

DOE/IG-0558

AUDIT
REPORT

COST SHARING AT THE ASHTABULA
ENVIRONMENTAL MANAGEMENT
PROJECT



JUNE 2002

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



U. S. DEPARTMENT OF ENERGY
Washington, DC 20585

June 7, 2002

MEMORANDUM FOR THE SECRETARY

FROM: Gregory H. Friedman (Signed)
Inspector General

SUBJECT: INFORMATION: Audit Report on "Cost Sharing at the Ashtabula Environmental Management Project"

BACKGROUND

From 1952 through 1988, RMI Titanium Company (RMI), a private company, performed work for the Department of Energy and its predecessor agencies as well as for various commercial customers. RMI's commercial work involved processing uranium and non-radioactive metals, such as copper and copper alloys. Historically, the Federal Government has not reimbursed private companies for clean-up activities related to their commercial operations. However, in March 1993, the Department awarded RMI a 10-year, cost-reimbursable contract to clean up the RMI site in its entirety and adjacent grounds to a level that permits release of the site for unrestricted use.

The site remediation, now referred to as the Ashtabula Environmental Management Project, is projected to cost approximately \$300 million. Through Fiscal Year 2001, the Department has spent about \$103 million on this effort. We conducted this audit to determine whether RMI should pay a portion of the remediation cost of Ashtabula.

RESULTS OF AUDIT

Based on our discussions with responsible Federal managers and a review of available documentation, we were unable to ascertain a clear rationale for the Department accepting full financial responsibility for remediating Ashtabula. As noted, the site was, and still is, privately owned and operated. Moreover, all of RMI's copper work and a portion of its uranium work was performed for commercial customers. At the same time, the Department has paid all of the costs associated with the decontamination and restoration of Ashtabula.

Although the decision was made nearly a decade ago and the historical record is incomplete, the information available to us suggests that the Department did not adequately evaluate cost-sharing options when negotiating the 1993 remediation contract. With the contract's expiration in 2003, the Department has an opportunity to negotiate an agreement for the remaining clean up work that requires both parties – RMI and the Government – to share costs in closer proportion to the benefits originally derived from site operations. Given the history of the relationship and the significance of the funding issues involved here, such negotiations are likely to be contentious and the outcome cannot be predicted with certainty. Nonetheless, we believe that reasonable cost-sharing provisions in future contracts at Ashtabula could save taxpayers as much as \$34 million.

During our review, we noted that cost-sharing arrangements had been used to assist in the clean up of other contractor-owned sites that supported the Department's nuclear weapons program. Accordingly, we recommended that such arrangements be included in the future remediation contract at Ashtabula.

MANAGEMENT REACTION

Management did not agree with our specific audit recommendations relating to cost sharing. However, the Ohio Field Office did agree to evaluate the impact of RMI's commercial work on the cost of the cleanup and factor the results of this evaluation into future contracts. In addition, management agreed to consider discontinuing fee payments in future contracts as the Department evaluates options to effectively liquidate the Department's liability at Ashtabula

Attachment

cc: Chief of Staff
Under Secretary for Energy, Science and Environment
Assistant Secretary for Environmental Management
Manager, Ohio Field Office

COST SHARING AT THE ASHTABULA ENVIRONMENTAL MANAGEMENT PROJECT

TABLE OF CONTENTS

Overview

Introduction and Objective.....	1
Conclusions and Observations.....	2

Cost Sharing Opportunities

Details of Finding.....	3
Recommendations and Comments	5

Appendices

Scope and Methodology.....	7
Chronology of Major Contract Actions With RMI	8
Prior OIG Reports.....	9

OVERVIEW

INTRODUCTION AND OBJECTIVE

From 1952 to 1961, Reactive Metals, Inc., then a division of Bridgeport Brass Company, performed extrusion¹ work for the Department of Energy's (Department) predecessor agencies in an Air Force facility in Adrian, Michigan. In 1961, the facility was sold to a private company, and the Department was required to relocate its extrusion press. The Government concluded that the best long-term solution for its extrusion work was to install the press at its Fernald facilities, near Fernald, Ohio. Conversely, Bridgeport Brass Company proposed to move the extrusion press from the Adrian facility to an idle facility in Ashtabula, Ohio, owned by Reactive Metals, Inc., with one of the primary considerations being the company's desire to use the Government's extrusion press for commercial work. In fact, the company requested that its contract be modified to include a "clear and unequivocal provision...for such use." In addition, the company stated that if the contract ran for a full 6-year period, the Government would have no obligation to clean up the plant. Since the Government's policy at the time was to encourage private industry involvement in weapons production, the Government authorized the relocation of the press to Ashtabula and modified the contract to state that the Government would not be liable for any cleanup costs of the Ashtabula facility.

In 1978, the Department again modified the contract to accept liability for the remediation costs associated with Government-owned buildings erected for the purpose of supporting the main extrusion plant owned by Reactive Metals, Inc. The contract still maintained that the Government was not liable for the restoration or cleanup of the facilities owned by Reactive Metals, Inc.

Until 1988, Reactive Metals, Inc., now known as the RMI Titanium Company (RMI), processed uranium at its Ashtabula facilities for the Department for the production of nuclear fuel elements. In addition to the uranium work performed for the Government, RMI also performed work for various commercial customers using the Government's extrusion press. The commercial work included extruding uranium as well as non-radioactive metals, such as copper and copper alloys. The Government neither assumed liability for RMI's commercial operations nor indemnified RMI from any damage resulting from its commercial operations. However, in 1988, RMI was awarded a subcontract under

¹ Extrusion refers to the process of reshaping metal into tubes, rods, or shaped forms by heating and forcing the material through a die on a horizontal extrusion press.

the Fernald prime contract that made payment of remediation costs arising from work performed for the Department allowable under the subcontract. (See Appendix 2 for a chronology of the major contract actions with RMI.)

In March 1993, the Department awarded RMI a 10-year, cost-reimbursable contract to clean the extrusion plant and adjacent grounds to a level that permits release of the site for unrestricted use. The Department negotiated the cleanup contract with RMI as part of the closeout activities under the prior contract. The project, now referred to as the Ashtabula Environmental Management Project (AEMP), is expected to cost about \$300 million. Through Fiscal Year (FY) 2001, the Department had spent about \$103 million on the contract.

The objective of this audit was to determine whether the Department should require RMI to pay a portion of the cost of remediating RMI's extrusion plant.

CONCLUSIONS AND OBSERVATIONS

RMI should pay a portion of the cost of remediating its extrusion plant. The Department is currently paying all of the cost to decontaminate the site even though RMI performed about 13 percent of its uranium work, and all of its copper work, for commercial customers. When negotiating the current remediation contract with RMI, the Department did not adequately evaluate cost-sharing opportunities. Had cost sharing provisions been included in the current contract, the Department could have avoided about \$25 million in unnecessary costs and fees. Additionally, the Department could avoid about \$34 million on future contracts by requiring RMI to pay its fair share of the cost to cleanup its plant and eliminating all fees.

This audit identified issues that management should consider when preparing its year-end assurance memorandum on internal controls.

Signed
Office of Inspector General

COST SHARING OPPORTUNITIES

Some Work Was For Commercial Customers

RMI's plant at Ashtabula performed work for the Department as well as for commercial customers. As such, RMI should pay a portion of the remediation cost of the contractor-owned facility.

Between 1962 and 1990, RMI performed a significant amount of commercial work at the plant using the Government-owned extrusion press. A preliminary review indicated that about 13 percent of the uranium processed by RMI was for commercial customers. According to RMI, the commercial work was performed for two customers performing work for the Department of Defense (DOD). The primary customer, for which 60 percent of the commercial work was completed, was a Canadian uranium mining company. The other customer was a prime contractor to the DOD.

The Department is also reimbursing RMI for cleanup costs resulting from RMI's copper operations, even though all of the copper work performed at the extrusion plant was for RMI's commercial operations. For example, RMI processed 171 drums of copper hydroxide waste generated from its commercial copper extrusion work and disposed of the waste at the Nevada Test Site. In addition, the Department paid for the removal and disposal of commercial pickle and rinse tanks used for RMI's copper operations. RMI also plans to install and startup a system to reduce copper contamination in water discharges as part of its remediation contract with the Department.

Prior Contracts Supported Cost Sharing

The Code of Federal Regulations requires contracting officers to assure that services are obtained at fair and reasonable prices and to obtain all information necessary to evaluate reasonableness. With respect to cost-reimbursement contracts, the contracting officer is further obligated to perform analyses to determine what the Government should realistically expect to pay for the service.

We determined that at other Departmental environmental remediation sites, the Department has utilized cost-sharing agreements to clean up privately-owned facilities that were used to perform both Government and commercial work. For example, at Battelle Memorial Institute in Columbus, Ohio, the Department pays 90 percent of the cleanup cost and the contractor pays the remaining 10 percent. Similarly, the Department paid 76 percent of the cost of cleaning up a General Atomics facility in San Diego, California, while the contractor paid the remaining 24 percent. For both of these contracts, we noted that extensive analyses were performed to support the cost-sharing provisions.

Evaluation of Cost Sharing Opportunities

We were unable to determine why the Department decided to change the RMI contract language in 1988 to allow Government reimbursement of remediation costs relating to the RMI-owned facility. As stated, in 1988, RMI was awarded a subcontract that allowed for the payment of remediation costs arising from work performed for the Department. On November 10, 1992, RMI filed a claim asserting that the new provision made the Government liable for all of the costs associated with restoring and cleaning up the site. On the same day, the Department sent two representatives to the AEMP to evaluate whether cost sharing would be a viable option. The representatives spent one day at the site, where they listened to briefings from RMI on its past commercial work and toured the site. The site was not fully characterized at the time of the evaluation. Based on the information provided by RMI on that day, the Department concluded that RMI's commercial work did not significantly contribute to the contamination of the site and that cost sharing was not warranted. This conclusion was based on the assumption that the commercial uranium work was of insignificant volume and performed on behalf of DOD.

The Department did not verify the accuracy of the information on commercial operations provided by RMI during contract negotiations. Subsequently, in May 2000, the Department issued a *Department of Energy Ohio Sites Recycled Uranium Project Report*. Although cost sharing was not the focus of the report, it indicated that 13 percent of the uranium processed at the site was for RMI's commercial customers. The report was based on RMI's review of shipping and receiving documents. Despite this new information on RMI's commercial work, a thorough review of RMI's past operations has not been conducted. When we discussed these matters with RMI during our audit, a company official estimated that a fully dedicated person would need three months to reconstruct a history of its past operations. In our judgement, the cost of the effort would be minimal in comparison to the potential remediation expenditures by the Department. The Office of Inspector General is aware that, by comparison, the Battelle Memorial Institute spent 10 months and 5,000 staff-hours to reconstruct its operational history. The Department required this analysis prior to funding 90 percent of the cleanup of the site.

Also, the Department did not evaluate RMI's claim that all of the non-Department uranium work was completed for the DOD or the extent that the DOD would have been liable for site cleanup. To be eligible for DOD cleanup funds, property owners must show that the

DOD controlled the property. Based on the available information, RMI's commercial operations did not meet this criteria.

Additionally, although copper contamination issues have arisen during cleanup of the site, the Department has not amended the contract to require RMI to pay for the cleanup of any copper contamination. In all of the instances discussed earlier in the report, RMI's plans for addressing the copper contamination issues were clearly documented in reports to the Department.

Costs and Fees

The Department could have avoided about \$25 million in unnecessary costs and fees under the current contract by requiring RMI to pay at least 13 percent of the cost to cleanup the site and eliminating all fees. This represents 13 percent of the \$103 million paid by the Department through FY 2001 as well as the projected costs through the end of the contract. Also, since the current contract will expire in March 2003, the Department could avoid about \$34 million in costs and fees on future contracts, based on RMI's latest cost and fee projections. In addition, it should be noted that cost-sharing arrangements normally provide maximum incentives for contractors to control and reduce costs for themselves and the Government.

With respect to fees, the Department paid RMI about \$6.2 million in fees for cleaning up the site through FY 2000, and could pay millions more before the project is complete. By comparison, at the Battelle Memorial Institute and General Atomic facilities, neither contractor received any fee for cleanup work that took place at their contractor-owned sites.

Further, without a clear understanding of the Department's liability with respect to RMI's commercial operations, the Department has little assurance that the cost of any future liabilities tied to RMI's past commercial operations will not be passed on to the Department. The potential exists, for example, for liabilities to arise from RMI's commercial work with beryllium copper.

RECOMMENDATIONS

We recommend that for future contracts or contract extensions involving the cleanup of the AEMP, the Manager, Ohio Field Office:

1. Require that RMI pay its fair share of cleanup costs associated with commercial extrusions, and
2. Discontinue fee payments to RMI for cleaning up its own facilities.

MANAGEMENT REACTION

Management did not concur with the recommendations as stated. However, management agreed to evaluate the impact of the commercial work conducted at the site, the conditions under which the commercial work was undertaken, and the impact, if any, on the cost of the cleanup. The Department plans to assemble a team of technical and administrative personnel to complete the evaluation by September 2002. If sufficient evidence to support a cost-sharing arrangement is found, then the Department will factor those conclusions into future agreements for liquidating the Department's liability at the AEMP. In addition, management stated that the Department will have the latitude to pursue alternatives, such as discontinuing fee payments to RMI, when the current contract ends on March 31, 2003. Management stated that it intends to take whatever action most effectively liquidates the Department's liability at the AEMP and that the report's recommendations will be considered in the evaluation of the Department's options.

AUDITOR COMMENTS

We consider the proposed actions to be responsive to the intent of the recommendations.

Appendix 1

SCOPE

The audit was performed from October 30, 2001, to December 20, 2001, at the Ohio Field Office in Miamisburg, Ohio, the Oak Ridge Operations Office, in Oak Ridge, Tennessee, and the Ashtabula Environmental Management Project in Ashtabula, Ohio. The audit included a review of the Department's cost sharing practices, extrusion operations at the Ashtabula extrusion plant from FYs 1962 through 1990, and cleanup operations from Fiscal Years 1990 through 2001.

METHODOLOGY

To accomplish the audit objective, we:

- Analyzed the historical context of the Department's decision to move the extrusion press to the RMI facility;
- Reviewed the Department's previous contracts and its current contract with RMI;
- Evaluated RMI's estimates of work performed at the extrusion plant;
- Reviewed cost sharing arrangements at other non-Department owned sites;
- Reviewed criteria for DOD cleanup funds;
- Evaluated costs associated with the AEMP; and,
- Interviewed personnel from RMI, the Department, and the U.S. Army Corps of Engineers.

The audit was performed in accordance with generally accepted Government auditing standards for performance audits and included tests of internal controls and compliance with laws and regulations to the extent necessary to satisfy the audit objective. Accordingly, the assessment included a review of the Department's implementation of the Government Performance and Results Act of 1993. Although no performance measures were established for cost sharing, performance measures were established for major cleanup activities at the AEMP. We did not rely on computer-processed data to achieve our audit objective.

We held an exit conference with the Department's AEMP Director, on May 15, 2002.

Appendix 2

CHRONOLOGY OF MAJOR CONTRACT ACTIONS WITH RMI

- 1961** The extrusion press was moved to the RMI-owned facility in Ashtabula, Ohio. The contract was modified to state,
- ...the Government shall not be liable to the Contractor for any costs of restoration or cleanup of the Contractor's Ashtabula facilities whether (1) arising upon completion, expiration or termination of this contract or any part thereof, or (2) resulting from removal of Government property from the Contractor's Ashtabula facilities at any time.*
- 1978** The Department modified RMI's contract to accept liability for the remediation costs associated with Government-owned buildings erected on the Ashtabula site to support the main extrusion plant owned by RMI. The contract stated,
- ...the Government shall not be liable to the Contractor for any costs of restoration or cleanup of the Contractor's Ashtabula facilities...provided, however, that the Government shall be liable for the aforementioned costs associated with...[two specific Department-owned buildings and concrete slabs currently on-site]....and such other buildings as DOE may in the future erect on the Ashtabula site.*
- 1988** When the Department's contract ended, RMI was awarded a subcontract from the Department's prime contractor for the Fernald site. The subcontract made payment of remediation costs arising out of work performed for the Department allowable under the subcontract. The subcontract stated,
- At such time as the subcontractor's Ashtabula facilities utilized for work under this subcontract or the predecessor contract with DOE (the "Contracts") are no longer required for performance of work under this subcontract or upon completion, expiration or termination of this subcontract, the cost of the shutdown, decommissioning, decontamination, cleanup, disposal, restoration, remediation and property management of the facilities which have been impacted by the subcontractor's performance of work under the contract shall be an allowable cost hereunder...*
- 1992** RMI filed a claim directly with the Department seeking restoration of the entire Ashtabula site. RMI based the claim on the language contained in the subcontract listed above.
- 1993** The Department awarded RMI a new contract to remediate the site. The new contract stated that the contract was intended to fulfill the Department's obligations under the 1988 subcontract clause listed above. The subcontract language was incorporated into the new contract.

Appendix 3

PRIOR OFFICE OF INSPECTOR GENERAL REPORTS

The Office of Inspector General has issued the following reports concerning cost sharing and the management of the AEMP:

Report DOE/IG-0441, *Cost Sharing at Basic Energy Sciences' User Facilities (March 1999)*. The audit concluded that cost sharing could enhance scientific research at Basic Energy Sciences' user facilities.

Report DOE/IG-0521, *Administration of Small Business Innovation Research Phase II Grants (August 2001)*. The audit found that the Department had not appropriately verified that all costs claimed by grantees were allowable, and did not verify that grantees fully contributed their required share of costs.

Report DOE/IG-0530, *Management of Personal Property at the Ashtabula Environmental Management Project (November 2001)*. The inspection concluded that the AEMP was not managing Government-owned personal property in accordance with Departmental and other Federal property management requirements.

Report DOE/IG-0541, *Remediation and Closure of the Ashtabula Environmental Management Project (January 2002)*. The audit determined that the remediation of the AEMP was not on schedule to be completed by March 2003.

Report DOE/IG-0542, *Soil Washing at the Ashtabula Environmental Management Project (January 2002)*. The audit concluded that the AEMP's soil washing project had not met the Department's performance and cost expectations.

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