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Department of Energy  
Carlsbad Field Office  
P. O. Box 3090  
Carlsbad, New Mexico 88221

OCT 24 2011



Mr. Jon E. Hoff, Manager  
Quality Assurance  
Washington TRU Solutions LLC  
P.O. Box 2078  
Carlsbad, New Mexico 88221-2078

Subject: Transmittal of Audit Report for Audit A-11-16, WTS Waste Handling Operations Programs

Dear Mr. Hoff:

The Carlsbad Field Office (CBFO) performed Audit A-11-16 of the Washington TRU Solutions (WTS) Waste Handling Operations Program, August 30 through September 1, 2011. The audit team concluded that the overall status of the program is adequate, satisfactorily implemented, and effective. The results of the audit and conclusions of the audit team are provided in detail in the enclosed report.

If you have any questions, please contact me at (575) 234-7442.

Sincerely,

M. Lea Chism  
Quality Assurance Specialist

Enclosure

cc: w/enclosure  
R. Unger, CBFO  
A. Holland, CBFO  
R. Farrell, CBFO  
C. Fesmire, CBFO  
E. Preciado, CBFO  
M. F. Sharif, WTS  
M. A. Mullins, WTS  
T. Peake, EPA  
M. Eagle, EPA  
E. Feltcorn, EPA  
R. Joglekar, EPA  
S. Ghose, EPA

* ED	R. Lee, EPA	ED
ED	J. Kieling, NMED	ED
ED	S. Holmes, NMED	ED
ED	T. Hall, NMED	ED
ED	D. Winters, DNFSB	ED
ED	T. Kesterson, DOE OB WIPP NMED	ED
ED	G. White, CTAC	ED
ED	P. Y. Martinez, CTAC	ED
ED	M. Mager, CTAC	ED
ED	WIPP Operating Record	ED
ED	CBFO QA File	
ED	CBFO M&RC	

\*ED denotes electronic distribution



**U.S. DEPARTMENT OF ENERGY  
CARLSBAD FIELD OFFICE**

**AUDIT REPORT**

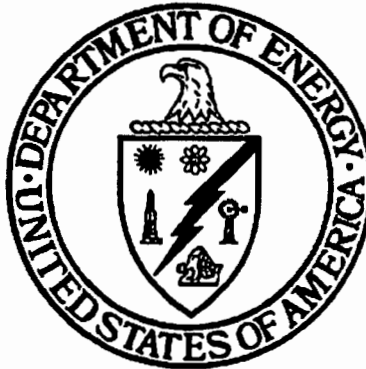
**OF**

**AUDIT NUMBER A-11-16**

**August 30 – September 1, 2011**

**WASHINGTON TRU SOLUTIONS (WTS)  
WASTE-HANDLING OPERATIONS**

**CARLSBAD, NEW MEXICO**



Prepared by: *Paisella Y. Martinez* Date: 10-18-11  
P. Y. Martinez, CTAC  
Audit Team Leader

Approved by: *Randy Unger* / *COURTNEY FESMID* Date: 24 Oct 2011  
Randy Unger, CBFO  
Quality Assurance Director

## **1.0 EXECUTIVE SUMMARY**

Carlsbad Field Office (CBFO) Audit A-11-16 was conducted August 30 through September 1, 2011, to evaluate the adequacy, implementation, and effectiveness of quality assurance (QA) and technical activities related to waste-handling operations at the Waste Isolation Pilot Plant (WIPP). The activities were evaluated with respect to the requirements defined in DOE/CBFO-94-1012, *CBFO Quality Assurance Program Document (QAPD)*; DOE/WIPP 02-3183, *CH Packaging Program Guidance*; DOE/WIPP 02-3184, *CH Packaging Operations Manual*; DOE/WIPP 02-3283, *RH Packaging Program Guidance*; DOE/WIPP 02-3284, *RH Packaging Operations Manual*; DOE/WIPP 02-3214, *RH TRU Waste Program Implementation Plan*; DOE/WIPP 02-3122, *Waste Acceptance Criteria*; and WP 13-1, *Washington TRU Solutions, LLC, Quality Assurance Program Description*.

The audit team concluded that overall, the Washington TRU Solutions LLC (WTS) Waste-Handling Operations Program continues to adequately address applicable upper-tier requirements and remains satisfactorily implemented and effective.

The audit team identified one condition adverse to quality (CAQ) during this audit related to contact-handled (CH) waste processing. The deficiency required remedial corrective action and was corrected during the audit (CDA), as described in section 6. No Observations or Recommendations were identified during the audit.

## **2.0 SCOPE**

### **2.1 Scope**

The scope of the audit included an evaluation of the WTS Waste-Handling Operations Program procedures and records, and performance of quality-affecting activities. The following areas were evaluated.

#### **Contact-handled and Remote-handled Waste-handling Operations**

- Program and Procedure Adequacy
- Waste Receipt
- Preoperational Inspections
- Packaging Operations
- Contact-handled Waste-handling Operations
- Remote-handled Waste-handling Operations
- Waste Data System
- Magnesium Oxide
- Training and Qualification
- Measuring and Test Equipment
- Nonconformances
- Records
- Work Processes

Evaluation of WTS procedures for adequacy was based on DOE/CBFO-94-1012, *CBFO Quality Assurance Program Document*.

### **3.0 AUDIT TEAM**

M. Navarrete	QA Management Representative, CBFO
P. Y. Martinez	Audit Team Leader, CBFO Technical Assistance Contractor (CTAC)
R. Castillo	Lead Auditor-in-Training, CTAC
C. Castillo	Auditor, CTAC
K. Martin	Auditor, CTAC
M. Martinez	Auditor, CTAC
J. Walsh	Auditor, CTAC
T. Putnam	Technical Specialist, CTAC
B. J. Verret	Technical Specialist, CTAC

### **4.0 AUDIT PARTICIPANTS**

Individuals contacted during the audit are identified in Attachment 1. A pre-audit conference was held in the WTS Support Building large conference room on August 30, 2011. The audit was concluded with a post-audit conference in the WTS Support Building large conference room on September 1, 2011.

### **5.0 SUMMARY OF AUDIT RESULTS**

#### **5.1 Program Adequacy, Implementation, and Effectiveness**

The audit team concluded that the applicable WTS waste-handling operations activities, as described in the associated WTS waste-handling operations implementing procedures, are satisfactory in meeting the requirements of the CBFO QAPD.

The following sections identify each of the quality program elements evaluated during the course of this audit. For each element, the audit team evaluated the associated implementing procedures to verify the adequate flow-down of upper-tier requirements, conducted interviews with responsible personnel, and reviewed randomly selected records to determine the degree to which the WTS Waste-Handling Operations Program is effectively implemented.

The audited areas are described below. One concern was noted in the area of waste-handling equipment preoperational inspections (see sections 5.2.2 and 6.0). Overall, the WTS Waste-Handling Operations Program was determined to be adequate, satisfactorily implemented, and effective.

Attachment 1 identifies the personnel contacted during the audit, Attachment 2 is a list of the documents reviewed, and Attachment 3 is the summary of the audit results.

## **5.2 Quality Assurance Program Audit Details**

WTS implementing procedures included in the audit are identified in Attachment 2. Details of the audit are contained in the following sections.

### **5.2.1 Waste Receipt**

The audit team evaluated waste receipt for transuranic (TRU) waste received at WIPP. The evaluation included interviews with responsible personnel, examination of receipt documents, and personnel training and qualification records.

The contents of the waste shipment receipt portfolio for shipment IN11029 were reviewed and found to contain:

- Attachment 1 (WP 08-NT3020, *TRU Waste Receipt*)
- Copy of WIPP Waste Information System/Waste Data System (WWIS/WDS) Shipment Summary Report (SSR)
- Copy of WWIS/WDS Shipment approval for arriving shipment
- Advance copy of the manifest

The following items were documented in Attachment 1 (WP 08-NT3020):

- Shipment number
- Type of shipment (CH/RH)
- Presence/absence of polychlorinated biphenyls (PCBs)
- Controlled Shipment
- LA154 or SQA154 (N/A)
- Packages containing the controlled waste
- Transportation Engineer sign-off
- Date and time of receipt

Overall, the requirements for waste receipts were determined to be adequate, satisfactorily implemented, and effective. No concerns were identified.

### **5.2.2 Preoperational Inspections**

The audit team evaluated the completion of required waste-handling equipment preoperational checks and inspections, including equipment associated with WTS CH and RH waste. Evaluations were performed through review of inspection forms, equipment operational logbooks, and observation of preoperational inspections as they were performed. The evaluation included verification to confirm that personnel performing preoperational inspections are qualified and that the results of the inspections are documented and reviewed. The following waste-handling related equipment and/or associated equipment logbooks were reviewed during the course of the audit:

### CH Waste

- CH Surface Transuranic Mixed Waste-handling Area Inspection
- TRUDOCK Pre-Operational Checks
- 13-Ton Electric Forklifts, Equipment #41-H-012
- Conveyance Loading Forklifts, Equipment #41-H-018
- Adjustable Center of Gravity Lift Fixture (ACGLF), Equipment #41-T-038
- Facility Cask Transfer Car, Equipment #41-H-003
- Primary U/G 6 Ton Forklift, Equipment #52-H-126
- Primary U/G 6 Ton Forklift, Equipment #52-H-033
- Backup U/G 6 Ton Forklift, Equipment #52-H-127
- Transporter, Equipment #52-H-008B
- Transporter, Equipment #52-H-008C

### RH Waste

- RH Surface Transuranic Mixed Waste-handling Area Inspection
- RH Cask Preparation Station
- 25-Ton Cask Unloading Room Crane
- RH Closed-Circuit TV System, Equipment #41-Z-117
- Facility Cask Transfer Car, Equipment #41-H-003
- 41-Ton Diesel Forklift, Equipment #52-H-005A
- 20-Ton Diesel Forklift, Equipment #52-H-125
- 6-Ton Diesel Forklift, Equipment #52-H-007C
- RH Horizontal Emplacement and Retrieval Equipment (HERE), Equipment #52-Z-003
- Road Cask Car, Equipment #41-T-157
- Road Cask Car, Equipment #41-H-115
- RH Canister Transfer System, Logbook #CTS-WH1705, which included:
  - Shuttle Car, Equipment #41-H-019
  - Telescoping Port Shuttle, Equipment #41-N-013
  - Transfer Shield Valve, Equipment #41-N-003
  - Cask Unloading Room (CUR) Shield Valve, Equipment #41-N-165
  - Hot Cell Shield Valve, Equipment #41-N-101
  - Lid Detent Robot, Equipment #41-T-236
  - Swipe Robot, Equipment #41-T-237

The results of the evaluations determined that preoperational inspections for waste-handling equipment are performed as required by qualified personnel and reviews of preoperational inspections documented in the associated logbooks are periodically reviewed as required.

However, during the inspections of logbooks 52-H-033 and 52-H-126, the audit team observed the required weekly waste-handling engineer (WHE) reviews were not performed on these logbooks as required by section 4.0 of procedure 05-WH1412, *CH Waste Handling Toyota Forklifts* (see CDA 1 in section 6.0).

As a result, the audit team concluded that the requirements for preoperational inspections and equipment for CH and RH waste are adequate, satisfactorily implemented, and effective.

### **5.2.3 Packaging Operations**

The audit team evaluated CH and RH transportation operations for waste received at WIPP. The evaluation included interviews with responsible personnel, and examination of receipt and empty container shipping documents, examination of measuring and test equipment (M&TE) to verify current calibration, container maintenance, TRUPACT-II and HalfPACT container loading and unloading from trailers, and personnel training and qualification records. Documents and logbooks were reviewed and verified for maintenance activities. Maintenance activities included observing the replacement of sections of the debris shield on the inner containment vessel (ICV) lid for TRUPACT-II 147. CH transportation activities were observed, including the removal of the outer containment vessel (OCV)/ICV lids, payload removal, TRUPACT-II maintenance, installation of the OCV/ICV lids on the TRUPACT-II and empty container loading of the Type B (TRUPACT-II and HalfPACT) containers onto a trailer. Document reviews for CH activities were performed on the attachments from WP 05-1015 and WP 05-1011 showing container maintenance.

During this audit, there were no RH transportation activities being performed. Shipment INR11029, sent from the Idaho National Laboratory, was the last shipment received at WIPP prior to the audit. Associated documentation was examined and found to be satisfactory.

The audit team concluded that the requirements for packaging/transportation operations for both CH and RH waste are adequate, satisfactorily implemented, and effective.

### **5.2.4 Contact-handled Waste-handling Operations (Surface and Underground)**

The audit team reviewed the CH waste-handling procedures related to surface and underground activities and verified adequate flow-down of CBFO QAPD requirements.

The audit team evaluated surface and underground CH waste-handling and processing activities, from entry of TRUPACT-II containers in the Waste Handling Building (WHB), through emplacement of the waste in the underground.

Procedural implementation was verified during CH waste-handling operations during the back-shift on August 31, 2011. This verification activity commenced with observations of the preoperational briefings conducted at the WIPP Support Building. Logbooks containing documentation of preoperational checks for lifting and transporting equipment were reviewed and entries were determined to have been made and reviewed in accordance with the procedure. The audit team verified that copies of continuous use of procedures were available at the immediate work locations in the WHB and underground, along with approved forms for documenting work activities.

The audit team witnessed waste being transported using the transporter car and underground forklifts and emplaced in Panel 6 of Room 7. The audit team noted the continual use of spotters as required, and observed that the waste was in visual contact of the Radiological Control Technicians (RCTs) at all times.

The audit team witnessed underground waste-handling operations for CH shipment #RL110078, conducted on August 31, 2011. The audit team observed and verified the following: preoperational equipment checks, equipment logbook entries, palletized waste placed on a transporter, waste moved by forklift to processing, and final waste emplacement. The audit team also observed RCT waste processing activities such as swipes and monitoring, handling of payloads, and use of additional equipment (e.g., ratchet straps, lifting pallets, bumper blocks, slip sheets). The audit team verified updates of the underground emplacement map and updates (including actual entries) to the WWIS/WDS for waste emplacement locations. Further, WHE safety factor calculations for emplacement of the magnesium oxide (MgO) 3000# supersacks were also verified. All operations were performed in accordance with established procedures.

Technician/operator/performer, reviewer, and validator signatures were verified, as well as individual personnel training and qualification records.

The audit team concluded that the requirements for surface and underground CH waste-handling operations and processes were adequate, satisfactorily implemented, and effective. No concerns were identified.

#### **5.2.5 Remote-handled Waste-handling Operations (Surface and Underground)**

The audit team reviewed RH waste-handling procedures related to surface and underground activities and verified flow-down of CBFO QAPD requirements.

The audit team evaluated procedural implementation of underground RH waste-handling and processing activities, from placement of the RH 72-B and emplacement of the waste, through review of completed documentation. Although no RH activities were being performed at the time of the audit, while underground the audit team verified RH equipment numbers on the RH equipment were correct in associated logbooks.

During the audit, the audit team verified the correct use of Attachment 1, RH Waste Processing Data Sheet, and verified that it was reviewed by the WHE on August 25, 2011. The audit team verified the completion of WH1025 Attachment 1 in accordance with procedure, and also verified that it was forwarded to the Facility Shift Manager (FSM), as required.

The audit team identified no concerns and determined that underground RH waste-handling operations and processes were adequate, effective, and satisfactorily implemented.



### **5.2.6 Waste Data System**

The audit team evaluated the adequacy of WTS Procedure WP 05-WH.02, *WIPP Waste Handling Operations WDS User's Manual*, with respect to the CBFO QAPD and DOE/WIPP-09-3427, *Waste Data System User's Manual*, and determined that the procedure contains adequate flow-down of upper-tier requirements. Interviews were conducted with a WHE qualified for both CH and RH waste, and documents related to container receipt and emplacements were examined. The audit team verified that the WHE entered container receipt data into the WDS. The audit team verified that emplacement locations and MgO calculations were entered into the WDS by the WHE. The audit team verified entered data by review of a WDS Waste Emplacement Report and determined that WDS data entry of receipt and emplacement data is performed adequately and in accordance with procedure.

In addition, interviews were held with WHEs for both CH and RH waste, and documents related to container receipt and emplacements were examined. The audit team verified the WHEs entered container receipt data into WWIS from a handheld Symbol Pocket PC, which included emplacement locations and supersacks calculations. The audit team verified the data were entered by review of WWIS reports. It was determined that the WWIS data entry of receipt and emplacement is performed adequately and in accordance with procedure.

Overall, the audit team concluded that the Waste Data System process was adequate, satisfactorily implemented, and effective. No concerns were identified.

### **5.2.7 Magnesium Oxide**

The audit team evaluated the MgO procurement process at the WIPP as controlled by WP 05-1105, *Magnesium Oxide Sample Record Management*. The WTS MgO Subcontract Technical Representative (STR) was interviewed and documents were reviewed, including Subcontract Purchase Order (PO) 410971. The audit team verified the MgO Sample Tracking Spreadsheet and determined it contained all required information. The audit team also reviewed a Certificate of Analysis (COA) from the MgO supplier (Martin Marietta) and a Request for Analysis (ROA) for Supplier Shipment Nos. SL6427096, SL6427103, SL6427095, and verified reactivity testing results were provided to the MgO STR, as required. All documents were found to be acceptable.

The audit team identified no concerns and determined that the MgO procurement process was adequate, satisfactorily implemented, and effective. No concerns were identified.

### **5.2.8 Training and Qualifications**

The audit team verified training records for selected waste-handling personnel and determined personnel were adequately trained for CH and RH waste-handling operations. The audit team determined that personnel performing surface and underground CH and RH waste-handling operations were adequately trained and

qualified in accordance with DOE/WIPP 02-3183, *CH Packaging Program Guidance*, and DOE/WIPP 02-3283, *RH Packaging Program Guidance*.

Overall, the audit team concluded that the Training and Qualifications processes were adequate, satisfactorily implemented, and effective. No concerns were identified.

#### **5.2.9 Measuring and Test Equipment**

Personnel interviews were conducted and objective evidence was examined to verify compliance with the requirements for the control of M&TE. A review was performed on the M&TE used during CH and RH waste-handling activities. The equipment was determined to have been properly controlled, calibrated, and maintained.

Overall, the audit team concluded that Measuring and Test Equipment control activities were adequate, satisfactorily implemented, and effective. No concerns were identified.

#### **5.2.10 Nonconformances**

The audit team evaluated nonconformance reports (NCRs) associated with CH and RH waste-handling processes. The audit team verified that NCRs FY2011-16, FY2011-20, and FY2011-27, were processed as required by the WTS QAPD and WP 13-QA3004, *Nonconformance Report*.

Overall, the audit team concluded that Nonconformance process activities were adequate, satisfactorily implemented, and effective. No concerns were identified.

#### **5.2.11 Records**

The audit team evaluated the records control process associated with CH and RH waste-handling processes. Objective evidence examined to verify compliance with the requirements for records included records submittals, retrieval requests, transmittal/receiving forms, Records Inventory and Disposition Schedule (RIDS), records inventory worksheets, and operational logbooks/notebooks. Records storage arrangements were evaluated to verify compliance with requirements for the preservation of in-process and completed records. Further, records were reviewed to verify accuracy, completion, legibility, and appropriate annotations for corrections when necessary.

Overall, the audit team concluded that the Records process was adequate, satisfactorily implemented, and effective. No concerns were identified.

#### **5.2.12 Work Processes**

Personnel interviews were conducted and various WTS Waste-Handling Operations Program implementing procedures were examined to verify compliance with work

process requirements. Work was verified to be performed under controlled conditions using approved instructions and procedures. Equipment used for the processing of the waste was verified to be correctly calibrated and/or maintained.

Overall, the audit team concluded that Work Processes were adequate, satisfactorily implemented, and effective. No concerns were identified.

## **6.0 SUMMARY OF DEFICIENCIES**

### **6.1 Corrective Action Reports (CARs)**

During the audit, the audit team may identify CAQs and document such conditions on CARs.

Condition Adverse to Quality (CAQ) – Term used in reference to failures, malfunctions, deficiencies, defective items, and nonconformances.

Significant Condition Adverse to Quality – A condition which, if uncorrected, could have a serious effect on safety, operability, waste confinement, transuranic (TRU) waste site certification, compliance demonstration, or the effective implementation of the QA program.

No CAQs requiring the generation of a CAR were identified during the audit.

### **6.2 Deficiencies Corrected During the Audit (CDAs)**

Corrected During the Audit (CDA) – Isolated deficiencies that do not require a root cause determination or actions to preclude recurrence, and where correction of the deficiency can be verified prior to the end of the audit. Examples include one or two minor changes required to correct a procedure (isolated), one or two forms not signed or dated (isolated), and one or two individuals who have not completed a reading assignment.

During the audit, the audit team may identify CAQs. The audit team members and the Audit Team Leader (ATL) evaluate the CAQs to determine if they are significant. Once a determination is made that the CAQ is not significant, the audit team member, in conjunction with the ATL, determines if the CAQ is isolated requiring only remedial action and therefore can be Corrected During the Audit (CDA). Deficiencies that can be classified as CDA are those isolated deficiencies that do not require a root cause determination or actions to preclude recurrence, and those for which correction of the deficiency can be verified prior to the end of the audit.

Upon determination that the CAQ is isolated, the audit team member, in conjunction with the ATL, evaluates/verifies any objective evidence/actions submitted or taken by the audited organization and determines if the condition was corrected in an acceptable manner. Once it has been determined that the CAQ has been corrected, the ATL categorizes the condition as a CDA.

One isolated deficiency, described below, was identified and corrected during the audit.

#### **CDA 1**

The audit team reviewed four equipment logbooks while observing CH underground operations, and found two of the logbooks, 52-H-033 and 52-H-126, did not contain the required supervisor or WHE signature verifying completion of the required weekly review.. Logbook 52-H-033 was last signed on 8/9/2011, and logbook 52-H-126 had not been signed since its original entry on 8/14/2011.

### **7.0 SUMMARY OF OBSERVATIONS AND RECOMMENDATIONS**

During the audit, the audit team may identify conditions that warrant input by the audit team to the audited organization regarding potential problems or suggestions for program improvement. The audit team members, in conjunction with the ATL, evaluate these conditions and classify them as observations or recommendations (using the following definitions). Once a determination is made, the audit team members, in conjunction with the ATL, categorize the conditions appropriately.

**Observation** – A condition that is determined not to be a violation of procedure or requirement at the time but, if not controlled or addressed, may result in a CAQ during future activities.

**Recommendation** – A suggestion that is directed toward identifying opportunities for improvement and enhancing methods of implementing requirements.

#### **7.1 Observations**

No Observations were identified during the course of this audit.

#### **7.2 Recommendations**

No Recommendations were provided to WTS Management during the course of this audit.

### **8.0 LIST OF ATTACHMENTS**

- Attachment 1: Personnel Contacted During the Audit
- Attachment 2: WTS Implementing Procedures Evaluated
- Attachment 3: Summary Table of Audit Results

<b>PERSONNEL CONTACTED DURING THE AUDIT</b>				
<b>NAME</b>	<b>ORGANIZATION/ DEPARTMENT</b>	<b>PRE-AUDIT MEETING</b>	<b>CONTACTED DURING AUDIT</b>	<b>POST-AUDIT MEETING</b>
Allen, Bill	WTS/Quality Assurance Integration Manager	X	X	X
Batchelder, Terry	WTS/CH Waste Handling	X	X	
Bellows, H. W.	WTS/Deputy Operations Manager	X	X	X
Billett, Bob	WTS/R&DC Manager	X	X	
Bowden, Chris	WTS/Waste-Handling Ops.		X	
Bradford, Brad	WTS/CH Waste-Handling Ops.		X	
Bryan, Wes	WTS/Site Operations and Disposal Manager	X	X	
Britain, Randy	WTS/Integrated Ops. Manager	X	X	X
Buttrey, Brenda	WTS/Transportation		X	
Carrasco, Fabian	WTS/Waste-Handling Ops.		X	
Carrasco, Ruben	WTS/Transportation Engineer		X	
Chism, Gary	WTS/Waste-Handling Engineer		X	
Curbello, Aaron	WTS/Quality Assurance	X	X	
Ferguson, Dan	CBFO		X	X
Ford, John	CBFO/Director of Fire Protection		X	
Gadbury, Casey	CBO/Site Operations Director		X	X
Gay, Cody	WTS/Waste-Handling Ops.		X	
Keathley, Martin	WTS/QA Programs Manager	X	X	X
Kesterson, Thomas	NMED	X	X	
Kirkes, Justin	WTS/Safety Rep.	X	X	
Lichty, Tom	WTS/Training		X	
Mcliwee, Kevin	WTS/Operations	X		
Meeker, Corry	WTS/Waste-Handling/Secretary/ Records Coordinator		X	
Mullins, Mary Ann	WTS/Quality Assurance Sr. Staff Assistant	X	X	X
Nance, Candace	WTS/Training		X	
Nance, Kirk	WTS/Waste-Handling Ops.		X	
Nieman, Robert	WTS/Transportation Specialist	X	X	X
Phillips, James	WTS/Operations Engineer		X	
Proctor, Mike	WTS/ Facility Operation Engineer		X	
Proctor, Tricia	WTS/QA Lead Auditor	X	X	X
Ramirez, David	WTS/Operations	X		
Ripley, David	WTS/RH Waste-Handling Manager	X	X	

<b>PERSONNEL CONTACTED DURING THE AUDIT</b>				
<b>NAME</b>	<b>ORGANIZATION/ DEPARTMENT</b>	<b>PRE-AUDIT MEETING</b>	<b>CONTACTED DURING AUDIT</b>	<b>POST-AUDIT MEETING</b>
Saltzman, Eric	WTS/Waste-Handling		X	
Suggs, Craig	WTS/Waste-Handling Operations Manager	X	X	X
Valenzuela, Raymond	WTS/Waste-Handling Operations Manager	X	X	
Waters, Jim	CBFO		X	

<b>WTS Implementing Procedures Evaluated</b>		
<b>Number</b>	<b>Doc. Number</b>	<b>Applicable WTS Document</b>
1	05-WH.02	WIPP Waste Handling Operations WDS User's Manual
2	05-WH1002	TRUDOCK Operation 41-T-152 41-T-153
3	05-WH1004	Facility and TRUPACT-II Pallet Handling
4	05-WH1005	CH Packaging Trailer Loading
5	05-WH1010	Container Overpacking
6	05-WH1011	CH Waste Processing
7	05-WH1015	Preparation of CH Packaging for Empty Shipment
8	05-WH1025	Ch Waste Downloading and Emplacement
9	05-WH1058	CH Waste Handling Abnormal Operations
10	05-WH1083	CH Packaging Operations
11	05-WH1101	CH Surface Transuranic Mixed Waste Handling Area Inspections
12	05-WH1105	Magnesium Oxide Sample Records Management
13	05-WH1402	13-Ton Electric Forklifts
14	05-WH1406	Conveyance Loading Car
15	05-WH1410	Adjustable Center of Gravity Lift Fixture
16	05-WH1412	CH Waste Handling Toyota Forklifts
17	05-WH1601	20-Ton Diesel Forklift 52-H-125
18	05-WH1602	41-Ton Diesel Forklift 52-H-005A
19	05-WH1603	CH TRU Underground Transporter, 52-H-008 A, B, & C
20	05-WH1700	Horizontal Emplacement and Retrieval Equipment Assembly
21	05-WH1701	Road Cask Transfer Car Operation
22	05-WH1703	RH TRU Emplacement Machinery Disassembly
23	05-WH1704	Facility Cask Transfer Car (41-H-003) Operation
24	05-WH1705	RH Canister Transfer System
25	05-WH1706	Preparation of an Empty RH-TRU 72-B Cask for Shipment
26	05-WH1707	RH-TRU 72-B Trailer Loading
27	05-WH1709	RH-TRU 72-B Trailer Unloading
28	05-WH1710	72-B RH Processing
29	05-WH1711	6-Ton Toyota Forklift 52-H-007C
30	05-WH1714	RH Cask Preparation Station 41-Z-076
31	05-WH1717	Cask Unloading Room Shield Door Operation
32	05-WH1719	25-Ton Cask Unloading Room Crane
33	05-WH1720	Empty 72-B Retrieval from Transfer Cell
34	05-WH1725	RH Downloading and Emplacement

<b>WTS Implementing Procedures Evaluated</b>		
<b>Number</b>	<b>Doc. Number</b>	<b>Applicable WTS Document</b>
35	05-WH1727	RH-TRU 72-B Cask Uprighting Trailer Loading
36	05-WH1729	RH-TRU 72-B Cask Uprighting Trailer Unloading
37	05-WH1744	Surface RH Transuranic Mixed Waste Handling Area Inspections
38	05-WH1757	RH Closed-Circuit TV System
39	05-WH1810	Underground TRU Mixed Waste Disposal Area Inspections
40	05-WH4401	Waste Handling Operator Event Response
41	08-NT3020	TRU Waste Receipt
42	08-PT.03	WIPP QA Program Plan for Type "B" Packaging
43	08-PT.11	RH-TRU 72-B Cask Trailer Operation and Maintenance Manual
44	10-AD3028	Calibration and Control of Measurement and Test Equipment
45	12-HP1314	Remote-Handled Waste Service Room
46	13-1	Washington TRU Solutions, LLC, Quality Assurance Program Description
47	13-QA3004	Nonconformance Report
48	14-TR.01	WIPP Training Program
49	15-RM	WIPP Records Management Program



**Summary Table of Audit Results**

Audit Elements	Concern Classification				QA Evaluation		
	CARs	CDAs	Obs	Rec	Adequacy	Implementation	Effectiveness
Waste Data System					A	S	E
MgO					A	S	E
Records/NCRs/Qualification and Training					A	S	E
M&TE/CH & RH Surface Inspections					A	S	E
CH Surface Waste Processing					A	S	E
CH Underground Waste Processing		1			A	S	E
RH Surface Waste Processing					A	S	E
RH Underground Waste Processing					A	S	E
<b>TOTALS</b>		<b>1</b>			<b>A</b>	<b>S</b>	<b>E</b>

**Definitions**

A = Adequate  
 I = Indeterminate  
 NA = Not Adequate  
 S = Satisfactory

E = Effective  
 M = Marginal  
 NE = Not Effective

CAR = Corrective Action Report  
 CDA = Corrected During Audit  
 Obs = Observation  
 Rec = Recommendation