

AUDIT  
REPORT

HAZARDOUS MATERIALS  
MANAGEMENT AND EMERGENCY  
RESPONSE TRAINING AND EDUCATION  
CENTER'S MARKETING PROGRAM



SEPTEMBER 2001

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



U. S. DEPARTMENT OF ENERGY  
Washington, DC 20585

September 24, 2001

MEMORANDUM FOR THE SECRETARY

FROM: Gregory H. Friedman (Signed)  
Inspector General

SUBJECT: INFORMATION: Audit Report on "Hazardous Materials Management and Emergency Response Training and Education Center's Marketing Program"

BACKGROUND

The Fiscal Year (FY) 1994 National Defense Authorization Act authorized the establishment of Hazardous Materials Management and Emergency Response (HAMMER) Training and Education Centers at Department of Energy sites to provide training for handling hazardous materials. The legislation envisioned HAMMER training centers as user facilities for the Department, other federal agencies, and regional response personnel. The only center built to date is located at the Hanford Site in Richland, Washington. This center, opened in September 1997, has an average annual operating budget of \$5.5 million.

Fluor Hanford, Inc. (Fluor), which operates HAMMER under a contract with the Department's Richland Operations Office (Richland), maintains a small, in-house staff that is responsible for day-to-day operations of the center. Industry experts and other external sources provide the actual training. Since it was anticipated that Hanford employees would use only 50 percent of the training center's capacity, Fluor established a marketing department to attract non-Hanford customers. Through this mechanism, the Department and Fluor hoped to generate enough revenue to make the training center self-sustaining. The objective of the audit was to determine whether the marketing program for HAMMER has been effective.

RESULTS OF AUDIT

The audit disclosed that HAMMER's marketing program has not been effective. The goal of making the training center self-sustaining has not been achieved. In fact, although Fluor was able to attract non-Hanford customers to HAMMER, the revenues generated from those customers were far less than the costs incurred in marketing the training center. Between FYs 1998 and 2001, the Department spent about \$3.4 million more on the marketing campaign than associated HAMMER revenues. Also, during this timeframe, non-Hanford customers never used over 5 percent of HAMMER's training capacity even though there was over 65 percent of the total training capacity available. Although in the report we cite several reasons for the relatively light use of HAMMER, it was clear that, because of its remote location, HAMMER was not an attractive venue for hazardous materials training for non-Hanford users. We concluded that the Department and Richland should reduce the scope of HAMMER's marketing

program to a more realistic level given its track record in attracting non-Hanford customers. We estimate that such action could release about \$800,000 per year in funds for alternative purposes.

#### MANAGEMENT REACTION

Management concurred with the finding and recommendation. Fluor has reorganized the HAMMER staff, refocused the marketing effort, and reduced the level of effort to \$200,000. The new organizational structure of HAMMER now dedicates more effort to working with the various Hanford contractors, including the Office of River Protection's contractors, and will minimize the effort directed to non-Hanford users. Richland accepted these changes and developed performance objectives and measures to hold the contractor accountable for results based on the new marketing effort.

Attachment

cc: Deputy Secretary  
Under Secretary for Energy, Science and Environment  
Manager, Richland Operations Office

# HAZARDOUS MATERIALS MANAGEMENT AND EMERGENCY RESPONSE TRAINING AND EDUCATION CENTER'S MARKETING PROGRAM

---

## TABLE OF CONTENTS

### Overview

Introduction and Objective..... 1

Conclusions and Observations..... 1

### HAMMER Marketing Program Not Effective

Details of Finding ..... 2

Recommendation and Comments..... 4

### Appendix

Scope and Methodology..... 6

---

## Overview

---

### INTRODUCTION AND OBJECTIVE

The National Defense Authorization Act for Fiscal Year (FY) 1994 authorized the establishment of Hazardous Materials Management and Emergency Response (HAMMER) Training and Education Centers at Department of Energy (DOE) sites. The HAMMER training centers were to assist DOE in providing hazardous materials and hazardous materials emergency response training. The enabling legislation set up HAMMER training centers as user facilities for DOE, other federal agencies, and regional response personnel. So far, the only center built is located at the Hanford Site in Richland, Washington. HAMMER opened in September 1997 and has an average annual operating budget of \$5.5 million.

Fluor Hanford, Inc. (Fluor) has contracted with DOE's Richland Operations Office (Richland) to operate HAMMER. The HAMMER training center maintains a small in-house staff that is responsible for its day-to-day operations; however, industry experts and others provide the training. Since it was anticipated that Hanford employees would use only 50 percent of the training center's capacity, Fluor established a marketing department to attract non-Hanford customers. Fluor hoped to generate enough revenue to allow the training center to be self-sustaining. The objective of the audit was to determine if the marketing program for HAMMER has been effective.

### CONCLUSIONS AND OBSERVATIONS

HAMMER's marketing program has not been effective. Although Fluor was able to attract external customers, the revenues generated from those customers were far less than the costs incurred in marketing the training center. For example, during FYs 1998 to 2001 the marketing program spent about \$3.4 million more than HAMMER received in revenues. During the first four years of operation, non-Hanford customers have never used over 5 percent of HAMMER's training capacity even though there was over 65 percent of the total training capacity available. The reason the marketing program has not been successful is that HAMMER is not attractive to external users. HAMMER does not have its own trainers and is not physically located in a readily accessible area. We estimate that Richland could better use approximately \$800,000 annually if it reduced the marketing program to a reasonable level to support HAMMER's mission.

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

\_\_\_\_\_  
(Signed)  
Office of Inspector General

## Hammer Marketing Program Not Effective

### **Non-Hanford Revenues Less Than Anticipated**

HAMMER's marketing program was not effective. Marketing expenses exceeded \$4 million in HAMMER's first four years of operation; however, the revenues generated amounted to only \$627,000. Not only did expenses exceed revenues, the revenues generated were much less than anticipated in Fluor's FY 1998 Business Plan. The Plan showed that Fluor anticipated receiving \$3.45 million during this four-year period. Further, although revenues increased in the second and third year, revenues actually declined in the fourth year. The history of the program from FY 98 to FY 01 is depicted in the following chart.

#### **Expenses Versus Revenues**

<u>Year</u>	<u>Marketing Expense</u>	<u>Revenues</u>	<u>Growth</u>
FY-1998	\$ 791,000	\$ 62,000	1 <sup>st</sup> Year
FY-1999	1,582,000	162,000	+\$100,000
FY-2000	952,000	203,000	+ 41,000
FY-2001	<u>709,000</u>	<u>200,000</u>	- 3,000
<b>Total</b>	<b>\$4,034,000</b>	<b>\$627,000</b>	

The chart also illustrates that marketing expenses exceeded revenues generated from selling excess training capacity at HAMMER. The monies generated, in fact, did not cover marketing expenses let alone the annual operating expenses of the entire facility.

Furthermore, Hanford and non-Hanford customers alike have used only about 35 percent of the available training capacity at HAMMER. The annual training capacity usage is displayed below.

#### **Capacity**

<u>Year</u>	<u>Hanford Use</u>	<u>Non-Hanford Use</u>	<u>Total Use</u>
FY-1998	Not Available	Not Available	Not Available
FY-1999	27.1%	3.2%	30.3%
FY-2000	30.3%	4.9%	35.2%
FY-2001	31.7%	4.8%	36.5%

So far, approximately 65 percent of Hammer's available training capacity has been unused.

---

Richland concurred that the marketing program, as it was configured, was not effective. Management, however, believed that a reduced level of marketing effort was needed to ensure an effective use of the facility for both non-Hanford and Hanford users.

## **Financial Independence**

Based on the assumption that Hanford employees would use only 50 percent of the HAMMER's training capacity, Richland and Fluor mutually agreed that the remaining capacity should be marketed to others and, through that marketing effort, Fluor would strive to make HAMMER financially independent. This seemed logical because management anticipated that Hanford employees training at HAMMER would decrease as the work force declined. In line with this, Richland gave Fluor a goal to increase HAMMER revenues and cost offsets by 25 percent for FY 2000 but did not assign any monetary rewards for success or penalties for failure.

Richland stated that it did not include a goal in FY 2001 to increase revenue from non-Hanford users because the new Richland management did not believe this would be productive based on the results from previous years. A goal, however, was established to develop a business plan that included a market analysis. The new management team believed that Fluor needed to better define the market and customer base to assure themselves there was a market for the HAMMER props before expending more effort in a manner similar to that of previous years.

## **Factors Affecting Marketing Program**

The success of the marketing program for HAMMER has been affected by numerous factors. A 1998 independent market analysis concluded that HAMMER was entering a "mature" market and would have significant competition from similar facilities. According to the analysis, three key obstacles could prevent Fluor from achieving a successful marketing program.

- HAMMER as a user facility with no trainers was highly unusual, therefore, unattractive to non-Hanford customers.
- HAMMER's location required non-Hanford customers to pay employee travel and per diem expenses.
- A majority of potential customers were not able to send groups of employees to HAMMER because of staffing and/or monetary constraints.

---

**Continued Marketing Expenses**

Since HAMMER began marketing to non-Hanford customers in its attempt to become financially independent, the marketing program has cost Richland \$3.4 million more than it received in revenues. Based on the difference of revenues received versus expenses incurred over the past four years, we estimate that Richland could better use approximately \$800,000 annually if it reduced HAMMER's marketing program to a reasonable level to support the HAMMER mission.

**RECOMMENDATION**

We recommend that the Manager, Richland Operations Office reduce HAMMER's marketing program to a reasonable level to support its mission.

**MANAGEMENT COMMENTS**

Management concurred with the recommendation. Fluor has reorganized the HAMMER staff and significantly reduced and refocused the marketing program. The new organizational structure of HAMMER dedicates more effort to working with the various Hanford contractors, including the Office of River Protection's contractors, and to minimize the effort directed to utilize excess capacity for non-Hanford users. Fluor has reduced the offsite marketing effort to approximately \$200,000 per year. Richland stated that the long-term goal is to allow HAMMER to be part of a training industry in the Tri-Cities, but it also recognized that this takes time and cannot be achieved as long as Hanford has a significant need for the facility. Richland has accepted these changes and has developed performance objectives and measures to hold the contractor accountable for results based on the new marketing effort.

Management stated that as the concept for HAMMER developed and became a reality, the shared vision between Richland and Fluor was that there would be excess capacity that would be made available to other federal and state agencies and the emergency response community in general. The concept that HAMMER could become self-sustaining or financially independent was also a shared vision between Richland and Fluor. Richland, however, did not agree that revenues alone represent the benefit of HAMMER. Management asserted that more benefits were derived from the marketing program than the actual marketing revenue generated. For example, management stated that the program generated general and administrative as well as shared services expenses during the four years that created additional benefit to Hanford in the amount of \$2,096,000. Management also stated that the costs identified as "marketing" in the report were inflated because they included support to other Hanford activities. Finally, management said that HAMMER was not operated under the assumption that Hanford would utilize only 50 percent of the facility.



---

**AUDITOR COMMENTS**

Management's comments are responsive to the recommendation.

Richland's assertion that more benefits were derived from the marketing program than the actual marketing revenue generated was not substantiated during the audit. The \$2,096,000 was for overhead expenses that would have been allocated to other Hanford activities if HAMMER was not there. With respect to the "inflated" marketing costs, we found no evidence that these costs supported other activities. Finally, the 50 percent utilization assumption was established in the FY 1998 Fluor Business Plan.

## Appendix 1

---

### SCOPE

The audit was performed from January 8, 2001 through July 25, 2001, at Richland and Fluor. The scope included the activities of HAMMER's marketing program for FYs 1998 to 2001.

### METHODOLOGY

To accomplish the audit objective, we:

- Interviewed Richland and HAMMER contractor management;
- Reviewed applicable Federal laws, regulations, DOE Orders, and internal policies and procedures;
- Reviewed *Government Performance and Results Act of 1993* to determine if performance measures were established;
- Reviewed 1998 Fluor Business Plan;
- Reviewed Integrated FY 2000 Marketing Plan;
- Reviewed HAMMER budgets for FYs 1998 to 2001;
- Reviewed 1998 Independent Market Analysis;
- Evaluated HAMMER facility training capacity and compared it to actual;
- Toured the HAMMER facility and observed training props;
- Analyzed HAMMER's potential for non-Hanford training; and,
- Compared marketing program budgeted expenses and revenues to actual.

We conducted the audit according to 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. Internal controls reviewed included DOE and contractor policies and procedures and Federal regulations related to management and operation of the HAMMER facility. We assessed the significant internal controls and performance measures established under the *Government Performance and Results Act of 1993* related to HAMMER's management and operations. Richland did not include any performance goals or performance fees for the operation of HAMMER in its contract with Fluor. Because we limited our review, it would not necessarily have disclosed all internal control deficiencies that may have existed at the time of our audit. We did not conduct a reliability assessment of computer-processed data because only a very limited amount of such data was used during the audit. We held an exit conference with Richland's Deputy Associate Manager for Science and Technology on August 29, 2001.

### CUSTOMER RESPONSE FORM

The Office of Inspector General has a continuing interest in improving the usefulness of its products. We wish to make our reports as responsive as possible to our customers' requirements, and, therefore, ask that you consider sharing your thoughts with us. On the back of this form, you may suggest improvements to enhance the effectiveness of future reports. Please include answers to the following questions if they are applicable to you:

1. What additional background information about the selection, scheduling, scope, or procedures of the audit would have been helpful to the reader in understanding this report?
2. What additional information related to findings and recommendations could have been included in this report to assist management in implementing corrective actions?
3. What format, stylistic, or organizational changes might have made this report's overall message more clear to the reader?
4. What additional actions could the Office of Inspector General have taken on the issues discussed in this report which would have been helpful?

Please include your name and telephone number so that we may contact you should we have any questions about your comments.

Name \_\_\_\_\_ Date \_\_\_\_\_

Telephone \_\_\_\_\_ Organization \_\_\_\_\_

When you have completed this form, you may fax it to the Office of Inspector General at (202) 586-0948, or you may mail it to:

Office of Inspector General (IG-1)  
U.S. Department of Energy  
Washington, D.C. 20585  
ATTN: Customer Relations

If you wish to discuss this report or your comments with a staff member of the Office of Inspector General, please contact Wilma Slaughter at (202) 586-1924.

The Office of Inspector General wants to make the distribution of its reports as customer friendly and cost effective as possible. Therefore, this report will be available electronically through the Internet at the following address:

U.S. Department of Energy Office of Inspector General Home Page  
<http://www.ig.doe.gov>

Your comments would be appreciated and can be provided on the Customer Response Form attached to the report.