

United States General Accounting Office Washington, D.C. 20548

National Security and International Affairs Division

B-245108

May 14, 1992



The Honorable Mike Synar Chairman, Subcommittee on Environment, Energy, and Natural Resources Committee on Government Operations House of Representatives

Dear Mr. Chairman:

As you requested, we are reviewing the Army's progress in obtaining environmental permits from state regulatory agencies for the incineration of chemical weapons. In addition, we are monitoring ongoing operational verification tests (OVT) at the prototype incineration facility on Johnston Island, located in the Pacific Ocean.

This letter provides an interim report of the progress of our current review and the implications of our findings on the Department of Defense's fiscal year 1993 budget request.

## BACKGROUND

In addition to the prototype facility on Johnston Island, the Army has targeted eight locations in the United States for the construction and operation of chemical weapons incineration facilities. Before the Army can build a chemical weapons incineration facility, it must obtain an environmental permit from the appropriate state agency.

GAO/NSIAD-92-219R Chemical Weapons Disposal

054347/146618

We have commented on the Army's chemical weapons destruction program in two previous GAO reports.<sup>1</sup> In the May 1990 report, we criticized the Army for being overly optimistic in estimating its schedule for obtaining environmental permits from state agencies. We also noted that community opposition and increasingly stringent state requirements for hazardous waste incineration facilities could make it difficult for the Army to obtain the necessary environmental permits. In November 1991, we reported on the failure of the Johnston Island prototype facility to achieve the destruction goals established by the Army for the first phase of OVTs.

## THE ARMY CONTINUES TO EXPERIENCE DELAYS IN OBTAINING ENVIRONMENTAL PERMITS

In July 1990, the Army sent an application to the state of Alabama for permission to construct a high-temperature hazardous waste disposal facility in Anniston. State officials currently estimate that October 1993 is the earliest a permit can be approved. This estimate is not in accordance with the Army's plan to begin construction in June 1993. Army managers held discussions with and sent correspondence to high-level Alabama officials, including the governor, in hopes of expediting approval of the permit. However, the Army has not received assurances that the permit will be granted sooner.

The Army is also likely to experience delays in obtaining a permit for a facility to be located in Lexington, Kentucky, because issuance of the permit is contingent on compliance with strict state requirements. Legislation enacted by the state in 1988 requires the Army to demonstrate the absence of any risk of acute or chronic health or environmental effects resulting from the incineration of chemical weapons. Recently enacted legislation also requires the Army to demonstrate that incineration is the safest

GAO/NSIAD-92-219R Chemical Weapons Disposal

<sup>&</sup>lt;sup>1</sup><u>Chemical Weapons: Obstacles to the Army's Plan to Destroy</u> <u>Obsolete U.S. Stockpile</u> (GAO/NSIAD-90-155, May 24, 1990) and <u>Chemical Weapons: Stockpile Destruction Cost Growth and</u> <u>Schedule Slippages Are Likely to Continue</u> (GAO/NSIAD-92-18, Nov. 20, 1991).

destruction technology currently in existence or under development. Lastly, some Kentucky-based community groups could prove to be an obstacle to the issuance of the permit; they promise to legally challenge the construction of the proposed Lexington disposal plant.

## THE ARMY HAS EXPERIENCED DELAYS IN OPERATIONAL VERIFICATION TESTING AND HAS NOT MET DESTRUCTION GOALS

Our review indicates that the Army continues to encounter delays in the completion of congressionally mandated operational verification tests of the prototype disposal facility on Johnston Island. To date, only two of the four planned test phases have been completed. The estimated time allowed for the completion of the verification test program has been extended from 16 to 29 months.

Initial verification tests indicate that the prototype facility did not destroy chemical weapons as quickly as the Army had anticipated. The Army planned to destroy an average of 13 rockets per hour during the first two phases of its operational verification tests. Instead, the destruction rate averaged only 5 rockets per hour for the initial GB rocket campaign and 12 rockets per hour for the VX rocket campaign.<sup>2</sup> The disposal operations were fraught with extensive maintenance problems and considerable downtime. During both phases of the verification tests, the incineration facility was available for rocket processing less than 50 percent of the scheduled operating hours.

In spite of these experiences, the Army continues to base life cycle costs and schedules on estimated data that do not incorporate actual experience. For example, the schedule requires that future sites operate 24 hours per day even though the Army generally has not been able to maintain operations at the Johnston Island facility for the scheduled 10 hours per day.

The Army will likely continue to experience difficulties meeting planned destruction rates as different agents and

<sup>2</sup>VX rocket campaign figures are based on our calculations.

GAO/NSIAD-92-219R Chemical Weapons Disposal

munitions are processed. For example, the prototype facility has not processed projectiles, which require mechanical disassembly prior to incineration. Although this mechanical process has not been tested during OVT, planned destruction rates for most projectiles are more than three times the rocket processing rate.

## PART OF THE ARMY'S FISCAL YEAR 1993 BUDGET REQUEST MAY BE PREMATURE

The Army's fiscal year 1993 budget request for chemical demilitarization programs totals \$646.7 million. Of this total, \$254.5 million is for procurement of equipment to be installed at various chemical agent disposal facility sites, and \$105.3 million is for the construction of the Anniston chemical disposal facility.

Fiscal year 1993 funding for construction and acquisition of long lead-time equipment for the Anniston chemical disposal facility will not be needed unless the environmental permits will be granted in that fiscal year. If the state continues to forecast environmental permit approval for early fiscal year 1994, funding for construction totaling \$105.3 million and expenditures for equipment acquisition totaling nearly \$49 million could be deferred until fiscal year 1994.

Likewise, fiscal year 1993 funding for equipment acquisition for the Lexington, Kentucky, chemical disposal facility may not be needed because of the probable delays in obtaining the environmental permits. Therefore, the \$9.1 million requested for acquisition of a deactivation furnace to be used in this facility could be deferred.

While the Army's tests to date have been conducted safely and within acceptable environmental standards, the prototype facility still has not demonstrated a capability to destroy all types of chemical agents and munitions, nor has it demonstrated desired destruction rates over prolonged periods. Thus, it might be prudent to defer funding approvals for all future construction projects and equipment acquisitions until the Army completes OVT testing of the prototype facility. Such a deferment could ensure that the Army has an opportunity to analyze and apply

GAO/NSIAD-92-219R Chemical Weapons Disposal

that the second

B-245108

lessons learned from the entire OVT program to the remaining sites before substantial funds are committed.

If you or your staff have any questions, please call me at (202) 275-4141.

Sincerely yours,

hard Davis

Director, Army Issues

GAO/NSIAD-92-219R Chemical Weapons Disposal

e ann

این . مراجع

(Code 393466)

5