

Department of Energy

Washington, DC 20585

August 30, 2004

Dr. Steven Warren
[]
Washington TRU Solutions, LLC
P.O. Box 2078
Carlsbad, NM 88221-2078

EA-2004-08

Subject: Preliminary Notice of Violation and Proposed Imposition of Civil Penalty

\$82,500

Dear Dr. Warren:

This letter refers to the Department of Energy's Office of Price-Anderson Enforcement (OE) investigation of the facts and circumstances concerning the procurement of four transportainers from Diversified Metal Products, Inc. (DMP) and the associated fabrication deficiencies.

OE initiated an investigation of the issues with a full review of relevant documentation. In addition, discussions that involved Department of Energy Carlsbad Field Office (DOE-CBFO) and Washington TRU Solutions, LLC (WTS) personnel took place in Carlsbad on May 11-12, 2004. Our findings were provided to you in an Investigation Summary Report dated June 25, 2004. An Enforcement Conference was held with you and members of your staff on July 27, 2004, to discuss these findings and to ascertain the WTS response to identified noncompliances. An Enforcement Conference Summary is enclosed.

Based upon our evaluation of the facts and information obtained during the course of our investigation and the information that you provided during the Enforcement Conference, DOE has concluded that violations of 10 CFR 830 Subpart A (Quality Assurance Requirements) occurred. These violations are described in the enclosed Preliminary Notice of Violation (PNOV).

The enclosed PNOV describes numerous examples of these violations of nuclear safety requirements associated with your procurement of the transportainers. Specifically, noncompliances were identified in the following areas: (1) management/programs, in which quality related requirements of the procurement were underemphasized in favor of cost and schedule priorities, and project planning for the transportainer procurement was less than adequate, (2) work processes, in which established requirements for

transportainer fabrication oversight were not followed, and (3) quality improvement, in which corrective actions taken in response to similar deficiencies were ineffective in preventing recurrence.

In accordance with the *General Statement of Enforcement Policy*, 10 CFR 820, Appendix A, the violations described in the enclosed PNOV have been classified as two Severity Level II violations and one Severity Level III violation. In determining the Severity Level of these violations, DOE considered the actual and potential safety significance associated with the noncompliances and the recurring nature of the problems.

To emphasize the importance of maintaining a comprehensive quality program for DOE nuclear activities, I am issuing the enclosed PNOV and Proposed Civil Penalty in the amount of \$82,500. DOE evaluated the WTS actions in timely identifying and promptly reporting the noncompliances. Although WTS did identify and report the quality-related deficiencies with the transportainers, OE's expectation is that these issues affecting the quality of the transportainers should have been identified during the early stages of fabrication and it is this failure that is at the heart of this enforcement action. WTS should seek opportunities to enhance its processes by which changing conditions are recognized and appropriately acted upon in a timelier manner. Thus, no mitigation has been applied to the violations for timely identification and reporting.

DOE also evaluated the adequacy of corrective actions taken by WTS in response to the transportainer procurement deficiencies. OE found the WTS Root Cause Analysis (RCA) report to be detailed. However, OE views the WTS characterization of the root cause (i.e., that Central Characterization Project (CCP) management failed to adequately plan, execute and oversee the fabrication of the transportainers) to be merely a broad restatement of the issue. Rather, the root cause(s) of the transportainer deficiencies lies in the reasons why CCP management failed to plan, execute and oversee the transportainer fabrication. In addition, OE noted that the WTS RCA and associated corrective actions did not fully address all pertinent issues affecting the quality of the transportainers, including the following: (1) broader management and organizational deficiencies, (2) lack of WTS self-assessments performed on the Characterization Repackaging Modular Unit project, and (3) failure of WTS to clearly and formally communicate its quality level expectations to DMP at the beginning of the procurement. It is noted that WTS addressed these issues during the July 27, 2004. Enforcement Conference and discussed the corrective actions that have been taken to address these additional issues. Based on corrective actions that were taken by WTS, OE has given 25 percent mitigation for both Severity Level II violations.

You are required to respond to this letter and to follow the instructions specified in the enclosed PNOV when preparing your response. Your response should document any additional specific actions taken to date. Corrective actions will be tracked in the Noncompliance Tracking System (NTS). You should enter into the NTS (1) any actions that have been or will be taken to prevent recurrence and (2) the target and completion dates of such actions. After reviewing your response to the PNOV, including your

proposed corrective actions, in addition to the results of future assessments or inspections, DOE will determine whether future enforcement action is necessary to ensure compliance with DOE nuclear safety requirements.

Sincerely,

Stephen M. Sohinki

Stell Machil

Director

Office of Price-Anderson Enforcement

CERTIFIED MAIL RETURN RECEIPT REQUESTED

Enclosures:

Preliminary Notice of Violation Enforcement Conference Summary Report List of Attendees

cc: J. Shaw. EH-1

A. Patterson, EH-1

R. Day, EH-6

T. Weadock, EH-6

Docket Clerk, EH-6

R. Lagdon, EH-31

P. Golan, EM-1

L. Vaughan, EM-3.2

A. Acton, IG-33

R. Detwiler, DOE-CBFO

R. Farrell, DOE-CBFO

B. Pace, WTS PAAA Coordinator

Preliminary Notice of Violation and Proposed Imposition of Civil Penalty

Washington TRU Solutions, LLC

EA-2004-08

In May 2004, The Office of Price-Anderson Enforcement (OE) conducted an investigation, including a site visit and a review of pertinent documentation, concerning the procurement of four transportainers and the associated fabrication deficiencies. Following an Enforcement Conference on July 27, 2004, the Department of Energy (DOE) has concluded that violations of DOE nuclear safety requirements have occurred and they are set forth below with the associated proposed civil penalties. Citations specifically citing the quality assurance criteria of 10 CFR 830.122 represent a violation of 830.121(a) which requires compliance with those criteria.

In accordance with 10 CFR 820, Appendix A, *General Statement of Enforcement Policy*, DOE issues this Preliminary Notice of Violation (PNOV), with proposed civil penalty, pursuant to section 234a of the *Atomic Energy Act of 1954*, as amended, 42 USC 2282a, and 10 CFR 820.

I. Violations Pertaining to Management/Program

10 CFR 830.122(a)(1) requires DOE contractors to establish an organizational structure, functional responsibilities, levels of authority, and interfaces for those managing, performing, and assessing the work.

10 CFR 830.122(a)(2) requires DOE contractors to establish management processes, including planning, scheduling, and providing resources for the work.

Contrary to the above, between May 2003 and November 2003, WTS established an organizational structure, which did not clearly define functional responsibilities and levels of authority for managing, performing and assessing transportainer fabrication activities. Further, the procurement of the transportainers was not adequately planned or scheduled and adequate resources were not assigned to the work. Specific examples include the following:

A. Communications, functional responsibilities, and lines of authority between the Washington TRU Solutions, LLC (WTS) organizations with quality assurance (QA) responsibilities for the transportainer procurement were lacking and led to deficiencies in fabrication oversight. The involved organizations included the WTS

QA organization and the Central Characterization Project (CCP) Project Quality Assurance group. Specific deficiencies resulting from the organizational inadequacies included (1) the failure to develop and approve an adequate Quality Assurance Verification Plan (QAVP) prior to the beginning of fabrication, (2) the failure to include all verification points identified in the fabrication specifications in the QAVP, (3) confusion regarding the role and level of qualification of the utilized Washington Group International (WGI) inspector, (4) the shipment of the transportainers prior to satisfaction of all source verification attributes, and (5) the inappropriate waiving of two customer hold points by an unauthorized individual. The complications introduced by this organizational relationship were further exacerbated by the limited human resources WTS management allocated to the transportainer procurement QA functions.

- B. WTS management failed to adequately communicate its quality related requirements for the transportainer procurement and placed a greater emphasis on cost and schedule constraints. Thus, the management processes, established by WTS to assure that quality products are procured from its vendors in compliance with nuclear safety requirements, were viewed as secondary and were circumvented in the interest of lowering cost and/or meeting scheduled milestones.
- C. The planning and scheduling of transportainer procurement activities were inadequate. The fact that unrealistic milestones were established for delivery of the Characterization Repackaging Modular Unit (CRMU) in conjunction with the fact that the design of the CRMU was not fixed until the fabrication of the transportainers was complete are examples of this inadequate planning and scheduling.

Collectively, these violations constitute a Severity Level II problem. Civil Penalty - \$41,250

II. Violations Pertaining to Work Processes

10 CFR 830.122(e)(1) requires that work be performed consistent with technical standards, administrative controls, and other hazard controls adopted to meet regulatory or contract requirements, using approved instructions, procedures, or other appropriate means.

Contrary to the above, between September 2003 and November 2003, the transportainer procurement was not performed consistent with technical standards, administrative controls, and other regulatory or contract requirements, using approved instructions, procedures, or other appropriate means. Specific examples include the following:

A. WTS procedure WP 15-PC3041, *Approval/Variation Request Processing*, Revision 5, section 1.7, dated August 18, 2003, states that "On an 'exception only' basis, the subcontractor may submit a document for approval or variance in the form of a letter. The Subcontract Administrator will attempt to obtain the supplier's submittal on the AR/VR form." However, in an email message from Mark Edwards (WTS

- procurement) to Herb Pollard (DMP), dated September 23, 2003, authorization was given to DMP to follow verbal approvals associated with the transportainer procurement. In addition, the WTS practice of using an informal means to evaluate DMP approval or variance requests was done on several occasions to include the (1) variance to DMP preparation of transportainer shop drawings, (2) WTS designation of safety significant design features associated with the transportainers, and (3) waiving of two customer hold points.
- B. WTS procedure WP 13-QA3020, Fabrication Oversight, Revision 1, section 1.1.7, dated September 22, 2003, states that WTS is to "Ensure manufacturer's fabrication process (e.g., traveler) establishes all applicable witness and hold points to facilitate fabrication oversight activities." However, WTS failed to assure that specified hold points were established in the DMP fabrication process for the transportainers. In addition, WTS approved the Modification, Inspection, and Test Plans (MITP) (e.g., traveler) provided by DMP without assuring that the specified witness and hold points were included.
- C. WTS procedure WP 13-QA3020, Fabrication Oversight, Revision 1, section 1.1.1, dated September 22, 2003, states that WTS is to "Ensure oversight planning is initiated and completed for the respective commodity." However, the QAVP developed for the transportainer procurement was not approved or used until October 13, 2003, at which time the fabrication of the transportainers was nearly complete.
- D. WTS procedure WP 13-QA3020, *Fabrication Oversight*, Revision 1, section 4.2, dated September 22, 2003, states that WTS "Oversight Programs, plan and execute source verification activities according to the requirements stated in the QAVP. Successful completion of attachment 1 constitutes the verification of field activities. Attachment 1 will be reviewed for completeness and acceptability." However, only one of the five source verification attributes (floor flatness) stated in the QAVP could be evaluated prior to shipment of the transportainers to WTS.
- E. WTS procedure CCP-QP-015, *CCP Procurement*, Revision 5, section 4.7, dated June 7, 2002, requires that the "QA Grading Level Determination Checklist or printed extract from the CCP Graded QA Database" be prepared as part of the procurement documentation. In addition, WTS procedure CCP-QP-001, *Graded Approach*, Revision 2, section 4.1.9, dated April 9, 2002, requires that the Site Project Quality Assurance Office make a copy of the QA Grading Checklist and include it as part of the purchase request. However, this checklist was not included as part of the transportainer purchase request.
- F. WTS procedure WP 13-QA3020, *Fabrication Oversight*, Revision 1, section 1.2 dated September 22, 2003, states that Oversight Programs are to ensure that WTS quality engineers and/or inspection personnel are qualified in accordance with WP 13-QA.04, *Quality Assurance Department Administrative Program*. In addition, section 1.3 states that Oversight Programs are to ensure that WTS engineering personnel assigned source verification duties complete QAE-01, *Quality Engineer*

Authorization Card, for qualification purposes. At the direction of WTS management, a WGI inspector was sent to perform the customer hold point inspection called out in the DMP transportainer MITPs. However, this WGI inspector was not qualified to WTS requirements to perform this task.

G. WTS procedure WP 15-PC3041, *Approval/Variation Request Processing*, Revision 5, section 3.6, dated August 18, 2003, states that it is the Technical Manager who grants authorization to "proceed" or "not proceed" with a variation request. However, on October 7, 2003, a CCP engineer authorized a variation request by waiving customer hold point inspections, when he was not authorized to do so.

Collectively, these violations constitute a Severity Level II problem. Civil Penalty - \$41,250

III. Violation Pertaining to Quality Improvement

10 CFR 830.122(c)(2) requires the identification, control, and correction of items, services, and processes that do not meet established requirements.

10 CFR 830.122(c)(3) requires the identification of causes of problems and work to prevent recurrence as a part of correcting the problem.

Contrary to the above, between May 2001 and November 2003, the identification, control, and correction of items, services, and processes that do not meet established requirements, and the identification of causes of problems and work to prevent recurrence as a part of correcting the problem did not occur in that WTS failed to adequately implement corrective actions directed at preventing recurrence of known procurement deficiencies. Specifically:

In May 2001 a Noncompliance Tracking System (NTS) report was submitted that described several instances in which items were either procured or acquired by CCP through excess property disposition without the application of appropriate quality requirements or controls. A common factor noted in the described events was that the acquisition involved a sense of urgency, and personnel were motivated to expedite the process. This motivation led to the impression that cumbersome requirements could be dealt with later or outside the formal procedure process.

Corrective actions for the 2001 report included the conduct of briefings and revisions to procurement procedures to emphasize management expectations of compliance and to assure urgent procurements meet all nuclear safety necessary requirements as well as project needs. The Root Cause Analysis Team noted that similar deficiencies existed with the subject transportainer procurement. These deficiencies indicated that prior corrective actions were not effective.

This violation constitutes a Severity Level III problem.

Pursuant to the provisions of 10 CFR 820.24, WTS is hereby required within 30 days of the date of the Preliminary Notice of Violation and Proposed Imposition of Civil Penalty, to submit a written statement or explanation to one of the following addresses:

(if sent by U.S. Postal Service):

(if sent by overnight carrier):

Director, Office of Price-Anderson Enforcement Attention: Office of the Docketing Clerk EH-6, 270 Corporate Square Building U.S. Department of Energy 1000 Independence Avenue, SW Washington DC 20585-0270 Director, Office of Price-Anderson Enforcement Attention: Office of the Docketing Clerk EH-6, 270 Corporate Square Building U.S. Department of Energy 19901 Germantown Road Germantown, MD 20874-1290

A copy should also be sent to the Manager, DOE Carlsbad Field Office and the DOE Assistant Secretary for Environmental Management. This reply should be clearly marked as a "Reply to a Preliminary Notice of Violation" and should include the following for each violation: (1) admission or denial of the alleged violations, (2) any facts set forth in this PNOV which you believe are not correct, and (3) the reasons for the violations if admitted, or if denied, the basis for denial. Corrective actions that have been or will be taken to avoid future violations should be delineated with target and completion dates in OE's Noncompliance Tracking System. In the event the violations set forth in the Preliminary Notice of Violation are admitted, this PNOV will constitute a Final Order in compliance with the requirements of 10 CFR 820.24.

Any request for remission or mitigation of civil penalty must be accompanied by a substantive justification demonstrating extenuating circumstances or other reasons why the assessed penalty should not be paid in full. Within the 30 days after the issuance of the PNOV and civil penalty, unless the violations are denied, or remission or additional mitigation is requested, WTS shall pay the civil penalty of \$82,500 imposed under section 234a of the Act by check, draft, or money order payable to the Treasurer of the United States (Account 891099) mailed to the Director, Office of Price-Anderson Enforcement, Attention: Office of the Docketing Clerk, at one of the above addresses. If WTS should fail to answer within the time specified, the contractor will be issued an order imposing the civil penalty. Should additional mitigation of the proposed civil penalty be requested, WTS should address the adjustment factors described in section IX of 10 CFR 820, Appendix A.

Stephen M. Sohinki

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Director

Office of Price-Anderson Enforcement

Dated at Washington, DC this 30th day of August 2004

ENFORCEMENT CONFERENCE SUMMARY

Transportainer Procurement Issues (NTS-ALO-CAO-WIPP-WIPP-2003-0002)

On July 27, 2004, the Department of Energy's Office of Price-Anderson Enforcement (OE) held an Enforcement Conference with Washington TRU Solutions, LLC (WTS), in Germantown Maryland. The meeting was called to discuss the facts, circumstances, and corrective actions pertaining to the procurement of four transportainers from Diversified Metal Products, Inc. and the associated fabrication deficiencies. Mr. Stephen Sohinki, Director of the Office of Price-Anderson Enforcement, called the meeting to order. Mr. Sohinki stated that OE had convened the meeting to (1) address the issues discussed in the June 25, 2004, Investigation Summary Report, (2) discuss corrective actions taken to prevent recurrence, and (3) discuss mitigation factors for OE consideration. Information and key areas discussed at the conference are summarized below, and material provided by WTS during the conference was incorporated into the docket.

Mr. Steven Warren, WTS General Manager, began the WTS presentation by stating that WTS agreed with the factual accuracy of the OE Investigation Summary Report and accepting WTS responsibility to assure safe and compliant work. Further, Mr. Warren stated that failure to ensure proper quality into procured equipment does not meet WTS expectations nor that of the Department of Energy. Mr. David Reber, WTS Deputy General Manager, addressed WTS senior management involvement in addressing the transportainer procurement issues and organizational restructuring in response to procurement issues. Mr. Reber then addressed the noncompliances, associated causes, and corrective action taken in response to the procurement issues. Mr. Reber went on to discuss (1) the extent-of-condition review conducted by WTS, (2) actions taken in response to issues not formally addressed in the WTS Root Cause Analysis report, (3) WTS actions taken to preclude potential consequences resulting from the transportainer deficiencies, (4) the commissioned 2003 review of Central Characterization Project projects, (5) analysis of corrective actions associated with the May 2001 Noncompliance Tracking System report, and (6) actions taken by WTS in support of mitigation for OE consideration. Mr. Warren closed the WTS presentation by stating that (1) the event was identified due to a questioning attitude and receipt inspection requirements, (2) WTS immediately took action based on recognized significance, (3) WTS thoroughly investigated the event and took corrective action, (4) WTS will continue to evaluate

improvement actions, (5) WTS will strengthen its self-assessments, and (6) WTS will institutionalize quality expectations.

Mr. Sohinki stated that OE would consider the information presented by WTS together with the entire record when OE undertakes its enforcement deliberations. Mr. Sohinki then adjourned the conference.

July 27, 2004

Enforcement Conference List of Attendees Transportainer Procurement Issues

DOE – Office of Price-Anderson Enforcement

Stephen M. Sohinki, Presiding Officer Les Bermudez, Enforcement Specialist Ron Collins, Enforcement Specialist Richard Day, Enforcement Specialist Tony Weadock, Enforcement Specialist Howard Wilchins, Senior Litigator Phil Wilhelm, Enforcement Specialist

DOE – Office of Environmental Management

Larry Vaughan, EM PAAA Coordinator Duli Agarwal, EM WIPP Representative

DOE – Carlsbad Field Office

Lloyd Piper, Deputy Manager Richard Farrell, CBFO PAAA Coordinator

Washington TRU Solutions

Steven Warren, General Manager David Reber, Deputy General Manager Michael Lipscomb, Quality Assurance Manager Chuck Conway, External Programs Manager Berry Pace, PAAA Coordinator