



## Department of Energy

Washington, DC 20585

August 31, 2011

Mr. Farok Sharif  
President and General Manager  
Washington TRU Solutions, LLC  
Waste Isolation Pilot Plant  
4021 National Parks Highway  
Carlsbad, New Mexico 88220

Dear Mr. Sharif:

The Office of Health, Safety and Security's Office of Worker Safety and Health Enforcement conducted an onsite regulatory assistance review of the Washington TRU Solutions, LLC (WTS) worker safety and health regulatory compliance program during April 26 – 28, 2011. The review included an evaluation of WTS programmatic processes for identification, reporting, and tracking of worker safety and health regulatory noncompliances; trending of regulatory compliance performance indicators; and self-assessment activities for monitoring the performance of the worker safety and health compliance program.

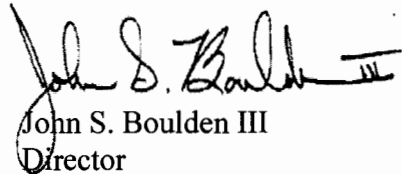
The WTS worker safety and health regulatory compliance program is supported by documented policies and procedures, qualified staff to develop and support the program, and a network of WTS organizations that demonstrate ownership of noncompliant issues and corrective actions. WTS has established a foundation for the program to mature in a manner aligned with the guidance set forth within the Department of Energy's (DOE) *Enforcement Process Overview*.

The results of this review, described in the enclosed report, identified a number of strengths as well as recommendations for your consideration that provide opportunities to further improve the implementation of the WTS worker safety and health regulatory compliance program. Most notably, WTS should expedite the approval and implementation of the updated worker safety and health regulatory compliance program procedure, acquire software capabilities that will allow the identification and analysis of noncompliance trends, and enhance the worker safety and health self-assessment program. Program improvements, whether self-identified or through implementation of the recommendations noted in this report, may serve as a basis for mitigation for any future worker safety and health related enforcement action against WTS, as described in the enforcement policy statement that accompanies DOE's Worker Safety and Health Regulation (i.e., 10 C.F.R. Part 851, Appendix B).



No reply to this letter is required. If you have any questions regarding this review, please contact me at (301) 903-2178, or your staff may contact Mr. Kevin Dressman, Director, Office of Worker Safety and Health Enforcement, at (301) 903-5144.

Sincerely,

A handwritten signature in black ink, appearing to read "John S. Boulden III". The signature is written in a cursive style with a horizontal line at the end.

John S. Boulden III  
Director

Office of Enforcement and Oversight  
Office of Health, Safety and Security

Enclosure: Regulatory Assistance Review Report

cc: Michael Hendrickson, Washington TRU Solutions  
Edward Ziemianski, CBFO

**Office of Worker Safety and Health Enforcement  
Regulatory Assistance Review  
Washington TRU Solutions, LLC**

**I. Introduction**

During April 26 – 28, 2011, the Office of Worker Safety and Health Enforcement, within the Office of Health, Safety and Security, conducted a regulatory assistance review of Washington TRU Solutions, LLC (WTS), which is the prime contractor at the Waste Isolation Pilot Plant (WIPP). The Office of Worker Safety and Health Enforcement planned and conducted the regulatory assistance review in accordance with the guidance provided in the U.S. Department of Energy (DOE) *Enforcement Process Overview* (EPO), dated June 2009. The EPO document is located on the Office of Health, Safety and Security website at:

[http://www.hss.energy.gov/enforce/Final\\_EPO\\_June\\_2009\\_v4.pdf](http://www.hss.energy.gov/enforce/Final_EPO_June_2009_v4.pdf)

The goal of the regulatory assistance review was to understand the WTS processes for noncompliance identification and reporting, implementation of the WTS internal self-assessment program, and trending of regulatory noncompliances. In addition, the regulatory assistance review evaluated WTS's effectiveness in resolving both noncompliant conditions and program deficiencies that can lead to noncompliances with the potential to adversely affect worker safety and health. The Office of Worker Safety and Health Enforcement gained first-hand information on WTS's program effectiveness and had the opportunity to exchange feedback regarding implementation of the WTS worker safety and health compliance program. Finally, regulatory assistance reviews assist the DOE contractor community by enhancing the uniformity of worker safety and health noncompliance identification and reporting.

During the onsite visit, the review team evaluated WTS's staff qualifications and experience, self-assessments, and noncompliance screenings for preselected operational events. In addition, the review team interviewed WTS employees and subcontractor employees. The regulatory assistance review report was prepared based on an evaluation of WTS nuclear safety and worker safety and health (NS&WSH) compliance program policies and procedures, issues screened for 10 C.F.R. Part 851 noncompliances, content and screenings of internal/external assessments and respective corrective actions, and subcontractor implementation of selected elements of the WTS worker safety and health program.

Overall, the WTS NS&WSH compliance program enables WTS to identify, evaluate, track, and correct worker safety and health noncompliances to prevent recurrence. The review team identified a number of program strengths as well as opportunities to enhance the WTS NS&WSH compliance program. The WTS NS&WSH compliance program would be improved by comprehensively identifying issues for regulatory noncompliance screening through self-assessments, and establishing data sets for trending based on specific noncompliances with

regulatory requirements. Trending of regulatory noncompliances can indicate programmatic or recurring worker safety and health issues and improve the implementation of the WTS safety and health program. Strengths and recommendations are discussed in further detail in the appropriate sections of this report.

## II. General Implementation

WTS procedures WP 15-GM.02, *Worker Safety and Health Program Description* (8/19/10); WP 15-RA.01, *Nuclear Safety and Worker Safety and Health Compliance Program* (4/30/07); and WP 04-IM1000, *Issues Management Processing of WIPP Forms* (12/06/10) establish the strategy and processes that WTS uses to identify, evaluate, report, and track worker safety and health regulatory noncompliances. The review team examined management processes within WTS policies and procedures, program implementation records, and responses from interviews with key personnel assigned ancillary roles and responsibilities that support the WTS NS&WSH compliance program. The review team determined that the compliance program is capable of meeting the guidance described within the EPO document with the size of the program suitable to address the activities and hazards located at the WIPP facility.

Procedure WP 15-GM.02 defines the process for incorporating Part 851 safety and health requirements in WTS management processes and procedures. WTS complies with safety and health standards that are applicable to the hazards at the WIPP site. Due to the mining activities that are performed at WIPP, WTS has elected to apply the requirements of 30 C.F.R. Parts 47, 48, 49, 57 and 62, "*Safety and Health Standards – Underground Metal and Nonmetal Mines*" to the underground area and related surface structures associated with mining activities.

The management structure within WTS consists of a general manager, senior staff managers, and section managers. The functional position within this organizational hierarchy for managing the WTS NS&WSH compliance program has been included as a senior staff position reporting directly to the general manager. A single employee performs this function and is designated as the compliance coordinator. The review team concluded that the compliance coordinator has extensive experience in the evolution of the Part 851 regulatory environment, is active in the EFCOG enforcement coordinator community, and has a clear understanding of DOE expectations for implementing the elements of Part 851. The compliance coordinator has sufficient authority and independence to make decisions without undue pressure from management and has direct access to senior management to inform them of significant regulatory noncompliance issues.

The qualifications and training for the compliance coordinator and ancillary staff (interpretive authority, senior management, line management) that support the WTS NS&WSH compliance program are defined in WP 15-RA.01. The three-tiered training program correlates training expectations with the level of NS&WSH program responsibilities assigned to the employee. Tier I training is required for all WTS personnel and is included as part of the General Employee Training and annual refresher training to introduce personnel to the elements of the DOE Enforcement Program. Tier II training is required for managers and supervisors and includes a focused and comprehensive discussion regarding the DOE EPO, Price-Anderson Amendments Act (PAAA), worker safety and health rules, and the WTS *Nuclear Safety and Worker Safety*

*and Health Compliance Program.* The highest level of training, Tier III, is intended for the compliance coordinator and interpretive authorities who, when training is completed, will have responsibilities for performing or assisting in actual noncompliance screening activities. This training consists of classroom training as well as a required reading assignment. At the time of this review, only the compliance coordinator had received the Tier III training.

An examination of the processes described in WTS procedure WP 15-RA.01 revealed an inconsistency in the actual activities performed by the compliance coordinator when compared to the requirements found in the documented program (e.g., interfaces with senior management, mechanism for the compliance coordinator to receive source documents, logging system for noncompliances). WTS indicated that the documented program was undergoing revision to address actual program changes that have occurred over the last 24 months.

The review team determined that collection, screening, tabulation, and analysis of data generated through the implementation of WTS procedure WP 15-RA.01 is highly labor intensive due to the lack of software tools allowing integration with the issues management program. As a result, employees spend extensive time duplicating data entry in multiple systems (e.g., Excel spreadsheets) and extracting data by hand to evaluate compliance metrics. The limitations of the software tools available for data management has resulted in minimal trending or statistical analysis of noncompliance screening data.

WTS requires subcontractors to perform work under WTS procedures WP 15-GM.02, WP 15-RA.01, WP 04-IM1000, and WP 12-IS.01-6, *Industrial Safety Program – Visitor, Vendor, User, Tenant, and Subcontractor Safety Controls* (4/8/11). By requiring subcontractors to follow WTS programs, WTS has maintained consistency in safety controls, is able to provide effective oversight, and can effectively invoke the site's safety culture. WTS takes full responsibility for identifying subcontractor noncompliances and integrates subcontractor noncompliance information into the WTS dataset for screening.

Strengths:

- WTS has an active and functional worker safety and health compliance program that envelops the activities of its subcontractors and aligns with the guidance established in the DOE EPO. The WTS NS&WSH compliance program provides a mechanism for WTS to maintain an awareness of their compliance status across all organizational entities.
- WTS effectively communicates subcontractor roles and responsibilities as they relate to Part 851, based on information provided by two subcontractors (Constructors, Inc., and Budwine Electrical) during onsite discussions with the review team.
- A diverse network of personnel representing WTS organizations are trained in Part 851, WP 15-RA.01, and demonstrate ownership of organizational noncompliant issues/conditions and corrective actions.

#### Recommendations:

- WP 15-RA.01 does not accurately reflect the process used to identify, evaluate, and report worker safety and health regulatory noncompliances. WTS should expedite the approval and implementation of the revised draft of this program document.
- Training consistent with the requirements in WP 15-RA.01 should be provided to interpretive authorities.
- WTS would benefit from automating its regulatory compliance screening processes with software tools that would allow integration with its issues management system and enhance the ability to perform data analysis manipulations with screening data.

### **III. Identification and Screening of Worker Safety and Health Noncompliances**

The compliance coordinator screens potential worker safety and health noncompliance issues from a wide variety of data sources identified in WP 15-RA.01. Line management submits source documents or issues to the compliance coordinator who will enter them into a Compliance Screening Log. Interpretive authorities assist the compliance coordinator using the Noncompliance Determination Screening Form in assessing each issue. The WTS compliance coordinator on average reviews 20-30 data sources a week. The largest percentage of data sources the compliance coordinator reviews are WIPP Form submittals. Medical monitoring reports, subcontractor field inspections checklists, and on-the-spot fixes are not receiving regulatory compliance screenings.

WTS documents its noncompliance screening on an electronic form known as a Noncompliance Determination Screening Form. The form requires the compliance coordinator to document the source document, issue description, applicable PAAA/WSH Rule Criteria, a conclusion with an appropriate justification, and applicable regulatory requirements. The compliance coordinator performs and documents all noncompliance screenings, resulting in a high level of consistency in the screening determinations. However, WTS does not regularly measure the timeliness of noncompliance screening. As a result, management is unable to monitor its overall process for reporting of noncompliant issues to DOE. In addition, WP 15-RA.01 did not clearly identify mechanisms for transmitting specific source documents to the compliance coordinator for screening.

In general, completed screening forms associated with worker safety and health issues or events cited appropriate worker safety and health regulatory noncompliance citations. The review team identified a few cases where relevant regulatory noncompliances had not been identified (e.g., National Fire Protection Association codes, Part 851 sections, internal WTS procedures). The compliance coordinator indicated that improvements in identifying consensus standards and codes during screening are needed, which ultimately would enhance WTS's ability to assess programmatic and/or recurring weaknesses in the worker safety and health program.

#### Strengths:

- The compliance coordinator reviews a large and diverse set of source documents to assess facility compliance with Part 851. Source documents include issue reports, occurrence reports, internal/external assessments, WIPP Forms, nonconformance reports, employee concerns, and injury/illness reports.

#### Recommendations:

- The WTS regulatory noncompliance identification and screening program should include several additional sources, such as medical monitoring data, subcontractor field inspection checklists, and potential secondary data sources (e.g., on-the-spot fixes).
- Several screening sheets indicated that the compliance coordinator is not identifying all potential noncompliances related to an issue. This may hinder WTS's ability to recognize a recurring or programmatic weakness within the WTS worker safety and health program.

### **IV. Evaluation for NTS Reportability**

After a Noncompliance Tracking System (NTS) reportable issue is identified, the compliance coordinator prepares a draft NTS report, informs appropriate line and senior management, and subsequently briefs the WTS general manager and legal counsel. The compliance coordinator will submit the NTS report once the management briefings have occurred. Thereafter, it is the compliance coordinator's responsibility to update, modify, and manage the NTS report until corrective actions are completed.

The review team examined a sample of worker safety and health screenings and found them aligned with the reportability criteria identified on the NTS Reportability Determination Screening Form and the event reporting thresholds as defined in the EPO. However, current and historical NTS reports revealed examples of contractor reported citations that are not comprehensive. For example, WTS did not identify noncompliances associated with certain requirements invoked by Part 851 such as National Fire Protection Association Standard 70E and 29 C.F.R. Part 1910. This weakness was reflected in the screening sheet associated with the corresponding NTS report. A review of WTS NTS reports revealed that the vast majority of submissions result from operational events and not issues identified by WTS; submitted NTS reports have not consistently met the EPO guideline for timeliness; and corrective actions included in NTS reports do not comprehensively address noncompliances identified in the screening of the event.

#### Strengths

- WTS has ensured that appropriate line and senior management take ownership of NTS reportable noncompliance issues by integrating them in the reportability screening process.

## Recommendations:

- WTS should identify process enhancements that would ensure that internal self-assessments, line organization inspection activities, and regulatory compliance trending activities are promoting self-identification of noncompliances. Noncompliance identification practices should transition from a reactive, event-oriented approach to one that drives the organization to be proactive in the critical self-evaluation of its worker safety and health programs.
- WTS should consider measures to promote consistent reporting of noncompliances into the NTS within 20 days of the date of noncompliance determination as identified in procedure WP 15-RA.01 and in the EPO document.

## V. Issues Management and Trending

Procedure WP 04-IM1000 describes the management processes associated with the WTS issues management program. The issues management program consists of initiating, tracking, resolving, and closing issues or process improvements identified on WIPP Forms. WIPP Forms are the mechanism by which WTS manages issues of both high and low significance, including safety issues, conditions adverse to quality, process improvements, and issues that have not been corrected through procedure changes, design changes, or other established processes. The WIPP Form Screening Committee, composed of representatives from all WTS organizations, reviews WIPP Form submittals, assigns issues to appropriate individuals for disposition, and participates in the development and evaluation of corrective actions. The compliance coordinator takes an active role in assisting the WIPP Form Screening Committee in assessing whether issues are NTS reportable and if proposed corrective actions address the regulatory noncompliances identified from the Noncompliance Determination Screening Form. WTS performs corrective action management based on the process described in WP 04-IM-1000.

WTS's Quality organization manages and analyzes the data set of worker safety and health metrics, including WTS noncompliances. Procedure WP 15-RA.01 references WP 13-QA3006, *Data Analysis and Trending* (4/25/11) as the mechanism to manage and evaluate statistical metrics to identify adverse quality trends. However, the procedure did not identify a process for establishing data sets that could be used to recognize systematic cross-cutting, programmatic, or recurring issues that were directly tied to regulatory noncompliant conditions. As a result, trending of regulatory worker safety and health noncompliances was not available.

WTS provided the review team with graphical trending representations for selected safety and health metrics maintained by the parent corporation URS (e.g., injury/illness cases) and at the local level (e.g., occupational injuries, deficiencies against the quality assurance program that include PAAA reportable issues, WIPP Form issues). The safety and health metrics were not directly associated with relevant worker safety and health regulatory functional areas or citations. The metrics selected by WTS to monitor safety and health performance did not reflect the diversity of regulatory noncompliance data that was available to the compliance coordinator from his routine screening activities.



#### Strengths:

- The process used to investigate events and ultimately develop corrective actions uses management as well as employees so that all stakeholders in the event agree on appropriate actions to prevent recurrence.

#### Recommendations:

- WTS should have the capability to collect, track, and trend pertinent noncompliance screening data so that the data can be used as a performance indicator for senior management. This process enhancement is particularly critical for ensuring that WTS identifies and corrects worker safety and health noncompliance conditions before they result in safety significant events and potential enforcement investigation. DOE's enforcement policy provides incentives for contractors who promptly self-identify and appropriately report noncompliances to DOE.

## **VI. Assessments and Quality Improvement**

WTS uses a variety of assessment tools to evaluate its worker safety and health programs. The 2010 and 2011 assessment schedules indicated that a number of topical areas associated with worker safety and health programs were, or are planned to be, evaluated. Routine management (internal/independent) assessments and subject matter expert observations of field implementation of worker safety and health programs augment assessment activities.

A review of the WTS assessment schedule indicated that a limited number of assessments addressing worker safety and health programs were performed in 2010. Based on the level of hazards associated with work activities at the WIPP site, the review team expected to see a rigorous self-assessment program that included regulatory driven, mandatory annual reviews, along with assessing a diverse number of subtopics from the Part 851 functional areas. The self-assessments reports provided to the review team did not have a consistent level of rigor and the lines of inquiry did not routinely indicate a direct linkage to a WTS procedural or regulatory driver. It was difficult to determine from the assessment reports if conclusions associated with the assessment field activities and the documents reviewed substantiated WTS's determination of procedural adherence and regulatory compliance.

#### Recommendations:

- WTS should identify and implement program improvements that would promote self-identification of noncompliances through self-assessment activities. Self-assessments of worker safety and health regulatory elements should comprehensively cover the topical areas applicable to WTS activities at WIPP and the applicable regulatory and corporate requirements.

## VII. Summary

WTS has established and maintains a regulatory compliance program appropriate for the activities and hazards at the WIPP facility. The WTS program contains all functional elements necessary for identifying, screening, and reporting worker safety and health regulatory noncompliances and managing corrective actions consistent with the guidelines delineated in the DOE EPO. Areas in need of further refinement include integration of the WTS NS&WSH program with that of the issues management system, expanding the capabilities for trending of the existing regulatory noncompliance data set, and enhancing the self-assessment program.

WTS should evaluate the recommendations identified during this review as opportunities for improving worker safety and health performance and avoiding or reducing the severity of worker safety and health noncompliances. Improvements to the WTS worker safety and health program will promote appropriate recognition and corrective action for worker safety and health program weaknesses; facilitate the Office of Worker Safety and Health Enforcement's exercise of discretion for noncompliant conditions considered to be less significant; and support mitigation consideration in any future enforcement action. Any corrective actions taken to address these recommendations should be coordinated with the Carlsbad Field Office.