



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

Resources, Community, and
Economic Development Division

B-271942

July 1, 1996

The Honorable Duncan Hunter
Chairman, Subcommittee on
Military Procurement
Committee on National Security
House of Representatives

Dear Mr. Chairman:

During fiscal year 1995, the Department of Energy's (DOE) Office of Environmental Management (EM) began an effort to reduce the current and future cost of cleaning up the department's former nuclear weapons sites. Responding to projections that EM's future budgets could decrease, program managers adopted a series of cost-saving actions that resulted in fiscal year 1995 savings of \$786 million. EM's Assistant Secretary also asked program managers to reduce budget outlays for fiscal years 1997 through 2000 by a total of \$4.4 billion. The Assistant Secretary believed that EM could achieve these cost reductions and still meet its cleanup objectives.

Concerned that EM's cost saving efforts could impair its ability to clean up former nuclear weapons sites, you asked us to develop information on (1) how EM plans to achieve the promised \$4.4 billion cost savings, (2) what the reliability of its reported fiscal year 1995 savings is, and (3) what lessons can be learned from the program's fiscal year 1995 cost-saving experiences.

In summary, we found that EM has set savings goals for fiscal year 1996 and fiscal year 1997 as part of the program's annual budget requests. EM has not developed long-term plans for how to reduce the budget outlays for fiscal years 1997 through 2000 by the promised \$4.4 billion. Instead, EM officials intend to continue using the budget process to set annual savings goals for the program. Although some savings for individual projects may be overstated, overall EM's claims of fiscal year 1995 savings appear to be reliable. Among the lessons learned from the first year's cost saving experience are the need to (1) define a consistent baseline for measuring savings, (2) agree on clear definitions of events that generate savings, and (3) independently verify savings claims.

GAO/RCED-96-163R DOE's Cleanup Cost Savings

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Enclosure I provides specific information on each of these areas in a format discussed with your office.

SCOPE AND METHODOLOGY

To develop this information, we interviewed EM officials at headquarters and three key EM sites—Savannah River, Georgia; Oak Ridge, Tennessee; and Idaho Falls, Idaho and analyzed \$102 million (44 percent) of the \$230 million in fiscal year 1995 savings reported by these sites.¹ We also evaluated the fiscal year 1995 cost-saving experience of EM's Richland site, which reported \$417 million in fiscal year 1995 savings. To evaluate these savings, we reviewed the results of an Arthur Andersen study of the site's cost savings and interviewed Arthur Andersen officials. The three sites that we examined plus the Richland site accounted for 82 percent of the \$786 million in savings that EM reported for fiscal year 1995. We performed our review from August 1995 through June 1996 in accordance with generally accepted government auditing standards.

AGENCY COMMENTS

We provided a draft of this report to DOE for review and comment. Its comments are presented in enclosure II. DOE generally concurred with the "lessons learned" cited in our report and is considering how to incorporate these lessons into EM's cost-saving efforts. However, DOE was concerned that our report suggests that EM has not developed long-range plans for how it will achieve the promised \$4.4 billion cost savings and stated that EM is beginning to develop a 10-year budget plan, updating its strategic plan, and evaluating options for accelerating sites' cleanup schedules. Although these activities are not directly linked to the goal of saving \$4.4 billion, DOE indicated that they will help EM assure itself that the program can reach this.

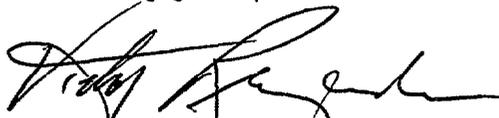
¹The \$102 million in savings is from 14 initiatives at the three sites. We selected these initiatives to review because they represented large fiscal year 1995 dollar savings or because they included efforts funded by EM's major programs at the sites.

B-271942

As agreed with your office, unless you publicly announce its contents earlier, we plan to make no further distribution of this report until 10 days from the date of this letter. At that time, we will send copies of this report to the appropriate congressional committees, the Secretary of Energy, and other interested parties. We will also make copies available to others on request.

If you have any questions or need additional information, please contact me at (202)512-3841. James Noël, Robert Lilly, and Delores Parrett of my staff were the major contributors to the report.

Sincerely yours,



Victor S. Rezendes
Director, Energy, Resources,
and Science Issues

Enclosures - 2

GAO EM's Plans to Achieve Cost Savings

- EM has identified several initiatives to reduce costs, including privatizing activities and adding incentives to performance contracts.
 - However, EM has not set long-term program or site-specific savings goals to achieve the \$4.4 billion.
 - EM is using the budget process to set annual savings goals.
-

GAO Reliability of FY 1995 Savings

- About \$71 million of the \$102 million in savings that we reviewed appears to be reliable.
 - About \$19 million of the savings represented costs shifted to other DOE programs and did not reduce DOE's overall budget
-

GAO Reliability (cont.)

- In addition, we question the reliability of about \$13 million in claimed savings because EM
 - inappropriately included work deferred to future years as FY 1995 savings (\$5.9 million),
 - took credit for expected savings too early (\$3 million),
-

GAO Reliability (cont.)

- used an inappropriate baseline to estimate savings (\$2.8 million), and
 - used estimated rather than actual savings (\$0.8 million).
-

GAO Reliability (cont.)

- Examples of questionable savings:
 - FY 1995 savings reported for a construction project that will not occur until FY 1997-98, when EM completes the project;
 - savings claimed from changing the approach for cleaning waste tanks when EM does not know the total cost of the new approach; and
-

GAO Reliability (cont.)

- savings resulting from comparing the lower cost of incinerating waste off-site with the cost of a nonoperating on-site facility.

GAO Reliability (cont.)

- Two management weaknesses in the sites' reporting processes could affect the credibility of future savings reports.
 - Field staff used different baselines to report savings.
 - Management did not independently verify reported savings.
-

GAO Reliability (cont.)

- Arthur Andersen initially questioned the reasonableness of some of Richland contractors' savings because
 - some initial claims represented deferrals of scope, not actual savings;
 - in some cases, contractors incorrectly implied that work increased enough to offset cost increases; and
-

GAO Reliability (cont.)

- Contractors could not support how much privatizing tank remediation would reduce EM's total costs.
 - The firm also observed that contractors were not
 - initially using the stie's approved baseline and
 - effectively identifying scope changes associated with savings.
-

GAO Reliability (cont.)

- DOE/Richland verified \$356 million of the \$417 million in savings that contractors had reported.
 - Arthur Andersen subsequently
 - reconciled DOE/Richland's exceptions with its own and
 - concluded that the \$356 million "reasonably represented" the site's FY 1995 savings.
-

GAO Reliability (cont.)

- Arthur Andersen's final report recommended that DOE/Richland improve its reporting process by
 - agreeing on a starting baseline as quickly as possible,
 - establishing a single control point for changing the baseline and ensuring that all staff consistently use the approved baseline,
-

GAO Reliability (cont.)

- improving management systems' documentation of savings,
 - independently verifying the processes that contractors use to estimate savings, and
 - publishing monthly reports of estimated savings.
-

**GAO Lessons Learned From EM's
FY 1995 Efforts**

GAO's work and Arthur Andersen's work suggest that the following are key to having a credible reporting process:

- having a single consistent baseline to measure savings against;
 - agreeing on clear definitions of deletions, deferrals, and other types of scope changes in projects and activities that generate savings;
-

GAO Lessons Learned
(cont.)

- communicating these definitions throughout EM;
 - integrating systems that report savings into existing budget and management systems; and
 - independently verifying the baseline, definitions, and data used to calculate interim and year-end savings.
-

GAO EM's Improvements for FY 1996

- The EM/HQ staff is making several improvements for FY 1996:
 - requiring that sites use a consistent baseline to calculate savings,
 - clarifying the definition of savings, and
 - considering ways to verify savings.
-

GAO EM's Improvements for FY 1996 (cont.)

- Richland management concurs with Arthur Andersen's findings and is developing a plan to improve its reporting of cost savings.

COMMENTS FROM THE DEPARTMENT OF ENERGY

**Department of Energy**
Washington, DC 20585

June 4, 1996

Victor S. Rezendes
Director, Energy, Resources, and
Science Issues
United States General Accounting Office
Washington, DC 20548

Dear Mr. Rezendes:

Copies of your draft report, entitled: Department of Energy: Clean-up Cost Savings (GAO/RCED-96-163R), have been received. Thank you for this opportunity to comment on the report.

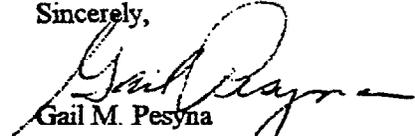
The Environmental Management Program generally concurs with the "lessons-learned" comments listed in the report and has taken action to define a consistent baseline and those activities that generate savings. Validating the claimed savings has been and is a continuing concern. Because of that, a decision was made to employ Arthur Anderson and Company to validate claimed savings at the Richland, Washington site. We are considering expanding this concept to other sites. Also, a financial incentives analysis team has been chartered to develop an internal process to verify savings. Additionally, a program-wide, productivity-efficiency, working group meets telephonically to ensure a consistent understanding of reporting requirements throughout the complex.

Your report suggests that EM has not developed plans on how it will accomplish \$4.4B savings FY 1997 through FY 2000. Early in the review, senior management explained to your team that the \$4.4B figure was not developed from a classic accounting-type estimate, but that it was their best estimate on how much program costs could be reduced when compared to the estimates developed under the previous administration. This estimate considered EM's benchmarking studies which indicated project costs could be reduced, process improvement team efforts, contract reform opportunities, and right-sizing the federal and contractor workforce. For example, 17,000 contractor positions have been reduced as a result of right-sizing the force while continuing to accomplish the mission. This action alone will save an estimated \$2B per year.

A series of "corporate workout" meetings involving states, stakeholders, and partners have been conducted with field offices to review costs and determine ways to accomplish the mission most efficiently. The program's strategic plan is being updated and sites are

developing vision statements and plans. The program is in the process of developing a 10-year budget plan. These activities will map the path forward and further assure that the \$4.4B targeted savings will be achieved.

Sincerely,



Gail M. Pesyna
Deputy Assistant Secretary
for Management and Evaluation

(302156)

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