



U.S. Department of Energy
Office of Inspector General
Office of Audits and Inspections

Audit Report

Use of American Recovery and
Reinvestment Act of 2009 Funds on
Solid Waste Project Activities at the
Department of Energy's Hanford Site



OAS-RA-L-11-08

May 2011

Memorandum

DATE: May19, 2011

Audit Report Number: OAS-RA-L-11-08

REPLY TO

ATTN OF: IG-34 (A10RA041)

SUBJECT: Report on "Use of American Recovery and Reinvestment Act of 2009 Funds on Solid Waste Project Activities at the Department of Energy's Hanford Site"

TO: Assistant Secretary for Environmental Management

INTRODUCTION AND OBJECTIVE

The Department of Energy's (Department), Richland Operations Office (Richland), awarded a contract, effective October 1, 2008, to CH2M HILL Plateau Remediation Company (CHPRC) to remediate Hanford's Central Plateau. Part of the contract's scope included solid waste cleanup activities associated with retrieval, treatment, and disposal of low-level and transuranic (TRU) waste at the Hanford Site (Hanford).

The Department allocated \$315 million in American Recovery and Reinvestment Act of 2009 (Recovery Act) funds to support Hanford's Solid Waste Project under the CHPRC contract. The Department's goals for Recovery Act funds were to accelerate cleanup, reduce life-cycle project costs, and provide jobs to stimulate the economy. Performance metrics were established to measure actual work accomplished, as compared to planned, and to determine if goals were met for Recovery Act funds obligated to the Solid Waste Project. Because of this significant increase in funding, we initiated this audit to determine if the Department effectively managed Hanford's Solid Waste Project Recovery Act activities.

CONCLUSION AND OBSERVATIONS

Our review of the Hanford Solid Waste Project did not identify material issues of compliance with Recovery Act requirements, including segregation of funds. However, we noted that the Hanford Solid Waste Project is behind schedule for retrieving and shipping some waste and is at risk of not achieving its accelerated waste disposal goals. Specifically, the Department is on average 2 months behind schedule and \$4.4 million over budget for two components of the overall effort – the TRU Waste and Mixed Low Level Waste Treatment subprojects.

Department officials told us that they plan to implement a number of procedures designed to recapture the cost and schedule slippages we identified.

Solid Waste Performance Goals

Although the Department had met its goal to retrieve remote-handled TRU waste, and is on track to meet its goals for TRU waste repackaging and contact-handled TRU waste disposal, it is behind schedule for contact-handled TRU waste retrieval and mixed low level waste shipping. In particular, CHPRC:

- Is behind schedule on the Department's goal of retrieving 2,500 cubic meters of contact handled TRU waste by September 30, 2011. As of March 2011, CHPRC had only retrieved 846 cubic meters of waste and had only 6 months remaining to retrieve the remaining 1,654 cubic meters of waste. Based on the remaining waste to be retrieved, CHPRC will need to average 275 cubic meters per month through September 30, 2011, to meet the overall 2,500 cubic meter goal; a retrieval level it has not achieved since Recovery Act funds became available. Management acknowledged that as of March 2011, the metric indicated that only one-third of the waste had been retrieved, but stated that much progress had been made in performing preparatory steps necessary to begin to quickly add additional volumes of waste toward meeting the goal. Thus, management believes the project is further along than the performance metric indicates.
- May not be able to meet the Department's goal of shipping 1,800 cubic meters of mixed low-level waste by September 30, 2011. As of March 2011, CHPRC's shipment of a cumulative total of 1,249 cubic meters was behind its target value of 1,427 cubic meters cumulative for that date. We noted that CHPRC was initially able to ship from its backlog of mixed low-level waste that was in storage. However, for the remaining waste volumes, CHPRC will first have to retrieve waste from burial grounds, which will be more difficult and time consuming. In our opinion, this will make it more difficult to meet its performance goal of shipping 1,800 cubic meters of mixed low-level waste by September 30, 2011. Management informed us that it is in the process of identifying additional volumes of alternate feed material that may be used to meet this goal.

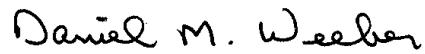
PLANNED ACTIONS

Hanford's Solid Waste Project faced formidable obstacles in meeting its performance goals. Specifically, many of the waste boxes retrieved by CHPRC were in a much more deteriorated condition than was envisioned under the contract. Furthermore, the contractors proposed use of the Trench Face Process System, which would repack waste at the retrieval site into standard waste boxes that were compliant with the Waste Isolation Pilot Plant's (WIPP) requirements for disposal at that site, was a new technology that did not prove to be as successful as initially envisioned.

According to management officials, Richland has implemented procedures to bring the contact-handled waste retrieval back on schedule, including adjusting procedures for handling TRU waste and evaluating various options, such as using an off-site treatment facility to repack the waste into standard waste boxes. In addition, Richland is currently going through a waste certification audit that would allow waste repackaged into standard

waste boxes to be certified for disposal at WIPP. Waste repackaged and certified into standard waste boxes would reduce the number of shipments, and save valuable space at the WIPP disposal facility.

We believe that the Department's planned actions, if successfully implemented, should help mitigate the issues we identified. Therefore, we have no further recommendations for corrective action and a formal response is not required. We do, however, suggest that management closely monitor implementation of planned actions. We appreciate the cooperation of your staff and the Department elements that provided information or assistance.


Daniel M. Weeber, Director
Environment, Technology, and
Corporate Audits Division
Office of Inspector General

Attachment

cc: Assistant Director, Office of Risk Management, CF-80
Team Leader, Office of Risk Management, CF-80
Audit Resolution Specialist, Office of Risk Management, CF-80
Audit Liaison, Office of Environmental Management, EM-4.1
Audit Liaison, Richland Operations Office

SCOPE AND METHODOLOGY

This review was performed between September 23, 2010, and May 4, 2011, at the Department of Energy's (Department) Richland Operations Office (Richland) in Richland, Washington. The scope of our audit included a review of Richland's use of the American Reinvestment and Recovery Act of 2009 (Recovery Act) funds on Solid Waste Project Activities. To accomplish the objective of this audit, we:

- Obtained and reviewed laws and regulations relevant to the Recovery Act;
- Obtained and reviewed the Department's Office of Management and Budget and Richland's implementing procedures concerning Recovery Act requirements;
- Reviewed findings from prior audits regarding Recovery Act activities;
- Reviewed the CH2M HILL Plateau Remediation Company contract with Richland;
- Held discussions with Department and contractor officials regarding Recovery Act activities for the Solid Waste Project; and,
- Performed transaction testing for Solid Waste Project Recovery Act transactions.

We conducted this performance audit in accordance with generally accepted Government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objective. We believe that the evidence obtained provides a reasonable based for our findings and conclusions based on our audit objective. Because our review was limited, it would not necessarily have disclosed all internal control deficiencies that may have existed at the time of our audit. We also assessed performance measures in accordance with the *Government Performance and Results Act of 1993* and found that the Department had established performance measures related to the use of Recovery Act funds for environmental management projects. We did not rely upon computer processed data to accomplish our audit objective.

The exit conference was waived on May 4, 2011.

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