



United States Government

Department of Energy

memorandum

Carlsbad Field Office
Carlsbad, New Mexico 88221

DATE: April 16, 2001

REPLY TO
ATTN OF: CBFO:QA:SAV:01-0680:UFC:2300.00


SUBJECT: SRS Certification Authority for Transportation and Characterization of Contact-Handled, Retrievably Stored Debris Waste Stream SR-T001-221F-HET

TO: Dale Ormand, DOE-SR

The Carlsbad Field Office (CBFO) has completed an evaluation of the Savannah River Site (SRS) programs for quality assurance, transportation, characterization, and certification of defense transuranic (TRU) contact-handled, retrievably stored debris waste stream SR-T001-221F-HET. The characterization methods evaluated were the active-passive neutron (PAN) and segmented gamma scanner (SGS) non-destructive assay (NDA) systems, real-time radiography (RTR), acceptable knowledge (AK), headspace gas (HSG) sampling and analysis, and visual examination (VE). Procedures SW15.7-SOP-TVEF-01, Revision 3 "TVEF Operations", SW15.7-SOP-RTR-01, Revision 8, IPC 1 – 5 "Real Time Radiography (RTR)/X-Ray Operations", and SW15.7-SOP-NDA-01, Revision 8, IPC 1 – 4 "Non-Destructive Assay (NDA) Operations" were written to be waste-stream specific.

Based on this evaluation (see attachment 1), the CBFO is satisfied that these activities meet all the requirements of the Waste Analysis Plan (WAP) of the WIPP *Hazardous Waste Facility Permit* (HWFP), the *Waste Acceptance Criteria for the Waste Isolation Pilot Plant* (WAC), the *Quality Assurance Program Document* (QAPD), the *Safety Analysis Report for the TRUPACT-II Shipping Package* (SARP), and other CBFO requirements and standards. However, due to the specificity of the above-listed procedures, this certification authority is limited to contact-handled, retrievably stored debris waste stream SR-T001-221F-HET.

The SRS transportation and waste certification authority is limited to those activities evaluated during audit A-01-01 (conducted November 7-16, 2000 and December 18, 2000). Attachment 2 contains a complete list of the procedures that were evaluated. 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
Carlsbad Field Office

Attachments

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Dale Ormand

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April 16, 2001

cc: w/attachments
T. Harms, DOE/HQ
K. Watson, CBFO
S. Vega, CBFO
H. Johnson, CBFO
B. Bennington, CBFO
J. D'Amelio, SRS
M. Mason, SRS
M. Gerle, WTS
D. Standiford, WTS
F. Marcinowski, EPA
M. Kruger, EPA
S. Zappe, NMED
M. Horseman, CTAC
T. Bowden, CTAC

SRS SITE CERTIFICATION PROGRAM STATUS

The site certification panel evaluated the documentation supporting the compliance of SRS's TRU waste quality assurance, transportation, characterization, and certification activities. The panel unanimously recommends that SRS be granted authority to transport, characterize, and certify contact-handled, retrievably stored debris waste stream SR-T001-221F-HET using the following systems and/or processes: active-passive neutron (PAN) and segmented gamma scanner (SGS) non-destructive assay (NDA) systems, real-time radiography (RTR), acceptable knowledge (AK), headspace gas (HSG) sampling and analysis, and visual examination (VE). The quality assurance program was found to be effectively implemented. See attachment 2 for the complete lists of procedures that were evaluated during audit A-01-01.

STATUS

- All necessary program elements have been determined to be complete
- The following SRS required site documents have been revised, approved, and are in place identifying how the site complies with the WIPP WAP, CAO QAPD, SARP, and WIPP WAC requirements:
 - ❑ WCP – *Savannah River Site WIPP Disposal Program Waste Certification Plan*, WSRC-RP-99-01095, Rev. 0, August 3, 2000
 - ❑ QAPjP – *Savannah River Site WIPP Disposal Program Quality Assurance Project Plan*, WSRC-RP-99-01097, Rev. 1, September 5, 2000
 - ❑ QAPD – *Savannah River Site WIPP Disposal Program Quality Assurance Program Document*, WSRC-RP-99-01119, Rev. 0, August 3, 2000
 - ❑ TRAMPAC and QA Plan – *Savannah River Site WIPP Disposal Program TRUPACT-II Authorized Methods for Payload Control (TRAMPAC)*, WSRC-RP-99-01120, Rev. 0, August 3, 2000 (QA Plan: Section 1.6 of TRAMPAC; also referenced in QAPD, Section 2.11)
 - ❑ Packaging QA Plan – (QAPD, Sections 1.0 – 6.1)
 - ❑ Graded Approach Procedure – (QAPD, Section 1.4)
 - ❑ Standard operating procedures (see attachment 2 for complete procedure lists)
- SRS successfully participated in the following performance demonstration programs (PDPs):
 - ❑ NDA PDP participation cycle was satisfactory in Cycle 7A (report date October, 2000).
 - ❑ HSG PDP participation cycle was satisfactory in Cycle 14A (report date June, 2000).
- CBFO conducted audit A-01-01 (November 7-16, 2000 and December 18, 2000). This audit determined that the processes, documentation, and procedures listed in attachment 2 are adequate and effectively implemented.
- CARs issued during audit A-01-01 were successfully implemented and closed. No significant CARs remain open.

RECOMMENDATION

The panel recommends that the CBFO Manager grant SRS authority to characterize, certify and transport TRU contact-handled, retrievably stored debris waste stream SR-T001-221F-HET. It is also recommended that this authority be limited to those systems and processes audited during audit A-01-01.

CONCURRENCE

Dea Chism
for S. Vega _____ 04/16/01
Quality Assurance Team Leader Date

K. Watson
K. Watson _____ 04/15/01
Assistant Manager Date
National TRU Program

Cynthia Zorn for H. Johnson
H. Johnson _____ 04/16/01
Acting Assistant Manager Date
Regulatory Compliance

SRS IMPLEMENTING PROCEDURES LISTING

Program Documents

Document No.	Document Title
WSRC-RP-99-01095	“Savannah River Site WIPP Disposal Program Waste Certification Plan”
WSRC-RP-99-01097	“Savannah River Site WIPP Disposal Program Quality Assurance Project Plan”
WSRC-RP-99-01119	“Savannah River Site WIPP Disposal Program Quality Assurance Program Document”
WSRC-RP-99-01120	“Savannah River Site WIPP Disposal Program TRUPACT-II Authorized Methods for Payload Control (TRAMPAC)”

Implementing Procedures

Technical-Related Procedures

Document No.	Document Title
SP-SW-099	Collecting Field Reference Standard and Equipment Blank Samples
SP-SW-098	Passive Active Neutron (PAN) System Minimum Detectable Concentration (MDC) Assays
SP-SW-095	Headspace Gas Sampling of Empty Drums
SP SW-93	PAN Standard Drum Reconciliation
SP-SW-092	Collecting Annual Field References Standard and Equipment Blank Samples
SP SW-88	PAN Standard Drum Reconciliation
SP-SW-085	Passive Active Neutron (PAN) Assay System Upgrade Test
SP SW-77	Passive Active Neutron (PAN) Assay System Test Drum Assembly
SP-SW-74	Segmented Gamma Scanner (SGS) Test Drum Assembly
SW18-WP-AP-0021	NDA Systems Measurement Control Program
SW18-WP-AP-0020	Headspace Gas Analysis Batch Data Review Reference Tables
SW18-WP-AP-0019	Computer Configuration Control: HSGA Laboratory
SW18-WP-AP-0018	Data Generation Level Review for NDA
SW18-WP-AP-0017	WIPP Disposal Program Data Generation Level Review for RTR/X-Ray
SW18-WP-AP-0016	WIPP Disposal Program Data Generation Level Review for Visual Examination
SW18-WP-AP-0015	Data Generation Level Validation and Verification for Headspace Gas Analysis
SW18-WP-AP-0014	Data Generation Level Validation and Verification for Headspace Gas Sampling
SW18-WP-AP-0013	Headspace Gas Analysis Journal
SW18-WP-AP-0012	TRUPACT-II Transportation Arrangement
SW18-WP-AP-0011	QC/Measurement Control: HGAS Laboratory
SW18-WP-AP-0010	WIPP Disposal Program Waste Stream Profile Form Preparation and Reconciliation with Data Quality Objectives
SW18-WP-AP-0009	WIPP Disposal Program Waste Stream Determination and Reporting
SW18-WP-AP-0008	WIPP Disposal Program Waste Certification Statement Preparation
SW18-WP-AP-0003	WIPP Disposal Program Project Level Validation and Verification
SW18-WP-AP-0002	WIPP Disposal Program Acceptable Knowledge
SW15.7-INSP-PDP-01	WIPP Disposal Program Non-Destructive Assay Performance Demonstration Program (PDP)
SW15.7-SOP-CONT-01	WIPP Waste Container Selection, Preparation, and Deficiency Operations
SW15.7-SOP HSGS-01	Headspace Gas Sampling

Document No.	Document Title
SW15.7-SOP HSGA-01	Headspace Gas Analysis Operations
SW15.7-SOP HSDR-01	Headspace Gas Analysis Data Review
SW15.7-INSP-HSG-01	Gas Analysis Systems Inspection
SW15.7-IMP-HSGAR-01	WIPP Disposal Program Gas Analysis Rounds
SW15.7-SOP-CCCP-01	Canister Cleaning and Certification
SW15.7-SOP-HGEC-01	Headspace Gas Equipment Certification
SW15.7-SOP-NDA-01	Non-Destructive Assay (NDA) Operations
SW15.7-SOP-SGS-01	Segmented Gamma Scanner Verification of Calibration
SW15.7-SOP-PAN-01	Passive Active Neutron System Verification of Calibration
SW15.7-SOP-PSR-01	PAN Standard Drum Reconciliation
SW15.7-SOP-WWIS-01	Waste to WIPP Information System (WWIS) Data Entry Operations
SW15.7-SOP-RTR-01	Real Time Radiography (RTR)/X-Ray Operations
SW15.7-SOP-TVEF-01	TVEF Operations
SW15.7-INSP-NDE-01	Non-Destructive Examination Test Drum Assembly
SW15.7-SOP-PYLD-01	TRUPACT-II Package Creation
SW15.7-SOP-WEIGH-01	Toledo Scale Operations
SW15.7-INSP-PDP-02	WIPP Disposal Program Headspace Gas Analysis Performance Demonstration Program (PDP)
SW15.7-INSP-LIFT-01	Ballymore Elevating Work Platform Inspections
SW15.7-INSP-NDE-02	WIPP Disposal Program Radiography Test Drum Observation
SW15.7-SOP-PYLD-02	TRUPACT-II Shipping Payload Assembly
SW15.7-SOP-TRUPT-01	TRUPACT-II Handling/Loading
SW15.7-SOP-TRUPT-02	TRUPACT-II O-Ring Leak Testing
SW15.7-SOP-TRUPT-03	TRUPACT-II Infrequent Operations
SW15.7-INSP-TRUPACT-01	TRUPACT-II Quarterly Tools/Materials Inventory Inspection
WSRC 19Q, TSM 1.02	General Transportation Requirements for Radioactive and Non-Radioactive Hazardous Materials

Document No.	Document Title
WSRC 19Q , TSM 2.02	Radioactive Material Shipment and Transfer
5Q1.1, Procedure 133	Radiological Surveys
QA-Related Procedures	
Document No.	Document Title
1Q, QAP 1-1	Organization
1Q, QAP 1-2	Stop Work
1Q, QAP 2-1	Quality Assurance Program
1Q, QAP 2-2	Personnel Training and Qualification
1Q, QAP 2-3	Control of Research and Development Activities
1Q, QAP-2-4	Auditor/Lead Auditor Qualification and Certification
1Q, QAP 2-5	Qualification and Certification of Independent Inspection Personnel
1Q, QAP 2-7	Program Requirements for Analytical Measurement Systems
1Q, QAP 4-1	Procurement Document Control
1Q, QAP 5-1	Instruction, Procedures, and Drawings
1Q, QAP 6-1	Document Control
1Q, QAP 7-2	Control of Purchased Items and Services
1Q, QAP 8-1	Identification and Control of Items
1Q, QAP 9-1	Control of Processes
1Q, QAP 9-2	Control of Nondestructive Examination
1Q, QAP 9-4	Work Processes
1Q, QAP 11-1	Test Control
1Q, QAP 12-1	Control of Measuring and Test Equipment
1Q, QAP 12-2	Control of Installed Process Instrumentation
1Q, QAP 13-1	Packaging, Handling, Shipping, and Storage
1Q, QAP 14-1	Inspection, Test, and Operating Status
1Q, QAP 15-1	Control of Nonconforming Items
1Q, QAP 15-2	Control of Nonconforming Activities
1Q, QAP 16-1	Corrective Action Reports
1Q, QAP 17-1	Quality Assurance Records
1Q, QAP 18-2	Quality Assurance Surveillance
1Q, QAP 18-3	Quality Assurance External Audits
1Q, QAP 18-4	Management Assessments
1Q, QAP 18-6	Quality Assurance Internal Audits
1Q, QAP 18-7	Quality Assurance Supplier Surveillance
1Q, QAP 19-2	Quality Improvement
1Q, QAP 20-1	Software Quality Assurance
SW-QI-1171	Records Management
SWD-SWT-98-0056	SRS WIPP Disposal Program Operations Training Program Description
SWD-SWT-98-0058	SRS WIPP Disposal Program Technical and Support Staff Training Program Description
SW18-WP-AP-0001	WIPP Disposal Program Process Control
SW18-WP-AP-0004	WIPP Disposal Program Quality Assurance Trending
SW18-WP-AP-0005	WIPP Disposal Program Quality Assurance Inspections
SW18-WP-AP-0007	WIPP Records Management

Document No.	Document Title
WSRC-RP-99-00359	Savannah River Site WIPP Disposal Program Software Quality Assurance Plan
WSRC-RP-99-00221	Savannah River Site WIPP Disposal Program Software Inventory
WSRC 1-01, Charter 6.12	Quality Managers Council
WSRC 1-01, Policy 5.35	Corrective Action Program
WSRC 12Q, FEB-1 4B, Procedure 4.0	Facility Evaluation Board Qualification and Certification Programs
3E, Procedure 1.7	Supplier Deviation Disposition Request For Procurement Specifications
WSRC 1B, MRP 3.32.	Document Control
WSRC 1B, Procedure 3.31	Records Management
WSRC 2S, Procedure 1.3	Procedure Compliance
WSRC 1.1, Procedure 1.1	Procedure Administration