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2. To: (Receiving Organization) Distribution	3. From: (Originating Organization) Operations & Transition Facilities Projects	4. Related EDT No.: N/A
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1	WHC-SD-F031-PMP-002		0	Project-Specific Project Management Plan for the Sodium Storage Facility	QD	1/2		

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Document Number: WHC-SD-F031-PMP-002, REV 0

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2. Title Project-Specific Project Management Plan Sodium Storage		3. Number WHC-SD-F031-PMP-002	4. Rev No. 0
5. Key Words Project Management Plan Sodium Storage Facility PMP SSF FFTF <i>KMB 12/29/94</i>		6. Author Name: D. R. Shank Signature Organization/Charge Code 7F160/B139D	
7. Abstract This Project-Specific Project Management Plan describes the project management methods and controls used by the WHC Projects Department to manage Project 03-F-031. The Sodium Storage Facility provides for storage of the 260,000 gallons of sodium presently in the FFTF Plant. The facility will accept the molten sodium transferred from the FFTF sodium systems, and store the sodium in a solid state under an inert cover gas until such time as a Sodium Reaction Facility is available for final disposal of the sodium.			
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PROJECT MANAGEMENT PLAN

**FAST FLUX TEST FACILITY
SODIUM STORAGE FACILITY
PROJECT-SPECIFIC
PROJECT MANAGEMENT PLAN
03-F-031**

PREPARED BY

WESTINGHOUSE HANFORD COMPANY

OCTOBER 1994

for the

**U.S. DEPARTMENT OF ENERGY
RICHLAND OPERATIONS OFFICE
RICHLAND, WASHINGTON**

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ACRONYMS

A/E	Architect Engineer
CCB	Change Control Board
CDR	Conceptual Design Report
CF	Construction Forces
CM	Construction Management
CR	Change Request
DOE HQ	Department of Energy - Headquarters
FDC	Functional Design Criteria
FP	Fixed Price
FFTF	Fast Flux Test Facility
PMP	Project Management Plan
PONC	Price of Non-Conformance
RL	Department of Energy - Richland Operations Office
SSF	Sodium Storage Facility
TWRS	Tank Waste Remediation System
WBS	Work Breakdown Structure
WHC	Westinghouse Hanford Company

Project-Specific
Project Management Plan

Project Number and Title:
Project 95L-EXF-028, Sub-Project
03-F-031, Fast Flux Test Facility
Sodium Storage Facility (SSF)

WHC PE: D. R. Shank
RL PE: D. M. Collado

INTRODUCTION

This Project-Specific Project Management Plan (PMP) supplements the Westinghouse Hanford Transition Project Plan WHC-SD-FF-SSP-004, Appendix A-1, and any subsequent revisions

1.0 Project Objectives

- 1.1 Purpose of Project: Sub-project 03-F-031 shall design and construct a facility to store the sodium off-loaded from the FFTF facility.
- 1.2 Technical Objectives: This facility will provide safe storage of the sodium in tanks existing on the site, specifically designed for such use.

The technical objectives are described in greater detail in the approved Functional Design Criteria (FDC) WHC-SD-FF-FDC-009.

1.3 Schedule Objectives:

Source and Date: Schedule objectives were developed from the Conceptual schedule in the Westinghouse Hanford Company (WHC) approved CDR, WHC-SD-FF-CDR-006, Rev. 0, approved by WHC October 18, 1994.

<u>WBS Element</u>	<u>Activity</u>	<u>Start</u>	<u>Complete</u>
1.0	Engineering	1/3/95	4/30/97
1.1	Def. Design (DD)	1/3/95	6/20/97
1.1.1	A/E DD	1/3/95	5/31/95
1.1.2	WHC DD	1/3/95	6/20/95
1.2	Eng. Inspection (E/I)	6/15/95	4/30/97
1.2.1	A/E E/I	6/21/95	4/30/97
1.2.2	WHC E/I	6/15/95	4/30/97
2.0	Procurement	N/A	N/A
3.0	Construction	6/15/95	1/31/97
3.1	On-site Contractor (ICF KH CF)	6/15/95	9/16/96

3.2	Off-site contractor (ICF KH CM)	7/5/95	1/31/97
3.2.1	Unit Price CM	7/5/95	9/29/95
3.2.2	Fixed Price CM	10/2/95	1/31/97
3.3	OAC Section I & II Approved by WHC		1/31/97
4.0	WHC Project Mgmt.	1/3/95	4/30/97
4.1	OAC Section III Approved by WHC		3/14/97

1.4 Cost Objectives (\$000)

Source and Date: Cost objectives were developed from the conceptual estimate in the WHC approved CDR, WHC-SD-FF-CDR-006, Rev. 0, approved by WHC October 18, 1994.

<u>WBS Element</u>	<u>Activity</u>	<u>Estimated Cost</u>	<u>Contingency</u>	<u>Total</u>
1.0	Engineering	1,447K		1,447K
1.1	Def. Design (DD)	990K		990K
1.1.1	A/E DD	818K		818K
1.1.2	WHC DD	172K		172K
1.2	Engineering Inspection (E/I)	457K		457K
1.2.1	A/E E/I	378K		378K
1.2.2	WHC E/I	79K		79K
2.0	Procurement	0		0
3.0	Construction	6,988K		6,988K
3.1	On-site Contractor (ICF KH CF)	1,041K		1,041K
3.2	Offsite Contractor (ICF KH CM)	5,947K		5,947K
3.2.1	Unit Price CM	204K		204K
3.2.2	Fixed Price CM	5,743K		5,743K
4.0	WHC Project Mgmt	179K		179K
5.0	Contingency		1,786K	1,786K
Total Estimated Costs		8,614K		10,400K
Other Project Support Costs (Expense)		1,357K	270K	1,627K
Total Project Costs		9,971K	2,056K	12,027K

Project support organizations will be held accountable for cost and schedule impacts to this project. FFTF will be financially accountable for delays to the project related to lack of plant support, i.e.; generation/review and approval of design and design change documents, operator/health physics and safety support. These types of plant delays are referred to as Price of Non-Conformance (PONC) changes. PONC accounts will be established and funded from paragraph 1.4 above, "Other Project Support Costs (Expense)." ICF KH will use the existing white card system for both ICF KH Construction Forces PONC and Unit Price/Fixed Price Contractor PONC.

1.5 Contingency Authorization Limits/Change Control Requirements:

Change Control Board (CCB) action is initiated to address changes to the project scope, schedule or cost that exceed the thresholds defined in this section. All changes are approved and documented using the Change Request (CR) form. Change requests shall be completed immediately upon the identification of a prospective change as described in Section P-14 of WHC-CM-6-2, Projects Department Procedures, which supports WHC-CM-2-5, Management Control System. If a CR is prepared, based on preliminary information, the final impact assessment information will be compared to identify any significant difference. If the difference is significant, the original CR will be referenced in a follow-up CR. A significant difference is defined as one that differs from the preliminary information by 10% or more.

Thresholds	Technical	Cost	Schedule
Level 1 DOE HQs (PSO)	Any change in scope identified & approved for HQ Program Manager/ Project Manager Control Source Document - DOE HQ's Office of Waste Operations (OWO) Standard Operating Practices and Procedures OWO 5.06	Any Change $\geq$ \$5 Million or 10% TEC, whichever is less	Level 1 HQ Milestones $\geq$ 2 Months
Class I (Level 2) DOE RL	Any changes to PSWBS *Any changes to Functional Design Criteria or scope identified & approved for RL control	Any change $<$ \$5 Million or $\geq$ \$50 Thousand	Any change to Baseline Milestones
Class II WHC Project Mgr.	Definitive Design Media	$<$ \$50K $\geq$ \$5K	Level 3 Milestones on Project Master Schedule $<$ 1 Month
Class III Contractor	Changes other than Class I or Class II	$<$ \$5K	Level 4 Milestones Any change

PSO = Program Secretarial Officer
PSWBS = Project Summary Work Breakdown Structure
* = RL Program Approval

$<$ = Less than
 $\geq$ = Greater than or equal to
 $\leq$ = Less than or equal to

NOTE: It is not permissible to break a large change into several smaller changes to reduce the classification. Each project change shall be identified on a single, stand alone CR.

RL approval is required for usage of any contingency when available contingency is less than \$430K. Reference: 1.4 (5% x TEC w/o Contingency)

The FFTF CCB membership is contained in the FFTF Transition Project Plan, WHC-SD-FF-SSP-004, Appendix A-1. For specific membership see that document.

Funds remaining after completion of a work element in the cost account plan may be moved to another work element by the Project Engineer.

2.0 PROJECT DESCRIPTION/JUSTIFICATION

2.1 Description

The scope of this project is to design and construct a facility to store radioactive and non-radioactive sodium that is to be removed from the FFTF. Four existing storage tanks will be utilized that are capable of storing the estimated 260,000 gallons of sodium. These tanks were originally built for the Clinch River Breeder Reactor Plant and have been stored in an outdoor laydown yard near the Hanford 300 Area since 1985. There are three 80,000 gallon tanks and one 52,000 gallon tank of Government Furnished Equipment (GFE) that can be utilized for this project.

Modifications to the tank internals and/or nozzle connections are required. These modifications will be made to the tanks prior to relocation to the SSF. All nozzles will be fitted with the required reducers and/or adapters to provide a connection of the size and material type indicated on the design drawings. At this time, the recommended modifications to the internals of tanks T-1, T-2 and T-3 are limited to modifications and extension of the sodium fill line. There are no required modifications to the internal of the 52,000 gallon tank, T-4.

The tanks will be moved approximately 9 miles from the laydown yard and installed on new foundations in the SSF. The SSF building provides shielding and weather protection for the tanks and installed equipment.

Transfer of the sodium is expected to take approximately 18 months and transfer of the sodium to a future reaction facility is expected to take approximately 2 years. Storage of the sodium in a frozen state in the tanks will require minimal operation and maintenance support. The design and construction of the SSF will

use conventional technology and will not disrupt current and projected activities at the FFTF site.

2.2 Justification

Construction and operation of the SSF is a crucial activity to achieving a timely and cost effective deactivation of the FFTF. Completion of sodium drain from the plant will result in a major reduction in mortgage costs for the FFTF (estimated at \$35M per year). As a result, efforts are focused on accelerating construction of this facility to the maximum extent possible within budgetary and regulatory constraints.

The sodium coolant will be maintained within the FFTF systems prior to drain, and within the SSF as product material until evaluation is completed in June 1998, which will determine the final sodium disposition and form. Current planning is that the sodium will be converted to sodium hydroxide for use at Hanford by the Tank Waste Remediation System (TWRS) Pretreatment Program for caustic washing of high level waste tank sludges. In the event the 1998 evaluation determines the sodium hydroxide use at TWRS is not viable, the sodium will have to be converted to an acceptable stable form for disposal as waste. Because of this current uncertainty in the final regulatory status of the sodium, the SSF will be designed to meet the storage requirements of RCRA, as implemented by WAC 173-303, "Dangerous Waste Regulation." If the sodium is later determined to be waste, no facility modifications will be required to meet storage requirements.

3.0 PROJECT ORGANIZATION

See FFTF Transition Project Plan, WHC-SD-FF-SSP-004, Appendix A-1.

4.0 PRINCIPAL/PROJECT PARTICIPANT RESPONSIBILITIES

See generic PMP, SD-MP-PMP-001, Rev. 1.

5.0 PROJECT MANAGEMENT AND CONTROL

5.1 Work Breakdown Structure

See Section 1.3 above.

5.2 Baseline Definition

The technical (scope) baseline is defined in the Functional Design Criteria, WHC-SD-FF-FDC-009, Rev. 0, released July 27, 1994 and the Engineering Change Notice 616226 to the Functional Design Criteria dated October 20, 1994. The schedule baseline is defined

in Section 1.3 above. The cost baseline is defined in Section 1.4 above.

5.3 Baseline Change Control

See Section 1.5 above.

5.4 Change Approval Requirements

See Section 1.5 above.

5.5 Performance Monitoring and Reporting

See FFTF Transition Project Plan, WHC-SD-FF-SSP-004, Appendix A-1.

5.6 Project Meetings

See generic PMP, SD-MP-PMP-001, Rev. 1.

5.7 Configuration Management

See generic PMP, SD-MP-PMP-001, Rev. 1.

5.8 System Engineering

See generic PMP, SD-MP-PMP-001, Rev. 1.

6.0 **QUALITY ASSURANCE**

Project-Specific Quality Assurance Plan, WHC-SD-F031-QAPP-001, Rev. 0 and any subsequent revisions.

7.0 **ENVIRONMENTAL ASSURANCE**

An Environmental Assessment is pending RL approval that encompasses the FFTF Transition Project. Project specific NEPA documentation for this sub-project has not been requested or generated. See generic PMP, SD-MP-PMP-001, Rev. 1 and Functional Design Criteria WHC-SD-FF-FDC-009 for additional information.

8.0 **PROCUREMENT PLAN**

See generic PMP, SD-MP-PMP-001, Rev. 1

9.0 **TEST AND EVALUATION PLAN**

See generic PMP, SD-MP-PMP-001, Rev. 1