000 Canberra's Genie 2000 Multi-Group Analysis (MGA) Multi-Group Analysis-Uranium (MGA-U) 	<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"> Broad Energy Germanium (BEGe) gamma detectors 122 helium-3 tubes used in passive neutron coincidence counting modality and the active neutron differential die-away modality Cf-252/Cs-137 Add-A-Source (AAS) correction source 14 MeV neutron generator Fast Neutron Detector Packs (FNDP) 	<ul style="list-style-type: none"> NDA 2000 Canberra's Genie 2000 Multi-Group Analysis (MGA) Multi-Group Analysis-Uranium (MGA-U) 	<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>

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"> • Broad Energy Germanium (BEGe) gamma detectors • 122 helium-3 tubes used in passive neutron coincidence counting modality and the active neutron differential die-away modality • Cf-252/Cs-137 Add-A-Source (AAS) correction source • 14 MeV neutron generator • Fast Neutron Detector Packs (FNDP) 	<ul style="list-style-type: none"> • NDA 2000 • Canberra's Genie 2000 • Multi-Group Analysis (MGA) • Multi-Group Analysis-Uranium (MGA-U) 	<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 Method described in INST-FOI-01	<ul style="list-style-type: none"> • Broad Energy Germanium (BEGe) gamma detectors • 122 helium-3 tubes used in passive neutron coincidence counting modality and the active neutron differential die-away modality • Cf-252/Cs-137 Add-A-Source (AAS) correction source • 14 MeV neutron generator • Fast Neutron Detector Packs (FNDP) 	<ul style="list-style-type: none"> • NDA 2000 • Canberra's Genie 2000 • Multi-Group Analysis (MGA) • Multi-Group Analysis-Uranium (MGA-U) 	<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>
NON-DESTRUCTIVE EXAMINATION					
9RR1	Z-213-101	Real-Time Radiography System Method described in INST-OI-12	RTR System	Waste Tracking System (WTS)	N/A
9RR2	Z-213-106	Real-Time Radiography System Method described in procedure INST-OI-12	RTR System	Waste Tracking System (WTS)	N/A
9RR3	RTR-RTR-1001	Real-Time Radiography System Method described in procedure INST-OI-12	RTR System	Waste Tracking System (WTS)	N/A

VISUAL EXAMINATION					
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
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

AMWTP DEACTIVATED EQUIPMENT and Process LIST			
WIPP #	Site Equipment #	Equipment Description	Date Deactivated
HEADSPACE GAS			
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	4/08
9HG5	Z-221-001B	Consonant Technology Inc. (CTI) –Gas Chromatography/Mass Spectrometry (GC/MS) System	4/08
9HG4	Z-221-001-A	Consonant Technology Inc. (CTI) –Gas Chromatography/Mass Spectrometry (GC/MS) System	3/13
Solids Sampling			
9DC1	Z-250-802	Drum Coring and Sample Collection Glove Box	3/13
VISUAL EXAMINATION			
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	2/12

AMWTP LIST OF CERTIFIED PROCEDURES		
#	Procedure Number	Procedure Title
1.	CI-IDA-NDA-0035	Calibration Verification & Confirmation Procedure for the Integrated Waste Assay (IWAS) at AMWTP, Canberra Industries
2.	CI-IDA-NDA-0055	Total Measurement Uncertainty for the AMWTP Integrated Waste Assay Systems, Canberra Industries
3.	INST-CD&M-11.1.2	Facility Modification Proposal Preparation
4.	INST-CD&M-11.2.1	Software Version Control
5.	INST-CD&M-11.2.2	Software Inventory Classification
6.	INST-CD&M-11.2.3	System Data Change Request
7.	INST-CD&M-11.2.6	Temporary Software Override
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-34	Non-Facility Visual Examination Operations
18.	INST-OI-45	Drum Filter Installation
19.	INST-OI-50	WMF-615 Filter Insertion Operation
20.	INST-TRUW-8.1.1	Drum Assay Post Maintenance Calibration & Verification
21.	LST-RTQP-03-IM	WIPP Training Requirements Implementation Matrix
22.	MP-CD&M-11.1	Change Control
23.	MP-CD&M-11.2	Software Quality Assurance
24.	MP-CMNT-10.5	Measuring and Test Equipment Program
25.	MP-CMNT-10.14	In-Plant and Process Instrumentation Testing Program
26.	MP-DOCS-18.1	Developing Written Work Instructions
27.	MP-DOCS-18.2	Records Management
28.	MP-DOCS-18.3	Developing Management Procedures
29.	MP-DOCS-18.4	Document Control
30.	MP-M&IA-17.1	Management Assessment
31.	MP-M&IA-17.2	Independent Assessment
32.	MP-M&IA-17.3	Quality Assurance Surveillance
33.	MP-PCMT-15.1	Acquisition of Material and Services
34.	MP-PCMT-15.21	Material Management
35.	MP-PRPL-22.1	Production Planning
36.	MP-Q&SI-5.1	Investigation and Root Cause Analysis
37.	MP-Q&SI-5.3	Corrective Action
38.	MP-Q&SI-5.4	Identification of Nonconforming Conditions
39.	MP-Q&SI-5.6	Graded Approach

AMWTP LIST OF CERTIFIED PROCEDURES		
#	Procedure Number	Procedure Title
40.	MP-Q&SI-5.8	Qualifying Supply Chain Inspectors, Auditors, Lead Auditors and Technical Specialists
41.	MP-RTQP-14.4	Personnel Qualification and Certification
42.	MP-RTQP-14.6	Job Analysis
43.	MP-RTQP-14.16	Training Program Evaluation
44.	MP-RTQP-14.19	Training Records Administration
45.	MP-TRUW-8.1	Certification Plan for INL Transuranic Waste
46.	MP-TRUW-8.2	Quality Assurance Project Plan
47.	MP-TRUW-8.5	TRU Waste Certification
48.	MP-TRUW-8.8	Level I Data Validation
49.	MP-TRUW-8.9	Level II Data Validation
50.	MP-TRUW-8.11	Data Reconciliation
51.	MP-TRUW-8.12	Waste Receipt and Shipping Inspection
52.	MP-TRUW-8.13	Collection, Review, and Management of Acceptable Knowledge Documentation
53.	MP-TRUW-8.14	Preparation of Waste Stream Profile Forms
54.	MP-TRUW-8.26	Reports to Management
55.	RPT-TRUW-03	Drum Assay Technical Review Report

AMWTP LIST OF CANCELLED and DEACTIVATED PROCEDURES			
#	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
26.	INST-OI-16	Drum Coring Operations	5/2/13
27.	INST-OI-43	HGAS Sampling and Analysis Operations	5/6/13
28.	INST-OI-73	Manual Drum Coring Operations	5/2/13
29.	INST-OI-75	Container-in-Container Sampling	5/2/13
30.	INST-OI-81	Real-Time Radiography Operations (For WIPP Certification Boxes)	3/4/13
31.	MP-TRUW-8.17	Co-located Core Sampling Control Charts	6/10/13
32.	MP-TRUW-8.25	Random Selection of Containers for Headspace Gas and Solids Sampling Analysis	6/10/13
33.	MP-TRUW-8.34	WIPP Sample Transfer	6/10/13

**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 February 2014)**

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 the Mound Site; Rocky Flats Environmental Technology Site; Battelle Columbus Laboratories; Bettis Atomic Power Laboratory; Argonne National Laboratory-East; Los Alamos National Laboratory debris; and Idaho National Laboratory, including the Materials and Fuel Complex and pre-1980 INL-exhumed Subsurface Disposal Area waste</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"> • Implementation of procedures and related documentation that formalize NDA-AK communication requirements • AK accuracy reports (annually, at a minimum) • 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 • New and revised AKSRs and generator-site-specific AK documents (e.g., RPT-TRUW-79, RPT-TRUW-89, RPT-TRUW-06, RPT-TRUW-83) • Item description code inclusion memoranda • The load management status of approved waste streams • Site procedures requiring CBFO approval • Any waste identified outside of the waste profiles included in the 2002 Transuranic Waste Baseline Inventory Report, when applicable • RPT-TRUW-05, RPT-TRUW-07 and RPT-TRUW-12
Nondestructive Assay	<p>New equipment or substantive physical modifications to approved equipment**</p> <p>Extension of or changes to the approved calibration range for approved equipment, including recalibration of EPA-approved equipment</p>	<p>Notification to EPA upon substantive modification** to:</p> <ul style="list-style-type: none"> • Site procedures requiring CBFO approval • Software for approved equipment • Operating ranges upon CBFO approval
Real-Time Radiography	None	<p>Notification to EPA upon:</p> <ul style="list-style-type: none"> • Substantive modification** to site procedures requiring CBFO approval • New equipment or substantive physical modifications** to approved equipment
Visual Examination and Visual Examination Technique	Changes in the vendor performing visual examination or visual examination technique	<p>Notification to EPA upon:</p> <ul style="list-style-type: none"> • Substantive modification** to site procedures requiring CBFO approval • Addition of a new waste category • Addition of a new procedure or site equipment identifier

WIPP Waste Data System	Changes to Waste Data System algorithms specific to load management	Notification to EPA upon substantive modification** to: <ul style="list-style-type: none"> • Site procedures requiring CBFO approval • The load management status of approved waste streams
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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 affect AMWTP’s CH waste characterization processes or documentation of them, excluding changes that are solely related to the 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. EPA may request copies of new references that DOE adds during a document revision.