

WR-B-99-06

AUDIT REPORT

PLANNED WASTE SHIPMENTS TO THE WASTE ISOLATION PILOT PLANT



AUGUST 1999

U.S. DEPARTMENT OF ENERGY
OFFICE OF INSPECTOR GENERAL
OFFICE OF AUDIT SERVICES

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MEMORANDUM FOR THE ASSISTANT SECRETARY FOR ENVIRONMENTAL MANAGEMENT

FROM: Phillip L. Holbrook, (Signed)
Assistant Inspector General for Audit Services
Office of Inspector General

SUBJECT: INFORMATION: Audit Report on "Planned Waste Shipments to the Waste Isolation Pilot Plant"

BACKGROUND

The Waste Isolation Pilot Plant (WIPP), which received its first shipment of waste in March 1999, was designed and constructed to safely dispose of transuranic (TRU) waste located at generator sites throughout the Department of Energy's weapons complex. The Carlsbad Area Office (Carlsbad) was established to operate WIPP and manage the Nation's TRU waste disposal efforts. To assist the waste disposal efforts, Carlsbad prepared a *National TRU Waste Management Plan* (Management Plan). The objective of this audit was to determine if the Management Plan was current and consistent with the information provided by the generator sites.

RESULTS OF AUDIT

The Management Plan was not current or consistent with the data at the generator sites and could not be used to measure target dates for shipping waste to WIPP. Planned schedules were based on the generator sites securing full funding, but the largest sites anticipated funding at approximately 75 percent. Although this has not adversely affected the movement of waste to date, there is no assurance that generator sites or WIPP will be able to close by the dates cited in the Management Plan unless full funding is received. Therefore, we recommended that the Office of Environmental Management require Carlsbad, after receipt of the *Resource Conservation and Recovery Act*, Part B hazardous waste permit, update its Management Plan; attempt to secure full funding for each generator site; and inform Congress of the impact on the generator sites and WIPP if sufficient funding is not secured.

MANAGEMENT REACTION

Management generally concurred with the recommendations and indicated that a revised Management Plan will be issued later in calendar year 1999.

PLANNED WASTE SHIPMENTS TO THE WASTE ISOLATION PILOT PLANT

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Overview

INTRODUCTION AND OBJECTIVE

The Waste Isolation Pilot Plant (WIPP) was designed and constructed to safely dispose of transuranic (TRU) waste located at generator sites throughout the Department of Energy's (DOE) weapons complex. WIPP is the world's first underground repository to permanently dispose of defense-generated TRU waste. TRU waste consists of such items as clothing, tools, and rags contaminated with small amounts of radioactive elements. Approximately \$2 billion has been invested since the mid-1970s to construct and certify the WIPP as the official repository for TRU waste. In March 1999, WIPP received its first shipment of waste.

The Carlsbad Area Office (Carlsbad) was established to operate WIPP and manage the Nation's TRU waste disposal efforts. To demonstrate that WIPP was ready and able to receive and dispose of waste from DOE generator sites, Carlsbad published a *National TRU Waste Management Plan* (Management Plan) even though it was not directed to do so. In December 1997, Carlsbad updated its Management Plan to reflect an expected opening date of May 1998. The Management Plan was fully integrated with the milestones and activities of the *WIPP Disposal Decision Plan*. The Management Plan, however, is the only DOE plan that coordinates site-specific waste management planning at the generating site facilities with WIPP's waste handling and disposal operations. The objective of our audit was to determine whether the Management Plan was current and consistent with the information provided by the generator sites.

CONCLUSIONS AND OBSERVATIONS

The Management Plan was not current or consistent with the information at the generator sites. Specifically, the Management Plan was based on the opening of WIPP in May 1998 and on fully funded site-specific budgets. However, DOE did not open WIPP until March 1999 and had not fully funded the generator sites. Thus, the Management Plan showed that WIPP was scheduled to receive a greater volume of waste than generator sites could ship through Fiscal Year (FY) 2006. Since generator sites cannot ship the volume of waste described in the Management Plan without budget increases, there is no assurance that generator sites or WIPP will be able to close by the dates cited in the Management Plan.

Earlier reports involving WIPP showed that management felt that it was important to demonstrate that WIPP was fully ready to operate as soon

as its legal complications were resolved. Thus, it was consistent for Carlsbad to prepare a Management Plan that demonstrated that WIPP was fully capable of handling and disposing of waste from most generator sites by FY 2006.

In our opinion, the matters discussed in this report should be considered when preparing the yearend assurance memorandum on internal controls.

(Signed)
Office Of Inspector General

Waste Shipments To WIPP

Planning Considerations

Federal agencies are required to develop formal plans for measuring performance. The plans should layout long-term goals that describe in general terms what the agency plans to accomplish. Annual performance plans are required that tie daily activities into the agency's long-term strategic goals. There should be an apparent relationship between this information and data within DOE's budget request. Budgets should include measurable and results-oriented performance data to which programs and contractors can be held accountable. It is important for performance data to be written in an objective, results-oriented, and measurable form so that actual progress toward predetermined target levels of performance can be determined. As part of its management responsibilities, therefore, Carlsbad prepared its Management Plan to provide Carlsbad with performance targets and to assist the Office of Environmental Management in making informed decisions that arise in the shipment of TRU waste to WIPP.

Generally, Carlsbad's December 1997 Management Plan responded to the expectation of establishing performance measures. Thus, the Management Plan coordinated site-specific management planning at the generating sites with the waste handling and disposal operations at WIPP. It also included waste processing and disposal schedules to show that most sites could dispose of TRU waste inventories by the end of FY 2006. However, the Management Plan was based on the assumption that WIPP would begin receiving waste in May 1998 and that DOE would secure site-specific budgets for the generator sites to meet target dates for shipping waste to WIPP.

Plan Not Current Or Consistent

The Management Plan was not current or consistent with the data at the generator sites and could not be used to measure target dates for shipping waste to WIPP. The Management Plan schedules were based on the generator sites securing full funding. However, the largest generator sites anticipated funding at approximately 75 percent of the amount shown in the Management Plan and this impacted the sites' ability to process and ship waste. For instance, the Management Plan shows that the five largest generators (at Los Alamos, Hanford, Idaho, Rocky Flats, and Savannah River) which account for 97 percent of the total TRU waste will transfer 29,454 cubic meters of waste to WIPP by FY 2006. However, these generators only planned to ship 23,489 cubic

meters of waste during this period of time. Without additional funding, the shipping process and schedules portrayed in the Management Plan cannot be followed.

Despite inadequate funding, generator site officials successfully shipped several truckloads of waste to WIPP after it opened in March 1999. Further, shipping waste to WIPP will continue as long as DOE provides adequate funding to the generator sites. Thus, the Management Plan did demonstrate that WIPP was fully capable of handling the waste that could be sent to it and DOE could dispose of TRU waste from most generator sites by FY 2006 if the generator sites were fully funded.

Prepared From National Perspective

The shipping schedules portrayed in the Management Plan will not be met because it was based on a national perspective in that it (1) assumed a May 1998 opening, (2) was prepared to demonstrate WIPP's ability to dispose of waste, and (3) based its shipping schedules on full funding. Thus, the performance expectations established by Carlsbad have not been met.

Closure Delays Could Occur

Without a Management Plan that is current and consistent with the funding at the generator sites, DOE cannot effectively manage its operations and inform the Congress of the impact of funding restrictions or scheduling delays. If the funding does not equal the amounts projected in the Management Plan, some waste disposal operations will not be completed by FY 2006. Such a situation could have severe implications for DOE sites, such as Rocky Flats, committed to closing by specific dates. Further, any delay will probably result in an increase in costs with respect to the operation of generator sites and WIPP.

RECOMMENDATIONS

We recommend that the Assistant Secretary for Environmental Management:

1. require Carlsbad, after receipt of the *Resource Conservation and Recovery Act*, Part B hazardous waste permit for WIPP, update its Management Plan to reflect a March 1999 opening date and delays caused by under funding at the generator sites; and,
2. inform the Congress of the impact on the generator sites and WIPP if funding is not sufficient to meet planned closure dates.

**MANAGEMENT
REACTION**

Management generally concurred with the recommendations and agreed to implement a corrective action plan. Management's comments are attached as Appendix 3.

AUDITOR COMMENTS

Management's comments are responsive to the recommendations.

Appendix 1

SCOPE

The audit was performed from June 30, 1998 through June 7, 1999, at Carlsbad, Los Alamos National Laboratory, Rocky Flats Environmental Technology Site, and Idaho National Engineering and Environmental Laboratory. In addition, we obtained FY 1997 TRU waste planning documents from the above sites, as well as from the Hanford Reservation and the Savannah River Site. Specifically, we focused on the Management Plan and planning documents for the five waste generator sites.

METHODOLOGY

To accomplish the audit objective, we reviewed DOE guidance regarding planning and the Management Plan. We compared FY 1997 generator site TRU waste planning documents to the Management Plan. In addition, we reviewed the *DOE's Accelerating Cleanup: Paths to Closure* report, the *TRU Waste Baseline Inventory Report*, the *DOE Strategic Plan*, and the performance requirements required in the *Government Performance and Results Act*. We interviewed personnel from Headquarters, Carlsbad, and DOE generator sites.

The audit was conducted in accordance with generally accepted Government auditing standards for performance audits, which included tests of internal controls and compliance with laws and regulations to the extent necessary to satisfy the audit objective. Because the review was limited, it would not necessarily have disclosed all internal control deficiencies that may have existed at the time of our audit. We verified computer generated data used during the audit.

The exit conference was waived by the Office of Environmental Management on July 28, 1999.

Appendix 2

Related Office Of Inspector General Reports

This audit related to an overly optimistic projection of funding levels at generator sites that will transport TRU waste to WIPP. Prior reports related to similar overly optimistic projections:

- *Audit of Selected Aspects of the Waste Isolation Pilot Plant Cost Structure*, DOE/ IG-0356, August 22, 1994.

Staffing levels were higher than needed at WIPP to meet its mission needs due to delays that extended the expected first receipt of TRU waste.

- *Audit of Labor Utilization at the Waste Isolation Pilot Plant*, WR-B-94-02, February 11, 1994

Staffing levels increased due to overly optimistic projections of the first receipt of TRU waste.

Appendix 3

Appendix 3

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