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

United States Government **Department of Energy**

Memorandum

DATE: April 22, 2004

REPLY TO ATTN OF: IG-36 (A04RL018) Audit Report No.: OAS-L-04-15

SUBJECT: Audit of Disposition of Excess Facilities at the Hanford Site

TO: Keith A. Klein, Manager, Richland Operations Office

INTRODUCTION AND OBJECTIVE

The Hanford Site (Hanford) is the largest of the three original defense production sites founded during World War II. Between 1943 and 1963, nine plutonium production reactors were built along the Columbia River and five processing facilities were built on the site's Central Plateau, with about 1,000 support facilities. Currently, Hanford has a total of 1,500 facilities of which an estimated 1,000 are excess to current and future mission needs.

In 2002, the Department's Environmental Management (EM) program issued a Top-to-Bottom Review of the EM Program. One of the major findings of the review was that EM's cleanup strategy was not based on comprehensive, coherent, technically supported risk prioritization. The review specified that the approach resulted in costly waste management and disposition strategies that are not proportional to the risk posed to human health and the environment. The review recommended that cleanup work should be prioritized to achieve the greatest risk reduction at an accelerated rate and that all high-risk, highly contaminated facilities should be decontaminated and decommissioned on an expedited basis.

Additionally, in 2002, the Office of Inspector General (OIG) evaluated the Department's plans for "Disposition of the Department's Excess Facilities" (DOE/IG-0550). The audit revealed that the Department's disposition activities were not prioritized to balance mission requirements, reduce risks, and minimize life-cycle costs. The report noted that at Hanford some facilities that posed extremely low risk had been decommissioned while several riskier facilities had not been addressed.

In response to the report, the Department developed Departmental Order 430.1B, *Real Property Asset Management*. The Order requires management to establish a corporate, holistic, and performance-based approach to real property life-cycle asset management that links real property asset planning, programming, budgeting, and evaluation to program mission projections and performance outcomes. Also, the Order specifies that a disposition baseline be developed to assess and prepare real property assets for disposition when they are no longer required for current program missions. The disposition plan shall include

cost and schedule information for disposition activities. Disposition activities include stabilizing, preparing for reuse, deactivating, decommissioning, decontaminating, dismantling, demolishing, and/or disposing of real property assets.

The objective of this audit was to determine whether an integrated disposition baseline for excess facilities at Hanford has been developed.

CONCLUSIONS AND OBSERVATIONS

We found that an integrated disposition baseline for excess facilities at Hanford has not been developed. In lieu of an integrated disposition plan, the Richland Operations Office (Richland) is 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. Additionally, Richland is in the process of implementing a regional closure optimization strategy (optimization strategy) for the site's 200 Area, which contains the vast majority of Hanford's excess facilities. While the optimization strategy considers risk, it does not take into account the cost to disposition the vast majority of the nearly 1,000 facilities that are not needed and take up valuable resources to maintain. Specifically, the optimization study does not contain sufficient cost data to compare the one time cost to disposition a facility versus continued surveillance and maintenance costs. While disposition activities in the site's 100 and 300 Areas are being performed by a different prime contractor, we identified a similar lack of sufficient cost data to support the disposition activities in those areas. This occurred, in part, because disposition activities at Hanford are managed within individual areas rather than prioritized on a site-wide basis. For example, the decision may be made to disposition a facility in one area on the site without adequately considering disposition priorities in other areas. Additionally, Richland has not established a separate budget for disposition activities at the site.

While Richland agreed that the current approach to dispositioning excess facilities at Hanford had some gaps, overall they felt that disposition activities are embedded in current plans and provide an effective approach. Richland estimates that about $71 million will be spent on surveillance and maintenance of excess facilities at Hanford during FY 2004. However, without a comprehensive facility disposition plan and sufficient cost data they cannot 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 the site may not be given a high priority.

Since no formal recommendations are being made, a formal response is not required. However, to ensure that the most cost-effective approach for dispositioning excess facilities at Hanford is implemented, we suggest that you comply with DOE Order 430.1B which requires you to prepare an integrated disposition baseline that addresses all excess facilities at Hanford. This baseline should contain sufficient cost data to compare the one time cost to disposition a facility versus continued surveillance and maintenance of that facility.

SCOPE AND METHODOLOGY

The audit was performed between October 20, 2003, and April 6, 2004, at the Hanford Site in Richland, Washington. The scope of the audit included a review of the plans and activities associated with the disposition of excess facilities at the Hanford Site.

To accomplish the audit objective, we analyzed the Hanford Life-Cycle Plan and the *Optimization Strategy for Central Plateau Closure*; reviewed prior OIG reports related to the audit's objective; reviewed applicable Departmental Orders; and held discussions with Richland Operations Office and contractor officials.

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 the disposition of excess facilities at Hanford. 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 did not rely on computer-based data.

We discussed the audit results with EM Headquarters and Richland Operations Office officials on April 19, 2004.

We appreciate the cooperation of your staff throughout the audit.

Phillip L. Holbrook

Phillip L. Holbrook, Director
Environmental Audits Division
Office of Inspector General

cc: Assistant Secretary for Environmental Management
Team Leader, Audit Liaison Team, ME-1.1
Audit Liaison, Richland Operations Office

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

Department of Energy

United States Government

memorandum

DATE: April 22, 2004

REPLY TO: IG-36 (A04RL018)

SUBJECT: Final Report Package for "Audit of Disposition of Excess Facilities at the Hanford Site"

TO: Linda J. Snider, Director for Planning and Administration (DPA)

Attached is the required final report package on the subject audit. The pertinent details are:

1. Staff days: Programmed N/A Actual N/A

2. Elapsed days: Programmed 186 Actual 185

3. Names of OIG audit staff:

Assistant Regional Manager:	Phillip D. Beckett
Team Leader (Audit-Control-Point):	Michael R. Kuklok
Auditor-in-Charge:	Larry Leslie
Audit Staff:	Robert O'Keefe
	Luther Hughes

4. This report has been discussed with OIG Investigations and Inspections personnel.

Michael Matkowski, Investigations, April 8, 2004
Geoff Gray, Inspections, April 9, 2004

5. Matters to be brought to attention of the IG or AIGA: None

Phillip L. Holbrook, Director
Environmental Audits Division
Office of Inspector General

Attachments:
1. Final Report (3)
2. Monetary Impact Report
3. IGDBMS File Printout

MONETARY IMPACT OF REPORT NO.: OAS-L-04-15

1. Title of Audit: Audit of Disposition of Excess Facilities at the Hanford Site

2. Division: Environmental Audit Division (EAD)/ Richland Audit (RLA)

3. Project No.: A04RL018

4. Type of Audit:

Financial: _____
Financial Statement _____
Financial Related _____
Other (specify type): _____

Performance: X
Economy and Efficiency X
Program Results _____

5. Please report monetary savings identified in the report using applicable columns. Provide additional explanations of audited activities/locations in Section No. 6 - Remarks.

FINDING		COST AVOIDANCE		QUESTIONED COSTS				MGT. POSITION	POTENTIAL BUDGET IMPACT
(A)	(B) Title	(C) One Time	(D) Recurring Amount PerYear	(E) Questioned	(F) Unsup-ported	(G) Unre-solved	(H) Total (E)+(F)+(G)	(I) C=Concur N=Noncon U=Undec	(J) Y=Yes N=No
	N/A								
TOTALS–ALL FINDINGS									

6. Remarks: N/A

7. Contractor: None
8. Contract No.: None
9. Task Order No.: None

10. Approvals:
Division Director/Date: 4/22/04
Technical Advisor & Date

Audit Project Office Summary (APS)

Report run on: April 22, 2004 10:25 AM

Audit#: A04RL018 Ofc: RLA Title: D&D ACTIVITIES AT THE HANFORD SITE

****** Milestones ******

	Planned	End of Survey	Revised	Actual	
Entrance Conference:.....	20-OCT-03		20-OCT-03	20-OCT-03	
Survey:.....	18-DEC-03		06-APR-04	06-APR-04	
Draft Report:.....					
Completed (With Report):.	30-SEP-04		23-APR-04	22-APR-04	(R)
----------Elapsed Days:	346		186	185	
				Elap. Less Susp:	

Date Suspended: Date Terminated:
Date Reactivated: Date Cancelled:
DaysSuspended(Cur/Tot): ( ) Report Number: OAS-L-04-15
Rpt Title: Report Type: LTR LETTER REPORT
DISPOSITION OF EXCESS FACILITIES AT THE HANFORD SITE

****** Audit Codes and Personnel ******

Class:	PER	PERFORMANCE			
Program:	ESH	Not Found			
MgtChall:	032	ENVIRONMENTAL CLEANU	AD:	327	BECKETT
Site:	MSA	MULTI-SITE AUDIT	AIC:	726	LESLIE
SecMiss:	ENV	ENVIRONMENTAL QUALIT	Team Ldr:	546	KUKLOK
PresInit:	SHC	STRATEGIC MANAGEMENT	Tech Adv:	432	GAMAGE

****** Task Information ******

Task No:
Task Order Dt: CO Tech. Rep:
Orig Auth Hrs: Orig Auth Costs:
Current Auth: Current Auth Cost:
Tot Actl IPR Hr: Tot Actl Cost:

****** Time Charges ******

Emp/Cont Name	Numdays	Last Date
KUKLOK, M	8.4	17-APR-04
O'KEEFE, R	31.8	21-FEB-04
HUGHES, L	71.4	20-MAR-04
LESLIE, L	83.9	03-APR-04
Total:	195.5	

Audit Project Office Summary (APS)

Report run on: April 22, 2004 10:25 AM

****** Keywords ******

DECOMMISSIONING
DECONTAMINATION
DEPARTMENT
DISPOSITION
DOE
DOE ORDER 430.1B
DOE-RICHLAND
EXCESS FACILITIES
FACILITY DISPOSITION PLAN
HANDFORD LIFE-CYCLE PLAN
HANFORD
OPTIMIZATION STRATEGY
RICHLAND
SUVEILLANCE AND MAINTENANCE

****** Location Information ******

Loc Code	Description
HSF	HANFORD SITE FACILITY - R
RLF	FLUOR HANFORD, INC

******Finding Information ******

Find#	Title	Type	Amount	Bud Yrs	Mgt Imp	Dept Pos	Dept Pos	Dept Amount	Dept Date

Audit Project Office Summary (APS)

Report run on: April 22, 2004 10:25 AM

Audit History

Audit No: A04RL018 History Date: 22-APR-04

History Text:

PB/ ENTERED COMPLETED WITH REPORT DATE.

AUDIT DATABASE INFORMATION SHEET

Project No.: A04RL018

1. Title of Audit: Audit of Disposition of Excess Facilities at the Hanford Site
2. Report No./Date: OAS-L-04-15; April 22, 2004
3. Management Challenge Area: Environmental Cleanup
4. Presidential Mgmt Initiative: N/A
5. Secretary Priority/Initiative: Environmental Program
6. Program Code: EM-1
7. Location/Sites: RL
8. Finding Summary:

We found that an integrated disposition baseline for excess facilities at Hanford has not been developed. In lieu of an integrated disposition plan, the Richland Operations Office (Richland) is 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. Additionally, Richland is in the process of implementing a regional closure optimization strategy (optimization strategy) for the site's 200 Area, which contains the vast majority of Hanford's excess facilities. While the optimization strategy considers risk, it does not take into account the vast majority of the nearly 1,000 facilities that are not needed and take up valuable resources to maintain. For example, the optimization study does not contain sufficient cost data to compare the one time cost to Disposition a facility versus continued surveillance and maintenance costs. While disposition activities in the site's 100 and 300 Areas are being performed by a different prime contractor, we identified a similar lack of sufficient cost data to support the disposition activities in those areas. This occurred, in part, because Richland has not assigned the responsibility for Disposition activities at the site to a single contractor. Additionally, Richland has not established a separate budget for Disposition activities at the site.

While Richland agreed that the current approach to dispositioning excess facilities at Hanford had some gaps, overall they felt that Disposition activities are embedded in current plans and provide an effective approach. Richland estimates that about $71 million will be spent on surveillance and maintenance of excess facilities at Hanford during FY 2004. However, without a comprehensive facility disposition plan and sufficient cost data they cannot 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 the site may not be given a high priority.

9. Keywords:

Excess Facilities	Hanford
Decontamination	Richland Operations Office
Decommissioning	Hanford Life-Cycle Plan
Disposition	Optimization Strategy
Disposition	Surveillance and Maintenance
DOE	Facility Disposition Plan
DOE-Richland	DOE Order 430.1b

POTENTIALLY SENSITIVE INFORMATION

The following is a list of information considered to be potentially sensitive. **If the information is detailed to such an extent that it would cause or could potentially cause damage to U.S. national security, citizens, or property, it cannot be included in our public reports.** Therefore, when preparing your reports be sure to use this checklist to determine whether the report contains potentially sensitive information.

CATEGORIES/TYPES OF INFORMATION	YES	NO
Facilities		
➢ Detailed description and location of facilities to include maps, written directions, drawings, blue prints, photographs and the like		X
➢ Detailed descriptions and location of storage facilities for nuclear or other hazardous materials		X
➢ Detailed descriptions and location of personnel or facility support systems (e.g. water supply, electrical supply systems, communications systems, emergency response personnel/equipment)		X
➢ Detailed descriptions and locations of computer systems used to process, store, and transmit sensitive information.		X
➢ Environmental Impact Statements that provide the consequences for what is being studied.		X
➢ Any detailed information pertaining to other sites that has not been reviewed/approved by the other site.		X
Materials		
➢ Form and quantity of hazardous materials, (chemical, nuclear, biological)		X
➢ Vulnerabilities of materials to unauthorized access or destruction.		X
➢ Consequences of release of hazardous materials		X
➢ Detailed transportation related information (routes, maps, shipping means, containers).		X
Security/Safety		
➢ Detailed plans, procedures, communications, reaction times, capabilities that would allow someone to determine vulnerabilities of the site.		X
➢ Specific assessments, exercise results, evaluations for a particular site		X
➢ Specific personnel data identifying security/safety personnel		X
➢ Specific equipment and its potential uses		X

POTENTIALLY SENSITIVE INFORMATION

Assessments		
➢ Site specific vulnerability assessments		X
➢ Site specific safety assessments/analysis		X
➢ Site specific risk analyses		X
➢ Specific hazardous assessments (Dispersion models and analyses, accident analyses, or site hazards)		X
Personnel		
➢ Specific organization charts or phone lists identifying senior management/key personnel		X
➢ Specific personal data to include travel plans, meetings and the like		X
➢ Specific training materials that include sensitive information		X
Programs		
➢ Detailed information identifying sensitive programs, special projects, SAPs, WFO		X
➢ Reports detailing specific activities and/or results from programs and projects		X
➢ Information pertaining to specific programs at other facilities/sites that has not been cleared with the other sites for publication on a publicly accessible web site		X

A04RL018

Larry Leslie-AIC
Mike Kuklok-Team Leader