

Project Baseline Summary Report

Data Source: **EM CDB**
Operations/Field Office: **Savannah River**
Site Summary Level: **Savannah River Site**
Project **SR-ER09 / HWCTR Projects**

Report Number: **GEN-01b**
Print Date: **3/9/2000**
HQ ID: **0486**

General Project Information

Project Description Narratives

Purpose, Scope, and Technical Approach:

Definition of Scope: The decision not to fund HWCTR in FY99 and FY00 was made very late in FY97. As a result, a firm scope definition is not available. The deactivation plan for HWCTR is currently being drafted. The deactivation plan, as currently drafted, encompasses a two pronged approach - closure of the reactor dome to prevent deliberate entry, and removal of any exterior components not expected to last at least sixty years.

1 Technical Approach: As part of this deactivation effort, the following is planned:

1. Demolition of the 735-U Health physics building;
2. Removal of the exhaust stack and other exhaust system exterior structures;
3. Removal of the exhaust system fans;
4. Removal of the 904-1U underground waste storage tank;
5. Removal of the fence enclosing the HWCTR compound; and,
6. Welding the entrances to the reactor dome closed.

Project Status in FY 2006:

Funding limitations currently preclude completion of HWCTR decommissioning. According to the HWCTR draft deactivation plan, the reactor dome doors will be welded shut. No provision for routine surveillance and maintenance will be made. HWCTR will remain in this state until such time as a final disposition action is funded.

Post-2006 Project Scope:

Funding limitations currently preclude completion of HWCTR decommissioning. According to the HWCTR draft deactivation plan, the reactor dome doors will be welded shut. No provision for routine surveillance and maintenance will be made. HWCTR will remain in this state until such time as a final disposition action is funded.

Project End State

This project provides for the deactivation of HWCTR only. Additional projects will be required to meet the EM site end state. Contamination in HWCTR is expected to be consolidated within the confines of the reactor building. At this time, an end state for HWCTR has not been defined. No plans have been made at this time to reuse HWCTR after deactivation (post-FY98).

No nuclear materials, spent fuel, or high level waste are stored in HWCTR, nor will any be generated by this project. Waste streams generated by this project will be defined in the deactivation plan when complete, most likely categorized in both cases as low level waste or mixed waste. Specific treatment methodologies for these wastes will depend on characterization, which has not been performed at this time.

Cost Baseline Comments:

Costs identified in this PBS are rough order of magnitude engineering estimates only.

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Date of Dataset: **9/20/1999**

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Project Description Narratives

Safety & Health Hazards:

The Heavy Water Components Test Reactor (HWCTR) has been closed since 1964. Source terms include activation products in the reactor vessel and concrete shielding, contaminated piping resulting from fuel failures, and some scattered spots of contamination around the building. Hazardous chemicals are found in the form of mercury, lead, chromium, and PCBs.

The criteria for determining the radiological hazard categories are provided in DOE-STD-1027-92, and the criteria for determining the chemical hazard categorization are provided in WSRC-MS-92-206. Determination of the above hazards are described in S-HAD-U-00001, Rev. 0, "Heavy Water Components Test Reactor Building 770-U Hazards Assessment Document", Section 7.0, "Hazards Assessment". Chemical inventories are controlled in accordance with procedure FDP 14.1, "Chemical Management Program".

Safety & Health Work Performance:

Activities and check points are described by the Integrated Management System Description. The conditions and requirements are clearly established and agreed upon prior to the starting of any project and those requirements are contractually binding upon WSRC. The key elements of the WSRC Integrated Safety Program are to define the scope of work, identify and analyze hazards associated with the work, develop and implement hazard controls, perform work within controls, and provide feedback on adequacy of controls and continue to improve safety management. The WSRC Integrated Procedures Management System is the primary mechanism for implementing the objective, principles and functions of the Safety Management System. This system establishes Company-Level, Division-level, and Program-specific procedures consistent with organizational roles, and ensures a consistent, discipline site-wide approach to safety while performing work. The resource description, costs and skill mix are defined in the following Sections: Costs D.2.2 and D.3, FTEs D. 2.5 and 2.7 of this document.

PBS Comments:

None.

Baseline Validation Narrative:

Not Applicable.

General PBS Information

Project Validated?	Date Validated:
Has Headquarters reviewed and approved project?	No
Date Project was Added:	12/1/1997
Baseline Submission Date:	7/3/1999
FEDPLAN Project?	Yes

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General PBS Information

Drivers:	CERCLA	RCRA	DNFSB	AEA	UMTRCA	State	DOE Orders	Other
	Y							Y

Project Identification Information

DOE Project Manager: C. V. Anderson
DOE Project Manager Phone Number: 803-725-3966
DOE Project Manager Fax Number: 803-725-7548
DOE Project Manager e-mail address: Cynthia-V.Anderson@srs.gov
Is this a High Visibility Project (Y/N):

Planning Section

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)	8,746	0	8,746	4,847	4,847	3,899	3,899		0	0	0	0	0	0	0	
PBS Baseline (constant 1999 dollars)	8,746	0	8,746	4,847	4,847	3,899	3,899		0	0	0	0	0	0	0	
PBS EM Baseline (current year dollars)	8,746	0	8,746	4,847	4,847	3,899	3,899		0	0	0	0	0	0	0	
PBS EM Baseline (constant 1999 dollars)	8,746	0	8,746	4,847	4,847	3,899	3,899		0	0	0	0	0	0	0	
	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)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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	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 (constant 1999 dollars)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PBS EM Baseline (current year dollars)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PBS EM Baseline (constant 1999 dollars)	0	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%	0.00%		3.60%	3.60%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%
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
2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%

Project Reconciliation

Project Completion Date Changes:

Previously Projected End Date of Project: 9/1/1998

Current Projected End Date of Project: 9/30/1998

Explanation of Project Completion Date Difference (if applicable):

Project Cost Estimates (in thousands of dollars)

Previously Estimated Lifecycle Cost (1997 - 2070, 1998 Dollars):	9,267	Actual 1997 Cost:	4,847	Actual 1998 Cost:	3,899
Previously Estimated Lifecycle Cost of Project (1999 - 2070, 1998 Dollars):	521	Inflation Adjustment (2.7% to convert 1998 to 1999 dollars):			14

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Project Reconciliation

Previously Estimated Lifecycle Cost (1999 - 2070, 1999 Dollars): 535

Project Cost Changes

	Cost Adjustments	Reconciliation Narratives
Cost Change Due to Scope Deletions (-):	535	Scope modified from decommissioning to deactivation of HWCTR.
Cost Reductions Due to Efficiencies (-):		
Cost Associated with New Scope (+):		
Cost Growth Associated with Scope Previously Reported (+):		
Cost Reductions Due to Science & Technology Efficiencies (-):		
Subtotal:	0	
Additional Amount to Reconcile (+):	0	
<hr/>		
Current Estimated Lifecycle Cost (1999 - 2070, 1999 Dollars):	0	

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	SR-ER09-001		10/1/1996								
Project End	SR-ER09-002		9/30/1998								

Milestones - Part II

Milestone/Activity	Field Milestone Code	Critical Decision	Critical Closure Path	Project Start	Project End	Mission Complete	Tech Risk	Work Scope Risk	Intersite Risk	Cancelled	Milestone Description
Project Start	SR-ER09-001			Y							
Project End	SR-ER09-002				Y						