

United States Government

memorandum

Carlsbad Field Office
Carlsbad, New Mexico 88221

DATE: May 24, 2001

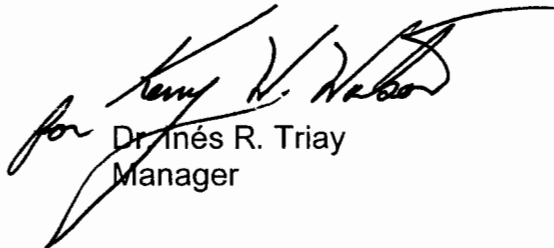
REPLY TO
ATTN OF: CBFO:NTP:KWW:VW:01-1026:UFC:5822

SUBJECT: RFETS Annual Re-evaluation for TRU Waste Program Compliance

TO: Barbara A. Mazurowski, Manager, Rocky Flats Field Office

The Carlsbad Field Office (CBFO) has completed its annual re-evaluation of the Rocky Flats Environmental Technology Site's (RFETS) TRU waste characterization and certification program for debris waste. The RFETS technical and QA programs were found to be in continued compliance with the Waste Analysis Plan (WAP) of the *Hazardous Waste Facility Permit (HWFP)*, the *Waste Acceptance Criteria for the Waste Isolation Pilot Plant (WIPP WAC)*, the *Quality Assurance Program Document (QAPD)*, the *Safety Analysis Report for the TRUPACT-II Shipping Package (SARP)*, and other CBFO requirements and standards. Based on this evaluation (see attachment 1), the CBFO is satisfied that these systems and processes continue to meet the requirements for characterization, certification, and transportation of debris waste.

The RFETS certification authority is continued for those systems and processes approved by CBFO on March 9, 2000, April 26, 2000, and February 6, 2001. TRU waste characterization, certification, or transportation using significantly revised or new processes and systems must be evaluated by CBFO prior to their implementation.



for Dr. Inés R. Triay
Manager

Attachments

010533



Barbara A. Mazurowski

-2-

May 24, 2001

cc: w/attachments
T. Harms, DOE-HQ
K. Watson, CBFO
R. Knerr, CBFO
S. Vega, CBFO
L. Chism, CBFO
C. Zvonar, CBFO
B. Bennington, CBFO
J. Legare, RFFO
L. Xuan, RFFO
G. O'Leary, RFETS
M. Gerle, WTS
L. Greene, WTS
D. Standiford, WTS
F. Marcinowski, EPA
S. Monroe, EPA
S. Zappe, NMED
M. Horseman, CTAC
T. Bowden, CTAC



RFETS CERTIFICATION PROGRAM STATUS

The site certification panel evaluated the documentation supporting the compliance and/or continued compliance of RFETS TRU waste characterization and certification programs. The panel unanimously recommends that the RFETS authority for debris wastes be granted or continued for the following processes: acceptable knowledge; radiography; visual examination; headspace gas; non-destructive assay (calorimetry, segmented gamma scanner (SGS); IQ3 gamma, passive neutron coincidence counter (PNCC), tomographic gamma scanner (TGS), passive neutron (PN), neutron multiplicity counter /transuranic isotopic fraction interrogation device (NMC/TRIFID), and the Gas Generation Testing Program. See attachment 2 for a complete list of procedures that were evaluated during the audits listed below.

STATUS


- All program elements remain complete
- The following RFETS required site documents have been revised, approved, and are in place identifying how the site complies with the Waste Analysis Plan of the HWFP, QAPD, SARP, and WIPP WAC requirements:
 - QAPjP – *Rocky Flats Environmental Technology Site TRU Waste Characterization Program Quality Assurance Project Plan, 95-QAPjP-0050, Rev. 4.*
 - GGTP QAPjP – *Rocky Flats Environmental Technology Site Gas Generation Testing Program Quality Assurance Project Plan, RS-020-001, Rev. 2.*
 - WCP – *Rocky Flats Environmental Technology Site Transuranic (TRU) Waste Management Manual, 1-MAN-008-WM-001, Rev. 4.*
 - QAP – (Section 2.2.2 of WCP)
 - TRAMPAC – (Section 2.2.7 of WCP)
 - TRAMPAC QA Plan – (Section 2.2.7 of WCP)
 - Packaging QA Plan – (Section 2.2.8 of WCP)
 - Graded Approach Procedure – *Rocky Flats Environmental Technology Site TRU Waste Characterization Project Quality Assurance Grading, PRO-486-WIPP-006, Rev. 1.*
 - Standard operating procedures (see attachment 2 for complete procedure list)
- RFETS participation in the following performance demonstration programs (PDPs):
 - RCRA PDP participation was satisfactory in cycle 7A (report date January 2001).
 - NDA PDP participation was satisfactory in cycle 7A (report date October 2000).
 - HSG PDP participation was satisfactory in cycle 14A (report date June 2000).
- CBFO completed audits A-00-08 (December 13-17, 1999 and January 18-20, 2000), A-00-10 (March 6-8, 2000), A-00-12 (September 18-22, 2000 and November 1-2, 2000), and A-01-07 (January 29 – February 1, 2001). These audits determined that the processes, documentation and procedures listed in attachment 2 are or remain adequate and effectively implemented.
- NMED has approved the RFETS Final Audit Reports for Audit A-00-08 (approval letter dated March 9, 2000) and Audit A-00-12 (approval letter dated February 7, 2001).
- EPA has approved RFETS for QA (4/3/01), the systems and processes for characterizing CH residues (11/7/00), the systems and processes for characterizing CH dry, wet, salt, and ash residues (January 13, 2000), and QA and systems and processes for characterizing CH debris waste (3/24/99).

- CAR 01-019 remains open. The subject of the CAR does not impact characterization, certification, or transportation. No other significant CARs remain open.

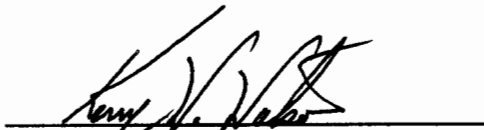
RECOMMENDATION

The panel recommends that the CBFO Manager continue the RFETS authority to characterize, certify and transport CH-TRU debris waste. It is also recommended that this authority be limited to those systems and processes listed in attachment 2 that were evaluated during audits A-00-08, A-00-10, A-00-12, and A-01-07.

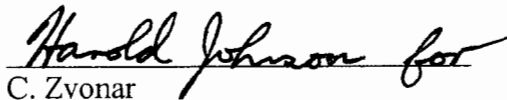
CONCURRENCE



S. Vega
Quality Assurance Manager



K. Watson
National TRU Program Team Leader



C. Zvonar
Assistant Manager
Regulatory Compliance

PROCEDURES/DOCUMENTS AUDITED

	PROCEDURE/DOCUMENT NUMBER	TITLE
1.	Unnumbered.	Rocky Flats Environmental Technology Site's Non-Destructive Assay Equivalency Request for Magnesium Oxide LECO Crucible Inserts, IDC 368
2.	Unnumbered.	Magnesium Oxide LECO Crucible Insert Equivalency Qualification Report
3.	Unnumbered.	Statistical Summary for the Magnesium Oxide Insert Crucibles (IDC 368) Measurement Equivalency Study
4.	Unnumbered.	Historical Magnesium Oxide LECO Crucible Inserts (IDC) Data Analysis
5.	Unnumbered.	Ash Residue Repack Project Building 707, Magnesium Oxide LECO Crucible Inserts, Item Description Code (IDC) 368 Report
6.	00-NDA-NMC-100	Qualification Plan for the Neutron Multiplicity Counter (NMC) Instruments and TRIFID Gamma-Ray Isotopics Systems
7.	00-NDA-TGS-002	Qualification Plan for the Tomographic Gamma Scanner (TGS)
8.	1-15320-HSP-2.08	Lockout/Tagout
9.	1-A65-ADM-15.01	Control of Nonconforming Items
10.	1-C80-WO-1102-WRT	Waste/Residue Traveler Instructions
11.	1-E93-ADM-16.18	Data Analysis and Trending for Performance Improvement
12.	1-I34-WO-1103-NRWOL	Non-Routine Waste Origination Log Instructions
13.	1-J55-ADM-08.10	Subcontractor Quality Evaluations
14.	1-M12-WO-4034	Solid Radioactive Waste Packaging Requirements
15.	1-MAN-004-CSMM	Computer Software Management Manual
16.	1-MAN-008-WM-001	Transuranic (TRU) Waste Management Manual
17.	1-MAN-013-SIOM	Site Integrated Oversight Manual
18.	1-MAN-017-LLGI-RM	Site Lessons Learned/Generic Implications Requirements Manual
19.	1-MAN-039-WEM-WP-1200	Waste and Environmental Management System (WEMS) Program Management Manual
20.	1-N92-ADM-02.03	Training, Qualification, and Certification of Independent Auditors and Assessors
21.	1-PRO-072-001	Inspection and Acceptance Test Process
22.	1-PRO-077-WIPP-005	Management of Waste Information Prior to Transmittal to the Waste Records Center
23.	1-PRO-079-WGI-001	Waste Characterization Generation and Packaging
24.	1-PRO-110-WP-1212	WIPP Waste Information System (WWIS) Data Entry
25.	1-PRO-Q11-WO-1221	Controls for Updating Waste Package Information in WEMS
26.	1-Q11-WO-1221	Controls for Movement of Waste Containers
27.	1-S49-T&Q-EX-001	Exception from Training
28.	1-T13-Traffic-306	Labeling and Marking TRUPACT Packages
29.	1-V41-RM-001	Records Management Guidance for Records Sources
30.	1-W36-APR-111	Acquisition Procedure for Requisitioning commodities and Services
31.	1-W37-IA-002	Integrated Planning and Scheduling of Independent Assessment Activities
32.	3-21000-ALQAP	Analytical Services On-Site Laboratories Quality Assurance Plan
33.	3-B52-IA-003	Conduct of Independent Assessment Activities
34.	3-MAN-006-NDA-1000	NDA Calibration and Validation Program Manual
35.	3-Q22-NDA-3000	Review of Nondestructive Assay Sheets
36.	3-U36-NDA-2000	Software Management for Nondestructive Assay Systems
37.	3-U82-NDA-1010	Calibration of Passive/Active Neutron Systems
38.	3-W24-MA-002	Kaiser-Hill Management Assessment Program

	PROCEDURE/DOCUMENT NUMBER	TITLE
39.	3-X31-CAP-001	Corrective Actions Process
40.	4-D15-BBPE-001	WSRIC Building book Preparation and Editing
41.	4-D56-SGS-CAN-01	Operating the Segmented Gamma Scan (SGS) Can Counter, Building 371
42.	4-D99-WO-1100	Solid Radioactive Waste Packaging
43.	4-F72-WEM-WP-1205	WEMS Software QA Compliance
44.	4-G83-WEM-WP-1209	WEMS Waste Package Verification and Certification
45.	4-H19-WSRIC-001	WSRIC Characterization and Reverification
46.	4-H80-776-ASRF-007	Visual Examination for Confirmation of RTR
47.	4-I19-NDT-00569	Real Time radiograph Testing of Transuranic and Low-Level Waste in Building 569
48.	4-J44-RC&I-6600	Nonweapons-Procured Item Acceptance & Certification
49.	4-K47-WEM-WP-1210	WEMS Offsite Shipping Module
50.	4-M63-WI-4013	Final and Loading Inspections for Packages
51.	4-PRO-108-PREP-01	Preparation of Nondestructive Assay Performance Demonstration Program Samples
52.	4-PRO-156-RS-0137	Data Review and Validation of Salt Residue Stabilization Sampling Batch Report
53.	4-PRO-173-NDA-1020	Calibration of Gamma Assay Systems
54.	4-PRO-174-WO-5227	Operating Building 371 SGS Drum Counter
55.	4-S72-QA-10.01	Quality Assurance Audit Program
56.	4-T20-Traffic-505	Certifying Authorized Payloads for TRUPACT-II
57.	4-W30-NDT-00664	Real-Time Radiography Testing of Transuranic and Low-Level Waste in Bldg 664
58.	4-W84-RS-0114	Salt Residue Stabilization, Bldg 707
59.	4-W90-FO-0103	Balances
60.	5-NDT-TC-1A	Training, Qualification and Certification of Metrology/Nondestructive Testing Personnel
61.	707SGSCS02/IDC301U	SGS Qualification Report (A report generated under 1-M60-WPC-001)
62.	707SGSCS03/IDC301u	SGS Qualification Report
63.	95-QAPjP-0050	Rocky Flats Environmental Technology Site TRU Waste Characterization Program Quality Assurance Project Plan (QAPjP)
64.	95-WP/SAP-001	Transuranic (TRU/TRM) Waste Sampling Plan
65.	96-RF/T&Q-0005	Training and Qualification Program
66.	99-NDA-SGS-100	Qualification Plan for the Canberra Segmented Gamma Scan (SGS) Can Counter Instruments
67.	Addendum 1 707SGSCS02/IDC310	SGS Qualification Report
68.	Addendum 1 707SGSCS03/IDC310	SGS Qualification Report
69.	CAO-96-1055	TRU Waste Materials Transportation Guide
70.	DOE/CAO-94-1045	Performance Demonstration Program Plan for Nondestructive Assay for the TRU Waste Characterization Program
71.	DOE/CAO-95-1076	PDP Plan for Analysis of Simulated Headspace Gases
72.	DOE/WIPP 93-1001	TRUPACT-II Operating and Maintenance Instructions
73.	GI9707070183C	Waste Generation Instruction for IDC 454X
74.	GI9807070179C	Waste Generation Instruction for IDC 433X
75.	GI9807070182C	Waste Generation Instruction for IDC 411X
76.	GI9807070436C	Waste Generation Instruction for IDC 429X
77.	INS-246	QAPD Matrix
78.	L-1000	Requirements for Radiological Laboratories L-Procedures

	PROCEDURE/DOCUMENT NUMBER	TITLE
79.	L-1006	Maintenance Records for Analytical Instrumentation
80.	L-2421	Precision Gas Mass Spectrometry Operations and Analysis (VG-30-38)
81.	L-3007	Calorimetry/Gamma Ray Assay Calculation and Reporting of Results
82.	L-4006	Chain-of-Custody for WIPP TWCP and GGTP Headspace Sample Canisters*
83.	L-4026	Records Handling, Storage, and Retrieval for the WIPP Project File
84.	L-4028	Sample Administration for Radiological Laboratory
85.	L4031	Software Quality Assurance Plan for the Radiological Laboratories
86.	L-4034	Data review and Validation for Calorimetric Assay for WIPP TRU Waste Characterization Program
87.	L-4035	Data Review and Validation for Total Metals for WIPP-TRU Waste Characterization Program (TWCP) Data Generation Level
88.	L-4038	WIPP Data Review and Validation for Volatile Organic Compounds
89.	L-4039	WIPP Data Review and Validation for Semi-Volatile Organic Compounds
90.	L-4108	Toxicity Characteristic Leaching Procedure (TCLP) for Metals in Waste
91.	L-4111	GC/MS Determination of Volatile Organics Waste Characterization
92.	L-4138	Summa Passivated Stainless Steel Canister Cleaning and Certification
93.	L-4146	Headspace Gas Sampling of Waste Containers*
94.	L-4148	Preparation of Samples and Calibration Standards for Determination of Gases in Sample Canisters
95.	L-4150	Total Metals Acid Digestion Procedure of Solid, Liquid, and TCLP Extract Samples
96.	L-4151	Waste Analysis by Atomic Absorption Spectroscopy
97.	L-4152	Mercury Analysis in Waste (Cold-Vapor Technique)
98.	L-4153	Trace Metals by ICP Spectrometry (Solids, Liquids, and TCLP Extracts)
99.	L-4165	GC/MS Determination of Volatile Organic Compounds (Solids, Liquids & TCLP Extracts)
100.	L-4193	Gamma-Ray Isotopic Analysis of Pu-bearing Solids in the Building 707 Cal/Gamma Laboratory
101.	L-4209	Calorimeter Procedure Using the Antech Airbath System in the Building 707 Cal/Gamma Laboratory
102.	L-4214	Extraction of Total SVOCS for GC/MS Analysis for WIPP
103.	L-4215	GC/MS Determination of Total SVOCS for WIPP
104.	L-4217	Metals Analysis Data Compilation and Reporting
105.	L-5016	Data Review and Validation of Inorganic Gas Analysis for WIPP-TRU Waste Characterization Program (TWCP) - Data Generation Level
106.	L-5017	Data Review and Validation of Organic Compound Analysis for WIPP-TRU Waste Characterization Program (TWCP) - Data Generation Level
107.	MAN-001-SDRM	Site Document Requirements Manual
108.	MAN-012-SCARM	Site Corrective Action Requirements
109.	MAN-062-CAUSEANALYSIS	Cause Analysis Requirements Manual
110.	MAN-092-M&TEM	Control of measuring and Test Equipment
111.	MAN-094-TUM	Training User's Manual
112.	OPS-INSTR-017	Building 664 Waste Handling and Storage Operations

	PROCEDURE/DOCUMENT NUMBER	TITLE
113.	PDP Plan, 11/97	Performance Demonstration Program Plan for RCRA Constituent Analysis of Solidified Wastes
114.	PLN-97-007	TRU Waste Characterization Program Training Implementation Plan
115.	PRO-1032-HEADSPACE	Building 991 Headspace Gas Sampling and Analysis Operations
116.	PRO-1141-WP-4701	Waste Characterization Gas Sampling
117.	PRO-232-DRR-776	Dry Residue Repackaging
118.	PRO-236-SGS-001	Operating the Canberra Segmented Gamma Scan Can Counter
119.	PRO-264-RS-0141	Data Review and Verification of Salt Residue Stabilization Sampling Batch Report
120.	PRO-284-POC-001	Pipe Overpack Container Initial Assembly Process
121.	PRO-291-TPO/WO/5035	TRUPACT-II Verification Leak Test, building 664
122.	PRO-415-SGS-003	Segmented Gamma Scan (SGS) System Calibration
123.	PRO-440-RS-0149	G&T Drum Selection and Batching
124.	PRO-446-RS-0150	Data Review and Verification of Dry Residue Repack Sampling Batch Reports
125.	PRO-484-WIPP-003	Collection, Review, and Confirmation of Acceptable Knowledge Documentation
126.	PRO-486-WIPP-006	TRU Waste Characterization Project QA Grading
127.	PRO-489-TRU-664	Vessel Inspection, Checking the Spacer Assemblies, and Loading/Unloading the TRUPACT-II Vessel in Building 664
128.	PRO-536-DRR-776	Dry Residue Repackaging of Graphite
129.	PRO-543-ASD-002	Initiation, Preparation, and Implementation of Chain-of-Custody Forms
130.	PRO-544-SALT-REPACK-371	Residue Repack, Building 371
131.	PRO-548-SSOC-SQA	Software Management for SSOC Nondestructive Assay Systems
132.	PRO-603-RS-0152	Data Review and Verification of Salt Residue Repack Sampling Batch Reports
133.	PRO-604-RC-001	Field Sample QC Data Calculations, Review, and Validation Batch Reports
134.	PRO-687-TGS-371	Operating the Tomographic Gamma Scanner (TGS)
135.	PRO-695-NDA-CBCP	Continuous Bias Correction Program
136.	PRO-697-MLC-00013	Preparation and Certification of NDA Standards and Sources
137.	PRO-701-TGS-371	Setup and Calibration for the Skid Mounted Tomographic Gamma Scanner (TGS)
138.	PRO-728-NDA-001	Operating the Neutron Multiplicity Counters and Trifid Gamma-Ray Isotopics Systems
139.	PRO-767-WIPP-001	Waste Records Center Processing
140.	PRO-815-DM-01 (was MAN-063-DC)	Developing, Maintaining, and Controlling Documents
141.	PRO-822-DR&V-371	Data Review and Verification of Wet Combustible Residue Batch Reports
142.	PRO-823-REPACK-371	Combustible Residue Repackaging
143.	PRO-830-DRUM-371	Drum Loading into Standard Waste Boxes
144.	PRO-845-NDA-008 (was PRO-420-SGS-008)	Data Validation and Verification for NDA Measurements
145.	PRO-856-RS-0153	Gas Generation Test Data Reduction and Reporting
146.	PRO-864-TGS-371	Setup and Calibration for the Can Counter Tomographic Gamma Scanner (TGS)
147.	PRO-933-NMC-002	Neutron Multiplicity Counter and TRIFID Systems Setup and Calibration
148.	PRO-940-WIPP-010 (was	WIPP TRU Waste Characterization Project Level Data Review and

	PROCEDURE/DOCUMENT NUMBER	TITLE
	WIPP-010)	Reporting
149.	PRO-943-WIPP-007 (was WIPP-007)	TRU Waste Characterization Program Conditions Adverse to Quality Trending and Analysis
150.	PRO-944-WIPP-008 (was WIPP-008)	Completion of Waste Stream Profile Form for Waste to be Disposed of at WIPP
151.	PRO-945-WIPP-009 (was WIPP-009)	RCRA Characterization of TRU Waste to be Disposed of at WIPP
152.	PRO-962-MGSS-001	Mobile Gas Generation Testing Sampling System (MGSS) Sampling Operations
153.	PRO-963-MGSS-001	Mobile Gas Generation Testing Sampling System Data Calculation
154.	PRO-964-CAN REPACK-371	Wet Combustible Residue Repackaging Room 3515
155.	PRO-J23-FO-0133	Drum and Box Repack
156.	PRO-N01-RES-030-001	Gas Test Canister Operations
157.	PRO-U76-WC-4030	Control of Waste Nonconformances
158.	PRO-X05-WC-4018 (was 1-PRO-X05-WC-4018)	Transuranic Waste Certification
159.	RF/RMRS-97-018	RFETS TRU Waste Acceptable Knowledge Supplemental Information
160.	RMRS-QA-07.01	Evaluation of Suppliers
161.	RMRS-WIPP-98-100	Acceptable Knowledge TRU/TRM Waste Stream Summaries
162.	RS-020-001	Gas Generation PjP
163.	RS-020-006	Salt Residue Stabilization, Building 707 Process Control/Qualification Plan
164.	RS-020-013	Dry Residue Repackaging Process Control Plan
165.	RS-020-017	Salt Residue Stabilization, Building 707 Qualification Report
166.	RS-020-018	Combustible Residue Repackaging Process Control Plan
167.	SQM-007	IQ3 Waste Assay Trailer Operating Procedure - Operating and Calibrating the Canberra IQ3 Gamma Scanner
168.	SQM-008	Operating & Calibrating the Canberra Passive Neutron Counter
169.	SQM-009	Operating & Calibrating the Canberra Segmented Gamma Scanner
170.	SQM-010	Review, Validation, & Reporting Nondestructive Assay (NDA) Data & Results
171.	SQM-011	Canberra Nuclear NDA Implementation Plan for RFETS Transuranic Waste Characterization Program
172.	SQM-016	Overview of Canberra Mobile NDA Services RFETS Project
173.	SQM-120	Mobile Software Configuration Management
174.	SQM-121	Mobile Software Configuration Verification
175.	SQM-130	RFETS Transuranic Waste Expert Review
176.	TWCP-DTP-1.2.016	Calibrating the TGS (LANL Procedure)
177.	TWCP-DTP-1.2-011	Waste Assay Using the TGS
178.	TWCP-DTP-1.2-029	Detailed Technical Instructions for Determining the Isotopic Ratios in Waste Containers Using the RANT PC FRAM Assay System (LANL Procedure)
179.	TWCP-TWID-RFETS-001	Interface Document