Project Baseline Summary Report

Data Source: **EM CDB**

Report Number: **GEN-01b**

Operations/Field Office: **Oakland**

Print Date: **3/9/2000**

Site Summary Level: **General Electric**

HQ ID: **0461**

Project **OK-013 / General Electric D&D (Environmental Restoration)**

General Project Information

Project Description Narratives

Purpose, Scope, and Technical Approach:

The purpose of the project is to decontaminate hot cell #4 at the GE Vallecitos Nuclear Center in Pleasonton, CA. This hot cell is one of four hot cells in the complex but this was the only one in which DOE contamination was involved. Also involved in the project is the decontamination of a glovebox, which is in another building.

Definition of Scope: The GE D&D Project has been split into phases. Phase 1 will include the following:

a. Hot Cell #4 surveillance and maintenance activities.
b. Development of a characterization plan and health and safety plan.
c. Characterization of Hot Cell #4 and the Glovebox through radiological surveys to determine locations and concentrations of radioactive contamination.
d. Development of a decontamination and restoration plan.

Phase 2 includes the following:

e. Decontamination and refurbishment of Hot Cell #4 (11` high x 17` long x 6` wide) including removal of the alpha liner.
f. Decontamination and disposal of the Emission Spectrograph Glovebox (6` high x 9` long x 3` wide).
g. Confirmation sampling and waste sampling and analysis prior to shipment.
h. Packaging and disposal of construction debris and equipment waste. Low level waste (approx. 20.0 cubic meters) will be disposed at Hanford. Non-aqueous remote handled transuranic waste (approx. 20.0 cubic meters) will be sent to WIPP.

Technical Approach: Remedy selection for this D&D project will be driven by the requirements prescribed by the NRC and DHS licenses. Phase 1 will include characterization and routine surveillance and maintenance and non-routine maintenance. Phase 2 will be decommissioning. A decontamination approach will be utilized so that simpler and more passive methods are used first, advancing to more agressive methods if needed. Passive techniques include standard vacumming, damp cloth wiping, and hand washing. If these passive techniques are not effective, more agressive methods will be used such as dry abrasive blasting and vacuum, scabbling, and pressure washing. GE is using existing technologies for D&D.

Waste generated from the D&D project will require disposal at Hanford and the Waste Isolation Pilot Plant. Approximately 20 cubic meters of remote handled transuranic waste will be generated as a result of the D&D project. In order to meet the completion dates specified in this plan, transuranic waste will be disposed of at WIPP.

Project Status in FY 2006:

Project Baseline Summary Report

Data Source: **EM CDB**

Report Number: **GEN-01b**

Operations/Field Office: **Oakland**

Print Date: **3/9/2000**

Site Summary Level: **General Electric**

HQ ID: **0461**

Project **OK-013 / General Electric D&D (Environmental Restoration)**

Project Description Narratives

This project is to be completed by FY 2007. Therefore all activities such as surveillance and maintenance during decontamination, characterization, plans, decontamination, sampling, packaging of waste, and disposal will be complete by FY2007. At the end of FY06 the majority of the decontamination activities will have been completed and most of the waste will have been shipped offsite.

Post-2006 Project Scope:

Based on proposed funding this project is to be completed by 2007. As such, no decontamination and restoration work will be required post 2007. The post - FY06 scope will consist of final decontamination activities, the remainder of any waste shipments, and the release for unrestricted use process.

Project End State

This is the only project identified by DOE/EM at GE. The hot cell will be turned back to GE and no post-remedial action institutional controls will be required.

Cost Baseline Comments:

The cost baseline is based on GE serving as the prime contractor. The cost baseline assumes no groundwater or soil contamination. The cost baseline is divided into phases. Phase I includes characterization and routine surveillance and maintenance and non-routine maintenance from the start of work. Phase 2 will be decontamination. DOE plans to share Hot Cell #4 decontamination and refurbishment costs with GE. However, this cost share has not been negotiated so the cost baseline represents total project costs. This cost baseline assumes TRU waste will be disposed of at WIPP and availability of shipping casks at the required time. The cost baseline assumes TRU waste disposal costs are not part of this project (disposal costs will be covered by WIPP). The Phase I estimate includes a contingency of 20%. The phase 2 estimate is based on an independent estimate from DOE/HQ.

Safety & Health Hazards:

The primary hazards at this site are radiological and industrial. A site specific health and safety plan will be prepared to identify the hazards associated with characterization and D&D activities. Surveillance and maintenance of Hot Cell facility systems and components are necessary to maintain a safe environment for the workers in ongoing operations around Hot Cell #4. In the decommissioning phase of the project, pricncipal hazards will be potential radiological hazard exposure to workers and normal occupational safety hazards related to building decontamination.

Safety & Health Work Performance:

Work will be completed in accordace with activities described in work authorization packages prepared by General Electric. A site specific health and safety plan will be prepared prior to initiation of charactierzation and D&D activities describing hazards and mitigation techniques that will be utilized to enhance worker safety. Operational awareness will be performed by GE management and DOE to ensure workers are complying with health and safety requirements.

This project in currently in the planning stage, and therefore additional details are not available at this time.

PBS Comments:

Project Baseline Summary Report

Data Source: **EM CDB** | Report Number: **GEN-01b**

Operations/Field Office: **Oakland** | Print Date: **3/9/2000**

Site Summary Level: **General Electric** | HQ ID: **0461**

Project **OK-013 / General Electric D&D (Environmental Restoration)**

Project Description Narratives

The GE Vallecitos Nuclear Facility is a privately owned commercial site. GE owns and operates the site and performs all landlord functions. As GE is a privately owned commerical facility and DOE is only removing contamination from an active Hot Cell facility, minimal public participation is anticipated. Should mixed waste be encountered,public participation will be solicited for the FFCA Site Treatment Plant process. Public comment will also be solicited through the NEPA process. DOE submitted an FFCA planning document as a place holder in case mixed waste is generated. DOE is negotiating a potential cost share agreement to split the cost of the D&D effort which would pro-rate the cost of the D&D work based on past usage by DOE and GE of the facilities.

Baseline Validation Narrative:

In October 1995, DOE Oakland prepared an independent activity based government estimate of the Phase I scope of work for the GE project. Using this estimate, a comprehensive comparison was made with the Phase I estimate prepared by GE. A report was prepared that discussed major differences point by point. A contract has not been let to date so negotiations have not been pursued. Phase II D&D has not been validated.

General PBS Information

Project Validated? **Date Validated:**

Has Headquarters reviewed and approved project? No

Date Project was Added: 12/1/1997

Baseline Submission Date: 7/13/1999

FEDPLAN Project? No

Drivers:

CERCLA	RCRA	DNFSB	AEA	UMTRCA	State	DOE Orders	Other
N	N	N	Y	N	Y	Y	Y

Project Identification Information

DOE Project Manager: Michael Lopez

DOE Project Manager Phone Number: 510-637-1633

DOE Project Manager Fax Number: 510-637-2031

DOE Project Manager e-mail address: mike.lopez@oak.doe.gov

Is this a High Visibility Project (Y/N):

Planning Section

Project Baseline Summary Report

Data Source: **EM CDB**

Report Number: **GEN-01b**

Operations/Field Office: **Oakland**

Print Date: **3/9/2000**

Site Summary Level: **General Electric**

HQ ID: **0461**

Project **OK-013 / General Electric D&D (Environmental Restoration)**

Baseline Costs (in thousands of dollars)

	1997-2006 Total	2007-2070 Total	1997-2070 Total	1997	Actual 1997	1998	Actual 1998	1999	2000	2001	2002	2003	2004	2005	2006
PBS Baseline (current year dollars)	19,613	3,000	22,613					313	500	3,000	3,000	3,200	3,300	3,300	3,000
PBS Baseline (constant 1999 dollars)	17,823	2,526	20,349					313	487	2,861	2,802	2,928	2,957	2,896	2,579
PBS EM Baseline (current year dollars)	19,613	3,000	22,613					313	500	3,000	3,000	3,200	3,300	3,300	3,000
PBS EM Baseline (constant 1999 dollars)	17,823	2,526	20,349					313	487	2,861	2,802	2,928	2,957	2,896	2,579

	2007	2008	2009	2010	2011-2015	2016-2020	2021-2025	2026-2030	2031-2035	2036-2040	2041-2045	2046-2050	2051-2055	2056-2060	2061-2065	2066-2070
PBS Baseline (current year dollars)	3,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PBS Baseline (constant 1999 dollars)	2,526	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PBS EM Baseline (current year dollars)	3,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PBS EM Baseline (constant 1999 dollars)	2,526	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Baseline Escalation Rates

1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
		0.00%	2.70%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%

Project Baseline Summary Report

Data Source: **EM CDB** | Report Number: **GEN-01b**

Operations/Field Office: **Oakland** | Print Date: **3/9/2000**

Site Summary Level: **General Electric** | HQ ID: **0461**

Project **OK-013 / General Electric D&D (Environmental Restoration)**

2010	2011-2015	2016-2020	2021-2025	2026-2030	2031-2035	2036-2040	2041-2045	2046-2050	2051-2055	2056-2060	2061-2065	2066-2070
2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%

Project Reconciliation

Project Completion Date Changes:

Previously Projected End Date of Project: 9/1/2005

Current Projected End Date of Project: 9/30/2007

Explanation of Project Completion Date Difference (if applicable):

Project Cost Estimates (in thousands of dollars)

Previously Estimated Lifecycle Cost (1997 - 2070, 1998 Dollars):	20,650	**Actual 1997 Cost:**	**Actual 1998 Cost:**
Previously Estimated Lifecycle Cost of Project (1999 - 2070, 1998 Dollars):	20,650	**Inflation Adjustment (2.7% to convert 1998 to 1999 dollars):**	558
Previously Estimated Lifecycle Cost (1999 - 2070, 1999 Dollars):	21,208		

Project Cost Changes

	Cost Adjustments	Reconciliation Narratives
Cost Change Due to Scope Deletions (-):		
Cost Reductions Due to Efficiencies (-):		Gov.
Cost Associated with New Scope (+):		
Cost Growth Associated with Scope Previously Reported (+):	558	Difficulty in negotiating the contract with GE has caused schedule delays and the concomitant cost
Cost Reductions Due to Science & Technology Efficiencies (-):		
Subtotal:	21,766	
Additional Amount to Reconcile (+):	-1,417	
Current Estimated Lifecycle Cost (1999 - 2070, 1999 Dollars):	**20,349**	

Project Baseline Summary Report

Data Source: **EM CDB**

Report Number: **GEN-01b**

Operations/Field Office: **Oakland**

Print Date: **3/9/2000**

Site Summary Level: **General Electric**

HQ ID: **0461**

Project **OK-013 / General Electric D&D (Environmental Restoration)**

Milestones

Milestone/Activity	Field Milestone Code	Original Date	Baseline Date	Legal Date	Forecast Date	Actual Date	EA	DNFSB	Mgmt. Commit.	Key Decision	Intersite
Project Start			12/1/1997								
Project End			9/30/2007								

Milestones - Part II

Milestone/Activity	Field Milestone Code	Critical Decision	Critial Closure Path	Project Start	Project End	Mission Complete	Tech Risk	Work Scope Risk	Intersite Risk	Cancelled	Milestone Description
Project Start				Y							Project start date.
Project End					Y	Y					Project end date.

Performance Measure Metrics

Category/Subcategory	Units	1997-2006 Total	2007-2070 Total	1997-2070 Total	Actual Pre-1997	Planned 1997	Actual 1997	Planned 1998	Planned 1999	Planned 2000	Planned 2001	Planned 2002	Planned 2003	Planne 20(
TRU														
Storage	M3							0.00	0.00	0.00	0.00	0.00	0.00	0.(
Rem. Waste														
Disposed	M3	25.00	15.00	40.00				0.00	0.00	0.00	0.00	0.00	0.00	5.(

Category/Subcategory	Units	Planned 2004	Planned 2005	Planned 2006	Planned 2007	Planned 2008	Planned 2009	Planned 2010	Planned 2011 - 2015	Planned 2016 - 2020	Planned 2021 - 2025	Planned 2026 - 2030	Planned 2031 - 2035
TRU													
Storage	M3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rem. Waste													
Disposed	M3	5.00	5.00	15.00	15.00								

Project Baseline Summary Report

Data Source: **EM CDB**

Report Number: **GEN-01b**

Operations/Field Office: **Oakland**

Print Date: **3/9/2000**

Site Summary Level: **General Electric**

HQ ID: **0461**

Project **OK-013 / General Electric D&D (Environmental Restoration)**

Category/Subcategory	Units	Planned 2036 - 2040	Planned 2041 - 2045	Planned 2046 - 2050	Planned 2051 - 2055	Planned 2056 - 2060	Planned 2061 - 2035	Planned 2066 - 2070	Exceptions	Lifecycle Total
TRU										
Storage	M3	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Rem. Waste										
Disposed	M3									40.00