December 15, 2004


Surveillance Report S-05-02 of the Hanford TRU Waste Transportation Program

Jerry Higgins, DOE-RL

The Carlsbad Field Office (CBFO) performed Surveillance S-05-02 of the Hanford TRU Waste Transportation Program on December 8, 2004. The surveillance team concluded that overall the Hanford TRU Waste Transportation Program demonstrated effectively the skills to perform standard waste box (SWB) and ten drum overpack (TDOP) handling/loading activities per WRP1-OP-0522, Revision G-1. The surveillance was conducted at the Hanford Waste Receiving and Processing (WRAP) Facility.

The surveillance team identified one deficiency corrected during surveillance (CDS) that is described in Surveillance Report S-05-02, section 6.2.

The details of the surveillance as well as conclusions are detailed within the enclosed surveillance report.

If you have any questions or comments concerning the evaluation, please contact me at (505) 234-7483.

Martin P. Navarrete
Quality Assurance Specialist

Attachment
Mr. Higgins

cc: w/attachment
A. Holland, CBFO *ED
K. Watson, CBFO ED
M. Eagle, EPA ED
E. Feltcorn, EPA ED
R. Joglekar, EPA ED
M. French, DOE RL ED
S. Zapae, NMED ED
L. Greene, WRES ED
S. Harrison, CTAC ED
T. Putnam, CTAC ED
CBFO QA File
CBFO M&RC
WIPP Operating Record, MS 486-06

*ED denotes electronic distribution
U.S. DEPARTMENT OF ENERGY
CARLSBAD FIELD OFFICE

Surveillance Report
of
Hanford TRU Waste Transportation Program

Richland, Washington

Surveillance Number S-05-02

December 7, 2004

TRU Waste Transportation Program
at the
Hanford Waste Receiving and Processing (WRAP) Facility

Prepared by: Thomas Putnam, CTAC Surveillance Team Leader

Date: 12-15-04

Approved by: Martin Navarrete, CBFO Quality Assurance Specialist

Date: 12-15-04
1.0 EXECUTIVE SUMMARY

Carlsbad Field Office (CBFO) Surveillance S-05-02 was conducted to evaluate the adequacy, implementation, and effectiveness of the Hanford TRU Waste Transportation Program. The surveillance evaluated the contact-handled (CH) waste packaging and assembly operations for the standard waste box (SWB) and the ten-drum overpack (TDOP) in accordance with the DOE/CBFO-94-1012, Revision 6, CBFO Quality Assurance Program Document (QAPD); DOE/WIPP 02-3183, Revision 1, CH Packaging Program Guidance; DOE/WIPP 02-3184, Revision 1, CH Packaging Operations Manual; and WRP1-OP-0522, Revision G-1, Assemble TRUPACT-II Payload, at the Hanford Waste Receiving and Processing (WRAP) Facility. The surveillance was conducted on December 7, 2004.

The surveillance team concluded that overall, the Hanford TRU Waste Transportation Program and implementing procedures are adequate relative to the flow-down of requirements from the CBFO QAPD, TRUPACT-II Authorized Methods for Payload Control (TRAMPAC), and DOE/WIPP CH packaging manuals. In addition, the surveillance team concluded that the implementing procedures are adequate and effectively implemented. The surveillance team also found that the Hanford program has the proper equipment (e.g., cranes, slings, forklifts) to assemble and load SWBs and TDOPs into the TRUPACT-II in a safe and efficient, compliance operation.

One concern, a procedure compliance issue, was discussed with the Hanford Transportation Certification Official (TCO) and documented as a Deficiency Corrected During the Surveillance (CDS) in section 6.

2.0 SCOPE

The surveillance team evaluated the adequacy, implementation, and effectiveness of SWB and TDOP payload certification, payload assembly, and payload loading. The surveillance team did not review or observe transuranic (TRU) waste shipment.

The following Hanford TRU Waste Transportation Program CH packaging operations and transportation areas were evaluated:

Training:
  o WRP1-OP-0522, Revision G-1, Assemble TRUPACT-II Payload

Loading SWBs, including:
  o Lid removal
  o Inspection
  o Loading
  o Gasket installation
  o Lid installation
  o Labeling
  o Payload assembly
• Loading TDOPs, including:
  o Lid Removal
  o Maintenance and inspection
  o Installation of gasket
  o Filter and plugs installation
  o Payload handling/loading of 55-gallon drums
  o Lid installation
  o Labeling

CH waste processing:
  o Retrieving drums
  o Scanning drums (barcodes)
  o Creating shipment container lists using the Data Management System
  o Recording shipment numbers

SURVEILLANCE TEAM AND OBSERVERS

CBFO SURVEILLANCE TEAM

Tommy Putnam  Surveillance Team Leader, Carlsbad Field Office
              Technical Assistance Contractor (CTAC)
James Eide    CTAC Auditor

OBSERVERS/INSPECTORS

None

SURVEILLANCE PARTICIPANTS

Individuals contacted during the surveillance are identified in Attachment 1. A pre-
surveillance conference was held in the WRAP Facility Conference Room on December
8, 2004. This conference was conducted during the pre-job briefing conducted by the
WRAP Field Work Supervisor (FWS). The pre-job briefing included the Radiation Work
Permit briefing by the Health Physics representative. The surveillance concluded with
an informal post-surveillance conference held in the office of the Director of TRU
Programs.

5.0 SUMMARY OF SURVEILLANCE RESULTS

Program Adequacy, Implementation, and Effectiveness

The surveillance team reviewed procedures and operations during TRU waste payload
assembly for the SWB and TDOP. One deficiency was noted in the area of SWB
labeling concerning the verification or application of the USA DOT 7A Type A marking
requirements.
The surveillance team concluded that overall, the Hanford TRU Waste Transportation Program and implementing procedures are adequate relative to the flow-down of requirements from the CBFO QAPD, TRAMPAC, and DOE/WIPP CH packaging manuals. In addition, the surveillance team concluded that the implementing procedures are satisfactory and effectively implemented in the areas of SWB and TDOP loading in preparation for shipment to the WIPP.

5.2 Surveillance Details

The evaluation to CBFO QAPD, TRAMPAC, and CH Packaging manual requirements began with the review of the Hanford TRU Program implementing procedure applicable to CH packaging operations for the SWB and TDOP to ensure that requirements flowed into the implementing procedure. The Hanford TRU Program implementing procedure was found to be adequate in addressing CBFO QAPD, TRAMPAC, and CH packaging manual requirements. The Hanford TRU Program implementing procedure included in the surveillance is identified in Attachment 2. The surveillance was conducted through interviews with key personnel, review of objective evidence including training records, and observation of SWB and TDOP loading operations. The results and surveillance conclusions are contained in the surveillance checklists.

The surveillance team reviewed the following activities, processes, and/or documentation:

- Procedure WRP1-OP-0522, Revision G-1, Assemble TRUPACT-II Payload
- WRP1-OP-0522, Revision G-1, Assemble TRUPACT-II Payload, Attachment 7, SWB Loading Form, for SWB ID# 9407462
- WRP1-OP-0522, Revision G-1, Assemble TRUPACT-II Payload, Attachment 8, TDOP Loading Form, for TDOP ID# 0020287
- WRP1-OP-0522, Revision G-1, Assemble TRUPACT-II Payload, Attachment 11, TDOP 55-Gallon Drum Placement Diagram, TDOP ID# 0020287
- Status of calibration of instrumentation and tools for torque wrenches SN# 545-88-01-263 and SN# 778-88-01-030
- Status of load testing for SWB assembly ratchet slings SN-343560-001-009, SN-343560-001-096, and SN-343530-001-004
- Personnel training programs reviewed against WRP1-OP-0522, Revision G-1, Assemble TRUPACT-II Payload.
- Document Change Form (DCF), No. 32341

One concern was identified in the SWB Labeling area, which resulted in the issuance of CDS-1. No significant conditions adverse to quality were identified. The CDS is discussed in Section 6.

6.0 CARs, CDSs, OBSERVATIONS, AND RECOMMENDATIONS
6.1 Corrective Action Reports

None issued.

6.2 Deficiencies Corrected During the Surveillance (CDS)

One deficiency, requiring only remedial action, was identified during the surveillance. This was corrected and documented on Document Change Form (CDF) No. 32341 before the completion of the surveillance. The CDS is described below and in the completed checklists.

CDS No. 1

During activities performed in accordance with WRP1-OP-0522, Revision G-1, 6.5.10, SWB Labeling, the surveillance team noted that the USA DOT 7A Type A marking required to be on the SWB was not on the SWB. The procedure did not have a step requiring the NCO to verify or apply the marking for the SWB, however the NCO is required to perform this operation for drums. Later in the procedure the TCO is required to complete the TRU Waste Container Integrity Inspection Checklist prior to container loading activities and the checklists includes labeling specifically USA DOT 7A. The surveillance team felt that the NCOs should perform this step prior to the container inspection performed by the TCO. The USA DOT 7A Type A marking is required by DOE/WIPP-02-3122, Section 3.2.1 and 49 CFR Parts 172.310 and 178.350, and

The Hanford TCO initiated DCF No. 32341 to add this check into the SWB Labeling section of WRP1-OP-0522. The surveillance team received a copy of the form and the revised procedure.

Observations

None documented.

Recommendations

None documented.

LIST OF ATTACHMENTS

Attachment 1: Personnel Contacted During the Surveillance
Attachment 2: Implementing Procedures
<table>
<thead>
<tr>
<th>NAME</th>
<th>ORGANIZATION</th>
<th>PRE SURVEILLANCE MEETING</th>
<th>CONTACTED DURING SURVEILLANCE</th>
<th>POST SURVEILLANCE MEETING</th>
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<td>Higgins, Gerald</td>
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<td></td>
<td>Facility Representative</td>
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<td>Dunn, Rick</td>
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<td>Buckmaster, Mark</td>
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<td>Rohner, Robert</td>
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<td>Clark, Travis</td>
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<td>Ankron, James</td>
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<td>Harris, Phillip</td>
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<td>Parsons, J</td>
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<td>Cabbage, Kenneth</td>
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<td>Root, Eric</td>
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**ADDITIONAL PROGRAMS OR PROCEDURES**

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