

United States Government

 DEPARTMENT OF ENERGY
Department of Energy

memorandum

Carlsbad Field Office
Carlsbad, New Mexico 88221

DATE: August 29, 2002

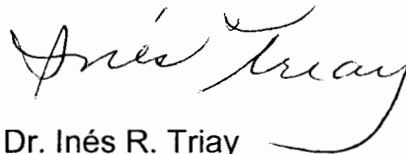
REPLY TO
ATTN OF: CBFO:NTP:RMK:VW:02-2799:UFC:5822

SUBJECT: Expansion of RFETS Certification Authority to Include the Use of the Multipurpose Crate Counter and Mobile Real-Time Radiography System

TO: Eugene C. Schmitt, Manager, Rocky Flats Field Office

The Carlsbad Field Office (CBFO) has completed the evaluation of the Rocky Flats Environmental Technology Site's (RFETS) characterization activities pertaining to the Multi-Purpose Crate Counter (MPCC) and the mobile real-time radiography (RTR) system. Audit A-02-19 was conducted June 4-6, 2002 to evaluate the technical and quality assurance programs for compliance with the Waste Analysis Plan (WAP) of the WIPP *Hazardous Waste Facility Permit* (HWFP), the *Quality Assurance Program Document* (QAPD), *Waste Acceptance Criteria for the Waste Isolation Pilot Plant* (WIPP WAC), and other CBFO requirements and standards. The technical and QA programs were found to be in compliance.

Previous RFETS certification authorities issued on May 24, 2001 (annual recertification for retrievably-stored debris waste), June 5, 2001 (homogeneous solid waste), December 5, 2001 (building 440 loading facility), April 5, 2002 (new NDA processes), April 8, 2002 (online headspace gas), and August 20, 2002 (newly generated waste) is therefore expanded to include the MPCC for nondestructive assay of contact-handled (CH) debris and homogeneous solids and the mobile RTR system for CH debris and homogeneous solid waste characterization on non lead lined drums. See attachments 2 and 3 for complete lists of currently certified procedures, documents, and systems. TRU waste characterization, certification, or transportation using significantly revised or new processes and systems must be evaluated by the CBFO prior to their implementation.



Dr. Inés R. Triay
Manager

Attachments

020849



Eugene C. Schmitt

-2-

August 29, 2002

cc: w/attachments
T. Harms, DOE-HQ
K. Watson, CBFO
R. Knerr, CBFO
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E. Feltcorn, EPA
S. Zappe, NMED
P. Roush, WTS Operating Record
L. Greene, WTS
J. Bennett, WTS
D. Standiford, WTS
M. Strum, WTS
C. Riggs, CTAC
T. Bowden, CTAC
CBFO Mailroom



RFETS CERTIFICATION PROGRAM STATUS

The CBFO Office of the National TRU Program Manager and Quality Assurance Manager have evaluated the documentation supporting the compliance and/or continued compliance of RFETS TRU waste programs. The recommendation to the CBFO Manager is that the previously issued certification authorities be expanded to include the Multi-Purpose Crate Counter (MPCC) for nondestructive assay of retrievably stored, repackaged, and newly generated debris and homogeneous solids. It is also recommended that certification authorities be expanded to include the use of the mobile real-time radiography (RTR) system for non-lead lined drums for retrievably stored debris and homogeneous solids. Attachments 2 and 3 provide complete lists of all currently certified procedures and systems, including those evaluated during audit A-02-19. Procedures specific to audit A-02-19 are listed in the audit report.

The following processes are currently approved at RFETS for characterizing retrievably stored, repackaged, and newly generated debris and homogeneous solids contact-handled waste: acceptable knowledge; headspace gas sampling and analysis; non-destructive assay; real-time radiography; solids sampling and analysis; transportation; visual examination (quality control check on visual examination); and visual examination technique.

STATUS

- All program elements remain complete.
- The following RFETS required site documents have been revised, approved, and are current that demonstrates how the site complies with the CBFO upper-tier documents and other CBFO requirements.
 - ❑ QAPjP – *Rocky Flats Environmental Technology Site TRU Waste Characterization Program Quality Assurance Project Plan*, 95-QAPjP-0050, Revision 6
 - ❑ GGTP QAPjP - *Rocky Flats Environmental Technology Site Gas Generation Testing Program Quality Assurance Project Plan*, RS-020-001, Revision 2
 - ❑ WCP – *Rocky Flats Environmental Technology Site Transuranic Waste Management Manual*, 1-MAN-008-WM-001, Revision 5
 - ❑ QAP – (Section 2.2.2 of WCP)
 - ❑ TRAMPAC and QA Plan – (Section 2.2.7 of WCP)
 - ❑ Packaging QA Plan – (Section 2.2.8 of WCP)
 - ❑ Standard operating procedures (see attachment 3 for complete procedure list)
- RFETS participation in the following performance demonstration programs (PDPs):
 - ❑ **RCRA PDP** -- Participation was satisfactory in cycle 9A (Memo CBFO:NTP:MRB:VW:02-2640 dated June 19, 2002)
 - ❑ **NDA PDP SWBs** -- Participation was satisfactory in cycle B1A for SWBs (Memo CBFO:NTP:MRB:VW:01-1079 dated July 30, 2001)
 - ❑ **NDA PDP Drums** -- Participation was satisfactory in cycle 8A (Memo CBFO:NTP:MRB:VW:01-1781 dated November 20, 2001)
 - ❑ **HSG PDP** -- Participation was satisfactory in cycle 16A (Memo CBFO:NTP:MRB:VW:02-2236 dated April 17, 2002)
- CBFO completed audit A-02-19 on June 6, 2002 and NMED approved it on August 8, 2002.
- EPA approval and Inspection Report (RFETS-6.02-8) dated August 8, 2002 approved the use of the mobile RTR system for non-lead lined drums and nondestructive assay using the

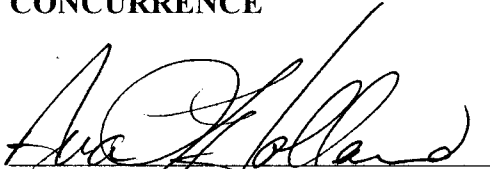
MPCC. AK for newly generated remediated waste was determined to be insufficient and therefore remediated waste is restricted from disposal at WIPP until such time that EPA re-evaluates and issues approval. (Report

- There are no open CARs associated with A-02-19.

RECOMMENDATION

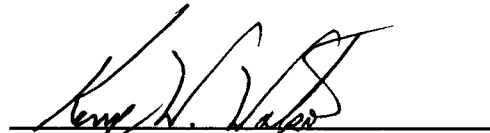
The recommendation to the CBFO Manager is to expand the RFETS transportation and waste certification authority to include characterization activities for newly generated waste. It is recommended that this additional authority be limited to the processes audited during audit A-02-19. Attachments 2 and 3 are lists of systems and procedures that constitute the bounds of the RFETS transportation and waste certification authority.

CONCURRENCE



Ms. Ava L. Holland
CBFO Quality Assurance Manager

8/26/02
Date



Mr. Kerry W. Watson
CBFO Assistant Manager
National TRU Program

8/28/02
Date

RFETS CERTIFIED SYSTEMS

WIPP #	Site Equipment #	Site Description	Components	Software
Headspace Gas				
5HG1		Headspace Gas GC/MS	GC/MS (Method described in procedure L-4111)	HVOC12
5HG2	GB	Automated Headspace Gas GC/MS	Headspace Gas Sampling and Analysis Using an Automated Manifold (Procedure L-4231)	HGAS
Non-destructive Assay				
5CC1	664MPCC01	Multi-Purpose Crate Counter	Passive-active large package counter and separate gamma-ray spectrometry system.	BNFL MPCC Assay Application, SGEAS
5TC1	371-STGS-01 (skid)	TGS Can Counter	Integrated tomographic gamma scan and gamma-ray spectrometry measurement.	LANL DAC-TGS, LANL ARC-TGS, PC/FRAM
5TC2	371TGS02	TGS Can Counter	Integrated tomographic gamma scan and gamma-ray spectrometry measurement.	ANTECH MasterScan, ANTECH MasterAnalysis, PC/FRAM
5TC3	371TGS03	TGS Can Counter	Integrated tomographic gamma scan and gamma-ray spectrometry measurement.	ANTECH MasterScan, ANTECH MasterAnalysis, PC/FRAM
5TC4	371TGS05	TGS Can Counter	Integrated tomographic gamma scan and gamma-ray spectrometry measurement.	ANTECH MasterScan, ANTECH MasterAnalysis, PC/FRAM
5NM1	371NMCC01/371T RIFID01	Neutron multiplicity counter	Neutron multiplicity counter operated in coincidence mode and separate gamma-ray spectrometry system.	Canberra Neutron Assay Software (NAS), TRIFID
5NM2	371NMCC02/371T RIFID01	Neutron multiplicity counter	Neutron multiplicity counter operated in coincidence mode and separate gamma-ray spectrometry system.	Canberra Neutron Assay Software (NAS), TRIFID
5TD1	371TGS01(DRUM)	TGS Large Package Counter	Integrated tomographic gamma scan and gamma-ray spectrometry measurement.	LANL DAC-TGS, LANL ARC-TGS, PC/FRAM
5TD2	569TGS04	TGS Large Package Counter	Integrated tomographic gamma scan and gamma-ray spectrometry measurement.	ANTECH MasterScan, ANTECH MasterAnalysis, PC/FRAM
5SD1	371SGSDC01	TGS Large Package Counter	Integrated segmented gamma scan and gamma-ray spectrometry measurement.	Genie PC Gamma Waste Assay System (Genie PC/GWAS), TRIFID
5PD1	569PADC01	PADC Large package counter	Passive-active drum counter and separate gamma-ray spectrometry system.	BNFL PADC/IPAN, PC/FRAM
5SH1	440SHENC01	SuperHENC Large package counter	High efficiency neutron counter and separate gamma-ray spectrometry system.	BNFL SuperHENC SGEAS, LANL SuperHENC/Neutron Analysis
5C01	AR02	Calorimeter/Gamma Spectrograph	Calorimeter	ANTECH Air Bath Calorimeter Control Software
5C02	AR03	Calorimeter	Calorimeter	ANTECH Air Bath Calorimeter Control Software
5C03	AR04	Calorimeter	Calorimeter	ANTECH Air Bath Calorimeter Control Software
5C04	AR05	Calorimeter	Calorimeter	ANTECH Air Bath Calorimeter Control Software
5C05	AR06	Calorimeter	Calorimeter	ANTECH Air Bath Calorimeter Control Software
5C06	AR07	Calorimeter	Calorimeter	ANTECH Air Bath Calorimeter Control Software
5C07	AR09	Calorimeter	Calorimeter	ANTECH Air Bath Calorimeter Control Software
5C08	P1	Calorimeter	Calorimeter	ANTECH Air Bath Calorimeter Control Software
5C09	P2	Calorimeter	Calorimeter	ANTECH Air Bath Calorimeter Control Software
5C10	P3	Calorimeter	Calorimeter	ANTECH Air Bath Calorimeter Control Software

WIPP #	Site Equipment #	Site Description	Components	Software
5C11	P4	Calorimeter	Calorimeter	ANTECH Air Bath Calorimeter Control Software
5C12	P5	Calorimeter	Calorimeter	ANTECH Air Bath Calorimeter Control Software
5C13	P6	Calorimeter	Calorimeter	ANTECH Air Bath Calorimeter Control Software
5C14	P7	Calorimeter	Calorimeter	ANTECH Air Bath Calorimeter Control Software
5C15	P8	Calorimeter	Calorimeter	ANTECH Air Bath Calorimeter Control Software
5C16	P9	Calorimeter	Calorimeter	ANTECH Air Bath Calorimeter Control Software
5C17	P10	Calorimeter	Calorimeter	ANTECH Air Bath Calorimeter Control Software
5C18	P11	Calorimeter	Calorimeter	ANTECH Air Bath Calorimeter Control Software
5GS1	GPC1	Gamma-ray Spectrometer	Gamma-ray Spectrometer	ANTECH TRIFID
5GS2	T4	Gamma-ray Spectrometer	Gamma-ray Spectrometer	ANTECH TRIFID
5GS3	T5	Gamma-ray Spectrometer	Gamma-ray Spectrometer	ANTECH TRIFID
5S01	371SGSCS01	SGS Can counter	Integrated segmented gamma scan and gamma isotopic measurement.	Genie PC Gamma Waste Assay System (Genie PC/GWAS), TRIFID
5S02	371SGSCS02	SGS Can counter	Integrated segmented gamma scan and gamma isotopic measurement.	Genie PC Gamma Waste Assay System (Genie PC/GWAS), TRIFID
5S03	371SGSCS03	SGS Can counter	Integrated segmented gamma scan and gamma isotopic measurement.	Genie PC Gamma Waste Assay System (Genie PC/GWAS), TRIFID
5S04	371SGSCS04	SGS Can counter	Integrated segmented gamma scan and gamma isotopic measurement.	Genie PC Gamma Waste Assay System (Genie PC/GWAS), TRIFID
5S05	707SGSCS02	SGS Can counter	Integrated segmented gamma scan and gamma isotopic measurement.	Genie PC Gamma Waste Assay System (Genie PC/GWAS), TRIFID
5S06	707SGSCS03	SGS Can counter	Integrated segmented gamma scan and gamma isotopic measurement.	Genie PC Gamma Waste Assay System (Genie PC/GWAS), TRIFID
5S07	707SGSCS04	SGS Can counter	Integrated segmented gamma scan and gamma isotopic measurement.	Genie PC Gamma Waste Assay System (Genie PC/GWAS), TRIFID
5S08	707SGSCS05	SGS Can counter	Integrated segmented gamma scan and gamma isotopic measurement.	Genie PC Gamma Waste Assay System (Genie PC/GWAS), TRIFID
5S09	707SGSCS06	SGS Can counter	Integrated segmented gamma scan and gamma isotopic measurement.	Genie PC Gamma Waste Assay System (Genie PC/GWAS), TRIFID
5IQ1	IQ3	Canberra mobile drum counter, bldg. 664	High Sensitivity Gamma Waste Assay System	Gamma Waste Assay Systems (GWAS) Analysis Software
5PN1	PN	Canberra mobile drum counter, bldg. 664	Passive Neutron (PN) Coincidence Counter	Canberra Neutron Assay Software (NAS)
5SD1	SGS	Canberra mobile drum counter, bldg. 664	Gamma-ray spectrometry portion of instrument utilized.	Multi-Group Analysis (MGA)
Non-destructive Examination				
5RR1	569 RTR	Real-time radiography	Standard setup	NA
5RR2	664 RTR	Real-time radiography	Standard setup	NA
5MR1	Mobile RTR	Real-time radiography	Standard setup	NA

RFETS CERTIFIED PROCEDURES

	PROCEDURE/DOCUMENT NUMBER	TITLE
1.	00-NDA-TGS-001	Qualification Plan for the Skid Mounted Tomographic Gamma Scanner (TGS)
2.	00-NDA-TGS-002	Qualification Plan for the 371TGS02 Tomographic Gamma Scanner (TGS) Building 371
3.	00-NDA-TGS-003	Qualification Plan for the 569TGS04 Tomographic Gamma Scanner (TGS) Building 569
4.	00-NDA-TGS-004	Qualification Plan for the 371TGS05 Tomographic Gamma Scanner (TGS) Building 371
5.	1-A65-ADM-15.01	Control of Nonconforming Items
6.	1-A67-QAP-08.01	Identification and Control of Items
7.	1-C20-QAP-09.01	Control of Processes
8.	1-C80-WO-1102-W/RT	Waste/Residue Traveler Instructions
9.	1-D97-ADM-16.01	Occurrence Reporting Process
10.	1-J55-ADM-08.10	Subcontractor Quality Evaluations
11.	1-M12-WO-4034	Solid Radioactive Waste Packaging Requirements Manual
12.	1-MAN-004-CSMM	Computer Software Management Manual
13.	1-MAN-008-WM-001	Transuranic (TRU) Waste Management Manual
14.	1-MAN-039-WEM-WP-1200	Waste and Environmental Management System (WEMS) Program Management Manual
15.	1-N92-ADM-02.03	Training and Qualification of Assessment and Surveillance Personnel
16.	1-PRO-072-001	Inspection and Acceptance Test Program
17.	1-PRO-079-WGI-001	Waste Characterization, Generation and Packaging
18.	1-PRO-087-WEMS-WP-1201	WEMS Waste Package Inventory, Tracking, and Control
19.	1-PRO-110-WP-1212	WIPP Waste Information System (WWIS) Data Entry
20.	1-PRO-Q11-WO-1221	Controls for Updating Waste Package Information in WEMS
21.	1-V10-ADM-15.02	Stop Work Action
22.	1-V41-RM-001	Records Management Manual
23.	1-V51-COEM-DES-210	Site Engineering Process Procedure
24.	1-W37-IA-002	Integrated Planning and Scheduling of Assessment Activities
25.	371-STGS-01 (IDC 411R)	Building 371 Skid TGS Can Counter (ID 371-STGS-01) Calibration and Qualification Report
26.	3-B52-IA-003	Conduct of Independent Assessment Activities
27.	3-W24-MA-002	Kaiser-Hill Management Assessment Program
28.	3-X31-CAP-001	Corrective Action Process
29.	4-D99-WO-1100	Solid Radioactive Waste Packaging Procedure
30.	4-F72-WEM-WP1205	WEMS and WSRIC Software Quality Assurance Compliance
31.	4-G83-WEM-WP-1209	WEMS Waste Package Verification and Certification
32.	4-H19-WSRIC-001	WSRIC Characterization and Reverification
33.	4-H80-776-ASRF-007	Visual Examination for Confirmation of RTR
34.	4-I19-NDT-00569	Real-Time Radiography Testing of Transuranic and Low-Level Waste in Building 569
35.	4-K47-WEM-WP1210	WEMS Offsite Shipping Module
36.	4-T04-TRAFFIC-204	Waste Shipment Certification Form, RF-46416
37.	4-T30-Traffic-515	Preparation and Retention of Shipping Papers
38.	4-W30-NDT-00664	Real-Time Radiography Testing of Transuranic and Low-Level Waste in Building 664
39.	4-W84-RS-0114	Salt Residue Stabilization/Repack, Bldg 707
40.	5-NDT-TC-1A	Training, Qualification, and Certification of Nondestructive Testing Personnel
41.	95-QAPJP-0050	Rocky Flats Environmental Technology Site TRU Waste Characterization Program Quality Assurance Project Plan (QAPJP)
42.	95-WP/SAP-001	Transuranic (TRU/TRM) Waste Sampling Plan
43.	BII-8215-C&VP-001	RFETS 569 Passive/Active Drum Counter Calibration and Validation Plan, Instrument Control Number 569PADC001, dated 8/26/99
44.	CALG-QP-00005	Calorimetric Qualification Plan
45.	INS-246	TWCP QAPD Procedures Matrix

	PROCEDURE/DOCUMENT NUMBER	TITLE
46.	KH-NDA2000-QUAL-371TGS01(DRUM)	Qualification Report for the Determination of Plutonium-239 Combustible Waste Packaged in 55-Gallon Drums Using the Reconfigured Skid-Mounted TGS Drum Counter 371TGS01(DRUM), dated 9/6/00
47.	KH-NDA2001-CAL-371TGS02	Calibration and Qualification Report for the ANTECH Tomographic Gamma Scanning (TGS) Can Counter 371TGS02 After Installation of ANTECH MasterScan and MasterAnalysis Software, dated 10/17/01
48.	KH-NDA2001-CAL-371TGS05	Calibration and Qualification Report for the ANTECH Tomographic Gamma Scanning (TGS) Can Counter 371TGS05, dated 10/11/01
49.	KH-NDA2001-QUAL-569TGS04	Calibration and Qualification Report for the Determination of Plutonium-239 Combustible Waste Packaged in 55-Gallon Drums Using the ANTECH TGS Drum Counter 569TGS04, dated 5/17/01
50.	KH-NDA2001-RECAL-371TGS03	Calibration and Qualification Report for the Conversion of the ANTECH TGS Can Counter 371TGS03 from DAC.TGS Data Acquisition to MasterScan Data Collection Software, dated 8/13/01
51.	KH-NDA2002-LLD	Determination of the Lower Limit of Detection (LLD) for WIPP Tracked Radionuclides on the WIPP Qualified NDA Systems used at the Rocky Flats Environmental Technology Site.
52.	KH-NDA2002-QUAL-440SHENC001(DRUM)	Supplemental Qualification Report for the Radioassay of Waste Packaged in 55-Gallon Drums Using the Super High Efficiency Neutron Counter (SuperHENC) 440SHENC001, dated 3/8/02
53.	KH-NDA2002-QUAL-569PADC01	Revised WIPP-Related Calibration and Qualification Report for Extension of the Qualified Plutonium Mass and Matrix Ranges for the Building 569 Passive-Active Neutron Drum Counter, 569PADC01, dated 1/24/02
54.	KH-NDA2002-QUALR-664MPCC01	Calibration and Qualification Report for the Multi-Purpose Crate Counter (MPCC) Imaging Passive-Active Neutron and Gamma Energy Analysis (IPAN/GEA) System, Instrument Control Number 664MPCC01, dated 5/29/02
55.	L-1000	Requirements for Laboratory L-Procedures
56.	L-1006	Maintenance Records for Analytical Instrumentation
57.	L-2421	Precision Gas Mass Spectrometry Operations and Analysis (VG-30-38)
58.	L-4006	Chain-of-Custody and Sample Administration for Headspace Sample Canisters
59.	L-4026	Records Handling, Storage, and Retrieval for the WIPP Project File
60.	L-4028	Sample Administration for the Radiological Laboratories
61.	L-4031	Software Quality Assurance Plan
62.	L-4035	Metals Data Verification and Validation Data Generation Level
63.	L-4038	WIPP Data Review and Validation for Volatile Organic Compounds
64.	L-4039	WIPP Data Review and Validation for Semi-Volatile Organic Compounds in Solid Samples
65.	L-4048	Radiological Laboratories Quality Assurance Plan
66.	L-4052	Headspace Gas Sampling and Analysis Using an Automated Manifold Qualification Plan and Test
67.	L-4053	Headspace Gas V&V (Data Generation Level)
68.	L-4108	Toxicity Characteristic Leaching Procedure (TCLP) for Metals in Waste
69.	L-4111	GC/MS Determination of Volatile Organics Waste Characterization
70.	L-4138	Summa Passivated Stainless Steel Canister Cleaning and Certification
71.	L-4146	Headspace Gas Sampling of Waste Containers
72.	L-4148	Preparation of Samples and Calibration Standards for Determination of Gases in Sample Canisters
73.	L-4150	Total Metals Acid Digestion Procedure of Solid, Liquid, and TCLP Extract Samples
74.	L-4151	Waste Analysis by Atomic Absorption Spectroscopy
75.	L-4152	Mercury Analysis in Waste (Cold-Vapor Technique)
76.	L-4153	Trace Metals by ICP Spectrometry (Solids, Liquids, and TCLP Extracts)
77.	L-4165	GC/MS Determination of Volatile Organic Compounds (Solids, Liquids, and TCLP Extracts)
78.	L-4214	Extraction of Total SVOCS for GC/MS Analysis for WIPP
79.	L-4215	GC/MS Determination of Total SVOCS for WIPP
80.	L-4217	Metals Analysis Data Compilation and Reporting
81.	L-4231	Headspace Gas Sampling and Analysis Using an Automated Manifold

	PROCEDURE/DOCUMENT NUMBER	TITLE
82.	L-5016	Radiological Laboratories Data Review and Validation of Inorganic Gas Analysis for WIPP-TRU Waste Characterization Program (TWCP) - Data Generation Level
83.	L-5017	HVOC Data Review and Validation (Data Generation Level)
84.	LATA-MGSSID-001	LATA Program Interface Document for the Mobile Gas Generation Sampling System for Use at the Rocky Flats Environmental Technology Site (RFETS)
85.	LA-UR-00-2955	Determination of the Total Measurement Uncertainty for the RFETS Skid Mounted TGS and Can TGS
86.	MAN-001-SDRM	Site Document Requirements Manual
87.	MAN-010-MCA	Materials Control & Accountability Manual
88.	MAN-062-CAUSEANALYSIS	Cause Analysis Requirements Manual
89.	MAN-066-COOP	Site Conduct of Operations Manual
90.	MAN-071-IWCP	Integrated Work Control Program Manual
91.	MAN-092-M&TEM	Measuring and Test Equipment Management Manual
92.	MAN-094-TPM	Training Program Manual
93.	MAN-131-QAPM (supercedes 1-MAN-013-S10M & MAN-012-SCARM)	Quality Assurance Program Manual
94.	MAN-134-PPM	Procurement Program Manual
95.	MAN-T91-STSM-001	Site Transportation Safety Manual
96.	MGSSQP-LATA-001	Mobile Gas Generation Testing Sampling System Qualification Plan
97.	MGSSTP-LATA-001	Mobile Gas Generation Testing Sampling System (MGSS) Test Plan
98.	PLN-97-007	TRU Waste Characterization Program Training Implementation Plan
99.	PRO-077-WIPP-005 (formerly 1-PRO-077-WIPP-005)	Management of Waste Information Prior to Transmittal to the Waste Records Center
100.	PRO-264-RS-0141 (supercedes PRO-822-DR&V-371)	Data Review and Verification of Residues Repack Batch Reports
101.	PRO-284-POC-001	Pipe Overpack Component Initial Assembly Process
102.	PRO-291-TPOWO/5035	TRUPACT-II Verification Leak Test, Building 664
103.	PRO-404-RS-0145	Data Review and Verification, Ash Residue Repack Batch Reports
104.	PRO-428-RS-0146	Data Review and Validation, Ash Residue Repack Sample Batch Reports
105.	PRO-440-RS-0149	GGTP Drum Selection and Batching
106.	PRO-484-WIPP-003	Collection, Review, and Confirmation of Acceptable Knowledge Documentation
107.	PRO-486-WIPP-006	TRU Waste Characterization Project Quality Assurance Grading
108.	PRO-489-TRU-664	TRUPACT-II Operating Instructions for Building 664
109.	PRO-543-ASD-002	Initiation, Preparation, and Implementation of Chain-of-Custody Forms
110.	PRO-544-SALTREPACK-371	Residue Repack, Building 371
111.	PRO-548-SSOC-SQA	Software Management for Nondestructive Assay Systems
112.	PRO-603-RS-0152	Data Review and Verification of Repack Sampling Batch Reports
113.	PRO-604-RC-001	Field Sample QC Data Calculations, Review, and Validation Batch Reports
114.	PRO-666-PADC569	Operating Building 569 Passive/Active Drum Counter
115.	PRO-687-TGS-371	Operating the Skid Mounted Tomographic Gamma Scanner (TGS)
116.	PRO-692-RES-030-002 (formerly PRO-692-MGSS-030-002)	Non-Heated Gas Test Canister Operations
117.	PRO-701-TGS-371	Setup and Calibration for the Skid Mounted Tomographic Gamma Scanner (TGS)
118.	PRO-731-MC-002	NDA Measurement Control Program
119.	PRO-767-WIPP-001	Waste Records Center Processing
120.	PRO-815-DM-01	Developing and Maintaining Documents
121.	PRO-823-REPACK-371	Combustible Residue Repackaging
122.	PRO-830-DRUM-371	Drum Loading into Standard Waste Boxes
123.	PRO-845-NDA-008 (formerly PRO-Q22-NDA-3000)	Data Review, Verification and Validation for Nondestructive Assay (NDA) Measurement Systems
124.	PRO-856-RS-0153	Gas Generation Test Data Reduction and Reporting
125.	PRO-860-RS-0156	Repack Sampling, Building 371
126.	PRO-908-ASD-004	On-Site Transfer and Off-Site Shipment of Samples

	PROCEDURE/DOCUMENT NUMBER	TITLE
127.	PRO-940-WIPP-010	WIPP TRU Waste Characterization Project Level Data Review and Reporting
128.	PRO-943-WIPP-007 (supercedes 1-E93-ADM-16.18)	TRU Waste Characterization Program Conditions Adverse to Quality Trending and Analysis
129.	PRO-944-WIPP-008	Completion of Waste Stream Profile Form for Waste to be Disposed of at WIPP
130.	PRO-945-WIPP-009	RCRA Characterization of TRU Waste to be Disposed of at WIPP
131.	PRO-957-SuperHENC	Operating the Super High Efficiency Neutron Coincidence (SuperHENC) Counter Mobile Assay System
132.	PRO-962-MGSS-001	Mobile Gas Generation Testing Sampling System (MGSS) Sampling Operations
133.	PRO-963-MGSS-002	Mobile Gas Generation Testing Sampling System Data Calculation
134.	PRO-984-440-HSGS (supercedes PRO-1357-440-HSGS-FAC)	C-Cell Operations
135.	PRO-1003-WSRIC-ADMIN (supercedes 4-D15-BBPE-001)	WSRIC Administration Guidance
136.	PRO-1006-TGS-569-01	Setup and Calibration of Building 569 Drum Tomographic Gamma Scanner (TGS)
137.	PRO-1007-TGS-569-02	Operating Building 569 Drum Tomographic Gamma Scanner (TGS)
138.	PRO-1018-SWB-371	Standard Waste Box Drum Selection and Grouping
139.	PRO-1031-WIPP-1112	TRU/TRM Waste Visual Verification (V ²) and Data Review
140.	PRO-1034-PEQA (supercedes PRO-PQR-001)	Procurement Engineering and Quality Assurance
141.	PRO-985-SURV	Performance of Surveillances
142.	PRO-1037-WEMS-97-107	Waste and Environmental Management System (WEMS) System Administration Guidance
143.	PRO-1038-WEMS-97-108	WEMS and WSRIC Software Validation Specifications (SVS) Development
144.	PRO-1045-WI-001 (supercedes 4-M63-WI-4013)	Solid Radioactive Waste Inspection
145.	PRO-1072-NDA-MSQ	Matrix-Specific Qualification for NDA Can Counters
146.	PRO-108-PREP-01	Preparation of Nondestructive Assay Performance Demonstration Program Samples
147.	PRO-1092-FRAM-569	Operating Building 569 FRAM Gamma Spectroscopy System
148.	PRO-1132-WIPP-012	Preparation of Interface Document for Vendor Owned or Operated Systems
149.	PRO-1140-NDA	NDA Trouble Report Processing
150.	PRO-1141-WP-4701	Waste Characterization Gas Sampling
151.	PRO-1205-MLA-008 (supercedes DCI SOP NO. MLA 008)	Metrology Control of Measuring and Test
152.	PRO-1290-TRIFID-371 (formerly L-4050)	TRIFID Gamma-Ray Isotopic Analysis System Qualification
153.	PRO-1297-CLC&RPT-371 (formerly L-3007)	Calorimetry/Gamma-Ray Assay Calculation and Reporting of Results
154.	PRO-1298-ISOAN-371 (formerly L-4193)	Gamma-Ray Isotopic Analysis of Plutonium-Bearing Solids in Building 371 Cal/Gamma Laboratory
155.	PRO-1299-AIRBATH-371 (formerly L-4209)	Calorimetry Using the ANTECH Airbath System in Building 371 Cal/Gamma Laboratory
156.	PRO-1302-WIPPDATA-371 (formerly L-4034)	Data Review and Validation for Calorimetric Assay for WIPP-TRU Waste Characterization Program in Building 371 Cal/Gamma Laboratory
157.	PRO-1306-ARIBA	Ariba Buyers Users Guide
158.	PRO-1326-Commodities	Requisitioning Commodities
159.	PRO-1327-Services	Requisitioning Services
160.	PRO-1329-DM-03	Site Document Control
161.	PRO-1351-440-SWB	Room 113 Perma-Con Operations
162.	PRO-1386-TGS-371 (supercedes PRO-864-TGS-371)	Setup and Calibration of Building 371 Can Tomographic Gamma Scanner (TGS)
163.	PRO-1392-TGS-371	Operating B371 Tomographic Gamma Scanning (TGS) Can Counters
164.	PRO-1393-LN2-371	Filling, Transfer and Detector Head Dewars in Building 371
165.	PRO-1400-NDA	NDA Evaluation of Item Description Codes

	PROCEDURE/DOCUMENT NUMBER	TITLE
166.	PRO-1405-PREP-02	Preparation of Boxed Waste Performance Demonstration Program (PDP) Samples for Nondestructive Assay
167.	PRO-1411-WO-Waste	Waste Receiving, Transfer and Handling
168.	PRO-1418-WO-TRUOP	TRUPACT-II Operations
169.	PRO-1419-WO-LKTST	TRUPACT-II Shipping Leak Test
170.	PRO-1433-MPCC-664	Operating the Multi-Purpose Crate Counter (MPCC) at Building 664
171.	PRO-1471-VE-771	Visual Examination for Confirmation of RTR
172.	PRO-1520-Mobile-RTR	Mobile Real-Time Radiography Testing of Transuranic and Low-Level Waste
173.	PRO-1541-SLLP (supercedes 1-MAN-017-LLGI-RM)	Site Lessons Learned Process
174.	PRO-1566-NDA-STD (supercedes PRO-697-MLC-00013)	Maintenance of NDA Standards
175.	PRO-1570-NDA-QUAL	Qualification Requirements for NDA Large Package Counters
176.	PRO-J44-RC&I-6600 (formerly 4-J44-RC&I-6600)	Procured Item Acceptance & Certification
177.	PRO-N01-RES-030-001	Heated Gas Test Canister Operations
178.	PRO-T13-Traffic-306 (formerly 1-T13-Traffic-306)	Labeling and Marking TRUPACT Packages
179.	PRO-T20-Traffic-505 (formerly 4-T20-Traffic-505)	Certifying Authorized Payloads for TRUPACT-II
180.	PRO-T43-Traffic-528 (formerly 4-T43-TRAFFIC-528)	TRUPACT-II Operations Flow
181.	PRO-T95-OSTP-002	Off-Site Transportation Procedure
182.	PRO-U76-WC-4030	Control of Waste Nonconformances
183.	PRO-W90-FO-0103	Balances
184.	PRO-X05-WC-4018	Transuranic (TRU) Waste Certification
185.	PRO-X32-RS-0128	Dry Residue Repackaging, Building 707
186.	PRO-X56-RS-0123	Ash Residue Repack, Building 707
187.	RF/RMRS-97-018	RFETS TRU Waste Acceptable Knowledge Supplemental Information
188.	RMRS-WIPP-98-100	Acceptable Knowledge TRU/TRM Waste Stream Summaries
189.	RS-012-004	Grid Method – Repack Solid Sampling & Analysis Plan
190.	RS-012-005	Cone & Quartering Method – Repack Solid Sampling and Analysis Plan
191.	RS-020-001	Gas Generation Testing Quality Assurance Project Plan
192.	RS-020-006	Salt Residue Stabilization, Building 707 Process Control/Qualification Plan
193.	RS-020-012	Ash Residue Repack, Process Control Plan
194.	RS-020-013	Dry Residue Repackaging Process Control Plan
195.	RS-020-017	Salt Residue Stabilization, Building 707 Qualification Report
196.	RS-020-018	Combustible Residue Repackaging Process Control Plan
197.	RS-020-021	Salt Residue Repack, Buildings 371 and 707 Process Control Plan
198.	Unnumbered	Calibration and Qualification Report Package for the SuperHENC Mobile Assay Trailer Instrument Identification Number: 440SHENC01, prepared January 22, 2001
199.	Unnumbered	Qualification Plan for Building 664 Multipurpose Crate Counter (MPCC) Instrument Identification Number: 664MPCC01, approved 4/5/02
200.	Unnumbered	Super High Efficiency Neutron Counter Calibration and Validation Plan, Instrument Control Number 984SHENC01, dated 10/16/99.

Deactivated / or Superseded Procedures

	Procedure Number	Title	Reason for Action
1.	00-NDA-NMC-100	Qualification Plan for the Neutron Multiplicity Counter (NMC) Instruments and TRIFID Gamma-Ray	Deactivated - counters shut down

		Isotopics Systems	
2.	1-E93-ADM-16.18	Data Analysis and Trending for Performance Improvement	Superseded by PRO-943-WIPP-007
3.	1-MAN-013-S10M	Site Integrated Oversight Manual	Replaced by MAN-131-QAPM, section 6.2.1 and 6.2.2
4.	1-MAN-017-LLGI-RM	Site Lessons Learned/Generic Implications Requirements Manual	Superseded by PRO-1541-SLLP
5.	3-MAN-006-NDA-1000	NDA Calibration and Validation Program Manual	Deactivated – counters shut down
6.	4-D15-BBPE-001	WSRIC Building Book Preparation and Editing	Superseded by PRO-1003-WSRIC-ADMIN
7.	4-M63-WI-4013	Final and Loading Inspections for Packages	Superseded by PRO-1045-WI-001
8.	99-NDA-SGS-100	Qualification Plan for the Canberra Segmented Gamma Scan (SGS) Can Counter Instruments	Deactivated - counters shut down
9.	DCI SOP NO. MLA 008	Metrology Control of Measuring and Test Equipment	Superseded by PRO-1205-MLA-008
10.	MAN-012-SCARM	Site Corrective Action Requirements	Superseded by MAN-131-QAPM
11.	PRO-174-WO-5227	Operating Building 371 SGS Drum Counter	Deactivated - counters shut down
12.	PRO-572-PQR-001	Procurement Quality Assurance Requirements	Superseded by PRO-1034-PEQA, appendix 5
13.	PRO-697-MLC-00013	Preparation and Certification of NDA Standards and Sources	Superseded by PRO-1566-NDA-STD
14.	PRO-728-NDA-001	Operating the Neutron Multiplicity Counters and TRIFID Gamma-Ray Isotopics Systems	Deactivated - counters shut down
15.	PRO-822-DR&V-371,	Data Review and Verification of Wet Combustible Residue Batch Reports	Superseded by PRO-264-RS-0141
16.	PRO-864-TGS-371	Setup and Calibration for the Can Counter Tomographic Gamma Scanner (TGS)	Superseded by PRO-1386-TGS-01
17.	PRO-933-NMC-002	Neutron Multiplicity Counter and TRIFID Systems Setup and Calibration	Deactivated - counters shut down
18.	PRO-1357-440-HSGS-FAC	Facility Headspace Gas Sampling	Superseded by PRO-984-440-HSGS.
19.	PRO-Q22-NDA-3000	Review of Non-TWCP Nondestructive Assay Sheets	Superseded by PRO-845-NDA-008
20.	SQM-007	IQ3 Waste Assay Trailer Operating Procedure - Operating and Calibrating the Canberra IQ3 Gamma Scanner	Deactivated - counters shut down
21.	SQM-008	Operating & Calibrating the Canberra Passive Neutron Counter	Deactivated - counters shut down
22.	SQM-009	Operating & Calibrating the Canberra Segmented Gamma Scanner	Deactivated - counters shut down
23.	SQM-010	Review, Validation, & Reporting Nondestructive Assay (NDA) Data & Results	Deactivated - counters shut down
24.	SQM-011	Canberra Nuclear NDA Implementation Plan for RFETS Transuranic Waste Characterization Program	Deactivated - counters shut down
25.	SQM-016	Overview of Canberra Mobile NDA Services RFETS Project	Deactivated - counters shut down
26.	SQM-120	Mobile Software Configuration Management	Deactivated - counters shut down
27.	SQM-121	Mobile Software Configuration Verification	Deactivated - counters shut down
28.	SQM-130	RFETS Transuranic Waste Expert Review	Deactivated - counters shut down