

U.S. Department of Energy, Richland Operations Office/Office of River Protection

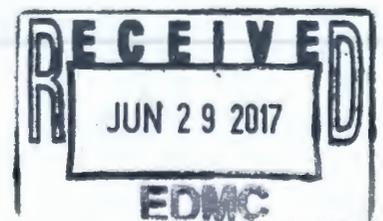
T Plant Environmental Compliance

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Analysis and Evaluation Division Assessment A&E-00-ASS-072



Executive Summary

The Richland Operations Office (RL) Analysis and Evaluation Division (A&E) assessment for environmental compliance was performed at T Plant during the week of October 10, 2000. The scope of the assessment was the contractor's compliance with the Hanford Site Federal Resource Conservation and Recovery Act (RCRA) Permit Number WA7890008967 requirements covering the treatment, storage, and disposal (TSD) of mixed waste.

An entrance meeting was conducted on October 10, 2000, at the T Plant Facility conference room. The A&E assessment team and Fluor Hanford, Inc. (FHI) points of contact attended the entrance meeting. An exit meeting was held on October 20, 2000, at T Plant.

The assessment identified no findings and no observations. The results of this assessment indicate that the T Plant Facility Management is adequately meeting the expectations of DOE in the areas of RCRA mixed waste treatment, storage and disposal, and the policy for line management environmental, safety and health oversight (P 450.5).

The facility's management and workers provided the assessment team with individual courtesy and cooperation, and demonstrated a commitment to working safely and providing a quality product. The facility specific requirements for environmental compliance that were reviewed by the assessment team at the facility were acceptably met.

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I. Introduction and Scope

A. Background

The T Plant complex is defined as an "Interim Status," TSD unit per RCRA and the Dangerous Waste Regulations of Washington State Administrative Code (WAC). T Plant is authorized to treat and store dangerous and/or mixed waste in accordance with the conditions of the Hanford Site RCRA Dangerous Waste Permit, the applicable provisions of the WAC Chapter 173-303 and 40 CFR. T Plant is one unit of a multi-part solid waste treatment system. Solid and aqueous mixed waste streams are stored at T Plant. The mixed waste stored at T Plant is a result of both previous facility operations and waste generated by, and transferred from, various Hanford Site waste management and remediation activities. Additional missions include decontamination of equipment and debris, identification, verification, sampling, treatment, and repackaging of mixed waste, repair, and preparation of equipment to be returned to service, and demonstration of new treatment technologies.

T Plant is composed of a 260-meter long canyon structure, a railroad access tunnel, outside storage pads, outside storage buildings, a decontamination building, office buildings/trailers, and a stack. Outside storage of containers with free liquids is controlled with mobile containment pans providing the necessary secondary containment system.

B. Assessment

This assessment covers the permittee's program for compliance with the RCRA Permit requirements pertaining to the receipt, treatment, and storage of mixed waste at T Plant. The purpose of this assessment was to evaluate T Plant operations for compliance with the Hanford Facility RCRA Permit Number WA7890008967, and to meet a commitment of the State of Washington Department of Ecology (Ecology) "Final Determination Pursuant to the Hanford Federal Facility Agreement and Consent Order (HFFACO) regarding the U.S. Department of Energy's (DOE) compliance with the Land Disposal Restriction (LDR) Requirements of Washington State's Hazardous Waste Management Act (HWMA), the Federal Resource Conservation and Recovery Act (RCRA), DOE's Annual Land Disposal Restrictions (LDR) Report, and HFFACO Milestone M-26-01."

The success of any organization at Hanford depends upon the extent to which its products or services satisfy DOE requirements and expectations. Delivery of products or expectations occurs through the implementation of programs, systems, and processes. The responsibility for satisfying the program requirements lies with each member of an organization. The intent of this assessment is to provide objective evidence of the areas in which management and workers need to improve on their ability to perform on the mission and achieve management's goals.

T-Plant Environmental Compliance Assessment

Third party assessments are conducted by DOE to evaluate the total picture of how well the Hanford contractor's (in this case, FHI) management system, complies with the applicable regulatory requirements and standards. This assessment was applied using a graded approach. The assessment was tailored to the specific activities being performed at T Plant.

II. Method

An assessment entry meeting was held at the facility on October 10, 2000. The assessment team members were identified. The purpose of the assessment was declared and the scope of the assessment was described. The conduct of the assessment was reviewed along with the assessment schedule.

The method used for this assessment was a combination of document review, facility walkdown/inspection, and interviews. Regulatory documents were reviewed to develop the areas of primary focus for the assessment. The areas of focus are listed below and are not exclusively related to mixed waste storage, but are instead a "comprehensive" look at operational and regulatory compliance areas. The documents used to develop the list for the assessment areas were the Part A permit application, the Dangerous Waste Regulations (WAC 173-303), 40 CFR, RL Facility Representative Surveillances, contractor self-assessments and independent assessments. This assessment focused on the following specific areas:

- Facility records;
- procedures;
- facility contingency plan;
- personnel training and qualification;
- waste analysis plan;
- operating log and logkeeping practices;
- facility security; and
- self and independent assessments.

The contractor oversight and evaluation planning process provides the mechanism whereby RL personnel (mission element, mission support, and support service) evaluate contractor performance to ensure work is performed in accordance with the applicable requirements. This process also provides the mechanism to evaluate the adequacy of the contractors' self-assessment (including independent) program, and fulfills an important part of the feedback and improvement function of the RL Integrated Management System (RIMS). This process supports implementation of DOE M 411.1A, "Safety Functions, Responsibilities and Authorities Manual," DOE Policy 450.5, "Line Environment, Safety, and Health Oversight," and DOE O 224.1, "Contractor Performance Based Business Management Process."

III. Results

A. General

1. **General Operations:** The facility's general housekeeping was maintained, appropriate warning signs inside the facility were established, spill kits were available for use and fire protection equipment was clearly marked and accessible. The personal protective equipment was present and appropriately staged. Radiation survey maps were current.

No issues were found.

2. **Inspections:** There was a written facility inspection plan with specified frequencies. Review of the inspection record files indicated that the daily operator rounds and weekly/monthly/quarterly health and safety inspections were performed and documented as required. Any findings recorded on the Inspection Data Sheets were correctly dispositioned on the Inspection Finding and Corrective Action Data Sheets.

Inspection procedures reviewed:

- DO-040-016, "Weekly and Daily Surveillance of Treatment Facility Waste Management Areas;"
- DO-040-020, "Daily Surveillance of 2706-T;" and
- DO-040-001, "Daily Surveillance for Treatment Facility."

No issues were found.

B. Specific

1. **Records:** The facility records of the information related to the mixed waste treatment and storage operations were reviewed. The T Plant facility inspection records are retained at the Solid Waste Project Records Control Center in MO-720. All other records pertaining to the waste analysis, inspections, waste receipt, waste handling, and waste shipping were acceptable.

No issues were found.

2. **Procedures:** Procedures reviewed for T Plant are written as part of the FHI Solid Waste Project program. Procedures covering waste receiving, treatment operations, drum handling, drum storage, and designation of waste storage areas were up-to-date and readily accessible.

The following procedures were reviewed:

- DO-040-001, "Daily Surveillance for Treatment Facility;"

DO-040-016, "Weekly and Daily Surveillance of Treatment Facility Waste Management Areas;"

- DO-040-020, "Daily Surveillance of 2706-T;"
- DO-100-012, "Package Mixed Waste in Drums and Boxes";
- DO-100-035, "Verify and Repackage Waste at Treatment Facility"; and
- DO-080-007, "Sample 270-T/221-T Radioactive Liquid and Sludge".

No issues were found.

3. Facility Contingency Plan: The facility's emergency preparedness plan was complete and approved by the facility management, the environmental compliance officer, the manager of emergency preparedness and the Hanford Fire Department.

Procedure Reviewed: HNF-IP-0263-TPC, "Building Emergency Plan for the Treatment Facility".

No issues were found.

4. Personnel Training and Qualifications: Training records indicated that the training coordinator was assigned, that all of the applicable courses were listed, and all personnel requiring training in their particular areas were current as required in the permit. The written training plan had the necessary content, training frequencies, and training techniques. Job descriptions were matched to the training requirements covering requisite skills, education, qualifications and duties for each position. It was clear that the training was relevant to the positions.

Procedure Reviewed: HNF-IP-1272, Rev. 2, "T Plant Dangerous Waste Training Plan".

No issues found.

5. Waste Analysis Plan: T Plant is presently in contact with Ecology over issues of waste designation, waste analysis, and management of waste containers. A Notice of Correction was issued on July 11, 2000, concerning 26 drums that were stored at the 2714-U T Hopper pad and transferred to T Plant in 1998. It is alleged that the drums were never properly designated as required by WAC-173-303. Because of the on going discussions with Ecology on this issue, the assessment team did not review this program in detail at present. The assessment team will evaluate the contractor's response and corrective actions on this subject at the next annual LDR assessment. The procedures for waste verification and acceptance were reviewed. Appropriate quality control measures were in place to ensure quality data is obtained when performing the waste sampling, and for performing physical and chemical screening.

Procedures reviewed: HNF-SD-EN-WAP-005, Rev. 1, "Waste Analysis Plan for T-Plant Complex," and WMP-370, "Waste Services".

No issues were found.

6. **Operating Logs and Logkeeping Practices:** Logbooks were in order. The necessary entries were made in the appropriate logbook whenever waste was received, processed, moved, stored or shipped. The logbooks also recorded safety and process equipment inspections. Logbooks reviewed were for the 221-T Canyon Building operations, the 2706 Facility (decontamination building) operations, and the radiological inventory tracking.

No issues were found.

7. **Facility Security:** The facility has posted the correct warning signs on the outside of the facility and at all entry points. The entry points to protected areas were controlled with keypads to prevent unauthorized entry.

No issues were found.

8. **Self and Independent Assessments:** Management and Worker self-assessments were performed, and the results reviewed by the assessment team. The following self-assessments were reviewed:

- WMP-00-ST-WA-EP-279 9/26/00 Training;
- WMP-00-SW-WA-EP-093 8/30/00 Chemical Management;
- WMP-00-SW-WA-EP-247 8/30/00 Sump/Drain Collection;
- WMP-00-ST-EA-EP-098 12/21/99 Water Quality Program;
- WMP-00-ST-EA-EP-113 12/25/00 Emergency Preparedness;
- WMP-00-ST-EA-EP-163 3/7/00 Air Quality;
- WMP-00-ST-WA-EP-081 2/22/00 Compilation of Nine Worker Assessments; and
- WMP-00-ST-WA-EP-007 10/2/00 PCB Postings Signs for the 214-T Storage Building.

The Facility Evaluation Board (FEB) last completed an independent assessment of T Plant in March 2000. There were no recurring environmental issues from the FEB assessment. In the assessment, weaknesses in the facility's radiological postings were noted. The facility walkthrough indicated that the deficiencies had been resolved. All other corrective actions were either completed or in the process of being completed.

The team noted that within the past year there have been no documented DOE oversight activities by either Facility Representatives (FR) or the mission element. FR program staff told the team that this was due to the low risk and hazard associated with the facility, and was, therefore, not included in base coverage. They also noted that this was consistent with DOE-STD-1063-2000 FR guidelines.

IV. Findings and Observations

A. No Findings.

Requirements: N/A

Discussion: N/A

B. No Observations

Requirements: N/A

Discussion: N/A

V. Personnel Interviewed

Brett Barnes, Environmental Compliance Officer
Steve Szendre, FH Regulatory Compliance Specialist
Charles Davis, Operations Specialist
Becky Robbins, SWTP Records

VI. Signatures



S.E. Chalk, Assessment Team Leader

11/14/00
Date



D.W. Roha, Team Member

11/14/00
Date



S.A. Christman, Team Member

11/14/00
Date