

**GENERAL INFORMATION**

Performance Incentive Number: CBFO-PBI #6 Performance Period:10/1/2005 through 9/30/2012  
 Performance Incentive Short Title: Alternate Waste Transport Route Preparation  
 Revision Number and Date: Revision 1, April 25, 2011

**SECTION II – ACCOUNTING/PROJECT INFORMATION**

Initial Budgeted Cost of Work Scheduled (BCWS) under this PM: Exemption 4  
 Maximum Available Incentive Fee Associated with this Measure: Exemption 4

CBFO Management Control Packages:

**SECTION III – INCENTIVE INFORMATION**

Incentive type: Base  Stretch  Super Stretch   
 Difficulty: High  Medium  Low   
 Duration: Annual  Multi-year   
 Fee Payment type: Completion  Progress  Provisional

**SECTION IV - PERFORMANCE MEASURE**

**Description:**

The WIPP management and operating Contractor will provide for sustained reliability and availability of the WIPP underground transportation route and provide for redundancy so the significant East 140 maintenance can be performed without impacting waste receipt. If the only existing route (E140) was disabled for any reason, waste emplacement would be impacted for an indefinite period of time, costing the DOE and taxpayers millions of dollars.

In addition to waste transport, the haul route is used for normal maintenance activities associated with waste receipt and tours. The one day a week that is available to perform significant ground control activities must be shared with other work groups. Normal ground control maintenance (broken roof bolt replacement and scaling activities) is performed during limited periods of non-waste transport. The majority of the transport route has been in existence since 1982 and requires a constant and ever increasing ground control effort. In the past, when major ground control projects needed to be performed, a shutdown of waste emplacement was utilized.

The only disposal route underground is East 140 and that is in the design (and other regulatory documents and HWFP permit) and the Contractor is only required to maintain East 140 for waste disposal. The Contractor is also required to maintain the rest of the underground openings for purposes other than waste disposal. Most of the E140 drift has been open for over 20 years and the Contractor has kept it safe and operable; however, with the demand for waste handling time increasing in the E140 drift, the time available for maintenance on that drift is less, but still sufficient for them to perform maintenance and upkeep. In addition, the annual outage is also available and needed for maintenance and upkeep. Therefore, this work to develop an alternate disposal route (in West 30) is above and beyond what is required by contract and provides the DOE with major advantages.

For example, once the alternate route is completed and approved, the Contractor can plan work in the E140 without interrupting waste handling. This would provide DOE two options for waste disposal routes and the strategic ability to keep the waste handling pathways open for many years to come.

Long-term maintenance of the E140 waste transport route presents its own unique challenges. The drift was originally excavated in 1982 and has undergone numerous dimensional increases since that time. Past ground control efforts have included installation of mechanical and resin anchored roof bolt systems, cable slings, and mesh. Deterioration of the immediate roof beam required that significant sections be removed in 1996. In response to increased roof beam expansion and closure rates, two separate

supplemental support systems consisting of twelve-foot resin anchored roof bolts and roof mats were installed in 2003. Roof beam sag is noticeable in a number of areas but is well supported. The current ground control effort focuses on maintaining the existing ground support system and milling of the floor to provide a smooth transport surface. Informal contingency plans have been developed in the event that the existing ground support system no longer performs adequately.

Alternatives to implementation of this PBI are not feasible at this time. Doing nothing is also not a viable option. WTS operations alone are currently incurring an average of <sup>Exemption 4</sup> in cost each month. That makes the average downtime for any one day over <sup>Exemption 4</sup>. If operability were lost for the only waste route available, this is what the government would incur without benefit of waste disposal activities.

This major site capability upgrade will ensure that the facility can continue to safely transport and dispose of TRU waste from generator sites in the WIPP repository for the planned duration of the project. It is imperative to mitigate the risk of downtime when mandatory and major E140 (existing route) maintenance must be performed. The deadlines established in this performance based incentive will ensure timely support to the ongoing Enriched Xenon Observatory (EXO) project. The EXO project is a prototype laboratory established in the WIPP underground designed to capture and measure the subatomic neutrino.

The Contractor's performance will be measured by its timely and successful upgrade to the WIPP underground by providing an alternate waste transportation route. The Contractor shall complete this project with the activities successfully planned and performed, as delineated within this PBI. Completion of the recovery will ensure reliability and sustainability of the WIPP underground transportation route, as well as demonstrate proper safety and fiscal stewardship for the infrastructure of the facility to support current and future missions.

Discreet elements associated with this project are:

1. Complete widening West 30 to 20 ft. and install ground control from South 1950 to South 2180.
2. Complete widening West 30 to 20 ft. and install ground control from South 2180 to South 2520.
3. Complete widening West 30 to 20 ft. and install ground control from South 2520 to South 2750 to 20 ft.
4. Complete widening South 700 to at least 20 ft., floor mining to attain 14 ft. height, install ground control and install a new airlock from East 140 to West 30.
5. Complete mining the floor from South 700 to South 2750 to attain 14 ft. drift height. This work will include cross drift floor mining to ramp or match grade as well as bulkhead rework or relocation as required.
6. Request the changes as part of the 10-yr. permit renewal process by 9/30/10.
7. Reconfigure bulkheads, install ventilation regulators and begin operations after permit changes are approved by June 30, 2012.
8. Complete installation of the West 30 South 2180 overcast prior to commencing waste handling in Panel 7.
9. Complete installation of the West 170 South 2750 overcast prior to commencing waste handling in Panel 6.

The following metric shall be used to measure performance and determine fee earned by the Contractor under this Rating Plan element.

Metric 1: The Contractor shall safely and compliantly complete widening of pathways, installing ground control, and mining floors to attain an optimum ceiling height. This includes matching ramps or grades and the installation of new airlocks and bulkhead rework or location, as required and completing all discreet work elements one through six cited above. **Evidence of this work will be by request for**

**changes as part of the 10-yr. permit renewal process by 9/30/2010.** The Contractor shall safely and compliantly complete elements 7-9 listed above. Specifically, the Contractor shall: Reconfigure bulkheads, install ventilation regulators and begin operations after permit changes are approved; complete installation of the West 30 South 2180 overcast prior to commencing waste handling in Panel 7; and complete installation of the West 170 South 2750 overcast prior to commencing waste handling in Panel 6. ***This will be accomplished by September 30, 2012.***

The completion of this metric will earn the Contractor **Exemption 4**

The maximum amount of fee available to WTS under this metric during the term of the contract is **Exemption 4**

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#### SECTION V - PERFORMANCE REQUIREMENTS

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**PREVIOUS GATEWAY:** Describe previous gateway (if applicable) that must be completed before fee can be paid under this performance measure.

WTS performed safe and compliant operations while conducting work necessary to provide for an alternate waste transportation route in the WIPP underground.

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**DEFINE COMPLETION:** Specify Performance Elements and describe indicators of success (quality/progress). Include baseline documents/data against which completion documentation should be compared.

**Payment:**

WTS will request a payment after transmittal of all documentation necessary to prove metric completion. Element 6 is contingent upon completion of Elements 1-5; therefore, the permit modification request in the required format to CBFO by the required date will serve as proof for those items. For items 7-9, other forms of project completion will be necessary.

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**DEFINITIONS:**

**CH – Contact-Handled:** Packaged TRU waste with an external surface dose rate that does not exceed 200 mrem per hour.

**Cubic Meters:** As used herein cubic meters refer to the TRU waste container volume. TRU waste container volume means the volume in cubic meters of the container. For example, the volume of one 55-gallon drum is 0.21 m<sup>3</sup>, and the volume of one standard waste box is 1.88 m<sup>3</sup>, etc.

**RH – Remote-Handled:** Packaged TRU waste with an external surface dose rate that exceeds 200 mrem per hour but is less than 1,000 rem per hour.

**TRU:** Transuranic Waste. Radioactive waste containing isotopes with an atomic number greater than 92, concentrations greater than 100 nanocuries per gram, and a half-life of greater than 20 years.

**WIPP:** Waste Isolation Pilot Plant

**WTS:** Washington TRU Solutions, the Contractor

**WWIS:** WIPP Waste Information System

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**TECHNICAL BOUNDARY CONDITIONS:** (Fundamental technical assumptions that must be maintained in order to accomplish the work scope associated with this Performance Measure.)

N/A

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**GENERAL REQUIREMENTS:**

To earn incentive fee under this Performance Incentive, the Contractor shall meet the specific completion criteria and expectations set forth in this Performance Incentive. The Contractor cannot earn fee for routine operations, the cleanup objectives defined in the metrics above must be accomplished. The Contractor shall support obtaining necessary regulatory approvals to accomplish the metrics by preparing appropriate submittals with good quality, promptly responding to regulator requests for added information and coordinating the preparation of response material, coordinating hearing preparation as needed, and coordinating implementation of approved regulatory changes.

Acceptable environmental, safety, and health performance for the entire Scope of Work for the contract is a pre-condition to earning 100% of the fee available under the contract. Unacceptable performance in these areas is defined as that which results in the Head of Contracting Activity (HCA) for the contract invoking provisions of the Conditional Payment of Fee (CPOF) clause of the contract to reduce the fee paid under the contract.

Acceptable cost and schedule performance for the entire Scope of Work for the contract is a pre-condition to earning 100% of the fee available under the contract. The threshold for unacceptable overall cost and schedule performance is when in any fiscal year the Contractor has a negative variance exceeding 7.5% percent in earned value for the baseline for the fiscal year in cost or schedule. If such a situation occurs, the HCA may invoke provisions of the CPOF of the contract to reduce the fee paid under the contract.

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**COMPLETION DOCUMENTS LIST:** *(In addition to the Completion Report, the document(s) that should be submitted/ data that should be available/ actions to be taken by evaluator, to determine actual performance to the requirements stated above.*

Note: WTS will provide documentation to the Contracting Officer as follows:

**Metric 1:** (Completion) Fee shall be payable upon submittal of documentation to CBFO that facilitates a permit change request and after completion of discreet elements 7-9 from Section IV above to be finished by June 30, 2012 and for completion of Items 7-9 in the descriptive section of this PBI.

For items 7-9 above, specific tasks include: reconfigure bulkheads, install ventilation regulators and begin operations after permit changes are approved; Complete installation of the West 30 South 2180 overcast prior to commencing waste handling in Panel 7; and Complete installation of the West 170 South 2750 overcast prior to commencing waste handling in Panel 6. Documentation for completion of elements 7-9 shall consist of completion reports accepted by the WTS Manager of Operations and Disposal. Completion of all of this work shall be completed by September 30, 2012.

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**SECTION VI - EARNINGS SCHEDULE**

**List percent of fee available for completion of each Element, and the schedule by which the fee may be earned. (Schedule identifies point(s) at which fee may be earned - does not define completion.)**

The maximum fee earnings for each metric in this PBI are included in the metric description in the previous Section IV – Performance Measure.

The fee included in the fee pool associated with PBI #6 may be earned at any time during the current contract period to September 30, 2012. However, for each fiscal year during the term of the contract, the Contractor and CBFO will agree on the maximum amount of fee that may be paid during the fiscal year for the option period and

PBI #6. If the Contractor and CBFO do not agree on the maximum fee pool fee potential for a fiscal year, CBFO may make a unilateral determination for that fiscal year. If fee is earned under PBI #6 in a given fiscal year but not paid in that fiscal year, then it may be paid in subsequent fiscal years. However, the work shall not extend beyond September 30, 2012.

A schedule is provided for this PBI and is included as an attachment. This schedule depicts information current at the time the schedule was generated. However, the schedule is subject to change based on DOE, generator site, and regulator priorities and reprioritization.

**PBIs will be reviewed and approved by DOE-CBFO annually beginning in FY06 to update the SQS table as necessary and determine applicability for continuation.**