



United States Government

Department of Energy

# memorandum

Carlsbad Field Office  
Carlsbad, New Mexico 88221

DATE: January 10, 2004

REPLY TO  
ATTN OF: CBFO:QA:DSM:LC:05-0310:UFC:2300

SUBJECT: Surveillance Report S-05-03, RFETS Characterization and Certification of Waste

TO: Joe Legare, Assistant Manager for Projects

The Department of Energy Carlsbad Field Office (CBFO) conducted a surveillance of the Rocky Flats Environmental Technology Site (RFETS) waste characterization activities. The surveillance was conducted on December 20-21, 2004. The surveillance team concluded that the RFETS technical and quality assurance programs for these activities were adequate in accordance with the WIPP Hazardous Waste Facility Permit, the CBFO Contact-Handled Transuranic Waste Acceptance Criteria for the WIPP, and the CBFO Quality Assurance Program Document. The surveillance team also concluded that overall the RFETS procedures were being satisfactorily implemented and the evaluated processes were effective.

One CBFO Corrective Action Report (CAR) was issued as a result of the surveillance. CBFO CAR 05-009 was transmitted under separate cover.

If you have questions or comments, please contact me at (505) 234-7491.

Dennis S. Miehl  
Quality Assurance Specialist



Attachment

050108



Mr. Joe Legare

-2-

January 10, 2005

cc: w/attachments

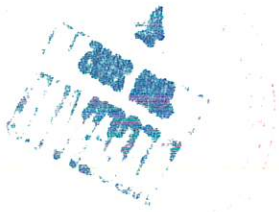
A. Holland, CBFO	*ED
L. Piper, CBFO	ED
K. Watson, CBFO	ED
L. Xuan, RFPO	ED
D. Hicks, RFPO	ED
M. Eagle, EPA	ED
B. Shroff, EPA	ED
R. Joglekar, EPA	ED
E. Feltcorn, EPA	ED
S. Zappe, NMED	ED
S. Holmes, NMED	ED
C. Ferrera, RFETS	ED
G. O'Leary, RFETS	ED
C. Riggs, CTAC	ED
S. Harrison, CTAC	ED
L. Greene, WRES	ED

WIPP Operating Record, MS 486-06

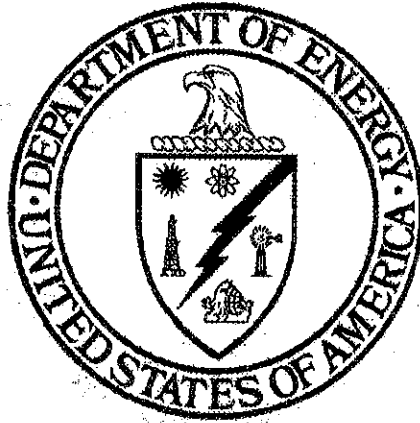
CBFO QA Record File

CBFO M&RC

\*ED denotes electronic distribution



U.S. DEPARTMENT OF ENERGY  
CARLSBAD FIELD OFFICE  
SURVEILLANCE REPORT  
OF THE  
ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE  
GOLDEN, COLORADO  
SURVEILLANCE NUMBER S-05-03  
December 20-21, 2004  
TRU WASTE  
CHARACTERIZATION AND CERTIFICATION ACTIVITIES



Prepared by:

Charles L. Riggs  
Charles L. Riggs, CTAC  
Surveillance Team Leader

Date:

1/10/05

Approved by:

Dennis S. Miehlis  
Dennis S. Miehlis, CBFO  
Quality Assurance Specialist

Date:

1-10-05

## 1.0 EXECUTIVE SUMMARY

Carlsbad Field Office (CBFO) Surveillance S-05-03 was conducted to evaluate the implementation of technical and quality assurance (QA) activities at the Rocky Flats Environmental Technology Site (RFETS). The activities evaluated included selected acceptable knowledge (AK) activities that had occurred since the last CBFO recertification audit (A-04-10) in April 2004. The activities associated with Supercompacted Waste were also evaluated.

The surveillance was conducted at the RFETS facilities in Golden, Colorado, on December 20 and 21, 2004. The surveillance team determined that the activities evaluated were satisfactorily implemented. One condition adverse to quality was identified as a result of the surveillance: the information documented for sealed sources in some containers did not constitute an auditable AK record (CBFO CAR 05-009). Two Observations were provided to RFETS management as a result of the surveillance and are described in section 6.0.

## 2.0 SCOPE

The surveillance team evaluated the continued implementation of the RFETS AK process and the quality program activities, and program assessments, as related to the AK process. The implementation of Supercompacted Waste activities was also evaluated.

The following QA activities were evaluated in accordance with the CBFO Quality Assurance Program Document (QAPD):

- Nonconformances and Corrective Action
- Personnel Qualification and Training
- Documents and Records

The following RFETS technical activities were evaluated for implementation in conformance with the Waste Acceptance Criteria (WAC) and Waste Analysis Plan (WAP):

- Acceptable Knowledge (AK)
- Supercompacted Waste

The evaluation of RFETS TRU waste activities and documents was based on current revisions of the following documents:

- *Waste Isolation Pilot Plant Hazardous Waste Facility Permit*
- *Quality Assurance Program Document, DOE/CBFO-94-1012*
- *Contact-Handled Transuranic Waste Acceptance Criteria for the Waste Isolation Pilot Plant Project, (WAC) DOE/WIPP-02-3122*

- *RFETS Quality Assurance Project Plan for the Transuranic Waste Characterization Program, 95-QAPJP-0050*
- *RFETS Transuranic Waste Management Manual, 1-MAN-008-WM-001*
- Related RFETS technical and QA implementing procedures.

### **3.0 SURVEILLANCE TEAM, INSPECTORS, AND OBSERVER**

#### **SURVEILLANCE TEAM**

Charlie Riggs	Surveillance Team Leader, CBFO Technical Assistance Contractor (CTAC)
Steve Calvert	Surveillance Team Member, CTAC, Deputy Manager
Wayne Ledford	Surveillance Team member, CTAC, Manager, Audits and Assessments

#### **INSPECTOR**

Ed Feltcorn	Environmental Protection Agency (EPA)
Connie Walker	EPA Contractor

#### **OBSERVER**

Connie Walker	New Mexico Environment Department (NMED) Contractor
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### **4.0 SURVEILLANCE PARTICIPANTS**

RFETS individuals involved in the surveillance are identified in Attachment 1. A pre-surveillance meeting was held at the RFETS Building 460 on December 20, 2004. The surveillance was concluded with a post-surveillance meeting at the RFETS Building 460 on December 21, 2004.

#### **SUMMARY OF SURVEILLANCE RESULTS**

##### **Program Implementation**

The surveillance team concluded that the RFETS AK process and Supercompacted Waste activities are satisfactorily implemented.

##### **5.2 Activities Evaluated**

The surveillance team verified continued implementation of the RFETS AK process and the quality program activities associated with personnel training and qualification, control of nonconformances and corrective actions, control of documents and records, and program assessments as related to the AK process. The implementation of Supercompacted Waste activities was also evaluated.

### 5.2.1 Acceptable Knowledge

The surveillance team evaluated waste streams for all three Summary Category Groups: Solids (S3000), Soils/Gravels (S4000), and Debris (S5000).

The surveillance team examined AK objective evidence including Waste Stream Profile Forms (WSPFs) for several waste streams: two solids waste streams for TRM Solidified Inorganic Waste (WSPF RF107.03 and WSPF RF107.07); TRM Miscellaneous Laboratory Debris (WSPF RF130.01), a mixed debris stream with several assigned Resource Conservation and Recovery Act (RCRA) codes; and TRM Soil (WSPF RF134.02).

In addition to reviewing the AK Summary documents, WSPFs and attachments, and examples from the referenced AK source documents, the team conducted a traceability study on a container from each of these four waste streams (containers S03341, DD9684, D77375, and DA4784). Beginning with information from the Waste and Environmental Management System (WEMS) database, AK information was traced back to waste stream residue identification and characterization (WSRIC) and/or Backlog Waste Reassessment Baseline Book (BWRBB) records on process. Batch data reports for these containers were also examined. In addition, the surveillance team reviewed and collected objective evidence relevant to discrepancies in the AK record, discrepancies between the AK record and confirmatory test data, the discovery and mitigation of prohibited items in waste, training of AK staff, and how AK Quality Assurance Objectives (QAOs) were met. These activities were assessed by reviewing the latest version of the AK Accuracy Report, and other documents.

The information documented for several containers containing sealed sources does not constitute an auditable AK record (see CBFO CAR 05-009). The surveillance team also presented two Observations: 1) some of the WSPFs do not have the depth of supporting documentation that was apparent in the past, and 2) RFETS needs to finalize plans for archiving their databases (see Observations 1 and 2).

The surveillance team concluded that overall, the AK process was adequate, satisfactorily implemented, and effective.

### 5.2.2 Supercompacted Waste

The RFETS has twenty-two drums of TRU waste that were supercompacted in the Supercompaction and Repackaging Facility (SARF). These containers were subsequently subjected to real-time-radiography (RTR) using WIPP approved procedures and equipment. During the surveillance, a sample of the RTR batch data reports and videotapes of the RTR scans were reviewed. The supercompacted pucks inside the drums were penetrable by RTR and the waste inside was clearly identifiable. The RTR batch data reports and associated videotapes scans fully met the objectives of RTR. The batch data reports and videotapes reviewed were for drums D81585, D84466, and D81602.

The surveillance team concluded that overall, the Supercompacted Waste activities were adequate, satisfactorily implemented, and effective.

## **CORRECTIVE ACTIONS AND OBSERVATIONS**

### **6.1 Corrective Action Report (CAR)**

One condition adverse to quality was identified during the surveillance, resulting in the issuance of CBFO CAR 05-009, described below.

Waste stream RF130.01 includes containers that contain sealed sources. The isotopic quantities for these sealed sources were obtained from a RFETS Radiological Engineering database. This database is not referenced in the AK documentation for the waste stream. The information documented for these containers does not constitute an auditable AK record.

#### **Observations**

Two Observations, described below, were provided to RFETS management as a result of the surveillance.

##### **Observation 1**

Some of the WSPFs do not have the depth of supporting documentation (supplemental information) that was apparent in the past. RFETS needs to monitor the quality of supporting documentation as they complete their final WSPFs to ensure they remain compliant.

##### **Observation 2**

RFETS needs to finalize plans for archiving their databases, such as WEMS, prior to closure. The information in these databases is needed as AK information for other sites characterizing RFETS waste.

## **LIST OF ATTACHMENTS**

- Attachment 1: Personnel Contacted During the Surveillance
- Attachment 2: RFETS Documents Evaluated

PERSONNEL CONTACTED DURING THE SURVEILLANCE				
NAME	TITLE/ORG	PRE-SURV. MEETING	CONTACTED DURING SURV.	POST- SURV. MEETING
Armour, Faith	Lead WRC, SOM	X	X	X
Ballenger, Roger	TRU Waste Program Manager, KH	X	X	X
Civcci, John	MS Waste Management, MS	X		X
D'Amico, Eric	TRU Waste Program, KH	X	X	X
Durel, Med	Measurements, Manager		X	
Ferrera, Carol	TWCP PQAO, KH	X	X	X
Grady, Frank	TRU Waste Engineer, KH	X	X	X
Hicks, Dave	RFPO TRU/LLW Project Lead, DOE	X		X
Johnson, Micky	TRU Waste Program, Wastren	X	X	X
Kirschenmann, Harley	MSQA Manager, KH/Mactec	X	X	X
O'Leary, Jerry	TWCP & Measure Manager, KH	X	X	X
Sisk, Susan	MSQA Assessor, MSQA	X		
Smith, Scott	TRU Waste Programs, AK SME		X	X
Tallman, Steve	RFCSS; NDT Manager		X	
Wolfe, Mike	TRU Waste Program PDCO, SOM	X	X	



RFETS DOCUMENTS EVALUATED		
Number	Document/Rev. No.	DOCUMENT TITLE
1	1-MAN-008-WM-001, V8	Transuranic (TRU) Waste Management Manual
2	95-QAPJP-0050, V10	Rocky Flats Environmental Technology Site TRU Waste Characterization Program Quality Assurance Project Plan
3	PRO-484-WIPP-003, V7	Collection, Review, and Confirmation of Acceptable Knowledge Documentation
4	PRO-944-WIPP-008, V4	Completion of Waste Stream Profile Form for Waste to be Disposed of at WIPP
5	PRO-945-WIPP-009, R6	RCRA Characterization of TRU Waste to be Disposed of at WIPP
6	RF/RMRS-97-018, R14	RFETS TRU Waste Acceptable Knowledge Supplemental Information
7	RMRS-WIPP-98-100	Acceptable Knowledge TRU/TRM Waste Stream Summaries