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

## Summary Inspection Report

# Actions Taken in Response to Missing Hazardous Waste Containing Cyanide

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## ACTIONS TAKEN IN RESPONSE TO MISSING HAZARDOUS WASTE CONTAINING CYANIDE

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#### INTRODUCTION

Recently, the U.S. Government has become increasingly sensitive to the potential for terrorists to use certain materials as weapons of mass destruction. A report completed by the Central Intelligence Agency stated that "The threat from terrorists using a weapon of mass destruction has increased since Sept. 11, and extremist groups appear most interested in chemicals like cyanide." For example, in February 2002, four suspected terrorists were arrested in Italy in possession of cyanide and maps of Rome pinpointing the U.S. Embassy and the city's drinking water network.

The Department of Energy (DOE) Office of Inspector General (OIG) received information that a container of hazardous waste containing cyanide had disappeared from a shipment of hazardous waste that originated from a DOE facility. Consequently, we initiated an inspection to determine whether:

- the apparent disappearance of the waste container was appropriately reported to DOE by contractor officials;
- appropriate follow-up actions were taken; and
- the handling of this incident had broader implications for DOE security.

Due to potential security implications, the locations and the identities of Federal and contractor organizations involved in this incident have been omitted from this report. However, this report complements our non-public report on the same subject, through which the OIG provided DOE management with the specific details of our inspection.

#### **BACKGROUND**

The missing hazardous waste addressed by this inspection was in a 10-gallon container weighing approximately 40 pounds, of which approximately 25 percent (10 pounds) was sodium cyanide. Sodium cyanide is a by-product of certain DOE plating operations and is handled and disposed of as hazardous waste. Sodium cyanide is highly toxic when ingested or inhaled.

### RESULTS OF INSPECTION

At this time, it is uncertain whether the hazardous waste containing cyanide is actually missing or, instead, inventory control errors occurred. We concluded, however, that the Department needs to heighten awareness of (1) security and safety issues associated with hazardous waste materials that could be used as weapons of mass destruction and (2) the importance of submitting required reports regarding incidents involving such materials so that appropriate follow-up actions may be taken. Specifically, we found that:

- there apparently was not appropriate recognition of the missing waste container as a possible security risk.
  Specifically, a required security incident report regarding the lost waste container was never submitted to DOE Headquarters by local contractor or DOE officials;
- because the required report was not appropriately submitted, timely follow-up actions, such as notification of law enforcement officials, were not taken;
- a required environmental, safety, and health Unusual Occurrence report was not submitted to DOE by contractor officials until three months after the loss was first discovered; and
- concerns exist about controls over the hazardous waste disposition process at the DOE location involved in this incident.

We also identified specific concerns with security and the inventory resolution process at an offsite waste disposal facility that processes hazardous waste for the DOE location involved in this incident.

#### RECOMMENDATIONS AND LESSONS LEARNED

Based on the incident reporting problems identified during this inspection, we recommended that the cognizant DOE manager enhance awareness among site Federal and contractor personnel regarding potential terrorist interest in materials that could be used as weapons of mass destruction and how incidents involving such materials should be handled. We also made recommendations to strengthen controls over the hazardous waste disposition process at the location in question and to enhance the security afforded DOE hazardous waste materials such as waste containing cyanide. The cognizant DOE organization agreed with our findings, conclusions, and recommendations. Corrective actions have been initiated that, if fully implemented, will be responsive to our recommendations

Because there are possible broader implications for DOE security based on the lessons learned from this inspection, we have suggested to the Under Secretary for Energy, Science and Environment and the Administrator, National Nuclear Security Administration, that they consider whether Department-wide actions are warranted.