

United States Government

Department of Energy

**memorandum**2000  
RECEIVEDCarlsbad Area Office  
Carlsbad, New Mexico 88221

**DATE:** May 31, 2000

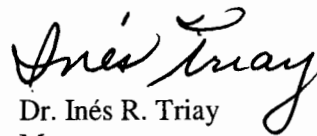
**REPLY TO  
ATTN OF:** CAO:QA:SAV:NM 00-0802 UFC 2300.00

**SUBJECT:** Authority for Certification and Characterization of Debris Waste

**TO:** Keith Klein, RL

The Carlsbad Area Office (CAO) has completed an evaluation of the Hanford Site's programs for quality assurance, transportation, characterization, and certification of defense transuranic (TRU) retrievably stored debris waste. The characterization systems and processes evaluated were the non-destructive assay (NDA) process, real-time radiography (RTR) system, acceptable knowledge (AK), headspace gas (HSG) process, and visual examination (VE) process. Based on this evaluation (see attachment1), the CAO is satisfied that these activities meet all the requirements of the Hazardous Waste Facility Permit, the *Waste Acceptance Criteria for the Waste Isolation Pilot Plant*, the *Quality Assurance Program Document*, and other CAO requirements and standards.

The Hanford transportation and waste certification authority is limited to those systems and processes evaluated during audit A-00-05 conducted January 24-28. 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 CAO prior to their implementation. NMED and EPA approval will be required prior to initial shipment. CAO will notify the Hanford Site when approval has been obtained.

  
Dr. Inés R. Triay  
Manager

## Attachments

cc:

- B. Stroud, CAO
- S. Vega, CAO
- K. Watson, CAO
- C. Zvonar, CAO
- M. French, DOE/RL
- P. Crane, Hanford
- S. Kouba, WID
- S. Monroe, EPA
- S. Zappe, NMED
- L. Greene, CTAC
- S. Calvert, CTAC



## HANFORD SITE CERTIFICATION PROGRAM STATUS

The site certification panel evaluated the documentation supporting the compliance of the Hanford Site TRU waste quality assurance, transportation, characterization, and certification activities. The panel unanimously recommends that the Hanford Site be granted CAO authority to transport, characterize, and certify retrievably stored debris waste. The following systems and/or processes are approved: non-destructive assay (NDA) system, real-time radiography (RTR) system, acceptable knowledge (AK), headspace gas (HSG) process and visual examination (VA) process. The quality assurance program was found to be effectively implemented. See attachment 2 for a complete list of procedures that were evaluated during audit A-00-05.

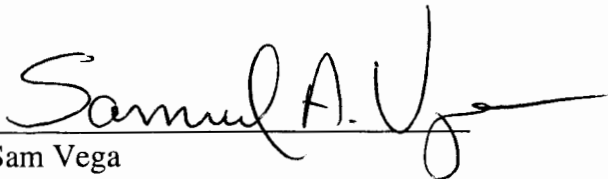
### STATUS

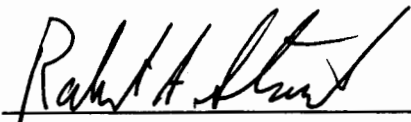
- All program elements were found to be complete
- The following Hanford required site documents have been revised, approved, and are in place identifying how the site complies with the WIPP Hazardous Waste Facility Permit WAP, CAO QAPD, and WIPP WAC requirements:
  - ❑ WCP – *Hanford Site Transuranic Waste Certification Plan*, HNF-2600, Rev. 2, December 2, 1999
  - ❑ QAPjP – *Hanford Site Transuranic Waste Characterization Quality Assurance Project Plan*, HNF-2599, Rev. 2, December 2, 1999 with page changes dated 2/2/00
  - ❑ TRAMPAC (section 4.0 of WCP)
  - ❑ Certification and TRAMPAC QA Plans (section 5.0 of WCP)
  - ❑ Grading Procedure (section 1.1.2 of WMH-400)
  - ❑ Procedures Matrix – *Quality Assurance Program Document Procedure Matrix*, HNF-2601, Rev. 1, December 27, 1999
  - ❑ Standard operating procedures (see attachment 2 for complete procedure list)
- Hanford successfully participated in the following performance demonstration programs (PDPs):
  - ❑ NDA PDP participation cycle 6A (report dated October 1999)
  - ❑ RCRA PDP participation cycle 6B (report dated September 1999)
  - ❑ HSG PDP participation cycle 13 (report dated May 1999 & letter CAO:OWDO:MRB 99-0600)
- CAO conducted audit A-00-05 (January 24-28) and returned on April 17-19 to close all associated CARs. This audit determined that the processes, documentation, and procedures listed in attachment 2 are adequate and effectively implemented.
- CARs issued during audit A-00-05 were successfully implemented and closed during the April 17-19 visit. No significant CARs remain open.


**RECOMMENDATION**

The panel recommends that the CAO Manager grant Hanford CAO authority to characterize, certify and transport TRU retrievably stored debris waste. It is also recommended that this authority be limited to those systems and processes audited during audit A-00-05.

**CONCURRENCE**

  
\_\_\_\_\_  
Sam Vega  
Quality Assurance Team Leader

  
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Robert A. Stroud  
National TRU Program Team Leader

  
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C. Zvonar  
Acting Assistant Manager  
Regulatory Compliance

## List of Procedures/Documents Audited (A-00-05)

NUMBER	PROCEDURE NUMBER	TITLE
1.	WMH-400, section 1.1.2	TRU Graded Approach
2.	WMH-400, section 1.2.1	TRU Training and Qualification Plan
3.	WMH-400, section 1.2.2	Qualification and Certification of Inspection and Test Personnel
4.	WMH-400, section 1.2.3	Qualification and Certification of Audit Personnel
5.	WMH-400, section 1.3.1	TRU Corrective Action Management
6.	WMH-400, section 1.3.2	TRU Nonconforming Item Reporting and Control System
7.	WMH-400, section 1.3.3	TRU Corrective Action Reporting and Control
8.	WMH-400, section 1.4.1	TRU Document Control
9.	WMH-400, section 1.5.1	TRU Records Management
10.	WMH-400, section 2.1.1	TRU Process Control
11.	WMH-400, section 2.1.2	TRU Operating Procedure Preparation and Approval
12.	WMH-400, section 2.1.3	TRU Administrative Procedure Preparation and Approval
13.	WMH-400, section 2.1.5	TRU Transportation Logistics
14.	WMH-400, section 2.1.6	TRU Analytical Procedure Process
15.	WMH-400, section 2.3.1	TRU Procurement Planning
16.	WMH-400, section 2.3.2	TRU Procurement Document Control
17.	WMH-400, section 2.3.3	TRU Control of Purchased Items and Services
18.	WMH-400, section 2.4.4	TRU Control of Measuring, Test, and Data Collecting Equipment
19.	WMH-400, section 2.4.5	TRU Identification and Control of Items
20.	WMH-400, section 3.1.1	TRU Management Assessment
21.	WMH-400, section 3.1.2	Quality Assurance Reports to Management
22.	WMH-400, section 3.2.1	TRU Independent Assessments
23.	WMH-400, section 3.2.2	TRU Surveillance Program
24.	WMH-400, section 6.1.1	TRU Software Quality Assurance
25.	WMH-400, section 7.1.1	TRU Waste DQOs Reconciliation and Reporting
26.	WMH-400, section 7.1.3	Transuranic Waste Repackaging, Visual Examination, and Sampling
27.	WMH-400, section 7.1.4	Sampling Design and Data Analysis for RCRA Characterization and Visual Examination of Retrievably Stored Waste
28.	WMH-400, section 7.1.5	WWIS Data Reporting and Entry
29.	WMH-400, section 7.1.6	TRU Waste Project Level Data Validation and Verification
30.	WMH-400, section 7.1.7	TRU Waste Sample and Waste Container Management Activities
31.	WMH-400, section 7.1.8	Transuranic Waste Transportation and Disposal Certification
32.	WMH-400, section 7.1.9	Acceptable Knowledge Documentation Management
33.	WMH-400, section 8.1.1	Logkeeping Practices for WIPP Activities in Special Analytical Support
34.	WMH-400, section 8.1.8	Data Management for Headspace Gas Results
35.	WMH-350, section 2.2	Calculation of Assay Results
36.	WMH-350, section 2.3	Data Management of NDE/NDA Results
37.	WMH-350, section 2.4	QAOs for NDA Results
38.	WMH-350, section 2.5	GEA Energy and Efficiency Setup and Baseline Establishment
39.	WRP1-OP-0503	Move Drums Throughout WRAP

<b>NUMBER</b>	<b>PROCEDURE NUMBER</b>	<b>TITLE</b>
40.	WRP1-OP-0521	Receive and Load TRUPACT Containers
41.	WRP1-OP-0522	Assemble and Stretch Wrap TRUPACT Payload
42.	WRP1-OP-0524	Helium Leak Detector Operation
43.	WRP1-OP-1225	Radiological Support of TRUPACT-II Shipping and Receiving
44.	WRP1-OP-0726	Glovebox Loadout
45.	WRP1-OP-0729	Visual Examination
46.	WRP1-OP-0906	Gamma Energy Assay Operations
47.	WRP1-OP-0908	Operation of Drum NDE System
48.	WRP1-OP-0911	Storage and Use of Special Nuclear Material (for PDP work only)
49.	DO-080-009	Obtain Headspace Gas Samples of TRU Waste Containers
50.	LA-523-410	Determination of VOCs in TRU/Mixed Waste Container Headspace
51.	LA-523-426	Determination of Permanent Gases in Waste Container Headspace
52.	LO-080-407	Cleaning SUMMA Canisters
53.	LO-090-450	TRU Project Sample Chain-of-Custody, Acceptance, and Disposal
54.	DOE/CAO-94-1045	Performance Demonstration Program Plan for Nondestructive Assay for the TRU Waste Characterization Program
55.	DOE/CAO-94-1076	Performance Demonstration Program Plan for Analysis of Simulated Headspace Gases