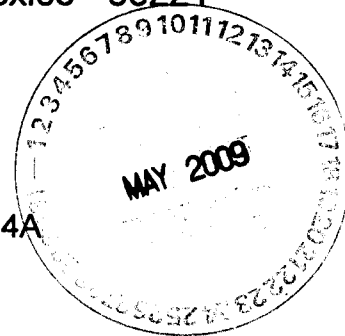




United States Government

Department of Energy

memorandum

 Carlsbad Field Office
 Carlsbad, New Mexico 88221


DATE: MAY - 9 2011

REPLY TO
ATTN OF: CBFO:NTP:JRS:GS:11-0286:UFC 5900.00SUBJECT: Certification Expansion to A-10-16 and A-10-17 at the INL-CCP Adding Lot 4A
Containers to Waste Stream ID-HFEF-S5400-RHTO: Mark L. Searle, DOE-ID
M. Farok Sharif, WTS

The Carlsbad Field Office (CBFO) is expanding the Idaho National Laboratory-Central Characterization Project (INL-CCP) Contact-Handled (CH) and Remote-Handled (RH) Certification Memorandum CBFO:NTP:JRS:GS:10-2013:UFC 5900.00 dated November 19, 2010. This expansion reflects the U.S. Environmental Protection Agency (EPA) inspection report, DOCKET NO: A-98-49; II-A4-145, which was approved on March 23, 2011 as a Tier 1 change to include the Lot 4A containers in the existing RH Transuranic (TRU) debris Waste Stream ID-HFEF-S5400-RH.

The CBFO conducted the Recertification Audit A-10-17 for the INL Analytical Laboratory and Audit A-10-16 of the CCP CH and RH TRU waste program deployed at the INL-CCP. The Audits were conducted on June 8-10, 2010. The characterization activities were determined to be adequate, satisfactorily implemented, and effective.

EPA submitted their approval of the CBFO Tier request of RH TRU solids Waste Stream ID-RTC-S3000 on November 1, 2010, EPA DOCKET NO: A-98-49; II-A4-137. Surveillance S-10-22 was conducted to evaluate the visual examination (VE) characterization process for the RH S3000 (solids) summary category group on March 3, 2010. The Surveillance Report was issued on March 11, 2010.

EPA submitted their approval on the CBFO Tier request of the RH TRU debris Waste Stream IN-ID-NRF-153 on November 1, 2010, EPA DOCKET NO: A-98-49; II-A4-135.

The CBFO conducted Surveillance S-10-33 of the INL-CCP Headspace Gas Waste Sampling processes on July 27, 2010. The CCP Quality Assurance Program (QAP) was audited during Audit A-10-11 on March 2-4, 2010 in Carlsbad, New Mexico. CCP CH and RH transportation activities were evaluated in Carlsbad, New Mexico on September 21-23, 2010 during Audit A-10-25.



M. Searle/M.F. Sharif

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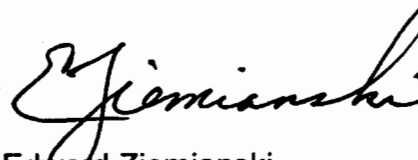
The audit team determined that the INL-CCP TRU programs were in compliance with the *Waste Analysis Plan (WAP)* of the Waste Isolation Pilot Plant (WIPP) *Hazardous Waste Facility Permit (HWFP)*, the *Quality Assurance Program Document (QAPD)*, the *TRU Waste Acceptance Criteria for the Waste Isolation Pilot Plant (WIPP WAC)*, and the *CH and RH Transuranic Authorized Methods for Payload Control (TRAMPAC)*, *RH TRU 72B Safety Analysis Report (SAR)*, *TRUPACT-II Certification of Compliance*, and *Remote-Handled TRU Waste Characterization Program Implementation Plan (WCPIP)*. The audit team determined that the procedures/documents were effectively implemented.

Based on the results of Audits A-10-16, A-10-17, A-10-11, and A-10-25, Surveillances S-10-33 and S-10-22, and conditions and limitations provided by the New Mexico Environment Department (NMED) and the U.S. EPA, the CBFO is authorizing INL-CCP to add the Lot 4A containers on the existing RH TRU debris Waste Stream ID-HFEF-S5400-RH, and include them into their certified program and continue authority at the INL-CCP for characterization, certification, and transportation activities for CH and RH solids (S3000), soils/gravel (S4000), and debris (S5000) waste as identified in Table 1, Pages 4 and 5 of this memorandum.

TRU waste characterization, certification, or transportation 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 INL-CCP certification program status;
- *Attachment 2* contains the equipment certified at the site;
- *Attachment 3* contains the certified CCP procedures; and,
- *Attachment 4* specific INL-CCP waste characterization process elements that must be reported. These process elements are identified as Tier 1 changes and Tier 2 changes.

The INL-CCP shall not ship for disposal at WIPP any wastes affected by a Tier 1 process element change without prior CBFO approval, and INL-CCP shall report Tier 2 changes to CBFO on a quarterly basis. INL-CCP procedures shall be revised as necessary to incorporate this reporting and approval process.



Edward Ziemianski
Acting Manager

Attachments (4)

M. Searle/M.F. Sharif

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cc: w/attachments

O. Vincent, CBFO	*ED
J. R. Stroble, CBFO	ED
M. Brown, CBFO	ED
N. Castaneda, CBFO	ED
C. Fesmire, CBFO	ED
D. Miehl, CBFO	ED
M. Navarrete, CBFO	ED
G. Basabilvazo, CBFO	ED
S. McCauslin, CBFO	ED
J. Wells, DOE-ID	ED
J. Cooper, DOE-ID	ED
W. Lattin, DOE-ID	ED
E. Schweinsberg, ID	ED
J. Malmo, ID	ED
T. Peake, EPA	ED
R. Joglekar, EPA	ED
E. Feltcorn, EPA	ED
R. Lee, EPA	ED
S. Holmes, NMED	ED
J. Kieling, NMED	ED
M. Percy, WTS	ED
L. Porter, WTS	ED
I. Quintana, WTS	ED
J. Vernon, WTS	ED
C. Kirkes, WTS	ED
J. Harvill, WTS	ED
D. Speed, WTS	ED
C. Luoma, WTS	ED
R. Chatfield, WTS	ED
D. Hofer, WTS	ED
M. Strum, WTS	ED
A. Johnson, WTS	ED
B. Nieman, WTS	ED
D. Standiford, WTS	ED
R. Allen, CTAC	ED
P. Martinez, CTAC	ED
P. Y. Martinez, CTAC	ED
D. Sellmer, CTAC	ED
P. Gilbert, LANL-CO	ED
G. Lyshik, LANL-CO	ED
S. Percy, SM Stoller	ED

WIPP Operating Record

CBFO M&RC

*ED denotes electronic distribution

CENTRAL CHARACTERIZATION PROJECT AT IDAHO NATIONAL LABORATORY CERTIFICATION PROGRAM STATUS

The CBFO Director of the Office of the National TRU Program and the CBFO Quality Assurance Manager have evaluated the documentation supporting the compliance of the Central Characterization Project (CCP) TRU waste program deployed at the Idaho National Laboratory (INL). Attachments 2 and 3 provide complete lists of certified processes, procedures, documents, and systems deployed at the INL-CCP. Attachment 4 is the CH and RH Tiering of TRU Waste Characterization Processes implemented by the CCP at INL.

PROGRAM STATUS

- All program elements remain complete.
- The following site documents are current and demonstrate how the CCP complies with the CBFO requirements during A-10-16 and A-10-17.
 - **QAPjP – CCP-PO-001, Revision 17 - CCP Transuranic Waste Characterization Quality Assurance Project Plan,**
Approved June 22, 2009 – CBFO:NTP:CF:GS:09-1029:UFC 5900.00
 - **WCP - CCP-PO-002, Revision 23 - CCP Transuranic Waste Certification Plan,**
QAP - Section 4.0 of CCP-PO-002,
Approved March 31, 2010 – CBFO:NTP:NC:GS:10-0792:UFC 5900.00
 - **CCP CH-TRAMPAC – CCP-PO-003, Revision 11 - CCP Transuranic Authorized Method for Payload Control (CCP CH-TRAMPAC)**
Approved June 3, 2009 – CBFO:NTP:CF:GS:09-0987:UFC: 5900.00
 - **RH-TRAMPAC – CCP-PO-505, Revision 0 - CCP Remote-Handled Transuranic Waste Authorized Methods for Payload Control (CCP RH-TRAMPAC)**
Approved September 20, 2006 - CBFO:NTP:CF:GS:06-1355:UFC 5900.00
- Certified Systems - see Attachment 2 for the complete list of certified systems used by the CCP at the INL.
- Standard operating procedures - see Attachment 3 for the complete list of certified CCP procedures used at the INL.
- Tiering of TRU Waste Characterization Processes implemented by CCP at INL (based on EPA Baseline Inspections) - see Attachment 4.


- CCP performance demonstration programs (PDPs) for Audits A-10-16 and A-10-17:
 - **NDA PDP** – Cycle B9A approving radioassay using the SuperHENC for SWBs and 100-gallon drums (IN05/INN2).
Memo CBFO:NTP:MRB:GS:09-2057:UFC:5900.00 dated December 14, 2009.
 - **NDA PDP** – Cycle 17A approving for analysis of TRU waste drums using the SGRS (IN04/ING3), the WAGS (IN03/ING2), using the SuperHENC (IN05/INN2), except for sludge-type or other uncalibrated-for matrix type drums; using the HENC (IN01/INN1).
Memo CBFO:NTP:MRB:GS:10-1457:UFC 5822.00 dated July 26, 2010.
 - **HSG PDP** – Cycle 24A approving for analysis of VOCs in headspace gas samples using the GC/MS and the GC for methanol (GCMS-F, GCMS-H, GC-1, GC-2 and GC-7).
Memo CBFO:NTP:MRB:GS:10-0864:UFC 5822.00 dated May 27, 2010.
 - **RCRA PDP** – Cycle 17A (INL CCP)
Memo CBFO:NTP:MRB:GS:10-0773:UFC 5822.00 dated March 10, 2010
approving:
 - **Approved for the analysis of metals** in solidified waste samples by the methods CCP-TP-183 and CCP-TP-182 (for all metals except mercury) and CCP-TP-181 (for mercury).
 - **Approved for the analysis of aqueous extractable VOCs** (including acetone, ethyl ether, methyl ethyl ketone, and pyridine) in solidified waste samples by the method identified as CCP-TP-186.
 - **Approved for the analysis of purgeable VOCs** in solidified waste samples by the method identified as CCP-TP-184.
 - **Approved for the analysis of SVOCs** (including 1,4-dichlorobenzene, and 1,2-dichlorobenzene) in solidified waste samples by the methods identified as CCP-TP-187 and CCP-TP-185.
- CBFO conducted a recertification Audit A-10-16 of the INL CCP on June 8-10, 2010.
 - CAR 10-036 was issued on June 18, 2010 and closed on July 29, 2010.
 - Interim Audit Report was issued on June 28, 2010.
 - Final Audit Report was issued to NMED on September 9, 2010.
 - NMED issued approval on October 20, 2010.
- CBFO conducted a recertification Audit A-10-17 of the INL Analytical Laboratories CCP on June 8-10, 2010.
 - Interim and Final Audit Report was issued to NMED on July 16, 2010.
 - NMED issued approval on August 30, 2010.

- CBFO requested a Tier 1 change adding RH TRU solids Waste Streams ID-RTC-S3000 and IN-ID-NRF-153 on February 8, 2010.
 - EPA approvals issued on November 1, 2010.
- Surveillance S-10-22 was conducted to evaluate the visual examination (VE) characterization process performed by the INL/CCP for waste stream ID-RTC-S3000 on March 3, 2010.
 - The Surveillance Report was issued on March 11, 2010.
- CBFO conducted a Quality Assurance Program Audit A-10-11 on March 2-4, 2010.
 - Audit Report was issued on March 16, 2010.
- CBFO conducted a Surveillance S-10-33 of the INL CCP Headspace Gas Waste Sampling processes on July 27, 2010.
 - Surveillance Report was issued on August 20, 2010.
- CBFO conducted CH and RH Transportation Audit A-09-27 on September 29-October 1, 2009.
 - Audit Report was issued on October 14, 2009.
- EPA CBFO requested a Tier 1 change adding Lot 4A containers to existing RH TRU debris Waste Stream ID-HFEF-S5400-RH on January 31, 2011.
 - EPA approval issued on March 23, 2011.
- EPA concurred with this CBFO expansion on April 21, 2011.

RECOMMENDATION

The recommendation to the CBFO Manager is to for CCP to include the Lot 4A containers to the existing RH TRU debris Waste Stream ID-HFEF-S5400-RH and to continue the CCP authority for characterization, certification, and transportation of contact-handled (CH) and remote-handled (RH) homogeneous solids (S3000), soils/gravel (S4000), debris (S5000) waste at the INL-CCP. Attachments 2, 3, and 4 list the systems and procedures that constitute the bounds of this authority.

CONCURRENCE



Dennis Miehl, Acting Director
Quality Assurance

4-20-11

Date



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

4-18-11

Date

LIST OF CERTIFIED EQUIPMENT AND PROCESSES AT INL/CCP					
WIPP WWIS #	Site Equipment # or Title	Description	Components	Software	NDA Calibrated and TMU
Non-Destructive Assay (NDA)					
14SHC1	SuperHENC	Super High Efficiency Neutron Counter (SuperHENC) Operating Procedure CCP-TP-146 SWBs, 55 gallon drums, 100 gallon drums	<ul style="list-style-type: none"> • HPGe Detector • (260) ³He Tubes • Neutron Assay Chamber • Gamma Assay Area with rotator • Cf-252 add-a-source assembly 	<ul style="list-style-type: none"> • SUPRHENC.EXE • PC-FRAM (fixed energy response-function analysis with multiple efficiencies) • MAESTRO • Neutron Gamma Integration (NGI) • SuperHENC_QC.xls 	<p>The calibration of the SuperHENC is documented in BII-5221-SRF-001, "SUPERHENC RFETS Calibration Documentation Package" and BII-5221-CVR-001, "Calibration and Validation Report SuperHENC Mobile Assay System."</p> <p>The TMU for the SuperHENC is documented in BII-5221-CVR-001, Section 4.11.</p>
14HENC1	CCP-HENC-01	CCP High Efficiency Neutron Counter combined neutron and gamma system Operating Procedure CCP-TP-107 55 gallon drums	<ul style="list-style-type: none"> • (113) ³He neutron detectors • (1) Broad range HPGe detector • Shielded assay chamber • Mechanical conveyor and turntable assembly for drum handling • Cf-252 add-a-source assembly 	<ul style="list-style-type: none"> • NDA 2000, Version 4.0 (MGA.exe and MGA-U.exe are tracked as part of NDA 2000) • Genie 2000, Version 3.0 	<p>The calibration of the HENC is documented in CCP-INL-HENC-001c, "CCP HENC Supplemental Calibration, Confirmation, and Verification Report."</p> <p>The TMU for the HENC is documented in CCP-INL-HENC-0002, Revision 1, "Total Measurement Uncertainty for the CCP High Efficiency Neutron Counter."</p>
14WAGS1	WAGS	Waste Assay Gamma Spectrometer (WAGS) Quantitative gamma acquisition system with transmission matrix corrections, multi curve density and gamma isotopic capabilities. Operating Procedure CCP-TP-019 55 gallon drums	<ul style="list-style-type: none"> • 6 BeGe detectors • Shielded Assay Chamber • 3 Ba-133 transmission sources • 6 Digital Spectrum Analyzers 1000 • Pulser 	<ul style="list-style-type: none"> • NDA 2000, Version 4.0 (MGA.exe and MGA-U.exe are tracked as part of NDA 2000) • Genie 2000, Version 3.0 	<p>Calibration for the WAGS is discussed in CCP-INL-WAGS-001, Revision 1. For the WAGS the calibrated range and operational ranges are synonymous. CCP-INL-WAGS-08-002, "Waste Assay Gamma Spectrometer Multi-Curve Efficiency Calibration Extension Addendum" extends the density range.</p> <p>The TMU for the WAGS is documented in CCP-INL-WAGS-002, "Total Measurement Uncertainty for the WAGS System."</p>
14SGRS1	SGRS	Stored Waste Examination Pilot Plant (SWEPP) Gamma Ray Spectrometer (SGRS) Quantitative gamma acquisition system with multi-curve density and gamma isotopic capabilities. Operating Procedure CCP-TP-115 55 gallon drums	<ul style="list-style-type: none"> • 4 BeGe detectors • Shielded Assay Chamber • 1 Pulser • 4 Digital Spectrum Analyzers 	<ul style="list-style-type: none"> • NDA 2000, Version 4.0 (MGA.exe and MGA-U.exe are tracked as part of NDA 2000) • Genie 2000, Version 3.0 	<p>The calibration for the SGRS is discussed in CCP-INL-SGRS-001, Revision 1. For the SGRS the calibrated range and operational ranges are synonymous.</p> <p>The TMU for the SGRS is documented in CCP-INL-SGRS-0002, "Total Measurement Uncertainty for the SGRS System."</p>

LIST OF CERTIFIED EQUIPMENT AND PROCESSES AT INL/CCP					
WIPP WWIS #	Site Equipment # or Title	Description	Components	Software	NDA Calibrated and TMU
Dose-to-Curie (DTC)					
14DTC1	Dose-to-Curie	Radiological characterization process using dose-to-curie (DTC) and modeling-derived scaling factors for assigning radionuclide values to RH waste streams for which the scaling factors are applicable, as described in the waste stream specific radiological reports. Dose-rate fractional contribution of Cs-137 and Co-60 using OSPREY™ La ₃ Br(Ce) gamma detector Procedure CCP-TP-504	As identified in CCP-TP-504	As identified in CCP-TP-504	N/A
Non-Destructive Examination (NDE)					
14RR2	MCS RTR-5	Real-time Radiography Mobile Characterization System's RTR-5 [built by VJ Technologies] Procedure CCP-TP-053	<ul style="list-style-type: none"> • Shielded x-ray enclosure with a hydraulic drum loading door and manually opened personnel door • Conveyer cart including drum manipulation equipment • X-ray imaging system including x-ray tube, image intensifier, and video camera • Video/audio recording equipment • Mobile platform 	N/A	N/A
14RRH1	RTR-RTR-0659	Real-time Radiography Characterization System [built by VJ Technologies] Procedure CCP-TP-508	<ul style="list-style-type: none"> • X-ray imaging system including x-ray tube, image intensifier, and video camera • Video/audio recording equipment • Fixed platform 	N/A	N/A

Gas Generation Testing (GGT)					
14GG1	MGSS Unit/Cart 1 (GC-14B)	Mobile Gas Generation Testing Sampling System Procedures CCP-TP-083	<ul style="list-style-type: none"> • Cart including Gas Chromatograph 	<ul style="list-style-type: none"> • Shimadzu Class-VP 7.2.1 Client Software • GGTP Data Calculation 	N/A
14GG2	MGSS Unit/Cart 2 (GC-17A)	Mobile Gas Generation Testing Sampling System Procedures CCP-TP-083	<ul style="list-style-type: none"> • Cart including Gas Chromatograph 	<ul style="list-style-type: none"> • Shimadzu Class-VP 7.2.1 Client Software • GGTP Data Calculation 	N/A
Visual Examination (VE)					
14RHVE1	Audio/video review/VE Technique	Visual Examination Technique (VET) to characterize RH TRU SCGs S3000, S4000, and S5000 waste. Procedure CCP-TP-500	N/A	N/A	N/A
14VE1	ARP Packaging Stations	Visual Examination of waste processed through the Accelerated Retrieval Project (ARP). Procedure CCP-TP-006	N/A	N/A	N/A

LIST OF CERTIFIED EQUIPMENT AND PROCESSES AT THE INL/CCP ANALYTICAL LABORATORIES

WIPP WWIS #	Site Equipment # or Title	Description	Components	Software	NDA Calibrated and TMU
Headspace Gas (HGS)					
8HSG2	HSG	SUMMA Sampling process on selected waste containers from waste stream lots.	As identified in CCP-TP- 093	As identified in CCP-TP-093	N/A
12HE4	GC/MS-H	Environmental Chemistry Lab (ECL) - Headspace gas volatile organic compounds specified in procedure CCP-TP-175 PDP ID - GC/MS-H	<ul style="list-style-type: none"> GC/MS (Method described in procedure CCP-TP-175) 	<ul style="list-style-type: none"> HP Enviroquant Chemstation 	N/A
12HE5	GC-1	Environmental Chemistry Lab (ECL) - Headspace gas volatile organic compounds specified in procedure CCP-TP-173 PDP ID - GC-1	<ul style="list-style-type: none"> GC-FID (Method described in CCP-TP-173) 	<ul style="list-style-type: none"> HP Chemstation 	N/A
12HE6	GC-2	Environmental Chemistry Lab (ECL) - Headspace gas volatile organic compounds specified in procedure CCP-TP-173 PDP ID - GC-2	<ul style="list-style-type: none"> GC-FID (Method described in CCP-TP-173) 	<ul style="list-style-type: none"> HP Chemstation 	N/A
12HE9	GC-7	Environmental Chemistry Lab (ECL) - Headspace gas volatile organic compounds specified in procedure CCP-TP-173 PDP ID - GC-7	<ul style="list-style-type: none"> GC-FID (Method described in CCP-TP-173) 	<ul style="list-style-type: none"> Agilent Chemstation 	N/A
Solids					
12HA8	VOA-4	Analytical Laboratory Department (ALD) - Total purgable volatile organic compound analysis specified in procedure CCP-TP-184	<ul style="list-style-type: none"> GC/MS (Method described in CCP-TP-184) 	<ul style="list-style-type: none"> Agilent Chemstation 	N/A
12HA3	GC-1	Analytical Laboratory Department (ALD) - Total non-halogenated volatile organic compounds specified in procedure CCP-TP-186	<ul style="list-style-type: none"> GC-FID (Method described in CCP-TP-186) 	<ul style="list-style-type: none"> Agilent Chemstation 	N/A
12HA14	GC-6	Analytical Laboratory Department (ALD) - Total non-halogenated volatile organic compounds specified in procedure CCP-TP-186	<ul style="list-style-type: none"> GC-FID (Method described in CCP-TP-186) 	<ul style="list-style-type: none"> Agilent Chemstation 	N/A
12HA10	SV-6	Analytical Laboratory Department (ALD) - Total semi-volatile organic compounds specified in procedure CCP-TP-185	<ul style="list-style-type: none"> GC/MS (Method described in CCP-TP-185) 	<ul style="list-style-type: none"> Agilent ChemStation 	N/A
12HA12	SV-8	Analytical Laboratory Department (ALD) - Total semi-volatile organic compounds specified in procedure CCP-TP-185	<ul style="list-style-type: none"> GC/MS (Method described in CCP-TP-185) 	<ul style="list-style-type: none"> Agilent ChemStation 	N/A

LIST OF CERTIFIED EQUIPMENT AND PROCESSES AT THE INL/CCP ANALYTICAL LABORATORIES					
WIPP WWIS #	Site Equipment # or Title	Description	Components	Software	NDA Calibrated and TMU
12HA13	VOA-5	Analytical Laboratory Department (ALD) – Total purgable volatile organic compound analysis specified in procedure CCP-TP-184	<ul style="list-style-type: none"> GC/MS (Method described in CCP-TP-184) 	<ul style="list-style-type: none"> Agilent Chemstation 	N/A
12HM11	ICP-7	Analytical Laboratory Department (ALD) – Total metals analysis specified in procedure CCP-TP-182	<ul style="list-style-type: none"> Total metals analysis (ICP-AES) specified in procedure CCP-TP-182 	<ul style="list-style-type: none"> J-YESS 	N/A
12HM13	ICP-8	Analytical Laboratory Department (ALD) – Total metals analysis specified in procedure CCP-TP-182	<ul style="list-style-type: none"> Total metals analysis (ICP-AES) specified in procedure CCP-TP-182 	<ul style="list-style-type: none"> J-YESS 	N/A
12HM8	CVHG-2	Analytical Laboratory Department (ALD) – Total metals (Hg) analysis specified in procedure CCP-TP-181	<ul style="list-style-type: none"> Total metals (Hg) analysis (CVAA) specified in procedure CCP-TP-181 	<ul style="list-style-type: none"> AA WinLab Analyst 	N/A
12HM12	CVHG-3	Analytical Laboratory Department (ALD) – Total metals (Hg) analysis specified in procedure CCP-TP-181	<ul style="list-style-type: none"> Total metals (Hg) analysis (CVAA) specified in procedure CCP-TP-181 	<ul style="list-style-type: none"> AA WinLab Analyst 	N/A
12HM9	MW-3	Analytical Laboratory Department (ALD) - Total metals digestion specified in procedure CCP-TP-183	<ul style="list-style-type: none"> Microwave digester - Method described in procedure CCP-TP-183 	<ul style="list-style-type: none"> N/A 	N/A
12HM10	MW-4	Analytical Laboratory Department (ALD) – Total metals digestion specified in procedure CCP-TP-183	<ul style="list-style-type: none"> Microwave digester - Method described in procedure CCP-TP-183 	<ul style="list-style-type: none"> N/A 	N/A

List of Deactivated Equipment			
WIPP #	Site Equipment #	Site Description	Date Deactivated
12HM2	ID 356094	INTEC Lab – Total metals digestion specified in procedure ACMM-8909 (Replaced by 12HM9)	May 2005
12HM1	ID322554	INTEC Lab – Total metals digestion specified in procedure ACMM-8909 (Replaced by 12HM10)	November 2005
14RR1	MCS RTR-2	Real-Time Radiography Mobile Characterization System RTR-2 [built by VJ Technologies] – 55-gallon drums – specified in procedure CCP-TP-102	December 2005
12HA5	SV-2	INTEC Lab – Total semi-volatile organic compounds specified in procedure ACMM-9270	March 2006
12HA11	SV-7	INTEC Lab – Total semi-volatile organic compounds specified in procedure ACMM-9270	June 2006
12HA6	SV-3	INTEC Lab – Total semi-volatile organic compounds specified in procedure ACMM-9270	June 2006
12SS1	W0096-0563-EC-00	Materials and Fuel Complex – Core sampling as specified in procedure HFEF-OI-6910	June 2006
12SS2	W0096-0563-EC-00	Materials and Fuel Complex – Small Container Sampling as specified in procedure HFEF-OI-6923	June 2006
12HE7	GC-5	Environmental Chemistry Lab - Headspace gas hydrogen and methane analysis specified in procedure ACMM-9925	May 2007
12HE8	GC-6	Environmental Chemistry Lab - Headspace gas hydrogen and methane analysis specified in procedure ACMM-9925	May 2007
14TGS1	CCP-TGS-1	CCP Tomographic Gamma Scanner, Tomographic gamma imaging system mounted in transportation container, specified in procedure CCP-TP-097.	March 2008
12HE1	GC/MS-E	ECL Headspace gas volatile organic compounds specified in procedure CCP-TP-175	April 2008
12HE3	GC/MS-G	ECL Headspace gas volatile organic compounds specified in procedure CCP-TP-175	April 2008
12HA9	GC-5	Analytical Laboratory Department (ALD) – Total non-halogenated volatile organic compounds specified in procedure CCP-TP-186, GC-FID (Method described in CCP-TP-186)	September 2009
12HM4	ICP-5	Analytical Laboratory Department (ALD) – Total metals analysis specified in procedure CCP-TP-182, Total metals analysis (ICP-AES) specified in procedure CCP-TP-182	September 2009
12HM7	CVHG-1	Analytical Laboratory Department (ALD) – Total metals (Hg) analysis specified in procedure CCP-TP-181	September 2009
12HA1	VOA-1	Analytical Laboratory Department (ALD) – Total purgable volatile organic compound analysis specified in procedure CCP-TP-184, GC/MS (Method described in CCP-TP-184), Finnigan Magnum	September 2009
12HM3	ICP-4	Analytical Laboratory Department (ALD) – Total metals analysis specified in procedure CCP-TP-182	October 2009
12HE2	GC/MS-F	Environmental Chemistry Lab (ECL) – Headspace gas Volatile organic compounds specified in procedure CCP-TP-175	May 2010