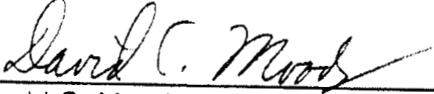


Carlsbad Field Office Site Action Plan  
Commitment 23, WP&WC – DNFSB Recommendation 2004-1

Carlsbad Field Office  
Site Action Plan  
Commitment 23, Work Planning and Work Control  
DNFSB Recommendation 2004-1

Approved:   
David C. Moody, Manager, Carlsbad Field Office

Note: Change Control for this Site Action Plan (SAP) resides with the Field Office Manager.

## EXECUTIVE SUMMARY

### Evaluation Process

This assessment was conducted as part of the Carlsbad Field Office (CBFO) response to Commitment #23 of the Department of Energy's Implementation Plan for Defense Nuclear Facilities Safety Board (DNFSB) Recommendation 2004-1, *Oversight of Complex, High-Hazard Nuclear Operations*. This assessment was conducted in accordance with instructions provided in the November 18, 2005 DOE Headquarters memorandum from the Chief Operating Officer for Environmental Management. Specific direction was provided to perform a review of the DOE field office and contractor in the area of work planning and control. The assessment team utilized existing assessment data, and conducting a focused assessment of specific components as required to fully evaluate all work planning and control processes utilized at the Waste Isolation Pilot Plant (WIPP).

The assessment is the product of a team effort with participation by personnel from the CBFO, the CBFO Technical Assistance Contractor (CTAC), and the Management and Operating (M&O) Contractor. The assessment team included: 1) the Director of the CBFO Office of Disposal with 20 years geotechnical and environmental management experience, NQA-1 lead auditor training, and completed technical qualifications; 2) the CBFO Safety Officer with 25 years industrial and nuclear safety experience, bachelor's of science with a chemistry major and mathematics minor, and completed technical qualifications as safety officer and nuclear safety specialist; 3) a CTAC senior professional engineer with NQA-1 lead auditor training, 30 years experience in industrial operations management and in safety and environmental compliance; and 4) an M&O contractor senior engineer/VPP Program Coordinator for the WIPP Site with ASQ lead auditor certification, OSHA lead safety assessment certification, DOE Radiological Programs Assessor Certification, and over 20 years experience in safety and quality assurance.

### Overall Evaluation Summary

The results of the WIPP assessment determined that CBFO meets objectives WPC 1 and 2 of the prescribed work planning and control Criteria Review and Approach Document (CRAD) with no issues noted. Washington TRU Solutions, the WIPP M&O contractor, was found to meet the objectives WPC 3 through 7 of the prescribed work planning and control

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CRAD with one opportunity for improvement (OFI) noted involving the fact that some new technical safety TSRs are still in the process of being implemented at WIPP and with several specific strengths or best practices noted.

Work Planning and Control CRAD

Objective #	Objective Met	Objective Partially Met	Objective Not Met	Comments
WPC 1.	X			No OFI's Noted
WPC 2.	X			No OFI's Noted
WPC 3.	X			No OFI's Noted
WPC 4.	X			No OFI's Noted, 1 Strength
WPC 5.	X			1 OFI, 1 Strength
WPC 6.	X			No OFI's Noted, 1 Best Practice
WPC 7.	X			No OFI's Noted

At the WIPP site, all the work planning and work control processes fall under the same programs allowing a consistency in implementation that provides a strong foundation for overall effectiveness and compliance with the prescribed performance objectives. WIPP procedures adequately delineate responsibilities of the personnel involved in the work control program including initiating, analyzing, and developing work control packages. The process establishes in-depth reviews from field personnel to first line management and the approvals necessary for the various types of work packages to ensure risks are identified and mitigated. Preliminary walk-downs, work area inspections, pre-job briefings, and other prerequisites including required training and limitations, are incorporated fully into the work planning processes. The overall work planning process is effective in generating work control documents that lead to safe and efficient completion of work activities. Work in progress is overseen by direct line management supervision, senior management walk-arounds, CBFO field oversight, inspections, surveillances, and formal audits. These oversight activities and other avenues such as performance indicators and post job reviews are trended and lessons learned implemented. Subsequently continuous improvement in work planning and work control is part of the routine process at WIPP.

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**Objective 1**

**The DOE field element has an established process that ensures effective oversight of the contractor's work planning and control process.**

Discussion:

The Carlsbad Field Office *Contractor Oversight Plan* (DOE/CBFO 04-3299) defines the process used by CBFO to oversee contractor work activities to verify that work is performed in a safe, secure and effective manner. DOE/WIPP 98-2287 the *CBFO Functions, Responsibilities, and Authorities Manual* (FRAM) defines responsibilities of field element personnel assigned safety oversight of contractor work planning and work control processes. CBFO established and utilizes these two documented processes to provide for, among with other outcomes, effective safety oversight of contractor work planning and work control at WIPP. The CBFO Contractor Oversight Plan and FRAM, and the objective evidence of their implementation at WIPP, which was reviewed in assessments associated with Commitment 23, satisfy this performance objective. Therefore, no opportunities for improvement were identified for this objective, and no currently open corrective actions from previous assessments were discovered related to this performance objective.

**Objective 2**

**The DOE field element performs effective oversight of the contractor's work planning and control process.**

Opportunity for Improvement:

No opportunities for improvement were identified for this objective, and no currently open corrective actions from previous assessments were discovered that are related to this objective. During fiscal year 2005, CBFO provided oversight for 24 operations assessments by the technical assistance contractor and conducted 8 direct assessments. For FY06 there are 16 operational assessments planned and 12 CBFO oversight assessments of the M&O Contractor. Implementation of the CBFO Contractor Oversight Program Plan, CBFO documented assessments, CBFO and independent ISMS reviews, and multiple work-place oversight activities conducted daily on an ongoing basis by CBFO technical staff deployed in Carlsbad and at the WIPP Site form the core for effective oversight of the contractors' work planning and control processes.

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**Objective 3**

**The contractor has developed an effective work planning and control process.**

Opportunity for Improvement:

Washington TRU Solutions LLC, the management and operating contractor (MOC) at WIPP, has developed and implemented an effective work planning and control process. WIPP Procedure (WP) 10-2, Rev. 11, *Maintenance Operations Instruction Manual*, (MOIM) and WP 10-WC3011, Rev. 16, *Maintenance Process*, were reviewed to verify that the procedures contain the necessary attributes of an effective work control program. The procedures adequately delineate the roles and responsibilities of the personnel involved in the work control program including initiating, analyzing, and developing work control documents. The process establishes the level of review and approval necessary for the various types of work packages from skill of the craft, to preventive maintenance, corrective maintenance, up to major modifications.

There were no opportunities for improvement identified for this objective. No open corrective actions or initiatives from previous reviews or assessments related to this objective were discovered.

**Objective 4**

**Proposed work activities are adequately defined and analyzed to identify hazards and their associated controls.**

Opportunity for Improvement:

A review verified that this objective is effectively met. In 2004, a Type B Investigation of an accident resulting in an injury to a WIPP underground miner led to the formulation of corrective actions to address findings of the investigations. A number of those corrective actions were connected to defining work activities and to analyzing and mitigating hazards. All corrective actions connected to the investigation have been implemented and closed by the management and operating contractor at WIPP, and independently verified by CBFO. Those corrective/verification activities have resulted in improved job hazard analysis at WIPP.

No current opportunities for improvement were identified for this objective. No open corrective actions or initiatives from previous reviews or assessments related to this objective were discovered.

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Strength:

A particular strength was noted that as mitigation actions were identified to be taken in case of specific hazards identified in the work package, each worker to be conducting the work involved in that package had to additionally sign at each mitigation step to ensure they understood the importance of that aspect in the package.

**Objective 5**

**The contractor work planning process generates work control documents that lead to safe and efficient completion of work activities.**

Opportunity for Improvement:

The work planning processes of the WIPP MOC and subcontractors are effective. An opportunity for improvement was identified related to this objective to incorporate safety basis requirements into work control documents. Since a new revision to the WIPP Documented Safety Analysis for contact-handled waste disposal operations includes new technical safety requirements (TSRs) that are in the process of being implemented at WIPP, the necessity to conduct a surveillance to verify full implementation of the new TSRs was identified as an opportunity for improvement for this objective. Implementation of TSRs will be assessed in the planned surveillance to verify that the application of TRSs to work planning processes result in their incorporation into work control documents in accordance with the criteria of this objective. No open existing corrective actions or initiatives related to this objective were identified.

Action Description	Deliverable(s)	Due Date	Owner
Verification of TSR Implementation	Surveillance Report	4/28/06	WTS Quality Assurance Manager

Strength:

The requirement for completion of a table identifying measurement and test equipment (M&TE) specifics such as instrument number, calibration date, and signature for each M&TE used to conduct the activities identified in the work package is considered a strength.

**Objective 6**

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**Contractor personnel perform work in accordance with approved work control documents.**

Opportunity for Improvement:

This objective was verified through document reviews, interviews, and observing work in progress. In addition, quality assurance trending has demonstrated continued improvement in procedural compliance. No previously existing corrective actions or initiatives related to this objective were discovered. No opportunities for improvement were identified for this objective.

Strengths:

The WIPP Lessons Learned Program, which was acknowledged as evidence addressing the criteria for this objective, was specifically noted as a Best Practice by the DOE EH VPP review team in the fall of 2005.

**Objective 7**

**The contractor has an established processes that requires line management and assessment personnel to perform timely assessments/surveillances of the work planning and control process, including periodic reviews of active and in-development work control documents.**

Opportunity for Improvement:

No opportunities for improvement were identified for this objective.

This objective was fully met through assessments/surveillances conducted in accordance with WIPP Procedure (WP) 13-1, the *WTS Quality Assurance Program Description*. These assessments/surveillances include independent assessments, management assessments, and informal walk-downs and reviews. No previous existing corrective actions or initiatives were discovered that are related to this objective.