U.S. Department of Energy
Office of Inspector General
Office of Audit Services

Audit Report

Deactivating and Decommissioning Facilities at the Savannah River Site

DOE/IG-0684

April 2005

Department of Energy

Washington, DC 20585

April 14, 2005

MEMORANDUM FOR THE SECRETARY

FROM: Gregory H. Friedman
Inspector General

SUBJECT: INFORMATION: Audit Report on "Deactivating and Decommissioning Facilities at the Savannah River Site"

BACKGROUND

In 2002, the Department of Energy's Office of Environmental Management (EM) completed a program-wide review of its operations. One of the key findings of this review was that EM had not focused on strategies, including a systematic approach to facility decontamination and decommissioning, that emphasized the most expeditious means of addressing the health risks and environmental concerns associated with the Department's massive inventory of radioactive, mixed, and hazardous waste. For example, the review included the observation that the limited remediation funds available to the Department were being used to address lower- rather than higher-risk projects. The review recommended that future strategies be based on a comprehensive, coherent, and technically-supported prioritization of risk and that all high-risk, highly contaminated facilities be decontaminated and decommissioned on an expedited basis.

The Savannah River Site has some of the most contaminated facilities in the Department complex. These facilities require prompt decontamination and decommissioning to reduce environment and health risks. In 2003, the Department worked with Westinghouse Savannah River Company (Westinghouse), the prime environmental remediation contractor at the site, to identify facilities for deactivation and decommissioning. The Department selected 225 facilities that Westinghouse could deactivate and decommission by September 30, 2006, the end of its current contract. This audit was to determine whether the Department was deactivating and decommissioning facilities at the Savannah River Site in a manner that reduced the threat to the environment, workers, and public using a risk-based approach.

RESULTS OF AUDIT

Deactivation and decommissioning activities completed at the Savannah River Site did not always provide a reduction in the risk posed to the environment, workers, or the public. In contrast to the program direction emanating from the 2002 comprehensive review, the approach in use at Savannah River did not appear to reflect a risk-based targeted methodology. We observed that:

- About 67 percent of the facilities completed by Westinghouse through August 2004, at a cost of about $7.8 million, posed little or no potential risk to the environment, workers, or public; and,

- Twenty-two facilities that posed potential environmental, safety, and health risk had not been scheduled for deactivation and decommissioning at the time of our review, even though they were available for remediation.

Further, we found that, had the Department concentrated on closing the higher-risk facilities, it could have avoided approximately $2.2 million in annual surveillance and maintenance costs. These funds could have then been used to advance the environmental remediation efforts at Savannah River.

In many cases, the Department scheduled facilities for deactivation and decommissioning largely based on physical location and ease of completion rather than on prioritized, risk-based facility evaluations. The Department's current approach, if not modified as recommended in this report, may delay the reduction in the environment, safety, and health risk associated with the higher-risk facilities.

Our finding and recommendations were consistent with a recent study by the National Research Council, *Improving the Characterization and Treatment of Radioactive Wastes for the Department of Energy's Accelerated Site Cleanup Program.* In its study, the National Research Council concluded that facilities posing little risk – many not contaminated or in structural jeopardy – were being dismantled.

In responses to a draft of this report, management argued that the Department's policy of aggressive surveillance and maintenance of the higher risk facilities mitigates the environment or safety concerns described previously. We agreed that enhanced surveillance and maintenance, while very costly procedures, are effective tools. However, as useful and necessary as they may be, they do not substitute for the prompt deactivation and decommissioning of high risk facilities at Savannah River or any Department of Energy facility.

While the Department has initiated or completed some actions to address problems with facility disposition, additional action is needed to ensure that facilities at the Savannah River Site are closed promptly. Accordingly, we made several recommendations designed to ensure that deactivation and decommissioning activities at the Savannah River Site are re-scheduled in accordance with the recommendations in the Department's 2002 program-wide review.

MANAGEMENT REACTION

The Acting Assistant Secretary for Environmental Management did not agree with our finding and recommendations and stated that, although correct in a limited context, the report does not fully take into consideration key aspects of worker safety as a driving factor in sequencing work. In particular, he indicated that any facility that is completely deactivated and decommissioned reduces some type of risk. He contended, as well, that EM had taken a "walk-before-run approach" which specifically targets lower risk and lower hazard facilities to be processed first, allowing workers to gain the on-the-job experience needed for higher radiological, chemical, and industrial hazard facilities.

We share EM's concern for worker safety and its support for on-the-job experience, recognizing the challenge of achieving an appropriate balance between the goals of worker safety and prompt facility remedial action. However, we found EM's position to be inconsistent with its stated objective to schedule work to maximize risk reduction at an accelerated rate. Further, Savannah River officials indicated that workers are trained to safely deal with specific situations as they are scheduled and that employees involved in remediation activities have demonstrated their capabilities to deactivate and decommission higher risk facilities in the past.

Management's comments and our response are summarized beginning on page 4 of the report. Management's verbatim comments can be found in Appendix 3.

Attachment

cc: Deputy Secretary
Administrator, National Nuclear Security Administration
Under Secretary, Energy, Science, and Environment
Assistant Secretary for Environmental Management
Manager, Savannah River Operations Office

REPORT ON DEACTIVATING AND DECOMMISSIONING FACILITIES AT THE SAVANNAH RIVER SITE

TABLE OF CONTENTS

DEACTIVATION AND DECOMMISSIONING ACTIVITIES

Background

In September 2003, Westinghouse issued the current version of the *Savannah River Site Environmental Management Integrated Deactivation and Decommissioning Plan*. This plan described the projected end states for Savannah River Site facilities, waste tanks, and waste sites; the anticipated sequencing and timing of deactivation and decommissioning activities; and the composite costs to achieve those end states. As part of its contract, Westinghouse was tasked by the Department to deactivate and decommission 225 specific facilities at the Savannah River Site by the end of FY 2006.

Risk and Cost Reduction

We determined that the Department has performed deactivation and decommissioning activities on 55 facilities that posed no potential risk to the environment, workers, and/or the public and provided minimal reduction in surveillance and maintenance costs. Additionally, some of the facilities that did pose an environment, safety and health (ES&H) risk[1] were not scheduled for closure or included in the scope of the current contract.

Westinghouse had developed a computer risk assessment model, the Ranking and Sequencing Model (Model), which would use three risk factors – ES&H, economic, and programmatic – to quantitatively identify a risk ranking for each of the facilities. Despite the availability of the Model, as of August 2004, 67 percent of the facilities that the Department had deactivated and decommissioned at the Savannah River Site posed no potential ES&H risk. The estimated demolition cost for these facilities was $7.8 million; however, the estimated reduction in annual surveillance and maintenance costs was only $122,900. For example, Westinghouse deactivated and decommissioned the following two facilities:

- *675-T Glass Melter Building* – Based on Westinghouse's calculations, the ES&H risk value for this building was zero – signifying that it posed no ES&H risk to the environment, workers, and/or public. This building was formerly used for the development and testing of various melter systems; however, no radioactive materials were ever used in the building. The estimated demolition cost for this facility was $540,237 and the estimated reduction in annual surveillance and maintenance cost was about $5,000.

[1] For the purpose of this report, the facilities included in this category were only those available for deactivation and decommissioning as of Fiscal Year 2003. Additional facilities become available each year, but were not included in the scope of our review.

- *717-D Shops, Stores and Change House* – This building also had an ES&H risk value of zero and had been used to provide general area maintenance, machine shop, and administrative support and it was considered a "clean" structure. The estimated demolition cost for this facility was $847,741 and the estimated reduction in annual surveillance and maintenance cost was also about $5,000.

Using its computerized model, Westinghouse identified 105 facilities, available by FY 2003, that posed some potential ES&H risk. However, not all of these facilities were included in the scope of the current contract. To illustrate, the Department does not plan to deactivate and decommission the 242-H 1H Evaporator Facility before September 30, 2006, despite the fact that this facility posed the largest potential ES&H risk of all the identified facilities. Management stated that EM's justification for the delay was that the facility is near active facilities and pursuing deactivation and decommissioning could create safety issues for workers in those facilities. Nevertheless, this facility had not been in use since 1994 and was identified as a Nuclear Category 2 facility – a site that has the potential for significant onsite consequences associated with an unmitigated release of radioactive and/or hazardous materials. This risk, along with the economic risk of not reducing estimated annual surveillance and maintenance costs of $2 million by spending an estimated $1.6 million to deactivate and decommission the facility, should be further considered.

Prioritizing Deactivation and Decommissioning Activities

Facilities posing no ES&H risk were addressed ahead of others with higher-risk because the Department did not use the Model designed by Westinghouse and did not prioritize its activities based on potential ES&H risk reduction. Rather, it chose to select facilities based largely on physical location and ease of completion. Specifically, the Department pre-selected excess facilities that were physically located at or near the site boundary with the goal of permanently closing these areas and creating a buffer zone between the public and the core areas of the site. This approach, however, was not the most advantageous to the Department. Facilities selected posed little, if any, risk to the environment, workers, and/or public, and as such, provided minimal benefit.

The Acting Assistant Secretary for Environmental Management agreed that the Department could have done a better job of prioritizing facilities for deactivation and decommissioning

activities, but cited several impediments to closing higher-risk facilities. For example, workers initially lacked the expertise in clean-up activities and had to be trained. Also, the danger associated with these activities dictated a slower progression prior to moving to higher-risk facilities. Finally, the Department sought to send a message that work as usual was changing – the site was no longer focused on nuclear weapons creation but was moving to site cleanup and eventual closure. For example, the Department chose to deactivate and decommission the main cafeteria, an action that affected workers on a daily basis and thus got their attention even though the facility contained little contamination.

While the Department's approach may have been understandable in the short run, it does not fully account for the planned approach for addressing facilities during the life of the current contract. As noted earlier, about 67 percent of the facilities deactivated and decommissioned at the Savannah River Site as of August 2004 have posed no ES&H risk. If the Department continues on its current path and completes the deactivation and decommissioning activities for all of the 225 facilities included in the current contract as planned, more than 60 percent of the facilities deactivated and decommissioned will have posed no potential risk to the environment, workers, and/or public.

Higher Potential Risks and Costs Remain

According to the Department's current plans, 22 facilities which pose some potential ES&H risk will not be deactivated and decommissioned until after FY 2006, the conclusion of the current contract. The higher potential risk from these 22 facilities will continue to exist until the Department negotiates its new contract and schedules these facilities for closure. Also, the Department will continue to incur the costs associated with surveillance and maintenance activities on higher-risk facilities.

Based on the Department's cost estimates, it will incur an estimated $44.8 million to deactivate and decommission facilities which posed no potential ES&H risk. However, the Department will only reduce its estimated annual surveillance and maintenance costs by $306,100. Instead, the Department could have incurred an estimated $21.7 million to deactivate and decommission 20 of the 22 facilities mentioned above and reduced the Department's estimated annual surveillance and maintenance costs by $2.2 million. The remaining two facilities would have required substantial deactivation and decommissioning costs with minimal reductions in annual surveillance and maintenance costs.

RECOMMENDATIONS

We recommend that the Assistant Secretary for Environmental Management direct the Manager, Savannah River Operations Office to:

1. Halt deactivation and decommissioning activities on facilities that pose no potential ES&H risk to the environment, workers, and/or public;

2. Re-prioritize all remaining facilities based on the potential ES&H risk that the facilities may pose to the environment, workers, and/or public; and,

3. Re-negotiate the current contract with Westinghouse to accelerate deactivation and decommissioning activities on the facilities that pose the highest potential risk to the environment, workers, and/or public.

MANAGEMENT REACTION

The Office of Environmental Management did not concur with the recommendations in the report. Management stated that, while the findings and recommendations were correct in a limited context, they did not fully take into consideration key aspects of worker safety as a driving factor in sequencing work.

Management stated that while it may seem that deactivation and decommissioning of the highest risk or highest hazard facilities first makes the most sense, in fact, almost the opposite is true. The lack of credible as-built schematics requires careful planning and robust oversight of the work. Also, a great deal of work requires personal protective equipment. As such, EM specifically targets lower risk and lower hazard facilities first in the deactivation and decommissioning process to allow workers and operators to gain the on-the-job experience needed for higher hazard facilities, a strategy it has followed at accelerated closure sites such as Rocky Flats. For example, in some cases, EM has had workers don full sets of personal protective equipment in facilities with no radiological or chemical hazard so they can get comfortable and proficient with their gear. This is the approach that EM took at its four accelerated closure sites.

Management also stated that its current strategy aims to expedite the closure of entire areas, beginning with those near the perimeter of the Savannah River Site. It has found this approach to be the most cost-effective while also addressing, in the near-term, areas closest to off-site receptors.

Finally, management stated that it had recently added two higher risk facilities to the current contract scope of work and has deactivation activities ongoing at two other higher risk facilities.

Management's verbatim comments can be found in Appendix 3.

AUDITOR COMMENTS

We acknowledge and appreciate EM's desire to adequately plan and oversee a robust deactivation and decommissioning effort at the Savannah River Site. We also see the value of providing workers with experience in a lower risk facility prior to moving on to the higher risk facilities. However, the extent to which it is being carried out at the Savannah River Site is questionable and inconsistent with the implementation of the Top-to-Bottom Review initiatives. In our opinion, deactivation of 55 facilities with no ES&H risk over a 2-year period is adequate to gain the experience necessary to safely deactivate and decommission higher-risk facilities. Continuing this approach through 2006 and beyond is inconsistent with what EM reported to Congress on the status of its implementation of the Top-to-Bottom Review initiatives. Specifically, EM reported that it had based contractor incentives on accelerated risk reduction criteria, requiring contractors to focus on reducing or eliminating the highest risks first. Yet, except for the two new facilities that have been recently added, EM continues to focus a majority of its efforts on the lower risk facilities with many of the higher risk facilities not being addressed until FY 2007 or later.

In addition, we found that the deactivation and decommissioning program at Savannah River has not performed an exercise where workers use full sets of personal protective equipment on facilities with no radiological or chemical hazard. Rather, we were informed by Department and contractor officials at the Savannah River Site that all radiological safety training associated with personal protective equipment was conducted in a classroom setting and not on-the-job during deactivation and decommissioning activities. Thus, we do not see its relevance in justifying why EM has targeted lower risk facilities for a majority of the deactivation and decommissioning work at the Savannah River Site.

Finally, while EM stated that its strategy to expedite closure of entire areas is cost-effective, we were provided with no analysis to support such a statement. Conversely, the audit found that the current approach of pursuing deactivation and decommissioning of lower risk facilities can result in continuing to spend millions on

extensive surveillance and maintenance work typically associated with higher risk facilities. Further, the risk Model designed by Westinghouse to make deactivation and decommissioning decisions already considers the impact of off-site receptors when assigning a risk score. Thus, if EM used the Model and focused on risk for prioritizing its deactivation and decommissioning activities, this issue would already be addressed.

Appendix 1

OBJECTIVE

The objective of the audit was to determine whether the Department is deactivating and decommissioning excess facilities at the Savannah River Site in a manner that minimizes risk to the environment, workers, and/or public, and provides the greatest economic benefit.

SCOPE

The audit was performed between April 15, 2004, and October 8, 2004, at the Savannah River Site in Aiken, South Carolina. The scope of the audit included a review of the current planning for deactivating and decommissioning facilities at the Savannah River Site between FY 2003 and FY 2025.

METHODOLOGY

To accomplish the audit objective, we:

- Researched Federal and Departmental regulations and other applicable guidance to determine requirements for prioritizing deactivation and decommissioning activities.
- Reviewed Modification M100 of the current contract with Westinghouse and implementation plans to determine the Savannah River Site's methodology for accomplishing deactivation and decommissioning activities and the facilities that will undergo deactivation and decommissioning activities prior to September 30, 2006.
- Reviewed the Model to determine how it was used to implement the Savannah River Site's deactivation and decommissioning activities.
- Reviewed the facilities for which the Department has completed deactivation and decommissioning activities as of August 2004 to determine whether these activities resulted in reducing the highest potential risk to the environment, workers, and/or public.

The audit was conducted 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, we assessed internal controls and performance measures established under the *Government Performance and Results Act of 1993* related to deactivating and decommissioning requirements. The Department established performance measures which required Westinghouse to complete deactivation and

decommissioning of 45 excess facilities in F-Area at the Savannah River Site. All other deactivation and decommissioning activities were at the discretion of Westinghouse. Because our review was limited, it would not necessarily have disclosed all internal control deficiencies that may have existed at the time of our audit. In performing this audit, we relied on computer-based data to accomplish the audit objective and, therefore, we performed limited tests to assess its reliability.

We held an exit conference with the Office of Environmental Management on March 29, 2005.

PRIOR AUDIT REPORTS

- *Disposition of Excess Facilities at the Hanford Site* (OAS-L-04-15, April 2004). The audit found that an integrated disposition baseline for excess facilities at the Hanford Site (Hanford) had not been developed. In lieu of an integrated disposition plan, the Richland Operations Office (Richland) was relying on the Hanford Life-Cycle Plan, which addresses disposition activities at Hanford by waste type and area rather than on an individual facility basis. This occurred, in part, because disposition activities at Hanford are managed within individual areas rather than prioritized on a site-wide basis. Additionally, Richland had not established a separate budget for disposition activities at Hanford. Without a comprehensive facility disposition plan and sufficient cost data, Richland could not determine which facilities provide the greatest payback for reduced surveillance and maintenance costs. Further, the lack of a single manager or separate budget increases the likelihood that disposition activities at Hanford may not be given a high priority.

- *Disposition of the Department's Excess Facilities* (DOE/IG-0550, April 2002). The audit found that the performance of the Department's program to dispose of excess facilities was not fully satisfactory. Specifically, facility disposition activities were not prioritized to balance mission requirements, reduce risks, and minimize life-cycle costs. In some cases, disposition plans were in conflict with requirements for new facilities. In other instances, facilities posing little risk were decommissioned, while the Department failed to dispose of buildings representing substantially greater risk. This occurred because the Department had not: (1) developed a corporate approach for disposition activities; (2) collected and reported reliable data on costs associated with disposition activities or on decommissioning performance; and, (3) designated sufficient funds to carry out an effective disposition program. Without a significantly enhanced approach to facility disposition, the Department may be hindered in the accomplishment of its various missions. Specifically, the excess facility disposition effort needed better coordination between cognizant program offices and greater overall emphasis on risk reduction.

- *Decontamination and Decommissioning at the East Tennessee Technology Park* (ER-B-99-01, December 1998). The audit found that the Oak Ridge Operations Office (Operations Office) reduced health, safety, and environmental risks through decontamination and decommissioning projects at the East Tennessee Technology Park (ETTP). However, the major ongoing decontamination and decommissioning project at the ETTP did not involve the facility that posed the greatest risk from exposure to radioactive waste, hazardous or toxic materials, and structural collapse. This occurred because the Operations Office did not fully emphasize reductions of health, safety, and environmental risks when it selected and performed decontamination and decommissioning projects at the ETTP. As a result, a high-risk facility continues to

deteriorate, and hazards to workers and the environment are increased. Also, the Department could incur $34.5 million in unnecessary surveillance and maintenance costs between FYs 1998 and 2002 for a building, which poses significant risks to workers and the environment.

- *Deactivation, Decontamination and Disposal of Surplus Facilities at the Savannah River Site* (ER-B-98-01, October 1997). The audit found that Westinghouse Savannah River Company only disposed of one facility and did not completely deactivate or decontaminate any of the 162 facilities identified as surplus at the Savannah River Site in FY 1996. This occurred because the Savannah River Operations Office did not compile a site-wide list, establish priorities, or provide sufficient funding for the deactivation, decontamination, and disposal of surplus facilities. As a result, the Department incurred unnecessary costs for the surveillance and maintenance of surplus facilities.

DOE F 1325.8
(8-89)
EFG (07-90)

United State Government **Department of Energy**

memorandum

DATE: January 27, 2005

REPLY ATTN OF: EM-21 (A. Szilagyi, 301-903-4278)

SUBJECT: Draft Report on Deactivating and Decommissioning Facilities at the Savannah River Site

TO: Rickey R. Hass, Assistant Inspector General for Audit Operations
Office of Inspector General

We have reviewed the Draft Report of the audit performed on the deactivating and decommissioning (D&D) facilities at the Savannah River Site (SRS). The specific scope of the Inspector General's (IG) audit was the risk-based performance of D&D at SRS. The findings and recommendations, although correct in a limited context, do not fully take into consideration key aspects of worker safety as a driving factor in sequencing work. As a result, we are unable to accept the recommendations of the draft report.

D&D of high hazard nuclear facilities poses one of the greatest challenges in the Office of Environmental Management (EM) program. While it may seem that D&D of the highest risk or highest hazard facilities first makes the most sense, in fact, almost the opposite is true. Due to the lack of credible as-built facility schematics, great care is taken to ensure planning and oversight of the work is robust. Additionally, a great deal of our D&D work requires operators to wear substantial personal protective equipment (PPE) when performing this work. Hazards need to be identified and work controls need to be developed and implemented to ensure our workers remain safe from the start to the finish of the job.

EM specifically targets lower risk and lower hazard facilities to be put in the D&D process first to allow our workers and operators to gain the on-the-job experience needed for D&D of higher hazard facilities. In this regard, EM has taken a *walk before run approach;* it is prudent that operators first learn in an environment that poses little hazard. In some cases, we have operators don full sets of PPE in non-contaminated facilities, where there is no radiological or chemical hazard so that they can get comfortable and proficient with their gear. Unless a person has worn a full face respirator and a full set of anti-contamination clothing for an entire shift performing very strenuous manual work, it is very difficult to understand just how hard it is to perform D&D work. This may cost the Department more up front, but in the long-run it is the safest, best, and most reliable approach for EM to achieve its life-cycle objectives.

This is the approach EM took at the accelerated closure sites (Rocky Flats, Mound, Fernald, and Columbus). At Rocky Flats, the D&D program was started with non-contaminated facilities and will culminate with the D&D of the two highest risk facilities, Building 371 and B776. Implementing this process at all four sites has shown that we can meet all the objectives of the Top-to-Bottom review, improve worker safety, and demonstrate that we are protective of the environment and good stewards of the taxpayers' monies. This is also the approach that we

are taking at the Idaho site, where we have targeted D&D of lower hazard facilities before taking on the greater challenges at the Idaho Nuclear Technology and Engineering Center. Workers at Idaho have D&D'd over a quarter million square feet in fiscal year 2004 alone but, more importantly, they are better prepared for the greater challenges that lie ahead.

This strategy also aims to expedite the closure of entire areas, beginning with those near the perimeter of the Savannah River Site--namely T, D, and M. We have found this approach to be the most cost-effective while also addressing in the near-term areas closest to off-site receptors. As such, 28 of the 117 facilities D&Ded were located in the T-Area, resulting in completing the T-Area D&D and turning the entire area over to the Environmental Restoration Program to complete the soil and groundwater portion of the cleanup. In addition, the deactivation of F-Canyon and the D&D of other facilities, including 247-F Naval Fuels Facility and the F-Canyon Out-side Support Facilities, is being conducted based primarily on risk-based prioritization.

The IG draft report notes that the Department of Energy is not taking action on a number of facilities that pose some potential risk and are presently available to D&D. Of those facilities, the Department has recently added two to the current contract scope of work and has deactivation activities–the primary risk reduction effort–ongoing at two other facilities. D&D of the contaminated maintenance facility in C-Area (717-C) and the demonstration waste incinerator in H-Area (230-H) have been added to the current scope of work, and deactivation of the disassembly basins contained within the 105-R and 105-P Reactor Buildings is also ongoing. The D&D of the 1-H evaporator (242-H) is inherently tied to the closure of associated waste tanks. Although that particular facility does represent a relatively high potential hazard, it is not feasible to fully decommission the facility in advance of tank closures.

Additionally, we are providing the attached specific comments. If you have any further questions, please call me at (202) 586-7709 or Mr. Mark Gilbertson, Deputy Assistant Secretary for Environmental Cleanup and Acceleration, at (202) 586-0755.

Paul M. Golan
Acting Assistant Secretary for
Environmental Management

Attachment

IG Report No. DOE/IG-0684

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 inspection 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 the 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?

5. 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 telefax it to the Office of Inspector General at (202) 586-0948, or you may mail it to:

Office of Inspector General (IG-1)
Department of Energy
Washington, DC 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.