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United States General Accounting Office

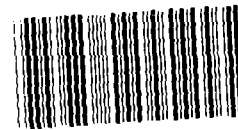
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Briefing Report to Congressional
Requesters

October 1987

AMMUNITION

Analysis of Selected Activities at the Army's Hawthorne Plant



134249



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

National Security and
International Affairs Division

B-226203

October 28, 1987

The Honorable David Boren
The Honorable Richard Lugar
The Honorable Don Nickles
The Honorable Dan Quayle
The Honorable Harry Reid
United States Senate

The Honorable Frank McCloskey
The Honorable Wes Watkins
House of Representatives

As requested, we reviewed selected activities at the Hawthorne Army Ammunition Plant in Nevada, which was converted from a government-operated plant to a contractor-operated plant in October 1980. Specifically, we addressed (1) cost savings and personnel reductions expected from the conversion, (2) contractor performance problems after the conversion, (3) lessons learned from the conversion that could be applied to future conversions, and (4) Army monitoring of the contractor's performance and costs and the Army's procedure for deciding when to recompetete its contractor-operated ammunition plants.

You asked us to review the Hawthorne activities after the Army announced in early 1986 that it would study converting its two remaining government-operated ammunition plants (located at Crane, Indiana, and McAlester, Oklahoma) to contractor-operated plants. On November 14, 1986, while we were performing our review, the 1987 National Defense Authorization Act (P.L. No. 99-661) was passed. Section 317 of this act prohibits the contracting out of functions performed by Department of Defense (DOD) employees at these plants. We reviewed section 317 and believe that this provision constitutes permanent legislation, thereby barring future conversions of the two plants from government to contractor operations. The restriction is general and unconditional, with no language limiting the period of its application.

We have briefed your representatives on the results of our work. As agreed, we are presenting the results of our review so that the Hawthorne experience can be used in planning

other conversions. The results are summarized below and discussed in detail in appendix I. Appendix II describes our objective, scope, and methodology.

WORK LOAD CHANGES
AFFECT EXPECTED
COST SAVINGS AND
PERSONNEL REDUCTIONS

The decision to convert Hawthorne to a contractor-operated plant was based largely on the Army's comparison of its estimated cost of continued government operations with the cost of contractor operations. This cost comparison showed that about \$5.2 million could be saved over a 38-month period (October 1, 1980, through November 30, 1983), primarily due to personnel cost savings. In its proposal of \$57.4 million for operating the Hawthorne plant, the contractor estimated that it would need about 534 employees, as opposed to the Army's estimate of about 647 personnel to continue the plant under government operation.

We were unable to determine whether these estimated cost savings and personnel reductions were achieved because, after the conversion, the work load of the Hawthorne plant was changed. For example, before the conversion, the Army had operated an active production line at the plant. Later, ammunition requirements changed so that the Hawthorne plant no longer produces any ammunition. Since such changes affected personnel needs and costs at the plant, it would not be meaningful to compare preconversion estimates with post-conversion experience. Some data on the original cost estimates and actual contractor costs are presented in appendix I.

OPERATIONAL PROBLEMS

The contractor experienced operational problems from the outset, and the contractor's performance became the focus of considerable attention. Within 6 months of the conversion, the Army established a fact-finding panel to determine the source of problems at the plant. Of 19 functional areas reviewed, the panel found that the contractor had performed unsatisfactorily in 5 areas and had performed only marginally in another 5. The panel attributed some of the problems to inexperienced and insufficient contractor personnel. It attributed other problems to the Army's poor planning for the conversion.

In 1984, another Army assessment concluded that, although the contractor had not met all performance goals, its performance had steadily improved.

LESSONS LEARNED
FROM THE CONVERSION

The Army has learned several lessons from the conversion and has taken action to implement them. For example, in 1985 it issued procedural guidelines for conversion studies and has developed standard operating procedures for its plants. The Hawthorne experience also showed the need (1) to develop a comprehensive transition plan before implementing a conversion and (2) to lengthen transition periods to ensure that the contractor has sufficient personnel and the capability to operate the plant efficiently.

MONITORING CONTRACTOR
PERFORMANCE AND
RECOMPETING PLANTS

At Army ammunition plants, on-site Army personnel monitor contractor performance and costs, and the Defense Contract Audit Agency monitors costs. In addition, the Army has review teams that conduct studies to determine how much activities should cost. If the Army determines that a contractor's costs are too high or that the performance is unsatisfactory, it can recompetete the plant; if no other contractor can be found, the Army can return the plant to government operations.

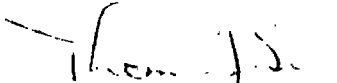
The Competition in Contracting Act of 1984 (P.L. 98-369, July 18, 1984) requires the use of competitive procedures to obtain full and open competition. The use of other than competitive procedures is limited to seven specified circumstances, and a written justification and approval is required in such situations. These requirements also apply to the award of follow-on contracts. The Army rates the performance of its contractor-operated plants and uses the ratings to determine which plants it will recompetete. We are currently reviewing the process the Army uses in considering the selection of ammunition plants for recompetition.

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We discussed the results of our review with officials of the Office of the Secretary of Defense and the Department of the Army and have incorporated their comments where appropriate. As requested, we did not obtain official agency comments.

B-226203

As arranged with your offices, we are sending copies of this report to various congressional committees and to the Secretaries of Defense and the Army. Copies will be made available to other interested parties upon request. If you have questions, please call me on (202) 275-4133.


Thomas J. Brew
Associate Director

CONVERSION OF THE HAWTHORNE ARMY
AMMUNITION PLANT TO CONTRACTOR OPERATIONS

BACKGROUND

Before October 1977, the Army had 23 ammunition-production plants, and the Navy had 3 ammunition depots that also produced ammunition. The Army's plants were operated by contractors, and the Navy depots were operated by the government. On October 1, 1977, the Secretary of the Army was designated the Single Manager for Conventional Ammunition and assumed control over DOD's ammunition production facilities, including those at the 3 Navy depots. Management of the 26 ammunition plants and depots is now the responsibility of the U.S. Army Armament, Munitions and Chemical Command (AMCCOM), located at Rock Island, Illinois.

In January 1979, the Army announced that it would study converting the former Navy facilities from government to contractor operations. The Army decided to study the plant located at Hawthorne, Nevada, first because its work load was smaller than that at the other two former Navy plants--located at Crane, Indiana, and McAlester, Oklahoma. Subsequently, as the Army study recommended, the Army issued a request for contractor proposals for operating the plant and prepared an estimate of the cost of continued government operation.

The Army received four contractor proposals that AMCCOM determined were acceptable and, after comparing the proposals with the estimated cost of continued government operation, awarded a contract on October 1, 1980, to the lowest bidder. After a 60-day transition period, the contractor assumed control of the plant.

In our report, Factors Influencing DOD Decisions to Convert Activities From In-House to Contractor Performance (PLRD-81-19, Apr. 22, 1981), we evaluated the Hawthorne conversion. We concluded the Army had disregarded serious shortcomings in the contractor's proposal when it compared the cost of continued government operation with the cost of contractor operation. We questioned whether the contract should have been awarded, and reported that (1) of four contractors who submitted proposals, the selected contractor was the only one to offer a price low enough to justify contracting the Hawthorne operations, (2) the contract was awarded despite understated labor costs, which exceeded the estimated cost savings and which the Defense Contract Audit Agency had identified, and (3) if the contractor's proposed costs had been adjusted to be more realistic, the operation of Hawthorne would not have been converted.

RESULTS OF OUR REVIEW

The results of our review of costs and personnel levels, the contractor's operational problems, lessons learned from the conversion, and Army monitoring of contractor performance and costs are described below.

Costs and personnel levels

The decision to convert Hawthorne to a contractor-operated plant was based largely on the Army's comparison of the estimated cost for continued government operations (\$112.5 million) and contractor operations (\$107.3 million). This 1980 comparison showed that about \$5.2 million could be saved over a 38-month period--from October 1, 1980, through November 30, 1983--primarily because of personnel cost savings. The estimated cost for contractor operations consisted of estimated contract costs of about \$57.4 million and government support and other costs of about \$49.9 million. The contractor estimated that it would need about 534 employees, not including government personnel who would inspect ammunition and monitor contract compliance. The Army estimated that it would need about 647 personnel for continued government operation.

The above cost and personnel estimates were based on the Army's statement of work, which included requirements to produce an ammunition item and to operate an ammunition disposal facility, called the Western Area Demilitarization Facility. After the conversion, however, the Army changed the work load of the plant, making it essentially a depot operation. Although these changes in work were not a result of the conversion, they affected the costs and personnel requirements for the plant, making a comparison of the original contract estimates and actual experiences meaningless.

AMCCOM representatives said that the actual contract costs totaled \$71.9 million for the period from December 1980 through May 1984, excluding a 6-month contract extension from December 1981 through May 1982 to the initial 1-year contract period, which was granted the contractor to improve performance. As shown in table I.1, the average personnel levels at the plant since its conversion ranged from a low of 587 in fiscal year 1981 to a high of 849 in fiscal year 1983.

Table I.1: Average Personnel Levels at the Hawthorne Army Ammunition Plant for Fiscal Years 1981 to 1986

<u>Fiscal year</u>	<u>Contractor personnel</u>	<u>Government personnel</u>	<u>Total</u>
1981	520	67	587
1982	679	71	750
1983	770	79	849
1984	737	75	812
1985	653	69	722
1986	589	68	657

Operational problems after the conversion

The contractor experienced operational problems from the start and within 6 months the Army established a fact-finding panel to investigate the reasons for the problems. After reviewing 19 functional areas (such as personnel, inventory, quality assurance, and standard operating procedures), the panel reported in May 1981 that the contractor had performed unsatisfactorily in 5 areas and had performed marginally in another 5. The panel attributed the unsatisfactory performance primarily to insufficient and inexperienced personnel, and the contractor agreed. The panel cited the following examples of personnel problems:

- First-line supervisors through top management lacked management expertise.
- Many of the former Army personnel the contractor hired were placed in positions for which they were unqualified.
- The contractor did not train new personnel during the transition period as the contract required because qualified personnel had to be used for operations, making them unavailable for training new employees.
- Management personnel the contractor hired from other ammunition plants were more familiar with ammunition production than with the depot operations at the Hawthorne plant.

Our review disclosed that the contractor was unable to hire as many former government personnel as expected. The contractor had expected that 454 people of the estimated 534 people needed to operate the plant would be former government employees. However, the contractor was able to hire only 217. According to AMCCOM, a major reason for this was that the contractor offered lower wages and benefits than the government had provided for similar work. Consequently, many employees chose to retire early or to be placed in government positions at other installations.

In addition to the personnel problems, the Army's May 1981 panel cited the following reasons for the contractor's not meeting contract requirements:

- The Army had not developed standard operating and administrative procedures for the plant.
- The transition period of 60 days was too short; a period of 90 to 180 days should have been provided.
- Neither the government nor the contractor had developed comprehensive transition plans.

The Army decided that it had contributed to some of the contractor's problems and, therefore, extended the initial 1-year contract period by 6 months to give the contractor time to correct the problems. According to AMCCOM, the contractor's performance improved during this period.

In the 3 years of operating Hawthorne after its transfer from the Navy, but before the conversion to contractor operations, the Army had experienced significant personnel and operational problems in trying to conform Hawthorne to Army standards. Some efforts to resolve these problems were still ongoing at the time of the conversion.

A 1984 AMCCOM assessment noted that the Hawthorne plant's overall performance in recent years compared favorably with that of the other two former Navy plants but that it was generally a more costly operation. The assessment report indicated that several factors contributed to the higher costs of the Hawthorne operations, including the plant's remote location and high ammunition renovation work load.

Lessons learned from the conversion

The Army has learned a number of lessons from the Hawthorne plant conversion. For example, some problems occurred because of inadequate guidelines for conversion studies. In 1985, the Army

issued procedural guidelines, which require a detailed statement of work for such studies. It has also developed standard operating procedures for its ammunition plants that are more definitive than those available during the conversion of the Hawthorne plant. In addition, AMCCOM has established an office to conduct conversion studies.

The Hawthorne conversion also showed that

- the transition process could be improved by developing a comprehensive plan for both government and contractor operations during the transition, allowing flexibility to extend the transition period if necessary; and
- the statement of work could be better defined by establishing appropriate performance requirements, thereby providing a basis for measuring contractor performance.

Monitoring contractor performance and costs

Several organizations are responsible for monitoring the contractor's performance and costs at the Hawthorne plant. These include two Army organizations (the on-site contracting officer representative staff and AMCCOM review teams) and the Defense Contract Audit Agency.

The Army's on-site contracting officer representative staff monitors the contractor's performance on a daily basis and conducts quarterly meetings to identify problems and ways to improve performance and lower costs. AMCCOM review teams conduct cost studies to determine what the contractor operations should cost. They also evaluate the contractor's performance. The review teams did should-cost studies at the Hawthorne plant in fiscal years 1982, 1983, and 1986.

The Defense Contract Audit Agency reviews contractor cost proposals and conducts audits to verify actual costs. In fiscal year 1981, the Defense Contract Audit Agency performed an audit at the Hawthorne plant and determined that the contractor's cost accounting and billing systems were basically adequate. Agency representatives told us that they planned to audit the contractor's costs for fiscal years 1982 through 1984.

If the Army determines that a contractor's costs are too high or that the performance is unsatisfactory, it can recompet the contract. If no responsive bids are obtained, it can return the plant to government operations.

The Competition in Contracting Act (CICA) of 1984 (P.L. 98-369, July 18, 1984) requires the use of competitive procedures to obtain full and open competition. The use of other than competitive procedures is limited to seven specified circumstances, and a written justification and approval is required in such situations. These requirements also apply to the award of follow-on contracts. According to AMCCOM, it determines which plants to recompete by rating the performance of contractor-operated plants--considering such performance factors as safety, quality, cost, schedule, equipment management, facilities, and labor--and recompeting those that rate lowest.

In 1986, an Army review team evaluated the Army's active ammunition plants operated by contractors and identified the Hawthorne plant as a candidate for recompetition in fiscal year 1987. According to AMCCOM officials, however, the Hawthorne plant will not be recompeted this year because (1) the cost of bid preparation would be high, compared with the value of its contract for depot operations, (2) plants that produce ammunition have a greater potential for savings, and (3) other contractors might not be interested in bidding for the contract. They also said that it is unlikely that the plant would be returned to government operation since it is the government's policy to rely on commercial sources to supply products or services available from commercial sources.

We found that the Army recompeted only 5 of its 24 contractor-operated ammunition plants between 1972 and 1985. Reasons for recompeting, in addition to CICA, were (1) the Army was dissatisfied with the contractors at two plants, (2) the contractors no longer wanted to continue operating two plants, and (3) the Army wanted to test the market for a lower-cost contractor at one plant. As a result of the recompetitions, the Army selected new contractors for four of the five plants.

OBJECTIVE, SCOPE, AND METHODOLOGY

Our objective was to review operations at the Hawthorne Army Ammunition Plant, Hawthorne, Nevada, after its conversion from government to contractor operations. As agreed, we focused on (1) cost savings and personnel reductions expected from the conversion, (2) contractor performance problems after the conversion, (3) lessons learned from the conversion that could be applied to future conversions, and (4) Army monitoring of contractor's performance and costs and how it decides when to recompete its contractor-operated ammunition plants. We also determined whether section 317 of the 1987 National Defense Authorization Act constitutes permanent legislation.

We performed our audit work at

- Headquarters, Department of the Army, Washington, D.C.;
- the U.S. Army Materiel Command, Alexandria, Virginia;
- the U.S. Army Armament, Munitions, and Chemical Command, Rock Island, Illinois;
- the Hawthorne Army Ammunition Plant, Hawthorne, Nevada;
- the Crane Army Ammunition Activity, Crane, Indiana;
- the McAlester Army Ammunition Plant, McAlester, Oklahoma;
and
- the Defense Contract Audit Agency, Sacramento, California.

At these locations, we interviewed officials and obtained and evaluated data on the Hawthorne plant's costs, personnel levels, work, and performance for the period before and after it was converted to contractor operations. We obtained Army estimates of expected cost savings and identified factors that affected the savings. We obtained contractor estimates of personnel requirements and of actual personnel levels. We obtained and reviewed various studies, assessments, and performance reports by the Army and others on the Hawthorne conversion and operations.

We conducted our review in accordance with generally accepted government auditing standards.

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