

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

JUN 23 2010

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



Subject: Transmittal of the Audit Report for Audit A-10-21

Dear Mr. Hoff:

The Carlsbad Field Office (CBFO) performed Audit A-10-21 of the Washington TRU Solutions (WTS) Quality Assurance Program April 13-15, 2010. The audit team concluded that the overall status of the WTS Quality Assurance Program is adequate, satisfactorily implemented, and effective. Two concerns were identified during the audit. The details of the audit, as well as conclusions, are provided in the enclosed audit report.

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

Sincerely,

M. Lea Chism
 Quality Assurance Specialist

Enclosure

cc: w/enclosure
 A. Holland, CBFO
 H. Budweg, CBFO
 D. Miehls, CBFO
 M. Navarrete, CBFO
 F. Sharif, WTS
 M. Mullins, WTS
 M. Eagle, EPA
 E. Feltcorn, EPA
 R. Joglekar, EPA
 S. Ghose, EPA

| | | |
|------|-------------------------------------|----|
| * ED | R. Lee, EPA | ED |
| ED | S. Zappe, NMED | ED |
| ED | S. Holmes, NMED | ED |
| ED | T. Kesterson, DOE OB WIPP NMED | ED |
| ED | D. Winters, DNFSB | ED |
| ED | P. Gomez, CTAC | ED |
| ED | WIPP Operating Record | ED |
| ED | CBFO QA File | |
| ED | CBFO M&RC | |
| ED | *ED denotes electronic distribution | |



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

AUDIT REPORT

OF

WASHINGTON TRU SOLUTIONS LLC (WTS)

CARLSBAD, NEW MEXICO

AUDIT NUMBER A-10-21

April 13 – 15, 2010

WTS QUALITY ASSURANCE PROGRAM



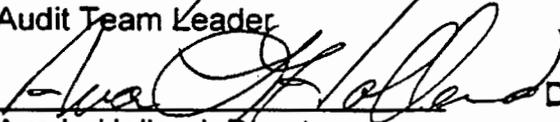
Prepared by:


Paul C. Gomez, CTAC
Audit Team Leader

Date:

6/2/10

Approved by:


Ava L. Holland, Director
CBFO Office of Quality Assurance

Date:

6/3/10

1.0 EXECUTIVE SUMMARY

Carlsbad Field Office (CBFO) Audit A-10-21 was conducted to evaluate the continued adequacy and implementation of the Washington TRU Solutions LLC (WTS) Quality Assurance (QA) Program related to the *Quality Assurance Program Requirements for Nuclear Facilities* (ASME NQA-1, 1989 Edition) Criteria 1 - Organization; 2 - Quality Assurance Program; 3 - Design Control; 4 - Procurement Document Control; 5 - Instructions, Procedures, and Drawings; 6 - Document Control; 7, Control of Purchased Items and Services; 8 - Identification and Control of Items; and 9 - Control of Processes.

The purpose of the evaluation was to verify the flow-down of NQA-1 requirements through the CBFO *Quality Assurance Program Document* (CBFO QAPD) and the WTS *Quality Assurance Program Description* (WTS QAPD) into the applicable WTS implementing procedures, and to determine if the procedures were effective. The audit was conducted April 13 – 15, 2010, at WTS facilities at the Waste Isolation Pilot Plant (WIPP) and the Skeen-Whitlock Building.

The audit team concluded that overall, the WTS QA Program and implementing procedures are adequate relative to the flow-down of requirements from the upper-tier documents. The audit team also concluded that the requirements are being satisfactorily implemented through WTS procedures. In addition, the audit team concluded that overall, the WTS QA Program is effective.

The audit team identified two conditions adverse to quality (CAQ) during this audit, which were documented on a corrective action report (CAR). No Observations or Recommendations were identified. The CAQ and CAR are described in section 6.

2.0 SCOPE AND PURPOSE

2.1 Scope

The audit team evaluated the adequacy, implementation, and effectiveness of selected QA processes related to the WTS QA Program. The following criteria were evaluated:

- Organization
- Quality Assurance Program
- Design Control
- Procurement Document Control
- Instructions, Procedures, and Drawings
- Document Control
- Control of Purchased Items and Services
- Identification and Control of Items
- Control of Processes

3.0 AUDIT TEAM

| | |
|--------------------|--|
| Paul C. Gomez | Audit Team Leader, CBFO Technical Assistance Contractor (CTAC) |
| Lea Chism | CBFO Management Representative |
| Tammy Bowden | Auditor, CTAC |
| Ava Holland | Auditor, CBFO |
| Harley Kirshenmann | Auditor, CTAC |
| Greg Knox | Auditor, 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 April 13, 2010. The audit was concluded with a post-audit conference in the WTS Support Building large conference room on April 15, 2010.

5.0 SUMMARY OF AUDIT RESULTS

5.1 Program Adequacy, Implementation, and Effectiveness

The audit team concluded that the WTS QA Program was adequate, satisfactorily implemented, and effective for the areas audited.

5.2 Quality Assurance Activities

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 Organization

The audit team interviewed management and quality assurance management personnel and reviewed documentation, including organization flow charts. The WTS Quality Assurance Manager reports directly to the General Manager. It was concluded that the QA organization has the required authority, independence, access to work areas, and organizational freedom necessary to perform assigned responsibilities. No concerns were identified during this portion of the audit.

Overall, the audit team concluded that Organization continues to be adequate, satisfactorily implemented, and effective.

5.2.2 Quality Assurance Program

The audit team interviewed personnel and reviewed documentation to verify the implementation and effectiveness of the QA Program.

The WTS training and qualification program was reviewed to ensure personnel are trained and qualified to perform their assigned tasks. The program was also reviewed

to ensure it provides continual training for personnel to maintain proficiency and to update their skills. The audit team reviewed the way managers determine the training and qualification needs of their personnel. The training department has a process for initial training, qualification, and methods for evaluating organizational changes to tasks and program improvements.

In addition to training and qualification, the CBFO QAPD requires that QA programs address and establish controls for communication and interface responsibilities. These include methods for trending analysis and sharing lessons learned related to the discovery of quality problems. The audit team interviewed the individual responsible for trending analysis and reviewed associated records, and determined that sufficient trending is performed, documented, and reported as required.

The audit team interviewed the individual responsible for lessons learned. WTS provides the lessons learned program for compliance with DOE Order 210.2, *DOE Corporate Operating Experience Program*, which is described in WTS Procedure (WP) 15-MD3100, *Operating Experience Program*. Based on the interview and reviews of associated documentation and records, the audit team determined that the CBFO QAPD requirement for managing lessons learned is adequately addressed and effectively implemented.

Overall, the audit team concluded that the Quality Assurance Program was adequate, satisfactorily implemented, and effective.

5.2.3 Design Control

The audit of the WTS Design Control process included the evaluation of objective evidence including engineering change proposals (ECPs), engineering change orders (ECOs), drawings, acceptance/variance reports, and interviews with personnel tasked with administering design control documentation and records packages.

The ECP packages evaluated included evidence of reviews of as low as reasonably achievable (ALARA) activities, the Hazardous Waste Facility Permit (HWFP), environmental compliance (EC), and unreviewed safety question (USQ) determinations. The documentation reviewed also included evidence of meeting minutes, various types of design verification, and results of design reviews. The audit team verified that all steps of design verification were performed in sequence and documented, including conceptual design review and final design review steps.

Engineering calculations in ECO11970, as well as engineering hand calculations, were included in documentation, as appropriate, and were determined to be adequately annotated, reviewed, and approved.

Drawings and sketches were reviewed as part of the ECP and ECO packages and were determined to be adequate to document scope and changes. Changes were approved by the same groups or organizations that reviewed and approved the original design

documents. Determination of functional classification, as appropriate, was adequately documented in the ECO documentation.

The audit team concluded that the WTS design control processes are adequate, satisfactorily implemented, and effective.

5.2.4 Procurement Document Control

The audit team reviewed procurement document control implementing documents, interviewed WTS personnel, and observed the functioning of the Quality Requirement Level and the Quality Supplier List databases.

Proposal, Competition, Identification, Selection, Evaluation and Award

This process is described in WP 15-PC3605, *Proposal, Competition, Identification, Selection, Evaluation and Award*. The audit team limited their review to the QA aspects of this process and had no concerns. The Quality Level 1 (QL1) procurement of the Light Weight Facility Cask, Purchase Order (PO) 411470 was selected for this review. This procurement was the only recent QL1 solicitation available. Award was made November 3, 2009. The solicitation identified the quality requirements of a NQA-1-1989 QA Program and utilized WTS QA clauses for specific quality-related items. The source list included ABW Technologies, Premier Inc., and RV Industries, all of which have experience in the design and manufacture of the item identified in the procurement. The Cross Functional Team (CFT) included a representative from the QA organization. QA comments were made on October 28, 2009. All comments by the CFT were resolved and documented in the technical evaluation report issued November 4, 2009. The report was signed by all team members. The PO was awarded to RV Industries, which was placed on the Qualified Suppliers List as of October 14, 2009.

Preparation of Purchase Requisitions

Several purchase requisitions (PRs) were reviewed that demonstrated compliance with the requirements of Procedure WP 15PC3609, *Preparation of Purchase Requisitions*. Quality requirements were included in each of the PRs. These included PRs for QL2 POs 412729 (Nucfil), and 412813 (Air Liquide), in addition to QL1 PO 412877 (Robinson Industries). Quality requirements included in the POs were for verification of Certificates of Conformance or Certificates of Analysis, in addition to basic receipt inspection (count, no damage, and part number). All suppliers were listed on the Qualified Suppliers List prior to the PO date. Integrated Financial Management System was reviewed for each procurement to verify that the "Inspection Required" box was checked and inspection requirements were identified in the line item description for each item. QA had approved each of the QL1 and QL2 PRs.

Credit Card Purchases

Review of credit card purchases by use of the Purchase Card (P-Card) was performed in accordance with the requirements of WP 15-PC3042, *Credit Card Purchases*, and WP 15-PC3043, *Request for Remittance*. P-Card holders have been approved by the

Procurement Services Manager and identified on the WTS Credit Card Program Accounts along with a single procurement dollar limit and a monthly limit. Approved supplier lists are maintained by card holders. A detailed listing of credit card purchases identifies purchases made by Accounting, those made to reimburse employees, and those made to pay vendors for non-quality related items/services. The Procurement Card Purchase Summary by Employee listing identifies purchases made by individual P-Card holders. The audit team did not identify any purchases of QL1 or QL2 items with P-Cards.

Quality Credit Card Purchases

The process for control of quality credit card purchases was determined to be successfully implemented in accordance with the requirements of WP 15-PC3044, *Quality Credit Card Purchases*. There are currently two quality credit card (Q-Card) holders. Each of the Q-Card holders are properly designated with dollar limits of purchase specified. Listings of Q-Card purchases are available as described above for P-Card holders. Review of the purchases made by the Q-Card holders since October 2009 identified that the purchases were for calibration services, which were allowed as specified on the QA web page. All purchases made were placed with suppliers on the Qualified Supplier List and identified to an inspection plan. Receipt inspection results were identified on the completed inspection plans. No deficiencies were identified for purchases.

Training and qualification records of personnel authorized to perform duties related to P-Card and Q-Card purchases were reviewed. A sample was selected that included Authorizing Officials, P-Card holders, and past and current Q-Card holders. There are two currently authorized and one expired Q-Card holders. The training records and qualification cards for the current Q-Card holders are up-to-date and satisfactorily completed. Records were checked to verify that the expired Q-Card holder has not performed credit card purchases subsequent to his date of expiration and were found satisfactory. P-Card holders and Authorizing Officials are required to have current training, but are not required to maintain a qualification card. All records reviewed for this sample were complete and satisfactory. No concerns were identified.

Approval/Variation Request

WP 15-PC3041, *Approval/Variation Request Processing*, identifies the process for control of technical submittal review and/or approval. The procurement requisitioner identifies the technical submittals in the Statement of Work, Purchase Requisition (PR), or Specification. The submittals are identified on an Approval/Variation Request (AR/VR) Transmittal Register (Form EA15PC3041-1-0), which is intended to be used as part of the documentation of satisfactory performance by the vendor. In general, the POs reviewed showed satisfactory compliance to procedure requirements, except for PO 411617, *Pipe Overpacks*. On PO 411617, the AR/VR Register was not used to track all submittals required by the Statement of Work (SOW). A significant number of required submittals were "approved" during pre-production meetings, but these submittals were not listed on the register and no AR/VRs or other similar documents were located to document those approvals. This approach appears to be limited to this

procurement only; all other POs reviewed followed procedural requirements. This concern resulted in CAR 10-023, as described in section 6.

Overall, the audit team concluded that the Procurement Document Control process was adequate, satisfactorily implemented, and effective.

5.2.5 Instructions, Procedures, and Drawings

The audit team interviewed personnel, reviewed documentation including letters of delegation, and verified the differences between a class I and class II review process (whether to involve DOE review or not), and observed packages including ECO11970, ECO12411, ECO12127, ECO12198, and ECO12472, including the USQ reviews, upgrades to systems, additions to heating, ventilation, and air conditioning (HVAC) systems, processes for returning nonconforming items, and hand-calculation reviews to verify the implementation and effectiveness of Instructions, Procedures, and Drawings.

One concern was identified as a result of this review. Minor changes to the Preventative Maintenance documents and Maintenance Work Instructions are not indicated, by the use of sidebars, within the approved documents. These documents do not have revision histories. The audit team issued CAR 10-022 to address this concern.

The audit team concluded that the WTS Instructions, Procedures, and Drawings processes are adequate, satisfactorily implemented, and effective.

5.2.6 Document Control

The audit team evaluated and assessed the WTS QA Program and procedures related to document control. The established implementing documents and procedures were determined to adequately address the CBFO QAPD requirements.

The audit team verified implementation of the procedures relative to document control through interviews with appropriate personnel.

The document control processes for operational reviews, approvals, and issuance of program documents were reviewed to the requirements of WP 15-PS3002, *WTS Controlled Document Processing*. Program procedures were also reviewed for compliance with WP 15-PS.2, *Procedure Writer's Guide*, for format. WP 15-PS3006, *Processing of WTS Forms and Electronic Attachments*, was not reviewed due to schedule limitations. Procedures 15-PM3517, *Stores Inventory Control*, 05-WH1058, *CH Waste Handling Abnormal Operations* and 10 WC3010, *Maintenance PM/MWI Controlled Document Process* were reviewed to verify compliance with format, procedural review, approval, and issuance controls. The detailed review included the procedure section headings, step numbering, and reference of technical specification requirements in technical procedures. The detailed review also included resolution of comments and reviewer approval, procedure approval process, and issuance of procedures.

The audit team determined that Document Control Processes and Procedures are marginally implemented and effective.

5.2.7 Control of Purchased Items and Services

The audit team reviewed the documentation implementing control of purchased items and services, interviewed WTS personnel, and observed the functioning of the Requisitioner Toolbox, requisition review workflow, and requisition approval. General elements of the control of purchased items and services process that were evaluated included purchase requisition preparation as described in WP 15-PC3609, *Preparation of Purchase Requisitions*; processing of approval and variation requests as described in WP 15-PC3041, *Approval/Variation Request Processing*; the proposal and award process as described in WP 15-PC3605, *Proposal, Completion, Identification, Selection, Evaluation, and Award*; and quality records resulting from the control of purchased items and services process. WTS personnel interviewed included procurement managers, supervisors, and specialists.

Overall, the audit team concluded that the Control of Purchased Items and Services process was adequate, satisfactorily implemented, and effective.

5.2.8 Identification and Control of Items

Stores Inventory Control

The stores inventory control process was determined to be adequately implemented per the requirements of 15-PM3517. Several files for the biennial review of Stores Stock Requests (SSRs) were examined to ensure parts and data for systems are correct and current. A sampling of parts in the warehouse identified that parts were properly located and of required quantities. SSRs were reviewed to assure proper completion by the requestor and Inventory Control. A monthly system inventory list is generated and sent to the cognizant engineer for completion. Inventory Control generates a consumables review report and issues it to the cognizant managers. The annual inventory report is generated by Inventory Control and issued to WTS management. The report is then provided to CBFO via letter from WTS management. No concerns resulted from this review.

Supplier Evaluation and Qualification

The WTS process for the evaluation and qualification of suppliers is satisfactorily implemented per the requirements of 13-QA3012, *Supplier Evaluation/Qualification*. A Qualified Supplier List identifies all procedural requirements of each supplier including the name and facility address of the supplier, product or service for qualification, basis for qualification, and expiration date. Supplier files are well maintained, placed in locked vertical files, and retrievable by alphabetical order. The files contain the original supplier questionnaire and records of initial qualification, such as desk review or on site evaluation. Annual evaluations are also included in the files. Qualification files for Packaging Specialties, Mirion Technologies, GEIS Davis Inotek, and Kinometrics, Inc., were reviewed. These files demonstrated that suppliers are evaluated prior to

placement on the Qualified Supplier List, annual evaluations are conducted, and adequate documentation is available to grant a supplier (Kinometrics, Inc.) a three-month extension.

Overall, the audit team concluded that Identification and Control of Items processes were adequate, satisfactorily implemented, and effective.

5.2.9 Control of Processes

The audit team evaluated the adequacy of Special Process procedures in comparison with the CBFO QAPD and NQA-1 Criterion 8 and Criterion 9. The WTS procedures evaluated were: WP 10-5, *WIPP Welding Guide*, WP 13-QA.06, *NDT Qualification*, WP 13-QA1001, *Liquid Penetrant Examination*, WP 13-QA1002, *Visual Examination*, WP 13-QA1004, *Magnetic Particle Examination*, WP 13-QA1006, *QA Plant Inspections*, WP 13-QA1007, *Dimensional Inspection*.

It was determined that the procedures contain adequate flow-down of upper-tier requirements. Because there was no ongoing work to observe, the audit team reviewed closed work packages and associated documentation. Qualification and training records were requested and reviewed for all individuals identified in the reviewed work orders and all were found to be current and acceptable for the work performed. Certification and calibration records for materials and equipment were reviewed and found to be current and compliant. The reviewed work packages provided adequate information for the identification of all materials and items and adequate controls were observed. No concerns were identified.

Overall, WTS processes for Identification and Control of Items and Special Process procedures were determined to be adequate, satisfactorily implemented, and effective.

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.

Two CAQs requiring the generation of CARs were identified during the audit, as described below.

CAR 10-022

Requirement

WP 10-WC3010, Rev. 14, Paragraph 1.0, Note: "only sidebars indicating changes will be displayed in the approved version."

Condition

Minor changes to the Preventive Maintenance (PM) and Maintenance Work Instruction (MWI) documents are not indicated by the use of sidebars within the approved documents. The documents do not contain a revision history.

CAR 10-023

Requirements

QP 15-PC3041, *AR/VR Processing*, section 1.2, "Requisitioner, identify all required data submittals and provide a schedule of those submittals on EA 15PC3041-1-0..."; section 1.7, "STR, perform the following for acceptable AR/VR submittals"; section 1.7.2, "record applicable data on EA 15PC3041-1-0"; section 3.13, "STR, complete transaction dates on EA 15PC3041-1-0 in the columns for the disposition, the resubmittal required, and date to the supplier."

Condition

Not all required data submittals are being logged and tracked as AR/VRs from submittal through approval on the AR/VR Register (Form EA15PC3041-1-0) on PO 411617 for Pipe Overpacks, as required by WP 15-PC3041. The cognizant engineer and subcontract technical representative (STR) have instituted a review and approval process that reviews and approves some data submittals during pre-fabrication meetings and audits, instead of tracking receipt, review, acceptance/rejection, and resolution during the course of the procurement as required by the procedure.

6.2 Deficiencies Corrected During the Audit (CDAs)

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 members, in conjunction with the ATL, determine if the CAQ is an isolated case requiring only remedial action and therefore can be a CDA. Upon determination that the CAQ is isolated, the audit team members, in conjunction with the ATL, evaluate/verify any objective evidence/actions submitted or taken by the audited organization and determine 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 according to the following definition.

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.

No CDAs were identified during the course of the audit.

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 – Suggestion that is directed toward identifying opportunities for improvement and enhancing methods of implementing requirements.

7.1 Observations

No Observations were noted during the course of this audit.

7.2 Recommendations

No Recommendations were offered during the course of this audit.

8.0 LIST OF ATTACHMENTS

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

| PERSONNEL CONTACTED DURING THE AUDIT | | | | |
|--------------------------------------|---------------------------|------------------|------------------------|-------------------|
| NAME | ORGANIZATION / DEPARTMENT | PREAUDIT MEETING | CONTACTED DURING AUDIT | POSTAUDIT MEETING |
| Allen, Bill | WTS/Quality Assurance | X | X | X |
| Aragon, Leslie | WTS/Disbursement Acct. | | X | |
| Ater, Ed | WTS/Quality Assurance | X | X | X |
| Atwood, Kaye | WTS/Buyer | | X | |
| Beeman, Bob | WTS/Configuration Mgmt | X | X | X |
| Bellows, H. W. | WTS/ Ops. Prog. Mgr. | | | X |
| Bostick, L | WTS/Maintenance Mgr. | | X | |
| Bryan, Wes | WTS/Site Ops & Disposal | X | | |
| Carrasco, Rey | WTS/RPD & Geo. Mgr. | X | | |
| Chester, Curtis | WTS/IWHE Manager | | X | |
| Cullum, Shari | WTS/Cr. Card Prog. Adm. | | X | |
| Fabian, Tom | WTS/Manager Training | | X | |
| Ferguson, Tom | WTS/Dept. Mgr. | | X | X |
| Friend, Mark | WTS/Team Lead Proc. | | X | |
| Garcia, Robert | WTS/Payroll Admin. | | X | |
| Gonzales, Marty | WTS/Manager Contracts | | X | |
| Hasten, Ken | WTS/Manager Doc. Ctr. | | X | |
| Hendrickson, M | WTS/GMO | | | X |
| Hernandez, Margaret | WTS/Fin & Acct Admin | | X | |
| Hoff, J. E. | WTS/Quality Assurance | X | X | X |
| Jones, S. B. | WTS/ Section Manager | X | | X |
| Keathley, M. | WTS/Qual. Progs. Mgr. | | | X |
| Lichty, Tom | WTS/Technical Training | | X | |
| McGonagill, Steve | WTS/Engineer | | X | |
| Mullins, Mary Ann | WTS/Quality Assurance | X | X | X |
| Navarrette, Coleen | WTS/Sr. Inventory Anyst. | | X | |
| Nesser, Cathy | WTS/Quality Assurance | X | X | X |
| Patterson, Terry | WTS/Dept. Mgr. Ops Mtn | | X | X |
| Proctor, Tricia | WTS/Quality Assurance | X | | |
| Redd, Darrell | WTS/Quality Engineer | | X | |
| Ridenour, Priscilla | WTS/STR Sr. Staff Asst. | | X | |
| Sanders, Curtis | WTS/Quality Assurance | X | | |
| Salness, Rick | WTS/Quality Assurance | X | X | |

| PERSONNEL CONTACTED DURING THE AUDIT | | | | |
|---|--------------------------------------|-----------------------------|-----------------------------------|------------------------------|
| NAME | ORGANIZATION / DEPARTMENT | PREAUDIT MEETING | CONTACTED DURING AUDIT | POSTAUDIT MEETING |
| Sifuentes, Soledad | WTS/STR IWHE | | X | |
| Strong, G | WTS/Quality Assurance | | | X |
| Tanner, Steve | WTS/Quality Assurance | X | | |
| Vasquez, Joe | L&M/Inventory Ctrl | X | X | |
| Whiting, Lynn | WTS/Procurement Svc | | X | X |

| WTS Documents Evaluated | | |
|--------------------------------|-------------------|---|
| Number | Doc Number | Applicable WTS Document |
| 1 | DOE/CBFO 94-1012 | <i>US Department of Energy Carlsbad Field Office Quality Assurance Program Document</i> |
| 2 | WP 09-8 | <i>WIPP Specification Preparation</i> |
| 3 | WP 09-10 | <i>WIPP Preparation Guide for System Design Description Documents</i> |
| 4 | WP 09-CN3005 | <i>Graded Approach to Application of QA Controls</i> |
| 5 | WP 09-3007 | <i>Engineering Design Document Preparation and Change Control</i> |
| 6 | WP 09-CN3018 | <i>Design Verification</i> |
| 7 | WP 09-CN3023 | <i>Functional Classification Determination for Design</i> |
| 8 | WP 09-CN3024 | <i>Configuration Management Board/Engineering Change Proposal</i> |
| 9 | WP 09-CN3031 | <i>Engineering Calculations</i> |
| 10 | WP 13-1 | <i>WTS Quality Assurance Program Description</i> |
| 11 | WP 13-QA1001 | <i>Liquid Penetrant Examination</i> |
| 12 | WP 13-QA1002 | <i>Visual Inspection</i> |
| 13 | WP 13-QA1004 | <i>Magnetic Particle Examination</i> |
| 14 | WP 13-QA1006 | <i>Quality Assurance Plant Inspections</i> |
| 15 | WP 13-QA1007 | <i>Dimensional Inspection</i> |
| 16 | WP 13-QA3006 | <i>Data Analysis and Trending</i> |
| 17 | WP 13-QA3012 | <i>Supplier Evaluation/Qualification</i> |
| 18 | WP 13-QA.04 | <i>Quality Assurance Department Administrative Program</i> |
| 19 | WP 14-TR.01 | <i>WIPP Training Program</i> |
| 20 | WP 15-PM3517 | <i>Stores Inventory Control</i> |
| 21 | WP 15-PS3002 | <i>WTS Controlled Document Processing</i> |
| 22 | WP 15-PS3006 | <i>Processing WTS Forms and Electronic Attachments</i> |

WTS Documents Evaluated

| Number | Doc Number | Applicable WTS Document |
|---------------|-------------------|---|
| 23 | WP 15-PS3103 | <i>Document Distribution</i> |
| 24 | WP 15-PS.2 | <i>Procedures Writer's Guide</i> |
| 25 | WP 05-WH1058 | <i>CH Waste Handling Abnormal Operations</i> |
| 26 | WP 10 WC3010 | <i>Maintenance PM/MWI Controlled Document Process</i> |

Summary Table of Audit Results

| Audit Elements | Concern Classification | | | | QA Evaluation | | |
|---|------------------------|----------|----------|----------|---------------|----------------|---------------|
| | CARs | CDAs | Obs | Rec | Adequacy | Implementation | Effectiveness |
| Organization | | | | | A | S | E |
| Quality Assurance Program | | | | | A | S | E |
| Design Control | | | | | A | M | E |
| Procurement Document Control | | | | | A | S | E |
| Instructions, Procedures, and Drawings | 10-022 | | | | A | S | E |
| Document Control | | | | | A | S | E |
| Control of Purchased Items and Services | | | | | A | S | E |
| Identification and Control of Items | | | | | A | S | E |
| Control of Processes | 10-023 | | | | A | S | E |
| TOTALS | 2 | 0 | 0 | 0 | A | S | E |

Definitions

E = Effective

CDA = Corrected During Audit

CAR = Corrective Action Report

A = Adequate

Rec = Recommendation

S = Satisfactory

Obs = Observation

M = Marginal