HNF-SP-1234
Revision 0
UC-900

Facility Stabilization Project Fiscal Year 1998 Multi-Year Work Plan (MYWP) for WBS 1.4

Date Published
September 1997

Prepared for the U.S. Department of Energy
Assistant Secretary for Environmental Restoration

Project Hanford Management Contractor for the
U.S. Department of Energy under Contract DE-AC06-96RL13200

Date Received by IRA: 9/30/97 vmb

INFORMATION RELEASE REQUEST - (Long Form)

(GRAY SHADED AREAS NOT TO BE FILLED IN BY INITIATOR)

1. COMPLETE THIS SECTION FOR ALL DOCUMENTS

A. Information Category

Speech or Presentation
- ☐ Full Paper
- ☐ Journal Article
- ☐ Summary
- ☐ Multimedia Presentation
- ☐ Abstract
- ☐ Software
- ☐ Visual Aid
- ☒ Other Work Plan

B. Document ID Number (include rev., vol., etc.)

HNF-SP-1234, Rev. 0

C. List attachments (i.e., copyright permission, copyright transfer)

NONE

D. Document Title

Facility Stabilization Project
Fiscal Year 1998
Multi-Year Work Plan (MYWP)
for WBS 1.4

E. WHC Project or Program

FSP

F. New or novel (patentable) subject matter?
If "Yes", has disclosure been submitted by WHC?
☒ No or Yes
☐ No or Yes If "Yes", Disclosure No(s): _____

G. Information received from others in confidence, such as proprietary data, and/or inventions?
☒ No or Yes If "Yes", contact WHC General Counsel.

H. Copyrights? ☒ No or Yes If "Yes", attach permission.

I. Trademarks? ☒ No or Yes If "Yes", identify in document.

2. COMPLETE THIS SECTION FOR ALL DOCUMENTS REQUIRING SUBMISSION TO OSTI

A. Unclassified Category UC - 900

B. Budget & Reporting Code B&R - EW7002010

3. COMPLETE THIS SECTION ONLY FOR A JOURNAL SUBMISSION

A. Title of Journal

4. COMPLETE THIS SECTION ONLY FOR A SPEECH OR PRESENTATION

A. Title for Conference or Meeting

B. Group or Society Sponsoring

C. Date(s) of Conference or Meeting

D. City/State

E. Will material be published in proceedings? ☐ No or Yes
Will material be handed out? ☐ No or Yes

5. REVIEWS

Reviewers	Yes	Signature indicates Approval as Requested unless otherwise indicated Name (print)	Signature/Date	Limited-Use Info.
General Counsel	☐			☐
DOE-RL	☐			☐
Communications	☐			☐
Applied Technology-Export Controlled Information or International Program	☐			☐
Other	☐			☐
Other	☐			☐

6. Applied Technology Material Referenced
☒ No ☐ Yes

7. Release Level
☒ Public ☐ Limited Distribution

8. Author/Requestor
W.C. Floberg (Print and Sign) — 9/29/97 Date

9. Responsible Manager
D.E. Wertz (Print and Sign) — 9/29/97 Date

INFORMATION RELEASE ADMINISTRATION APPROVAL

IRA Approval is required before release. Release is contingent upon resolution of mandatory comments. NOTE: This block for IRA use only.

APPROVED FOR RELEASE OFFICIAL DOCUMENT Date 9/30/97

Date Cancelled

Date Disapproved

ERRATA SHEET

Please make the following changes to the attached document:

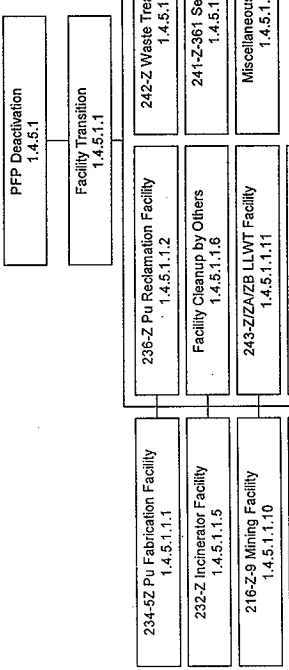
1. Remove existing pages "B.5-9/B.5-10, B.6-19/B.6-20, and B.6-21/B.6-22," and replace with new pages "B.5-9/B.5-10, B.6-19/B.6-20, and B.6-21/B.6-22."

2. Page B.5-2, paragraph 10, second bullet: Change "FY 1999" to read "FY 2000"

3. Page B.6-2, first new paragraph: Change "October 1, 1997" to read "February 16, 1998"

4. Page B.6-10, first paragraph: Change "May 7002" to read "May 2002"

PFP Deactivation Work Breakdown Structure



PHMC

MILESTONE DESCRIPTION SHEET

Title: COMPLETE CEMENTATION/DISCARD OR DISP. OF 1,269 KG BULK PU RESIDUE				Date: 7/31/97
Assigned To: FSP/PFP				CIN:
Program WBS Designator: 1.4.5.2				Due Date: 9/30/98
PBS No: RL-TP06				
MC #: TRP-97-409		TPA No:		Rev: 1

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): COMMIT #: RECOMM #:	Report X Letter Drawing(s) Other (Specify)	DOE-HQ X DOE-RL Other (Specify)

Milestone Description:
The cementation/discard or disposition of 1,269 Kg Bulk Pu Residues (total combined for FYs 1997 & 1998) out of a total of 3,765 Kg Bulk will be completed to the applicable discard criteria.

Description of what constitutes completion of this milestone:
The cementing, packaging for discard, or dispositioning of the PFP's inventory of miscellaneous Pu-bearing residues will be performed to criteria acceptable to Hanford's Central Waste Complex and the applicable regulatory agencies. Also included is all necessary stabilization, shipping, packaging and/or waste disposal tasks necessary to support the cementation/discard or disposition.
This milestone provides for the cementing, packaging for discard, and acceptable packaging for shipment to Hanford's Central Waste Complex of approximately 1,050 (1,269 total) Kg Bulk Pu-bearing residues in FY 1998 out of a total 3,765 Kg of residues currently stored in the PFP vaults. A letter will be issued to DOE-RL documenting completion of this milestone, also indicating the plutonium inventory of the material dispositioned and its packaging configuration.

PHMC

MILESTONE DESCRIPTION SHEET

Title: REVISE OPERATING SPECIFICATION DOCUMENT FOR OXIDE STORAGE AT PFP		**Date:** 7/31/97
Assigned To: FSP/PFP		**CIN:**
Program WBS Designator: 1.4.5.2		**Due Date:** 12/19/97
PBS No: RL-TP06		
MC #: TRP-98-409	**TPA No:**	**Rev:** 0

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): COMMIT #: RECOMM #:	Report X Letter Drawing(s) Other (Specify)	DOE-HQ X DOE-RL Other (Specify)

Milestone Description:
Revise operating specification document (OSD) for oxide storage at PFP.

Description of what constitutes completion of this milestone:
Revise the operating specification document (OSD) for plutonium oxide storage at PFP consistent with technical basis documentation. The purpose is to insure that the PFP vault storage OSD provides a can configuration so that plutonium dioxide, generated either by direct denitration, oxalate conversion, or thermal stabilization can be safely stored in PFP vaults consistent with accepted technical justification.
A letter will be issued to DOE-RL documenting revision of the OSD for plutonium storage at PFP.

1998 Multi-Year Work Plan Approval Sheet

Transition Program Division
U. S. Department of Energy
Richland Operations Office

Assistant Manager-Contracting Officer's Representative

J. E. Mecca for P. M. Knollmeyer — 9/24/97 (Date)

J. E. Mecca — 9/24/97 (Date)

B&W Hanford Company

W. F. Heer — 26 Sept 97 (Date)

D. B. Cartmell — 9/26/97 (Date)

Fluor Daniel Hanford, Inc.

L. Olguin — 9/26/97 (Date)

TABLE OF CONTENTS

PFP Stabilization

PFP Vault Management

Transition Project Management

Hanford Surplus Facilities Program 300 Area Revitalization

A.1.0 Technical Baseline

The MYWP technical baseline describes the work to be accomplished by the Project and the technical standards which govern that work.

A.1.1 Mission Statement

The primary Facility Stabilization mission is to provide minimum safe surveillance and maintenance of facilities and deactivate facilities on the Hanford Site, to reduce risks to workers, the public and environment, transition the facilities to a low cost, long term surveillance and maintenance state, and to provide safe and secure storage of special nuclear materials, nuclear materials, and nuclear fuel (SNM/NM/NF). Facility Stabilization will protect the health and safety of the public and our workers, protect the environment, and provide beneficial use of the facilities and other resources. Work will be in accordance with the Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement), local, national, international and other agreements, and in compliance with all applicable Federal, state, and local laws. The stakeholders will be active participants in the decision processes including establishing priorities, and in developing a consistent set of rules, regulations, and laws. The work will be leveraged with a view of providing positive, lasting economic impact in the region. Effectiveness, efficiency, and discipline in all mission activities will enable us to achieve our mission in a continuous and substantive manner.

As the mission for Facility Stabilization has shifted from production to support of environmental restoration, each facility is making a transition to support the Site mission. The mission goals include the following:

- Achieve deactivation of facilities for transfer to EM-40, using Plutonium/Uranium Extraction (PUREX) plant deactivation as a model for future facility deactivation.

- Manage nuclear materials in a safe and secure condition and where appropriate, in accordance with International Atomic Energy Agency (IAEA) safeguards rules.

- Treat nuclear materials as necessary, and store onsite in long-term interim safe storage awaiting a final disposition decision by U.S. Department of Energy (DOE).

- Implement nuclear materials disposition directives. In the near term these are anticipated to mostly involve transferring uranium to other locations for beneficial use.

- Work will be in accordance with the Tri-Party Agreement, and other agreements and in compliance with all applicable Federal, state and local laws.

The transition to deactivation will be accomplished through a phased approach, while maintaining the facilities in a safe and compliant configuration. In addition, Facility Stabilization will continue to maintain safe long-term storage facilities for Special Nuclear Material (SNM), Nuclear Material (NM), and Nuclear Fuel (NF).

The FSP deactivation strategy aligns with the deactivate facilities mission outlined in Hanford Site SE documentation. Inherent to the FSP strategies are specific Hanford Strategic Plan success indicators such as: reduction of risks to workers, the public and environment; increasing the amount of resources recovered for other uses; reduction/elimination of inventory and materials; and reduction/elimination of costly mortgages.

The FSP deactivation strategy is as follows:

HNF-SP-1234
Revision 0
UC-900

Facility Stabilization Project Fiscal Year 1998 Multi-Year Work Plan (MYWP) for WBS 1.4

Date Published
September 1997

Prepared for the U.S. Department of Energy
Assistant Secretary for Environmental Restoration

Project Hanford Management Contractor for the
U.S. Department of Energy under Contract DE-AC06-96RL13200

Date Received by IRA: 9/30/97 mb

INFORMATION RELEASE REQUEST - (Long Form)

(GRAY SHADED AREAS NOT TO BE FILLED IN BY INITIATOR)

1. COMPLETE THIS SECTION FOR ALL DOCUMENTS

A. Information Category

Speech or Presentation
- ☐ Full Paper
- ☐ Journal Article
- ☐ Summary
- ☐ Multimedia Presentation
- ☐ Abstract
- ☐ Software
- ☐ Visual Aid

☒ Other Work Plan

B. Document ID Number (include rev., vol., etc.)

HNF-SP-1234, Rev. 0

C. List attachments (i.e., copyright permission, copyright transfer)

NONE

D. Document Title

Facility Stabilization Project
Fiscal Year 1998
Multi-Year Work Plan (MYWP)
for WBS 1.4

E. WHC Project or Program

FSP

F. New or novel (patentable) subject matter?
If "Yes", has disclosure been submitted by WHC?
☒ No or Yes
☐ No or Yes If "Yes", Disclosure No(s):

G. Information received from others in confidence, such as proprietary data, and/or inventions?
☒ No or Yes If "Yes", contact WHC General Counsel.

H. Copyrights? ☒ No or Yes If "Yes", attach permission.

I. Trademarks? ☒ No or Yes If "Yes", identify in document.

2. COMPLETE THIS SECTION FOR ALL DOCUMENTS REQUIRING SUBMISSION TO OSTI

A. Unclassified Category UC - 900

B. Budget & Reporting Code B&R - EW7002010

3. COMPLETE THIS SECTION ONLY FOR A JOURNAL SUBMISSION

A. Title of Journal

4. COMPLETE THIS SECTION ONLY FOR A SPEECH OR PRESENTATION

A. Title for Conference or Meeting

B. Group or Society Sponsoring

C. Date(s) of Conference or Meeting

D. City/State

E. Will material be published in proceedings? ☐ No or Yes
Will material be handed out? ☐ No or Yes

5. REVIEWS

Signature indicates Approval as Requested unless otherwise indicated

Reviewers	Yes	Name (print)	Signature/Date	Limited-Use Info.
General Counsel	☐			☐
DOE-RL	☐			☐
Communications	☐			☐
Applied Technology-Export Controlled Information or International Program	☐			☐
Other	☐			☐
Other	☐			☐

6. Applied Technology Material Referenced
☒ No ☐ Yes

7. Release Level
☒ Public ☐ Limited Distribution

8. Author/Requestor
W.C. Floberg (Print and Sign) — 9/29/97 Date

9. Responsible Manager
D.E. Wertz (Print and Sign) — 9/29/97 Date

INFORMATION RELEASE ADMINISTRATION APPROVAL

IRA Approval is required before release. Release is contingent upon resolution of mandatory comments. NOTE: This block for IRA use only.

APPROVED FOR RELEASE OFFICIAL DOCUMENT Date 9/30/97

Date Cancelled

Date Disapproved

A-6001-401 (07/94)

THIS PAGE INTENTIONALLY
LEFT BLANK

10. *LEGENDS/NOTICES/MARKINGS* (Required by WHC-CM-3-4 or Reviewer) Reviewer indicates applicable markings to be affixed or removed.

	Affix	Remove	Initials		Affix	Remove	Initials
Applied Technology	☐	☐		Official Use Only	☐	☐	
Availability - OSTI	☑	☐	KMB	Patent Status	☐	☐	
Availability - ESTSC	☐	☐		Predecisional Information	☐	☐	
Availability - NTIS	☑	☐	KMB	Programmatic Notice	☐	☐	
Business-Sensitive Information	☐	☐		Proprietary Information	☐	☐	
Computer Software Notice	☐	☐		Purpose and Use	☐	☐	
Copyright License Notice	☐	☐		Thesis/Dissertation	☐	☐	
Export Controlled Information	☐	☐		Trademark Disclaimer	☐	☐	
Legal Disclaimer	☑	☐	KMB	Other:	☐	☐	
Limited Disclosure	☐	☐					

11. *MANDATORY COMMENTS* (List only mandatory comments here. All other comments shall be made on the document and returned to the author.)	Reviewer (Print & Sign)	Date	Resolved by Author/Requestor (Print & Sign)	Date

12. *ADDITIONAL INFORMATION/COMMENTS:*

THIS PAGE INTENTIONALLY
LEFT BLANK

ERRATA SHEET

Please make the following changes to the attached document:

1. Remove existing pages "B.5-9/B.5-10, B.6-19/B.6-20, and B.6-21/B.6-22," and replace with new pages "B.5-9/B.5-10, B.6-19/B.6-20, and B.6-21/B.6-22."

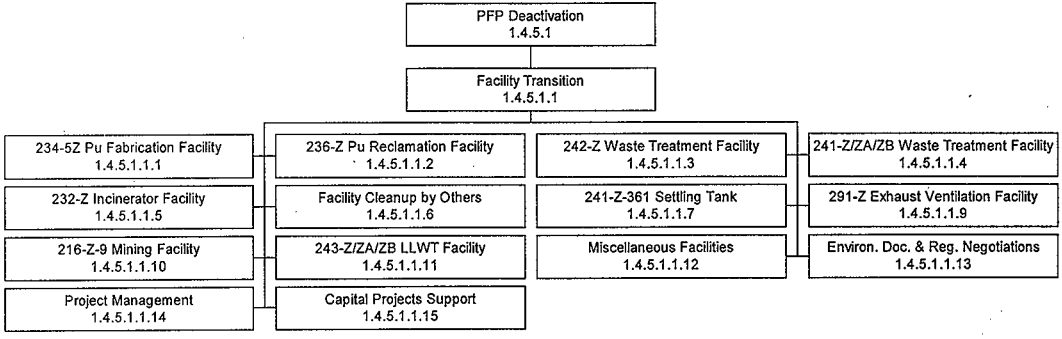
2. Page B.5-2, paragraph 10, second bullet: Change "FY 1999" to read "FY 2000"

3. Page B.6-2, first new paragraph: Change "October 1, 1997" to read "February 16, 1998"

4. Page B.6-10, first paragraph: Change "May 7002" to read "May 2002"

THIS PAGE INTENTIONALLY
LEFT BLANK

PFP Deactivation Work Breakdown Structure



HANFORD SITE WORK BREAKDOWN STRUCTURE DICTIONARY
FACILITY STABILIZATION
WBS: 1.4
10/03/1997

1. Activity Title: PFP DEACTIVATION	2. Date 7/31/1997	3. PBS Number RL-TP05	4. Dict Rev 0

5. Contract WBS No. 1.4.5.1.1	6. Corresponding FDS No. K6D	7. Baseline CR No.

8. Organization Name 15000	9. B & R No.

10. Scope of Work
This activity provides for the cleanup, transition deactivation, and turnover of all PFP facilities, except for the 2736-Z vaults and vault support facilities, in accordance with EM-60 guidelines. The following activities are included:

*234-5Z Plutonium Fabrication Facility Cleanup and Transition *236-Z Plutonium Reclamation Facility Cleanup and Transition *242-Z Waste Treatment and Americium Facility Cleanup and Transition *241-Z/ZA Tank Farm Waste Disposal Facility Cleanup and Transition *232-Z Incinerator Cleanup and Transition
*Facility Cleanup and Transition Performed by Others
*241-Z-361 Settling Tank Cleanup and Transition
*291-Z Exhaust Ventilation Building Cleanup and Transition
*216-Z-9 Mining Facility Cleanup and Transition
*243-Z,ZA,ZB Low Level Wastewater Treatment Facility Cleanup and Transition
*Miscellaneous Buildings Cleanup and Transition
*Environmental Documentation and Regulatory Negotiations
*Project Management

PHMC

MILESTONE DESCRIPTION SHEET

Title: COMPLETE CEMENTATION/DISCARD OR DISP. OF 1,269 KG BULK PU RESIDUE				Date: 7/31/97
Assigned To: FSP/PFP				CIN:
Program WBS Designator: 1.4.5.2				Due Date: 9/30/98
PBS No: RL-TP06				
MC #: TRP-97-409		TPA No:		Rev: 1

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): COMMIT #: RECOMM #:	Report X Letter Drawing(s) Other (Specify)	DOE-HQ X DOE-RL Other (Specify)

Milestone Description:
The cementation/discard or disposition of 1,269 Kg Bulk Pu Residues (total combined for FYs 1997 & 1998) out of a total of 3,765 Kg Bulk will be completed to the applicable discard criteria.

Description of what constitutes completion of this milestone:
The cementing, packaging for discard, or dispositioning of the PFP's inventory of miscellaneous Pu-bearing residues will be performed to criteria acceptable to Hanford's Central Waste Complex and the applicable regulatory agencies. Also included is all necessary stabilization, shipping, packaging and/or waste disposal tasks necessary to support the cementation/discard or disposition.
This milestone provides for the cementing, packaging for discard, and acceptable packaging for shipment to Hanford's Central Waste Complex of approximately 1,050 (1,269 total) Kg Bulk Pu-bearing residues in FY 1998 out of a total 3,765 Kg of residues currently stored in the PFP vaults. A letter will be issued to DOE-RL documenting completion of this milestone, also indicating the plutonium inventory of the material dispositioned and its packaging configuration.

PHMC

MILESTONE DESCRIPTION SHEET

Title: COMPLETE INSTALLATION OF SOLUTION STABILIZATION DENITRATION CALCI				Date: 9/15/97
Assigned To: BWHC/PFP STABILIZATION				CIN:
Program WBS Designator: 1.4.5.2				Due Date: 1/31/99
PBS No: RL-TP06				
MC #: TRP-97-406	TPA No:			Rev: 2

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG X OTHER	DNFSB (Y/N): N COMMIT #: RECOMM #:	Report X Letter Drawing(s) Other (Specify)	DOE-HQ X DOE-RL Other (Specify)

Milestone Description:
Complete installation of the solution stabilization denitration calciner in 234-5Z.

Description of what constitutes completion of this milestone:
A production scale denitration calciner has been designed, fabricated and installed in the applicable glovebox(es) in the 234-5Z facility and ready to initiate ATP/OTP testing. This denitration calciner consists of the calciner itself, electrical transformer system for the heaters and any applicable feed and waste storage tanks and associated transfer lines. All equipment and systems necessary for PRETREATMENT of solutions are NOT included in this milestone.
A letter will be issued to DOE-RL documenting installation of the denitration calciner consistent with this milestone description.

PHMC

MILESTONE DESCRIPTION SHEET

Title: REVISE OPERATING SPECIFICATION DOCUMENT FOR OXIDE STORAGE AT PFP		**Date:** 7/31/97
Assigned To: FSP/PFP		**CIN:**
Program WBS Designator: 1.4.5.2		**Due Date:** 12/19/97
PBS No: RL-TP06		
MC #: TRP-98-409	**TPA No:**	**Rev:** 0

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): COMMIT #: RECOMM #:	Report X Letter Drawing(s) Other (Specify)	DOE-HQ X DOE-RL Other (Specify)

Milestone Description:
Revise operating specification document (OSD) for oxide storage at PFP.

Description of what constitutes completion of this milestone:
Revise the operating specification document (OSD) for plutonium oxide storage at PFP consistent with technical basis documentation. The purpose is to insure that the PFP vault storage OSD provides a can configuration so that plutonium dioxide, generated either by direct denitration, oxalate conversion, or thermal stabilization can be safely stored in PFP vaults consistent with accepted technical justification.
A letter will be issued to DOE-RL documenting revision of the OSD for plutonium storage at PFP.

PHMC

MILESTONE DESCRIPTION SHEET

Title: COMPLETE CEMENTATION/DISCARD OR DISP. 2,569 KG BULK RESIDUES				Date: 7/31/97
Assigned To: FSP/PFP				CIN:
Program WBS Designator: 1.4.5.2				Due Date: 9/30/99
PBS No: RL-TP06				
MC #: TRP-98-406		TPA No:		Rev: 1

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): COMMIT #: RECOMM #:	Report X Letter Drawing(s) Other (Specify)	DOE-HQ X DOE-RL Other (Specify)

Milestone Description:
The cementation/discard or otherwise disposition of accumulative to date 2,569 Kg Bulk Pu Residues, out of a total of 3,765 Kg Bulk, will be completed to the applicable discard criteria.

Description of what constitutes completion of this milestone:
The cementing, packaging for discard, or dispositioning of the PFP's inventory of miscellaneous Pu-bearing residues will be performed to criteria acceptable to Hanford's Central Waste Complex and the applicable regulatory agencies. Also included is all necessary stabilization, shipping, packaging and/or waste disposal tasks necessary to support the cementation/discard or disposition.
This milestone provides for the cementing, packaging for discard, and acceptable packaging for shipment to Hanford's Central Waste Complex of 2,569 Kg Bulk Pu-bearing residues out of a total 3,765 Kg residues currently stored in the PFP vaults (1,300 Kg Bulk cemented in FY 1999). A letter will be issued to DOE-RL documenting completion of this milestone, also indicating the plutonium inventory of the material dispositioned and its packaging configuration.

1998 Multi-Year Work Plan
Approval Sheet

Transition Program Division
U. S. Department of Energy
Richland Operations Office

Assistant Manager-Contracting Officer's Representative

J. E. Mecca for P. M. Knollmeyer — 9/24/97 (Date)

J. E. Mecca — 9/24/97 (Date)
J. E. Mecca

B&W Hanford Company

W. F. Heer — 26 Sept 97 (Date)

D. B. Cartmell — 9/26/97 (Date)

Fluor Daniel Hanford, Inc.

L. Olguin — 9/26/97 (Date)

RELEASE AUTHORIZATION

Document Number:	HNF-SP-1234, Rev. 0
Document Title:	Facility Stabilization Project Fiscal Year 1998 Multi-Year Work Plan (MYPP) for WBS 1.4
Release Date:	9/30/97

This document was reviewed following the procedures described in WHC-CM-3-4 and is:

APPROVED FOR PUBLIC RELEASE

WHC Information Release Administration Specialist:

Kara M. Broz — September 30, 1997

TABLE OF CONTENTS

PUREX Sub-Project

300 Area/SNM Sub-Project

PFP Deactivation

PFP Stabilization

PFP Vault Management

324/327 Facility Transition Project

K Basin Deactivation

Accelerated Deactivation

Transition Project Management

Hanford Surplus Facilities Program 300 Area Revitalization

Appendix

A.1.0 Technical Baseline

The MYWP technical baseline describes the work to be accomplished by the Project and the technical standards which govern that work.

A.1.1 Mission Statement

The primary Facility Stabilization mission is to provide minimum safe surveillance and maintenance of facilities and deactivate facilities on the Hanford Site, to reduce risks to workers, the public and environment, transition the facilities to a low cost, long term surveillance and maintenance state, and to provide safe and secure storage of special nuclear materials, nuclear materials, and nuclear fuel (SNM/NM/NF). Facility Stabilization will protect the health and safety of the public and our workers, protect the environment, and provide beneficial use of the facilities and other resources. Work will be in accordance with the Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement), local, national, international and other agreements, and in compliance with all applicable Federal, state, and local laws. The stakeholders will be active participants in the decision processes including establishing priorities, and in developing a consistent set of rules, regulations, and laws. The work will be leveraged with a view of providing positive, lasting economic impact in the region. Effectiveness, efficiency, and discipline in all mission activities will enable us to achieve our mission in a continuous and substantive manner.

As the mission for Facility Stabilization has shifted from production to support of environmental restoration, each facility is making a transition to support the Site mission. The mission goals include the following:

- Achieve deactivation of facilities for transfer to EM-40, using Plutonium/Uranium Extraction (PUREX) plant deactivation as a model for future facility deactivation.

- Manage nuclear materials in a safe and secure condition and where appropriate, in accordance with International Atomic Energy Agency (IAEA) safeguards rules.

- Treat nuclear materials as necessary, and store onsite in long-term interim safe storage awaiting a final disposition decision by U.S. Department of Energy (DOE).

- Implement nuclear materials disposition directives. In the near term these are anticipated to mostly involve transferring uranium to other locations for beneficial use.

- Work will be in accordance with the Tri-Party Agreement, and other agreements and in compliance with all applicable Federal, state and local laws.

The transition to deactivation will be accomplished through a phased approach, while maintaining the facilities in a safe and compliant configuration. In addition, Facility Stabilization will continue to maintain safe long-term storage facilities for Special Nuclear Material (SNM), Nuclear Material (NM), and Nuclear Fuel (NF).

The FSP deactivation strategy aligns with the deactivate facilities mission outlined in Hanford Site SE documentation. Inherent to the FSP strategies are specific Hanford Strategic Plan success indicators such as: reduction of risks to workers, the public and environment; increasing the amount of resources recovered for other uses; reduction/elimination of inventory and materials; and reduction/elimination of costly mortgages.

The FSP deactivation strategy is as follows:

- Facilities on receipt of a shutdown notice will be deactivated to the point where a stable configuration exists which poses a low risk to follow-on long-term surveillance and maintenance (LTS&M), the environment and public.

- Facility deactivation plans will be developed to manage deactivation and will include defined turnover endpoints where deactivation activities end and LTS&M or D&D begin.

- Radioactive and hazardous materials will be identified and removed or stabilized in place. Utilities and facility inter-ties will be deactivated except as required for facility LTS&M and security.

- Only those systems and portions of a facility involved with the active safety and compliance envelope will be maintained and operated at the completion of deactivation. All aspects of the safety envelope will be challenged during the deactivation process to reflect the continual reduction in facility hazards. All facility reconfigurations will be performed under OSHA construction requirements.

- Because long time periods may be expected between deactivation and final disposition, characterization of the facility will be performed while knowledgeable facility staff and records are available. A graded approach to characterization of the facility will be employed to focus on high risk areas.

- SNM/NM/NF materials will be consolidated early in the facility deactivation process to minimize the safety and compliance envelope. Where feasible, these materials should be removed from the facility early in the deactivation process. When deactivation is complete a facility will no longer contain inventoried quantities of SNM/NM/NF.

- Stakeholders will be actively involved during the development of deactivation plans and their execution.

The long-term SNM/NM/NF storage mission within FSP aligns with the treat, store and disposition SNM/NM/NF materials mission outlined in Hanford Site SE documentation. Inherent to the FSP strategies are specific Hanford Strategic Plan success indicators such as: reduction of risks to workers, the public and environment through stabilization of SNM/NM/NF and reduction/elimination of costly mortgages through consolidation of SNM/NM/NF.

The SNM/NM/NF strategy is as follows:

- SNM/NM/NF will continued to be safely and compliantly stored until a national policy on their dispostion is formulated.

- SNM/NM/NF will be transferred to other beneficial uses where possible.

- The current safety and security approach with necessary interim upgrades will be challenged for reductions until a preferred longer term approach is selected.

- The criteria for the receipt, storage, treatment and disposition of SNM/NM/NF will continue to be developed, negotiated and implemented.

- SNM/NM/NF will be stored in a safe storage mode, and treated where necessary to provide for safe storage. Studies to determine the best alternatives for onsite material storage will continue.

- Stakeholders will be actively involved in the development of long-term treatment, storage and disposition plans through the National Environmental Policy Act process.

- Treatment for final disposition will await determination of the final disposition.

The Following are the specific sub-project mission strategies:

PUREX/UO3 (7.1.1)

The Plutonium Uranium Extraction Facility (PUREX) Deactivation Sub-Project will demonstrate a safe, cost-effective model for facility transition of the PUREX and transfer to EM-40. The project's chief emphasis is on the transition activities that remove, reduce, and/or stabilize the major radioactive sources and hazardous substances within the facilities. The PUREX HVAC system will then be modified to minimize long term surveillance and maintenance requirements and the utility systems will be deactivated. During transition the Project is responsible for the safe, secure, and environmentally sound management of the facilities. The surveillance and maintenance requirements will be maintained at the minimum safe compliance level. Develop the PUREX Transition Process so that it will be used as a model for future facility transitions.

300 Area Fuel Supply (7.1.2)

The Fuel Supply Shutdown Facility Sub-Project will be maintained in a regulatory-compliant state until turnover to EM-40 is completed. Shutdown activities will be performed as described in the "Shutdown Plan for the 300 Area Fuel Supply Facilities".

Resource Conservation and Recovery Act of 1976 (RCRA) implementation activities are also being carried out per the 303K Facility and Waste Acid Treatment System (WATS) RCRA closure plans.

To mitigate hazards of an unsafe roof, the 313 Building south portion will be isolated (no access or utilities).

Upon completion of shutdown, RCRA activities, and SNM relocation (and/or disposition), all Fuel Supply buildings will be ready to be transferred to EM-40.

PFP (7.1.3)

The mission strategy for the Plutonium Finishing Plant (PFP) Sub-Project is to implement the Record of Decision (ROD) resulting from the PFP Stabilization Environmental Impact Statement (EIS). This currently entails the following activities:

- Implementation of Defense Nuclear Facility Safety Board (DNFSB) Recommendation 94-1, by safely stabilizing reactive scrap inventories, initiating terminal cleanout activities, implementing required capital upgrades (Plutonium Stabilization & Handling (PUSH) System) and stabilizing vault material by calcination or other methods as appropriate in order to complete these activities, is minimally supported in FY98 and FY99 resulting in at least a 3 year delay in completion.

- Transition parts of the PFP Complex into a D&D ready state, including the implementation of ductwork remediation and radiation zone reduction activities as necessary and the isolation of the 2736-Z Vault complex from the balance of the plant. There is no support for PFP Facility Transition to deactivation in FY98 and FY99.

- Continue to maintain the safety envelope for the PFP Complex as defined in approved Operational Safety Requirement documentation;

- Safely and securely operate the PFP Vault complex to receive, store and ship SNM consistent with applicable Federal, State and International regulations and requirements until at least 2025; and,

- Continue to complete scheduled environmental upgrades and perform activities necessary to maintain

compliance with environmental regulations and compliance agreements.

Program and Environmental Management (7.1.6)

Program and Environmental Management provides centralized program/project management to plan, execute and control the Facility Stabilization baseline. Program and Environmental Management also provides for common safeguard and security support, centralized coordination of environmental and historical compliance activities, systems engineering, communications support, management of SNM, and conduct of operations support, and future deactivation planning.

B Plant (7.1.7)

The B Plant Transition Sub-Project is moving rapidly towards a minimum cost safe storage mode pending transfer to EM-40 through accelerating the reduction of known hazards and aggressive transition activities. Accelerated hazard reduction activities such as the recently completed removal of legacy organics from the canyon are the early focus of transition to allow a quick reduction of surveillance and maintenance costs. A replacement facility exhaust system is being designed and built which will provide the required negative pressure while allowing the deactivation and isolation of the legacy filter units containing thousands of curies of radioactive material. Other transition activities such as gallery deactivation and outdoor contaminated area stabilization or decontamination will also be completed as needed to place a facility into a minimal surveillance and maintenance mode. During the accelerated hazard reduction and transition activities, the facilities will be maintained in a safe, secure, and environmentally compliant status.

WESF (7.1.8)

The WESF Transition Sub-Project is focusing on assuring the safe storage of approximately 1900 cesium and strontium capsules by upgrading their systems and structures to be capable of functioning safely for the next 20 years and without a need for services currently supplied from B Plant. Primary upgrades are planned in the next few years in the areas of response to a potential capsule leak, pool cell monitoring capabilities, and capsule monitoring equipment. Safety analyses are also being upgraded with the preparation of a new safety analysis report with accompanying operational safety requirements. These upgrades are necessary to maintain the Cesium and Strontium capsules in a safe storage condition until all of the capsules are transferred out for ultimate disposal. Final capsule removal is planned to begin in 2013 and complete in 2017. After capsule removal the facility will be deactivated and turned over to EM-40.

324/327 Facility (7.1.X)

On October 1, 1996 the 324 Building and 327 Building transferred to Facility Stabilization Project, and deactivation planning activities were initiated. The mission of the 324/327 Facility Transition Project is to place these buildings in the lowest radiological classification possible for S&M pending re-use where feasible or final D&D. This project will remove and/or reduce human health and environmental hazards associated with the 324 and 327 Buildings.

The scope of the 324/327 Facility Transition Project includes minimum safe S&M, ongoing deactivation/risk mitigation subprojects, and future deactivation subprojects.

Planning Assumptions:

The FSP will identify SNM/NM/NF inventories and track them through transfer, receipt, storage, and disposition. The FSP will further develop schedules for transfer, receipt, storage, and disposition of the SNM/NM/NF as NEPA RODs and other disposition decisions are made.

The FSP deactivation and stabilization actions will generate small amounts of tank waste that will be

transferred to TWRS.

The FSP deactivation and stabilization actions will generate LAW streams (such as solid LLW, TRU solid waste, and liquid effluents) which will be transferred to the appropriate Hanford Site Contractor for disposition.

Refer to FSP Subprojects for a more detailed discussion of waste and material flows and requirements/assumptions.

Life-cycle planning and budget responsibility for major FSP facilities are identified in the subprojects. The Hanford Site Technical Baseline database uses these data to define interfaces between Hanford Site projects. The life-cycle phases are those identified in DOE Order 430.1, Life-Cycle Asset Management (DOE 1995).

Deactivation of remaining contaminated excess facilities not already in the FSP or part of the ERC (excluding the T Plant complex) are grouped into three outyear PBS's as follows:

a. K Basin Deactivation Project, which deals with the 100 K Area facilities connected with the KE and KW Basins

b. Hanford Surplus Facility Program 300 Area Revitalization Project, which deals with the deactivation, conversion, and D&D of 300 Area facilities not covered by other FSP/ERC PBS's

c. Accelerated Deactivation Project, which deals with deactivation of excess contaminated facilities outside the 300 Area not included in other FSP PBS's.

A.1.2 Boundary Diagram with Major Facilities

The following table indentifies the major facilities that interface with this Project. The left column of the table identifies the major facilities that generate waste, materials, or infrastructure for this Project. The right column of the table identifies the major facilities that will receive waste and materials from this Project. The blank center column represents this Project.

Table A.1-1 Facility Stabilization Project Boundary Diagram

External Interfaces Hanford Legacy Idaho National Engineering Laboratory Hanford Site Environmental System Interfaces hsems.2.5.3 Central Plateau Steam System hsems.2.5.4 Central Plateau Water System hsems.2.5.5 Central Plateau Office Facilities hsems.2.5.6 Central Plateau Electrical System hsems.2.5.9 Central Plateau Shop Facilities hsems.2.5.13 Central Plateau Road System hsems.4.3.1 Fast Flux Test Facility hsems.4.4.1 South 600 Area Electrical System hsems.4.4.3 South 600 Area Water System hsems.4.4.6 South 600 Area Office Facilities hsems.4.4.7 South 600 Area Shop Facilities hsems.4.6.2 325 Building hsems.4.7.1 331 Complex		External Interfaces Hazardous Waste Disposal Contracts Oak Ridge National Laboratory Offsite Landfill Offsite Sales Savannah River Site Hanford Site Environmental System Interfaces hsems.2.2.5 242-A Evaporator hsems.2.2.16 Liquid Effluent Retention Facility hsems.2.3.2 Double Shell Tank (DST) System hsems.2.3.4 200 Interim Storage Area (ISA) hsems.2.3.5 Central Waste Complex hsems.2.4.3 200 Area Treated Effluent Disposal Facility hsems.2.5.1 222-S Laboratory hsems.2.5.7 Central Plateau Liquid Sanitary Waste System hsems.4.2.1 300 Area Treated Effluent Disposal Facility hsems.4.2.2 307 Retention Basins hsems.4.2.3 340 Waste Handling Facility hsems.4.4.13 HAMMER

A.1.3 Facility Responsibility Assignment Matrix

This section provides a table that identifies the sub-projects, major facilities, and the life cycle assignments.

Table A.1-2 Facility Responsibility Assignment Matrix

Asset	Life Cycle								
	Program Planning	Pre Conceptual	Conceptual	Execute				Close Out	
				Design	Construction	Turnover	O&M	Post Ops	D&D
100 K Area Facilities	RL-WM01 RL-TP09						RL-WM01	RL-TP09	RL-ER06 RL-ER05
242-A Evaporator	RL-WM05						RL-WM05	RL-TP10	RL-ER06 RL-ER05
Plutonium-Uranium Extraction Plant	RL-TP03							RL-TP03 RL-ER05	RL-ER06 RL-ER05
B Plant	RL-TP01							RL-TP01	RL-ER06 RL-ER05
Waste Encapsulation and Storage Facility	RL-TP02						RL-TP02	RL-TP02	RL-ER06 RL-ER05
Plutonium Finishing Plant	RL-TP07						RL-TP07 RL-TP05 RL-TP06	RL-TP07 RL-TP05 RL-TP06	RL-ER06 RL-ER05
T-Plant Facility	RL-WM04						RL-WM04	RL-TP10 RL-WM04	RL-ER06 RL-ER05
2706-T	RL-WM04						RL-WM04	RL-TP10 RL-WM04	RL-ER06 RL-ER05
M-91 Facility	RL-WM04	RL-WM04	RL-WM04	RL-WM04	RL-WM04	RL-WM04	RL-WM04	RL-WM04 RL-TP10	RL-WM04 RL-ER05
WRAP Module 1	RL-WM04						RL-WM04	RL-TP10 RL-WM04	RL-WM04 RL-ER05
Liquid Effluent Retention Facility	RL-WM05						RL-WM05	RL-TP10	RL-ER06 RL-ER05
200 Area Effluent Treatment Facility	RL-WM05						RL-WM05	RL-TP10	RL-ER06 RL-ER05
Transuranic Storage and Assay Facility	RL-WM03						RL-WM03	RL-TP10 RL-WM03	RL-ER06 RL-ER05
222-S Laboratory	RL-WM06						RL-WM06	RL-TP10 RL-WM06	RL-ER06 RL-ER05
300 Area Fuel Supply System	RL-TP04							RL-TP04	RL-ER06 RL-ER05
South 600 Area Steam System	RL-TP13						RL-I111 RL-TP14	RL-TP13 RL-TP14	RL-TP13 RL-TP14
South 600 Area Water System	RL-TP13						RL-I112 RL-TP14	RL-TP13 RL-TP14	RL-TP13 RL-TP14
South 600 Area Liquid Sanitary Waste System	RL-TP13						RL-I113 RL-TP14	RL-TP13 RL-TP14	RL-TP13 RL-TP14
South 600 Area Telecommunication System	RL-TP13						RL-I6 RL-TP14	RL-TP13 RL-TP14	RL-TP13 RL-TP14
South 600 Area Office Facilities	RL-TP13						RL-I13 RL-TP14	RL-TP13 RL-TP14	RL-TP13 RL-TP14
South 600 Area Shop Facilities	RL-TP13						RL-I1 RL-TP14	RL-TP13 RL-TP14	RL-TP13 RL-TP14
South 600 Area Storage Facilities	RL-TP13						RL-I7 RL-TP14	RL-TP13 RL-TP14	RL-TP13 RL-TP14
South 600 Area Land	RL-TP13						RL-I123 RL-TP14	RL-TP13 RL-TP14	RL-TP13 RL-TP14
South 600 Area Road System	RL-TP13						RL-I121 RL-TP14	RL-TP13 RL-TP14	RL-TP13 RL-TP14
South 600 Area Rail System	RL-TP13						RL-I122 RL-TP14	RL-TP13 RL-TP14	RL-TP13 RL-TP14
324 Building	RL-TP08						RL-TP08 RL-ST01	RL-TP08	RL-ER06 RL-ER05

Asset	Life Cycle								
	Program Planning	Pre Conceptual	Conceptual	Execute				Close Out	
				Design	Construction	Turnover	O&M	Post Ops	D&D
325 Building	RL-ST01						RL-ST01 RL-ST02 - 09	RL-TP14 RL-ER05	RL-ER06 RL-ER05
326 Building	RL-ER10						RL-ST01	RL-TP14 RL-ER05	RL-ER06 RL-ER05
327 Building	RL-TP08						RL-TP08 RL-ST01	RL-TP08	RL-ER06 RL-ER05
329 Building	RL-ST01						RL-ST01	RL-TP14 RL-ER05	RL-ER06 RL-ER05
320 / 3720 / 3745	RL-ST01						RL-ST01 RL-ST02 - 09	RL-TP14 RL-ER05	RL-ER06 RL-ER05
Misc. Rad Labs	RL-ER10							RL-TP14 RL-ER05	RL-ER06 RL-ER05
331 Complex	RL-ER10						RL-ST01 RL-ST02 - 09	RL-TP14 RL-ER05	RL-ER06 RL-ER05

RL-ER05 - Surveillance and Maintenance
RL-ER06 - Decontamination & Decommissioning
RL-ER10 - Environmental Restoration Program Management and Support
RL-I1 - DynCorp Infrastructure
RL-I111 - Steam Utilities
RL-I112 - Water Utilities
RL-I113 - Liquid Sanitary Waste Utilities
RL-I121 - Roadway Maintenance
RL-I122 - Rail Operations & Maintenance
RL-I123 - Vehicle Operations
RL-I13 - General Purpose Facilities
RL-I6 - Information Resource Management
RL-I7 - Asset Management
RL-ST01 - PNNL Waste Management Project
RL-ST02 - 09 - Science & Technologies Project
RL-TP01 - B Plant Sub-Project
RL-TP02 - WESF Sub-Project
RL-TP03 - PUREX Sub-Project
RL-TP04 - 300 Area/SNM Sub-Project
RL-TP05 - PFP Deactivation
RL-TP06 - PFP Stabilization
RL-TP07 - PFP Vault Management
RL-TP08 - 324/327 Facility Transition Project
RL-TP09 - K Basin Deactivation
RL-TP10 - Accelerated Deactivation Project
RL-TP13 - Landlord
RL-TP14 - Hanford Surplus Facility Program 300 Area Revitalization Project
RL-WM01 - Spent Nuclear Fuel
RL-WM03 - Solid Waste Storage & Disposal
RL-WM04 - Solid Waste Treatment
RL-WM05 - Liquid Effluents Project
RL-WM06 - Analytical Services

A.1.4 Project Planning Assumptions

This section contains the issues that affect the project. These include project specific issues, as well as the site-level issues that have been assigned to the project for resolution. It also contains the assumptions that are used as a basis for the development of project plans until the issues are formally resolved with records of decision. The "Champion" column determines if the Project has lead responsibility or is an affected participant. If the champion belongs to the Project, the Project has the lead. If not, the Project is an affected participant. Project plans include appropriate activities and resources for resolving these issues.

Table A.1-3 Project Issues And Assumptions

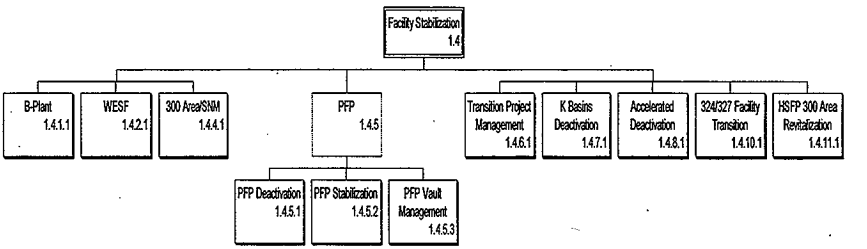
	ISSUE	PLANNING ASSUMPTION	CHAMPION
1	**Revitalization Project Facility Timing** What is the acceptance criteria and timing for the transfer of facilities in the 300 Area to the Revitalization Project?	Transfer of facilities into the Revitalization Project will begin in FY 99.	Lund
2	**PFP Budget Shortfall** A significant budget shortfall for the PFP Project has occurred in FY98 and FY99. Minimal support to DNFSB Recommendation 94-01 is provided. There is no support for facility transition to deactivation.	Incremental funding is not provided. As a result DNFSB Recommendation 94-01 is only minimally supported in FY 98 and FY 99. A total rebaseline of the PFP Project is required to establish new completion dates for PFP facility transition to deactivation and implementation of DNSFB Recommendation 94-01.	Mecca Olguin
3	**Revitalization Project Facility Acquisition** Which facilities in the 300 Area will be transferred to the Revitalization Project?	No Decision made.	Lund
4	**Land Use Plan 100** The interim end state for the 100 Areas has not been defined.	Soil sites remediated consistent with CERCLA-ROD cleanup standards. DOE will retain control of this land throughout the cleanup mission and will protect archaeological , cultural and environmental resources.	Bauer
5	**Land Use Plan 200** The interim end state for the 200 Areas has not been defined	The 200 Area and central plateau will be used for the management of nuclear materials and the collection and disposal of waste materials that remain on site and for other related and compatible uses. Cleanup levels and disposal standards will be established in the CERCLA and RCRA permit modifications. Soil sites will be remediated consistent with CERCLA-ROD cleanup standards. DOE will retain control of this land.	Bauer
6	**Land Use Plan 300** The interim end state for the 300 Areas has not been defined.	The 300 Area waste sites, materials, and facilities will be remediated to allow industrial and economic transition opportunities. The Federal government will retain ownership of land in and adjacent to the 300 and 400 Areas, but will lease land for private and public uses to support regional industrial and economic development. Excess land within the 1100 and 3000 areas will be targeted for transition to non-Federal ownership.	Bauer
7	**End State for Canyon Facilities** The end state for the canyon facilities has not been clearly defined.	Canyon facilities will be entombed in-place with a barrier cap.	Bauer Liedle
8	**325 & 204-AR Upgrades** Liquid waste collection and loading facility (340 facility) is scheduled for shutdown after FY 1998. Initially nothing will be done to preclude accepting waste at the 340 facility after this date. Transfer systems from Bldg. 325 to the tank farms via 204-AR facility will not be available per the current schedule.	No Decision made.	Beard Briggs
9	**325 & 204-AR Upgrades Ad-hoc Team** Line Item Project B-472 provides an alternative waste handling and processing method to be used by Building 325 and 204-AR after September 1998.	No Decision made.	Lowe

Table A.1-3 Project Issues And Assumptions (Continued)

	ISSUE	PLANNING ASSUMPTION	CHAMPION
10	**Pu National Disposition Policy** It has not been decided where, when and how surplus weapons useable Pu will be dispositioned (reuse, storage, or disposal).	The ROD on PEIS recommended continued interim storage for Hanford Material at PFP pending national policy on disposition, and that the Hanford Site will be evaluated for PU disposition activities in the next level of NEPA studies. Pu stabilization will occur by 2002.	Mecca Reynolds
11	**Fuels Grade Pu Disposition** Final disposition of Fuels Grade Pu has not been determined.	Continue interim storage at PFP vaults pending national policy on disposition. New and/or modified vaults may be required.	Mecca Reynolds
12	**Cs & Sr Capsules Disposition Policy** It has not been decided where, how and when Cs/Sr capsules will be finally dispositioned.	MDD: Cs/Sr capsules will continue to be interim stored at WESF. In the event the Cs/Sr capsules are declared waste, the contents will be processed to meet high-level waste feed requirements, blended with other tank waste, vitrified and stored onsite for eventual disposal at the geologic repository.	Mecca Reynolds
13	**Project Life Cycle Planning** The forecasting information for SNF terminates with the end of the Project (FY 2002). However it is clear that there will be waste streams from the K-Basins and from the CSB as well as infrastructure needs. These need to be included in the forecasting section of some project.	No Decision made.	Piper Brennan
14	**Facility Life Cycle Planning** In the HSTD Database, Projects do not have assigned responsibility for each life cycle phase of the on-site facilities (K-Basins transition is either not assigned to or accepted by SNF, Tr P, or ER).	Each Project that currently owns a facility is responsible for planning the entire life cycle or negotiating that responsibility to Transition Projects or ER	Wisness Brennan
15	**HSIS / SE Interface Differences** The Interface information is needed to support the Hanford Site Integrated Schedule preparation. The current HSIS activities can not be easily linked to the SE interface titles.	Use interfaces as currently defined in the HSTB.	Wisness Brennan

THIS PAGE INTENTIONALLY
LEFT BLANK

Facility Stabilization Project Work Breakdown Structure



LEVELS

1 - SITE

2 - MISSION AREA

3 -

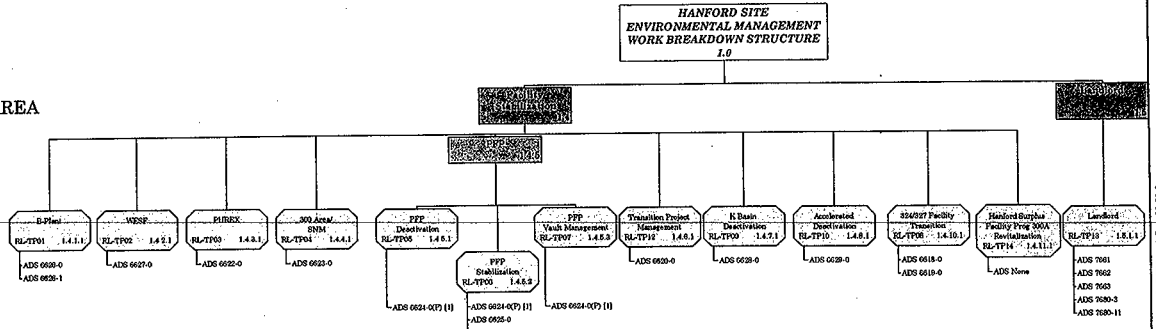
4 -PROJECTS

5 - ACTIVITY

6 - COST ACCOUNT

7 - WORK PACKAGE

8 - TASK



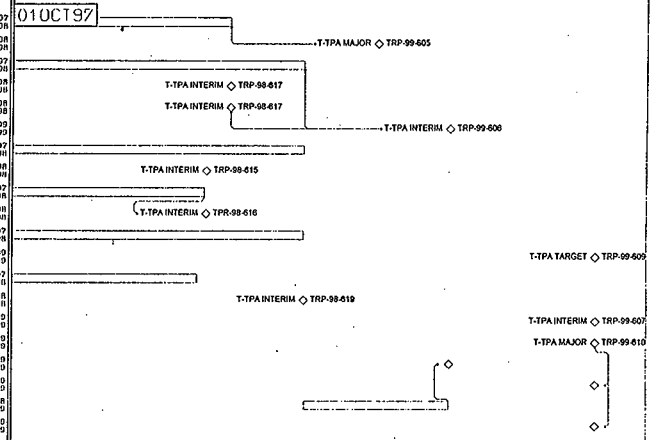
(P) Represents an ADS split between 3 PBSs.
[1] Division of work scope may be seen in the Project Baseline Summaries.

9/9/97

FACILITY STABILIZATION PROJECT
RL-TP01 B-Plant Sub-Project
Site Master Baseline Schedule

Time-Phased Logic Diagram
FY 98 MYWP September 1997

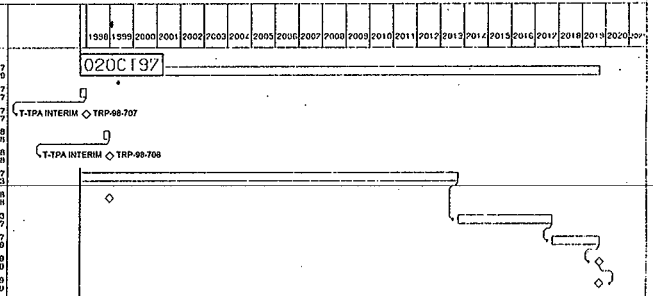
Activity	Description	Start / Finish
BP012	WESF DECOUPLING PROJECT	10/01/97 / 06/30/98
BP030	MILESTONE: TRP-99-605 DECOUPLE WESF (M-82-00)	12/31/98 / 12/31/98
BP036	END POINT ADMINISTRATION	10/01/97 / 09/30/98
BP038	MILESTONE:TRP-98-617 DOC HAZARD/SUBSTANCE/REMAIN	08/30/98 / 08/30/98
BP051	MILESTONE:TRP-98-617 DOC.HAZ. REMAING (M-82-07)	08/30/98 / 08/30/98
BP054	MILESTONE: TRP-99-606 SUB. PRECLE PLAN(M-20-21A)	03/31/99 / 03/31/99
BP058	221 AREA	10/01/97 / 09/30/98
BP060	MILESTONE:TRP-98-615 DEACT. AQUE.AREA(M-82-05)	05/31/98 / 05/31/98
BP068	LIQUID EFFLUENT	10/01/97 / 05/29/98
BP070	MILESTONE:TRP-98-616 COMP.DEACT. LIQ. E(M-82-06)	05/31/98 / 05/31/98
BP072	W-059 B-PLANT CANYON VENTILATION UPGRADE	10/01/97 / 09/30/98
BP080	MILESTONE:TRP-99-609 COMPL ISO/STAB(M-82-10-T01)	09/30/99 / 09/30/99
BP084	ORGANICS REMOVAL	10/01/97 / 05/29/98
BP086	MILESTONE: TRP-98-619 DISP ORGANICS (M-82-08)	09/30/98 / 09/30/98
BP090	MILESTONE: TRP-99-607 COMP DEACT CANYON(M-82-10)	09/30/99 / 09/30/99
BP093	MILESTONE:TRP-99-610 COMP DPLT. TANKS (M-82-09)	09/30/99 / 09/30/99
BP096	SSS-F1. T/O B-Plant Facilities to EM-40	03/31/99 / 03/31/99
BP099	HSP.EV.4.E. Trans PUREX/B-Plant to Deact/Stab	09/30/99 / 09/30/99
BP080	B-PLANT FACILITY TURNOVER TO ERC	10/01/98 / 03/31/00
BP100	Compl of Requested Analytical Support from WMH	09/30/99 / 09/30/99



FACILITY STABILIZATION PROJECT
RL-TP02 WESF Sub-Project
Site Master Baseline Schedule

Time-Phased Logic Diagram
FY 98 MYWP September 1997

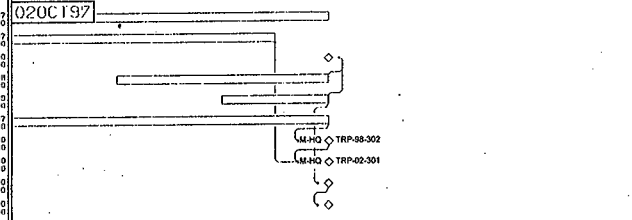
Activity	Description	Start / Finish
WF	WESF Sub-Project	10/01/97 / 09/30/19
WF021	PART A PERMIT APPLICATION	10/01/97 / 12/31/97
WF024	MILESTONE:M-92-03 SUBMIT PART "A" COMPLETE	12/31/97 / 12/31/97
WF031	WESF RECEIVE 300 AREA Cs/Sr	10/01/98 / 12/30/98
WF032	MILESTONE: M-92-04 RECEIVE 300 AREA Cs/Sr	12/31/98 / 12/31/98
WF103	WESF Cs/Sr CAPSULE SAFE STORAGE OPERATIONS	10/01/97 / 09/30/13
WF104	HSP.ET.4.D, Cont Safe Storage for Cs/Sr Capsules	12/31/98 / 12/31/98
WF106	SSS-F2, WESF Cs/Sr CAPSULE TRANSFER/DISPOSITION	09/30/13 / 09/30/17
WF109	WESF DEACTIVATION	09/30/17 / 09/30/19
WF112	SSS-F3, T/O WESF FACILITIES TO EM-40	09/30/19 / 09/30/19
WF115	Compl of Requested Analytical Support from HFSH	09/30/19 / 09/30/19



FACILITY STABILIZATION PROJECT
RL-TP04 300 Area FSS / SNM Project
Site Master Baseline Schedule

Time-Phased Logic Diagram
FY 98 MYWP September 1997

Activity	Description	Start / Finish
3A	300 AREA FSS/ SNM PROJECT	10/01/97 09/30/00
3A203	WASTE ACID TREATMENT RCRA CLOSURE	10/01/97 03/31/00
3A213	Compl of Requested Analytical Support from WMH	03/10/00 09/30/00
3A230	PREPARE PHASE II BUILDINGS TRNSFR EM-40	10/01/98 09/29/00
3A245	PREPARE PHASE III BLDGS TRNSFR EM-40	10/01/98 09/29/00
3A257	SNM SAFE STORAGE	10/01/97 09/30/00
3A260	TRP-98-302,SHIP SNM OUTSIDE 300 AREA	09/30/98 09/30/00
3A266	TRP-02-301, COMPL 300 AREA FSS DEACTIVATION	09/30/00 09/30/00
3A272	HSP.ET.4.J, Complete Transition of 300 Area FSS	09/30/00 09/30/00
3A275	SSS-F14 T/O 300 FSS Phase I & II & III Bldg - ER	09/30/00 09/30/00



FACILITY STABILIZATION PROJECT
RL-TP06 PFP Stabilization Project
Site Master Baseline Schedule

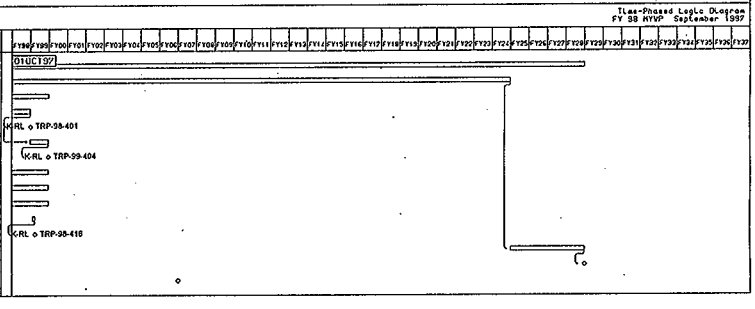
Time-Phased Logic Diagram
FY 98 MYWP September 1997

Activity	Description	Start	FY 98	FY 99	FY 00	FY 01	FY 02	FY03
PS	PFP STABILIZATION PROJECT	10/01/97 09/30/99	01OCT97					
PS403	TRP-98-409, Revise OSD for Oxide Storage	12/19/97 12/19/97	K-RL ◇ TRP-98-409					
PS406	Complete Installation	10/01/98 01/20/99						
PS409	TRP-97-406, Complete Installation of Calciner	01/30/99 01/30/99		K-RL ◇ TRP-97-406				
PS412	Hire/Train/ORR	04/01/99 09/30/99						
PS415	Cementing	10/01/97 09/30/98						
PS418	TRP-97-409, Cement/Discard 1269 Kg	10/01/98 10/01/98		K-RL ◇ TRP-97-409				
PS421	Cementing	10/01/98 08/26/99						
PS424	TRP-98-406, Cement/Discard 2569 Kg	08/27/99 08/27/99			K-RL ◇ TRP-98-406			

FACILITY STABILIZATION PROJECT
RL-TP07 PFP Vault Management Project
Site Master Baseline Schedule

Time-Phased Logic Diagram
FY 98 MYVP September 1997

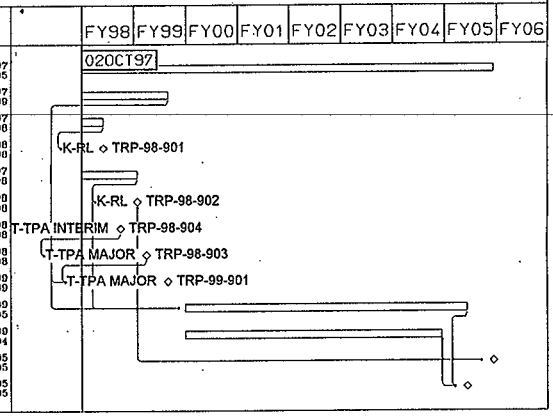
Activity	Description	Start
YM	PFP VAULT MANAGEMENT PROJECT	10/01/97 09/30/24
YM100	PFP Vault Management Project	10/01/97 09/30/24
YM103	PFP Surveillance and Maintenance	10/01/97 09/30/24
YM106	Annual FSAR Update	10/01/97 09/30/24
YM109	TRP-98-401, Complete Annual FSAR Update	10/01/98 10/01/99
YM112	Annual FSAR Update	10/01/99 09/30/00
YM115	TRP-99-404, Complete Annual FSAR Update	08/30/01 09/30/01
YM118	SNF Safe Storage and Treatment	10/01/97 09/30/24
YM121	General Plant Support	10/01/97 09/30/99
YM124	Safeguards and Security (S&S)	10/01/97 09/30/98
YM127	ALE Task Closeout	11/15/98 12/30/99
YM130	TRP-98-416, Provide Beneficial Use ALE	12/01/98 11/30/99
YM133	PFP Vault (2736 Z/ZB) Stabilization	10/01/01 09/30/20
YM136	232-Z-D, T/D PFP Vaults to EM-40	10/01/23 10/01/24
YM139	Completion of Analytical Support Services, WESF	08/29/08 09/30/24



FACILITY STABILIZATION PROJECT
RL-TP08 324/327 Facilities Project
Site Master Baseline Schedule

Time-Phased Logic Diagram
FY 98 MYWP September 1997

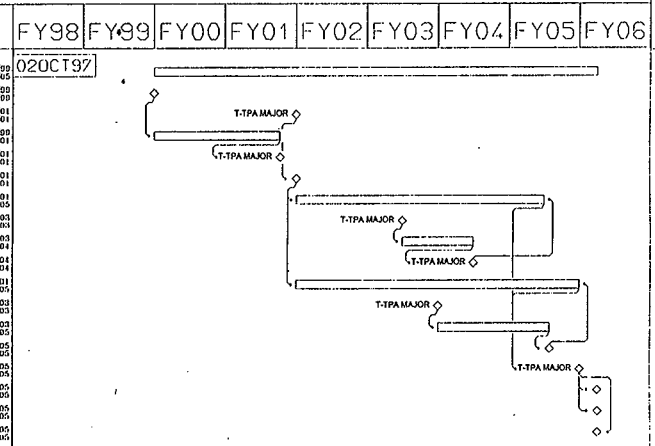
Activity	Description	Start
BC	324/327 FACILITIES PROJECT	10/01/97 09/09/05
BC603	B-Cell Rack and Equipment Removal	10/01/97 05/28/99
BC621	Prepare Final PNP/End-Points	10/01/97 02/20/98
BC624	Submit Final PNP/End-Points	02/20/98 02/28/98
BC633	NORDIAN CAPSULE/POWDER/PELLETS PROCESSING	10/01/97 10/26/98
BC636	Complete Repackaging Cs Powder/Pellets in 324	10/26/98 10/26/98
BC645	N-89-05, Comp 324 Facility SCW Assmnt	06/30/98 06/30/98
BC647	N-92-04, Compl Xefer 300A Cs/Sr to Appr. Loc.	12/30/98 12/30/98
BC649	N-89-05, Remove B-Cell Equipt/100% Dispersibles	05/30/99 05/30/99
BC672	324 FACILITY DEACTIVATION	10/01/99 03/09/05
BC676	327 FACILITY DEACTIVATION	10/01/80 09/13/04
BC681	SSS-F11, T/O 324/327 FACILITIES TO EM-40	09/09/05 09/09/05
BC682	HSP.ET.4.K 324/327 Fac Deact Cond/Disp Nuc Mat'l	03/10/05 03/10/05



FACILITY STABILIZATION PROJECT
RL-TP09 K-Basins Deactivation Project
Site Master Baseline Schedule

Time-Phased Logic Diagram
FY 98 MYWP September 1997

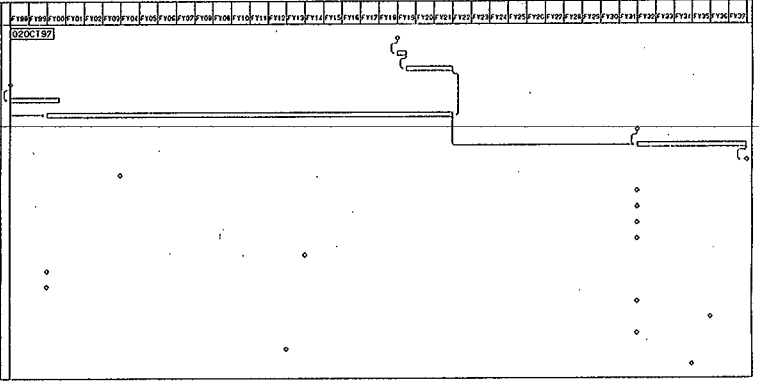
Activity	Description	Start / Finish
K0	K-BASIN DEACTIVATION PROJECT	10/01/99 / 12/31/05
K0703	INITIATE K-BASIN DEACTIVATION PLANNING	10/01/99 / 10/01/99
K0712	SSS-S1, SNF T/O 100K Facilities to DWIC for Deac	10/01/01 / 10/01/01
K0715	Prepare Project Management Plan	10/01/99 / 07/09/01
K0718	Submit DOE Apprvl PMP/S&M Plan to Ecology	07/10/01 / 07/10/01
K0724	Start Deactivation of 100 K area Basin Facilitie	10/01/01 / 10/01/01
K0727	K-Basin West Deactivation	10/01/01 / 03/31/05
K0730	Initiate K-Basin West Water removal	04/01/03 / 04/01/03
K0733	K-Basin West Water removal	04/01/03 / 03/31/04
K0736	Complete K-Basin West Water removal	04/01/04 / 04/01/04
K0739	K-Basin East Deactivation	10/01/01 / 02/28/05
K0742	Initiate K-Basin East Water removal	10/01/03 / 10/01/03
K0745	K-Basin East Water removal	10/01/03 / 01/29/05
K0748	Complete K-Basin East Water removal	04/30/05 / 04/30/05
K0751	K-Basin Deactivation Complete T/O EM-40	10/01/05 / 10/01/05
K0752	HSP.ET.4.A, Drain, Decon/Stabilize K-Basins Fac.	12/30/05 / 12/30/05
K0754	SSS-F6, T/O K-BASIN FACILITIES TO EM-40	12/31/05 / 12/31/05
K0757	Compl of Requested Analytical Support from WSHH	12/30/05 / 12/30/05



FACILITY STABILIZATION PROJECT
RL-TP10 Accelerated Deactivation Project
Site Master Baseline Schedule

Time-Phased Logic Diagram
FY 98 MYWP September 1997

Activity	Description	Start
AD372	233-S2, Recieve T Plant from Waste Management	10/01/15 10/01/15
AD374	T Plant Deactivation Planning	10/01/15 03/15/18
AD376	T Plant Deactivation & Transition	03/20/18 03/20/21
AD808	Initiation of Deactivation Planning	10/03/97 10/01/97
AD903	Deactivation Planning	10/03/97 05/15/04
AD908	Facility Deactivation (41 Facilities)	10/01/98 09/30/21
AD909	Start Deactivation of Remained Facilities	10/01/21 10/01/21
AD909	Trans Remain Facilities to Deactivated Condition	10/01/21 09/28/22
AD910	UPF-79, Trans Facilities to deactivated, cond	10/01/27 10/01/29
AD819	T-10, Receive 242-T from Waste Mgmt, Inc.	09/30/03 09/30/03
AD824	233-S2, Receive UMAP 1 Facility from Waste Mgt	10/01/21 10/01/21
AD830	255-W16, Receive 200 Area TSDF from Waste Mgmt	09/30/21 09/30/21
AD836	252-W7, Receive 200 Area ETF from Waste Mgmt	10/01/21 10/01/21
AD840	251-W7, Receive 200 Area LERF from Waste Mgmt	10/01/21 10/01/21
AD842	255-W7, Receive 241-A from Waste Management	10/01/15 10/01/15
AD848	233-W1, Receive TRUSAF from Waste Management	10/01/98 10/01/98
AD866	233-W12, Receive Building 616 from Waste Mgmt	09/30/99 09/30/99
AD878	Receive LARGE/Treatment from Waste Mgmt	10/01/21 10/01/21
AD886	255-W4, Receive 3706-T Facility from Waste Mgmt	10/01/26 10/01/31
AD887	255-W13, Receive PAT/Treatment Facility from EM	10/01/21 10/01/21
AD890	Receive Retrieval Facilities from Waste Mgmt	10/01/15 10/01/15
AD893	252-W3, Receive 222-S Labs from Waste Mgmt	10/01/31 10/01/31



FACILITY STABILIZATION PROJECT
RL-TP12 Facility Stabilization Project Management
Site Master Baseline Schedule

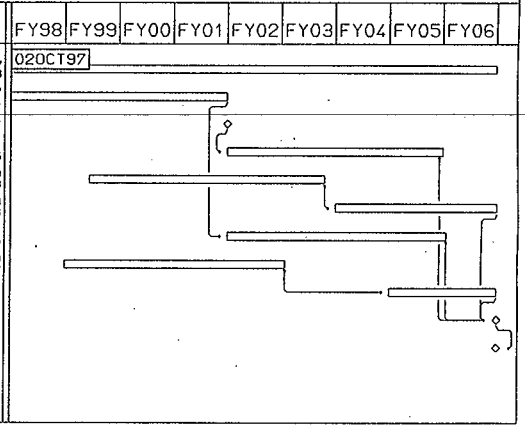
TLee-Phased Logic Diagram
FY 98 MYWP September 1997

Activity	Description	Start	
PM	TRANSITION PROJECT MANAGEMENT	10/02/97 09/30/37	
PM000	TRANSITION PROJECT MANAGEMENT	10/02/97 09/30/37	
PM00A	HSP.FAC.A Safe,Stable,Secure Onsite Storage SNM	09/30/00 09/30/00	
PM00B	HSP.FAC.B. Fac to stable deactivated condition	10/01/37 10/01/37	
PM00C	HSP.FAC.C. Surplus Facilities S&D sufficiently	10/01/37 10/01/37	
PM00D	HSP.ET.4.C. Provide Safe,Stable,Storage SNM 200A	09/30/00 09/30/00	
PM00G	HSP.ET.4.N. Comp Final Disposition UU Inventorie	03/31/98 03/31/98	
PM00H	HSP.ET.4.M. Transfer SNM from South 600A to 200A	09/30/03 09/30/03	
PM00J	HSP.ET.4.H. Rem Uranium thru Interim Storage 400	10/02/97 10/02/97	
PM00K	HSP.ET.4.D. Trans High Cost Surplus Facilities	09/30/12 09/30/12	
PM00M	WX-92-06TComp Disposal/Compliant Storage Site UU	12/31/08 12/31/08	T-TPA TARGET ◇ TRP-01-108
PM00N	WX-92-07T,Submi Site UU PMP to Ecology(Sec 11.6)	11/30/97 11/30/97	T-TPA TARGET ◇ TRP-98-108
PM00P	WX-92-08T, Submit Site UU Disposition Assmt Rprt	03/31/98 03/31/98	T-TPA TARGET ◇ TRP-98-109

FACILITY STABILIZATION PROJECT
RL-TP14 300 Area Revitalization Project
Site Master Baseline Schedule

Time-Phased Logic Diagram
FY 98 MYWP September 1997

Activity	Description	Start
RV	300 AREA REVITALIZATION PROJECT	10/02/97 09/29/06
RV851	Surveillance & Maintenance Contamin. Facilities	10/02/97 09/30/01
RV854	SSS-W10, Recieve 340 Facility from Waste Mgmt	10/01/01 10/01/01
RV857	340 Facility Stabilization and Deactivation	10/01/01 09/30/05
RV880	Conversion/Marketing Effort 300 Area Facilities	03/15/99 07/23/03
RV883	Commercial Conversion 300 Area Facilities	10/01/03 09/29/06
RV886	Deactivation Cont. Facilities,300 Area (26 Bldg)	10/01/01 10/20/05
RV889	D & D Clean Facilities,300 Area (73 Bldg)	10/01/98 10/28/02
RV892	D & D Contaminated Facilities,300 Area (26 Bldg)	10/01/04 05/29/06
RV895	Compl Hanford Excess Fac Program 300 Area Rev.	09/30/06 09/30/06
RV898	Compl of Requested Analytical Support from WMH	09/30/06 09/30/06



4.1 ESTIMATE BASIS

The cost estimates for the Facility Stabilization Project have been prepared in accordance with HNF-PR-000585, Cost Estimating, to provide a cost profile of the remaining work scope required to deactivate designated project facilities. They were developed using activity-based cost estimating techniques and applying the methodology prescribed in the U.S. Department of Energy Office of Waste Management "Cost and Schedule Estimating Guide," Section VI, "Operating Cost Estimating Methods." The scopes of the project activities are defined in the Hanford Site Technical Baseline, individual plant Standards/Requirements Identification Documents (S/RIDS), and in Section 1 of this document.

With the scope of the stabilization activities defined, cost estimates and schedules have been developed. The complexity of developing these estimates for a resource-loaded schedule required the involvement of many disciplines covering the entire spectrum of planning, scheduling, and estimating. The disciplines that provided input included technical, operational, project management, maintenance, engineering, safety, health physics, quality assurance, and security.

Approximately 24 percent of the project dollars were estimated using the level of effort technique.

Planning rates and escalation used are consistent with those developed by the FDH Chief Financial Officer and approved by the DOE-RL. Resource loaded schedules are traceable to the cost estimate packages

Final cost estimate packages contain the following:

Technical scope
Purpose of the project
Assumptions and exclusions
Estimate work breakdown structure
Technique and historical basis
Cost estimating relationship (CER) development
Labor rates, unit rates, and unit cost sources
Escalation amounts and sources
Contingency calculation development (if applicable)
Legal drivers
Labor costs
Technical logic diagram
Integrated, logic driven, resource loaded schedules
Responsibility assignment matrix
Other costs that will be reflected in the budget for the particular project

Individual activity-based cost estimate packages and their locations are as follows:

ESTIMATE PACKAGE	LOCATION
300 Area Baseline Estimate	333 Bldg/Rm 229/300
FY 1997 PFP Transition Project ABC Estimate Update	270-Z/Rm 66/200W
Life-Cycle Cost Estimate B Plant Transition Project	MO-410/Rm E/200E
Life-Cycle Cost Estimate WESF Transition Project	MO-410/Bay/200E

EXHIBIT 1a

FACILITY STABILIZATION
SUMMARY OF LIFE CYCLE COST BASELINE (BCWS) BY YEAR BY
BY PROJECT BASELINE SUMMARY (PBS)
FY 1998

($000s)

PROJECT WBS : 1.4

PBS TITLE	PBS NO	FY1997	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	SUBTOT FY1997-FY2006
B Plant Sub-Project	RL-TP01	23,967	22,381	4,909	-	-	-	-	-	-	-	51,257
WESF Sub-Project	RL-TP02	13,574	13,113	10,747	16,157	12,597	12,479	12,467	12,247	13,034	13,254	129,669
300 Area/SNM Sub-Project	RL-TP04	4,216	4,688	4,894	8,935	-	-	-	-	-	-	22,733
PFP Deactivation	RL-TP05	-		-	5,494	16,344	21,778	28,258	27,279	15,950	3,320	118,423
PFP Stabilization	RL-TP06	-	11,886	30,060	18,889	13,324	8,081	-	-	-	-	82,240
PFP Vault Management	RL-TP07	85,201	80,975	62,687	75,140	70,120	67,068	61,532	62,406	63,535	27,329	635,993
324/327 Facility Transition	RL-TP08	23,661	33,481	31,042	38,661	30,329	23,021	14,132	10,188	752	-	205,287
K Basin Deactivation	RL-TP09	-	-	-	1,196	3,284	25,189	35,341	32,895	24,589	1,158	123,652
Accelerated Deactivation	RL-TP10	-	2,716	1,445	3,583	2,666	2,503	3,345	3,164	2,971	2,778	25,171
Transition Project Management	RL-TP12	10,494	11,596	12,026	11,415	13,564	13,900	14,248	15,108	15,478	13,229	131,058
Hanford Surplus Facility Program 300 Are	RL-TP14	-	872	759	5,472	14,187	10,635	9,251	34,274	27,686	35,816	138,952
												-
												-
TOTAL BCWS/PMB[1]		161,113	181,708	158,569	184,942	176,415	184,654	178,574	197,561	163,995	96,884	1,664,435

[1]Budgeted Cost of Work Scheduled (BCWS) Equals Performance Measurement Baseline (PMB); Expense Carryover Is NOT Included.

FACILITY STABILIZATION
SUMMARY OF LIFE CYCLE COST BASELINE (BCWS) BY YEAR BY BY PROJECT BASELINE SUMMARY (PBS)
FY 1998

($000s)

PROJECT WBS :		1.4									
PBS TITLE	PBS NO	FY2007-FY2010	FY2011-FY2015	FY2016-FY2020	FY2021-FY2025	FY2026-FY2030	FY2031-FY2035	FY2036 FY2040	FY2041-FY2045	FY2046 FY2050	TOTAL FY1997-FY2050
B Plant Sub-Project	RL-TP01	-	-	-	-	-	-	-	-	-	
WESF Sub-Project	RL-TP02	58,650	82,738	60,552	-	-	-	-	-	-	331,609
300 Area/SNM Sub-Project	RL-TP04	-	-	-	-	-	-	-	-	-	22,733
PFP Deactivation	RL-TP05	-	-	-	-	-	-	-	-	-	118,423
PFP Stabilization	RL-TP06	-	-	-	-	-	-	-	-	-	82,240
PFP Vault Management	RL-TP07	185,282	204,667	335,126	545,784	255,362	-	-	-	-	2,162,214
324/327 Facility Transition	RL-TP08	-	-	-	-	-	-	-	-	-	205,267
K Basin Deactivation	RL-TP09	-	-	-	-	-	-	-	-	-	123,652
Accelerated Deactivation	RL-TP10	20,937	6,000	-	-	-	20,000	41,000	45,000	15,400	173,508
Transition Project Management	RL-TP12	8,000	10,000	10,000	10,000	10,000	-	-	-	-	179,058
Hanford Surplus Facility Program 300 Are	RL-TP14	31,200	-	-	-	-	-	-	-	-	170,152
											-
											-
TOTAL BCWS/PMB[1]		304,069	303,405	405,678	555,784	265,362	20,000	41,000	45,000	15,400	3,650,113

[1]Budgeted Cost of Work Scheduled (BCWS) Equals Performance Measurement Baseline (PMB); Expense Carryover Is NOT Included.

EXHIBIT 4a

FACILITY STABILIZATION
SUMMARY OF LIFE CYCLE BUDGET AUTHORITY (B/A) BY YEAR BY BY PROJECT BASELINE SUMMARY (PBS)
FY 1998

($000s)

PROJECT WBS : 1.4

PBS TITLE	PBS NO	FY1997	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	SUBTOT FY1997-FY2006
B Plant Sub-Project	RL-TP01	24,072	22,381	4,909	-	-	-	-	-	-	-	51,362
WESF Sub-Project	RL-TP02	13,619	13,113	10,747	11,857	11,821	11,643	11,534	11,713	11,870	11,808	119,725
300 Area/SNM Sub-Project	RL-TP04	4,305	4,688	4,894	8,935	-	-	-	-	-	-	22,822
PFP Deactivation	RL-TP05	-		-	5,494	16,344	21,778	28,258	27,279	15,950	3,320	118,423
PFP Stabilization	RL-TP06	-	11,886	30,060	18,889	13,324	8,081	-	-	-	-	82,240
PFP Vault Management	RL-TP07	87,180	58,877	62,687	75,140	70,120	67,068	61,532	62,406	63,535	27,329	635,874
324/327 Facility Transition	RL-TP08	23,661	33,481	31,042	38,661	30,329	23,021	14,132	10,188	752	-	205,267
K Basin Deactivation	RL-TP09	-		-	1,196	3,284	25,169	35,341	32,895	24,589	1,158	123,652
Accelerated Deactivation	RL-TP10	-	2,716	1,445	3,583	2,666	2,503	3,345	3,164	2,971	2,778	25,171
Transition Project Management	RL-TP12	10,494	11,596	12,026	11,415	13,564	13,900	14,248	15,108	15,478	13,229	131,058
Hanford Surplus Facility Program 300 Are	RL-TP14	-	872	759	5,472	14,187	10,635	9,251	34,274	27,686	35,816	138,952
												-
												-
TOTAL NEW B/A		163,331	159,610	158,569	180,642	175,639	183,798	177,641	197,027	162,831	95,438	1,654,546

EXHIBIT 4a

FACILITY STABILIZATION
SUMMARY OF LIFE CYCLE BUDGET AUTHORITY (B/A) BY YEAR BY BY PROJECT BASELINE SUMMARY (PBS)
FY 1998

($000s)

PROJECT WBS : 1.4

PBS TITLE	PBS NO	FY2007-FY2010	FY2011-FY2015	FY2016-FY2020	FY2021-FY2025	FY2026-FY2030	FY2031-FY2035	FY2036 FY2040	FY2041-FY2045	FY2046 FY2050	TOTAL FY1997-FY2050
B Plant Sub-Project	RL-TP01	-	-	-	-	-	-	-	-	-	
WESF Sub-Project	RL-TP02	58,650	82,738	60,552	-	-	-	-	-	-	321,665
300 Area/SNM Sub-Project	RL-TP04	-	-	-	-	-	-	-	-	-	22,822
PFP Deactivation	RL-TP05	-	-	-	-	-	-	-	-	-	118,423
PFP Stabilization	RL-TP06	-	-	-	-	-	-	-	-	-	82,240
PFP Vault Management	RL-TP07	185,282	204,667	335,126	545,784	255,362	-	-	-	-	2,162,095
324/327 Facility Transition	RL-TP08	-	-	-	-	-	-	-	-	-	205,267
K Basin Deactivation	RL-TP09	-	-	-	-	-	-	-	-	-	123,652
Accelerated Deactivation	RL-TP10	20,937	6,000	-	-	-	20,000	41,000	45,000	15,400	173,508
Transition Project Management	RL-TP12	8,000	10,000	10,000	10,000	10,000	-	-	-	-	179,058
Hanford Surplus Facility Program 300 Are	RL-TP14	31,200	-	-	-	-	-	-	-	-	170,152
											-
											-
TOTAL NEW B/A		304,069	303,405	[illegible]	555,784	265,362	20,000	41,000	45,000	[illegible]	[illegible]

EXHIBIT 2

FACILITY STABILIZATION
FY 1998 COST BASELINE (BCWS) BY MONTH BY FUND TYPE BY PROJECT
EXECUTION YEAR
($000s)

PROJECT WBS	PROJECT TITLE	FUND TYPE	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
1.4	Facility Stabilization	Operating Expense	11,708	13,523	11,333	11,786	11,352	14,620	12,127	13,950	11,900	10,390	13,390	15,102	151,182
		CENRTC	0	0	0	0	0	0	0	0	0	0	0	0	0
		GPP	0	0	0	0	0	0	0	0	0	0	0	0	0
		Line Item	188	229	155	164	164	216	173	215	173	2,133	3,507	3,209	10,526
		Total BCWS/PMB[1]	11,896	13,752	11,489	11,950	11,516	14,836	12,300	14,165	12,073	12,523	16,897	18,311	161,708
		Mgmt Reserve[2]													0
		Line Item Contingency[2]													0
		Offsite Transfers[3]													0
Total			11,896	13,752	11,489	11,950	11,516	14,836	12,300	14,165	12,073	12,523	16,897	18,311	161,708

[1]Budgeted Cost of Work Scheduled (BCWS) Equals Performance Measurement Baseline (PMB); Expense Carryover Is Not Included.
[2]Management Reserve and Line Item Contingency Held By RL.

EXHIBIT 3

FACILITY STABILIZATION
FY 1998 COST BASELINE (BCWS) BY MONTH BY COST ELEMENT BY PROJECT
EXECUTION YEAR
($000s)

PROJECT WBS	PROJECT TITLE		COST ELEMENT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
1.4	Facility Stabilization	0	Salaries	4,724	5,238	4,436	4,783	4,517	5,745	4,830	5,366	4,839	3,896	5,058	4,446	57,877
		1	Material	494	572	466	428	384	679	593	678	580	499	672	583	6,628
		2	Purchased Serv	750	791	772	712	682	936	674	771	773	661	723	885	9,130
		3	Other Contr Chgs	70	80	88	108	124	119	77	88	80	79	117	106	1,133
		4	Internal Serv	896	1,066	856	893	880	1,159	943	1,092	935	837	1,129	1,005	11,692
		5	Internal Chgs	951	1,218	1,044	1,088	1,058	1,333	1,102	1,223	1,076	943	1,267	1,133	13,436
		6	LMSI	18	16	18	19	17	20	18	20	17	17	18	16	214
		7	Overheads	2,666	3,118	2,587	2,693	2,657	3,301	2,783	3,205	2,527	2,882	3,762	6,354	38,535
		8	Revenue	118	150	118	125	125	164	131	156	131	117	163	144	1,642
		9	Enterprise Cos	1,265	1,455	1,131	1,122	1,074	1,357	1,170	1,526	1,136	2,611	3,948	3,625	21,421
Total BCWS/PMB				11,952	13,703	11,517	11,870	11,518	14,813	12,320	14,125	12,093	12,544	16,856	18,291	161,707

[1]Budgeted Cost of Work Scheduled (BCWS) Equals Performance Measurement Baseline (PMB); Expense Carryover Is **Not** Included.

B.1 B Plant Sub-Project (RL-TP01)

B.1.1.0 B Plant Sub-Project Technical Baseline (RL-TP01)

B.1.1.1 B Plant Sub-Project Organization Mission (RL-TP01)

This project is to orderly transition B Plant to a deactivated facility, and place it into a configuration suitable for long term surveillance. This includes deactivation of the 800 foot long B Plant canyon building and adjoining support facilities to an environmentally secure and stable state, and turning the facility over to the ER program for final disposition at a later date.

The major project objectives are:

Maintain the B Plant facility in a safe, environmentally sound condition.

Transition B Plant and its ancillary facilities to a safe and cost-effective surveillance and maintenance configuration by the end of fiscal year (FY) 1998, and effect an orderly turnover to the Hanford Surplus Facilities Program in FY1999.

Planning Assumptions:

It is assumed that the organic solvents removed fron the B Plant canyon during FY97 can be disposed of via offsite incineration.

Removal of radioactive and hazardous liquids from B Plant tanks and vessels, similar to PUREX, is assumed and has been completed, in parallel with the development of a final management strategy and associated end points.

The need for an operating canyon ventilation system is an early assumption to support the S&M phase of B Plant decommissioning. Retired, underground, B Plant canyon filters contain a large inventory of radioactive Sr and Cs. The filter design prevents total isolation of loaded filters because the retired filters and the active filter share a common inlet plenum. In addition, it is assumed that an end point will require that the outlet water seals be replaced with an alternative, more permanent, method of isolation. An early assumption has been made to isolate the retired/old filter banks and to construct a new system under Project W-059. This will place the retired filters into a safe, stable shutdown condition for the S&M phase pending their ultimate disposition.

The isolation or "decoupling" of WESF from B Plant will be needed to complete the B Plant Transition Project. B Plant currently supports the WESF mission by receiving and disposing of liquid LLW. Liquid LLW generated in WESF will be collected and disposed to tank farms or an alternate disposal site, as appropriate.

B Plant currently relies on steam to operate solution transfer jets, steam heaters for process and building heat, and steam-driven backup ventilation systems. Steam reliance shall be eliminated to reduce the costs of operating and maintaining the steam supply systems.

Routine maintenance and operations at B Plant require work in radiologically contaminated areas. Contaminated or potentially contaminated areas involve extra cost and hazard exposure to workers compared to uncontaminated areas. Cost and hazard exposure will be reduced by reducing B Plant radiological contamination areas.

B.1.1.2 B Plant Sub-Project End Point Targets from Hanford Strategic Plan

- Transition high cost surplus facilities in the central plateau and south 600 areas to a low cost, stable, deactivated condition.

- Transition the PUREX facility and B-Plant to low cost, stable, deactivated condition.

B.1.1.3 B Plant Sub-Project Major Facilities

B.1.1.3.1 B Plant Facility

B.1.1.3.1.1 B Plant Facility Description

B-Plant is located in the 200-E Area of Hanford. It was constructed in 1944 of reinforced concrete as a separation plant for recovering nuclear materials through a bismuth phosphate process. It was refurbished in 1961-1967 to operate as a waste fractionization plant to remove Ce, Pr, Cs, and Sr from tank farm liquid waste. Its usage as a fractionization plant ended in 1985, and the plant is now being deactivated.

B.1.1.3.1.2 B Plant Facility Technical Logic:

The Department of Energy (DOE), in partnership with its contractors, shall plan, acquire, operate, maintain, and dispose of physical assets as valuable national resources. Stewardship of these physical assets shall be accomplished in a cost-effective manner to meet the DOE mission. This shall incorporate industry standards, a graded approach, and performance objectives.

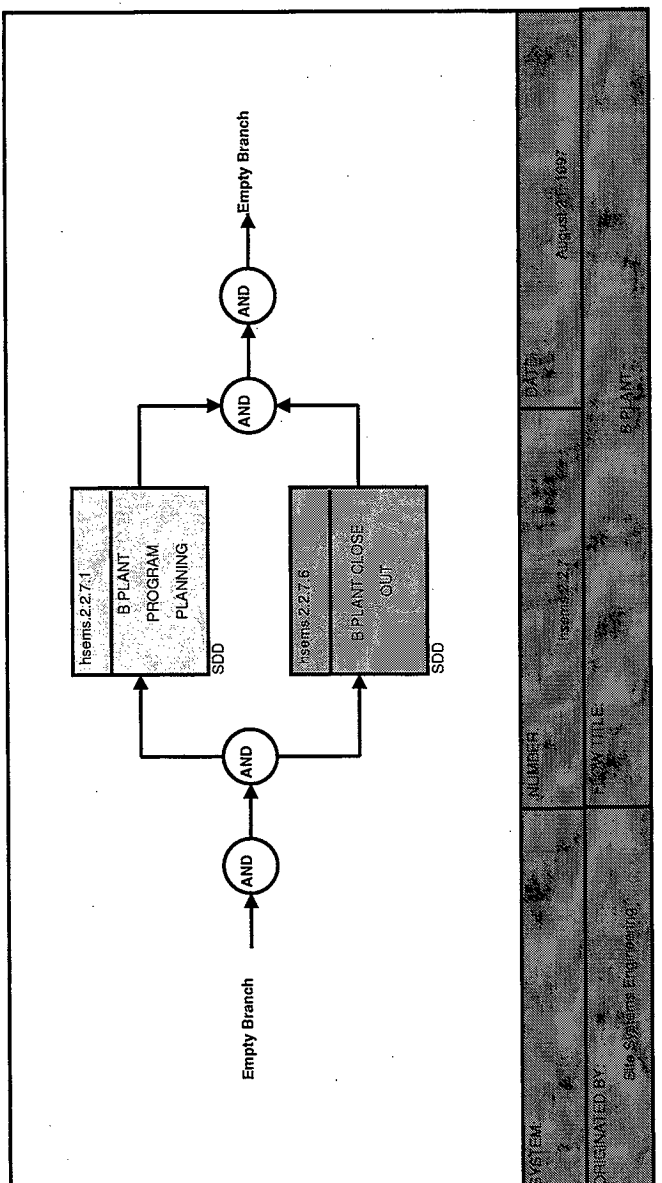


Figure B-1 B PLANT

B.1.1.3.1.3 B Plant Requirements and Life Cycle Function Descriptions

Requirements:

- Facilities discharging to the 200 Area TEDF shall implement Best Available Technology (BAT)/All Known, Available, and Reasonable Treatment (AKART). The generator shall provide the information required by WAC 173-240, Submission of Plans and Reports for Construction of Waste Water Facilities.
- B Plant shall be transitioned to the surveillance and maintenance phase by October 1998
- Central Plateau inactive facilities shall be maintained within the approved safety envelope
- B Plant shall be maintained within the approved safety envelope
- Central Plateau asbestos abatement shall be performed as necessary
- Phase II liquid effluent streams shall be treated using "Best Available Technology/All Known, Available, and Reasonable Methods of Prevention, Control, and Treatment (BAT/AKART)"

Life Cycle Function Descriptions:

B.1.1.3.1.3.1 B PLANT PROGRAM PLANNING WORK SCOPE SUMMARY

Functions that include planning and developing the overall program; establishing broad priorities; providing program technical direction; preparing and defending the program budget; controlling milestones; integrating all components of the program; providing public and private sector policy liaison; expediting interface activities and follow-up actions; and retaining overall accountability for program success.

B PLANT PROGRAM PLANNING SPECIFIC FUNCTIONS

B.1.1.3.1.3.2 B PLANT POST OPERATIONS WORK SCOPE SUMMARY

Day-to-day work, including pre-stabilization surveillance and maintenance, stabilization, post-stabilization surveillance and maintenance, deactivation, and post-deactivation surveillance and maintenance, that is required to allow safe decontamination and decommissioning.

B PLANT POST OPERATIONS SPECIFIC FUNCTIONS

B.1.1.3.1.3.3 Maintain Safe & Compliant B-Plant Facility in CP Areas

Maintain the B-Plant facility structures, operating systems and equipment, and monitoring systems within the approved safety and compliance requirements until the facilities are made available for clean-up.

B.1.1.3.1.3.4 Transition B-Plant Facility

Initiate the transition phase of decontamination and decommissioning for the B-Plant facility.

B.1.1.3.1.4 B Plant Boundary Diagram

Table B.1-1 B Plant Boundary Diagram

External Interfaces Hanford Legacy Hanford Site Environmental System Interfaces hsems.2.2.8 Waste Encapsulation and Storage Facility hsems.2.5.3 Central Plateau Steam System hsems.2.5.4 Central Plateau Water System hsems.2.5.5 Central Plateau Office Facilities hsems.2.5.6 Central Plateau Electrical System hsems.2.5.9 Central Plateau Shop Facilities hsems.2.5.13 Central Plateau Road System hsems.4.7.1 331 Complex		External Interfaces Hazardous Waste Disposal Contracts Hanford Site Environmental System Interfaces hsems.2.3.2 Double Shell Tank (DST) System hsems.2.3.5 Central Waste Complex hsems.2.4.3 200 Area Treated Effluent Disposal Facility hsems.2.5.1 222-S Laboratory hsems.2.5.7 Central Plateau Liquid Sanitary Waste System

B.1.1.3.1.5 B Plant Interface Description and Forecast

EXTERNAL INPUTS

Table B.1-2 External Inputs for B Plant

Stream	Category	Period	Baseline	Units
X.0 Hanford Legacy				
Legacy B Plant LLMW (Liquid) *LLMW (Liquid) Transferred by Hanford Legacy.*	LLMW (Liquid)	1997 - 1997	47.0	cubic meters
Legacy B Plant CH-LLMW-I *CH LLMW I Transferred by Hanford Legacy.*	CH LLMW I	1997 - 1997	1.0	cubic meters
Legacy B Plant CH-LLW-I *CH LLW I Transferred by Hanford Legacy.*	CH LLW I	1997 - 1997	6.0	cubic meters

INTERNAL INPUTS

Table B.1-3 Internal Inputs for B Plant

Stream	Category	Period	Baseline	Units
hsems.2.2.8 Waste Encapsulation and Storage Facility				
WESF LLW (Liquid) *LLW (Liquid) Transferred by Waste Encapsulation and Storage Facility.*	LLW (Liquid)	1999 - 2019	84.0	cubic meters
WESF LLW (Liquid) (to B Plant) *LLW (Liquid) Transferred.*	LLW (Liquid)	1997 - 1997	20.0	cubic meters
WESF CH-LLW-I (to B Plant) *CH LLW I Transferred.*	(none forecasted)			
hsems.2.3 Central Plateau Storage Facilities				
Storage Space (Program Owned) for B PLANT *Storage Space (Program Owned) for B PLANT*	Allocated Storage	1997 - 1998	1830	sq. ft.
hsems.2.5.3 Central Plateau Steam System				
Steam for B PLANT *Steam for B PLANT*	Steam	1997 - 1998	42.5	Mlbs
hsems.2.5.4 Central Plateau Water System				
Raw Water for B PLANT *Raw Water for B PLANT*	Raw Water	1997 - 1998	0.399	Mgal
Potable Water for B PLANT *Potable Water for B PLANT*	Potable Water	1997 - 1998	1.42	Mgal
hsems.2.5.5 Central Plateau Office Facilities				
Office Space (Program Owned) for B PLANT *Office Space (Program Owned) for B PLANT*	Office Space (Program Owned)	1997 - 1998	66500	sq. ft.
Office Space (Infrastructure Owned) for B PLANT *Office Space (Infrastructure Owned) for B PLANT*	Office Space (Infrastructure Owned)	1997 - 1998	27700	sq. ft.
hsems.2.5.6 Central Plateau Electrical System				
Electricity for B PLANT *Electricity for B PLANT*	Electricity	1997 - 1998	810.0	MW-hr
hsems.2.5.9 Central Plateau Shop Facilities				
Lifting (Cranes) for B PLANT *Lifting (Cranes) for B PLANT*	Lifting Services	1997 - 1998	23.0	crane days
Custodial Services for B PLANT *Custodial Services for B PLANT*	Custodial Services	1997 - 1998	66500	sq. ft.
Fab Shop Services for B PLANT *Fab Shop Services for B PLANT*	Fabrication Services (Other)	1997 - 1998	1340	labor-hrs
hsems.2.5.13 Central Plateau Road System				
Hanford Road Sys. Heavy Traffic for B PLANT *Hanford Road Sys. Heavy Traffic for B PLANT*	Hanford Road System (Heavy Traffic)	1997 - 1998	2.0	truck loads
Heavy Trucks for B PLANT *Heavy Trucks for B PLANT*	Heavy Trucks	1997 - 1998	68.4	vehicle-hrs
Heavy Equipment for B PLANT *Heavy Equipment for B PLANT*	Heavy Equipment (Other)	1997 - 1998	8.0	equipment days
Sedans/Light Trucks for B PLANT *Sedans/Light Trucks for B PLANT*	Sedans/Light Trucks	1997 - 1998	8.0	no. of vehicles
hsems.4.7.1 331 Complex				
Industrial Hygiene Services for B PLANT *Industrial Hygiene Services for B PLANT*	Industrial Hygiene Services	1997 - 1998	8.0	samples

Table B.1-3 Internal Inputs for B Plant (Continued)

Stream	Category	Period	Baseline	Units
Non-rad Standards (Calibrations) for B PLANT *Non-rad Standards (Calibrations) for B PLANT*	Non-rad Standards Lab Services	1997 - 1998	9.0	calibrations

EXTERNAL OUTPUTS

Table B.1-4 External Outputs for B Plant

Stream	Category	Period	Baseline	Units
X **Hazardous Waste Disposal Contracts**				
B Plant Asbestos *Asbestos Disposed by B Plant.*	Asbestos	1998 - 1998	6.0	cubic meters
B Plant Hazardous Waste *HAZ Disposed by B Plant.*	HAZ	1997 - 1998	8.0	cubic meters

INTERNAL OUTPUTS

Table B.1-5 Internal Outputs for B Plant

Stream	Category	Period	Baseline	Units
hsems.2.3.2 Double Shell Tank (DST) System				
BPlant-TCO (DN), HLW *HLW Transferred by B Plant.*	HLW	1997 - 1998	348.0	cubic meters
BPlant-Misc, HLW *HLW Transferred by B Plant.*	HLW	1997 - 2028	1130	cubic meters
BPlant, LLMW (Liquid) *LLMW (Liquid) Disposed by B Plant.*	LLMW (Liquid)	1997 - 1998	639.0	cubic meters
BPlant, LLW (Liquid) *LLW (Liquid) Transferred by B Plant.*	LLW (Liquid)	1997 - 1998	40.0	cubic meters
hsems.2.3.5 Central Waste Complex				
B PLANT, CH-LLW-III *CH LLW III Transferred by B Plant.*	CH LLW III	1997 - 1998	30.0	cubic meters
B PLANT, CH-LLW-I *CH LLW I Transferred by B Plant.*	CH LLW I	1997 - 1998	240.0	cubic meters
B PLANT, CH-LLMW-I *CH LLMW I Transferred by B Plant.*	CH LLMW I	1997 - 1998	2.0	cubic meters
hsems.2.4.3 200 Area Treated Effluent Disposal Facility				
B Plant Chemical Sewer *Treated Liquid Effluent Transferred by B Plant.*	Treated Liquid Effluent	1998 - 2019	308000	cubic meters
hsems.2.5.1 222-S Laboratory				
Analytical Laboratory Services for B PLANT *Analytical Laboratory Services for B PLANT*	Analytical Laboratory Services	1998 - 1998	6.0	samples
hsems.2.5.7 Central Plateau Liquid Sanitary Waste System				
B Plant Sanitary Liquid Waste *Sanitary Liquid Waste Transferred by B Plant.*	Sanitary Liquid Waste	1997 - 1998	1420	Mgal

B.1.1.4 Drivers for B Plant Sub-Project

Table B.1-6 Source Documents for B Plant Sub-Project

Name	Title
DOE/EIS-0222D	Draft Hanford Remedial Action Environmental Impact Statement and Comprehensive Land Use Plan
DOE/RL-89-10	Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement), Rev.4
DOE/RL-96-14	Updated Draft Mission Direction Document, June 1996
DOE/RL-96-92	Hanford Strategic Plan
ST 4502	State Waste Discharge Permit for the 200 Area TEDF

B.1.1.5 B Plant Sub-Project Risk Management

B Plant deactivation is an ongoing project that began with a shutdown order from the Department of Energy in the Fall of 1995 and is scheduled to complete in September 1998. Following completion of deactivation, the facility will be transferred to the onsite environmental restoration contractor for long term surveillance and maintenance pending final decommissioning. Current risk sources include contamination levels as high as millions of curies of cesium and strontium contamination on process cell surfaces, contaminated equipment, and air filtration systems. These sources are protected within massive structures, with High Efficiency Particulate Air (HEPA) filters protecting from releases through the stack. Additional industrial hazards are similar to other large facilities (electrical and facility infrastructure). Activities include removal or isolation of significant hazards such as highly contaminated air filters previously used as part of the canyon and process cell exhaust system, and deactivation of most utilities and services. During the project, the driving risk scenarios are the design-basis earthquake with or without a stack collapse on the filter building, and industrial accidents. The earth quake has an anticipated frequency of 0.001 per year (once in 1000 years), while the risk of industrial accidents is similar to other large industrial operations. The radioactive release scenario results from structural failure or filter failure with subsequent failure of the filter seal, which would let radioactive particulates vent through the stack to the environment. The primary risk reduction activities are to isolate the contaminated filters and provide an alternate ventilation system, remove radioactive and hazardous liquids, deactivate equipment and systems, and stabilize other sources of contamination.

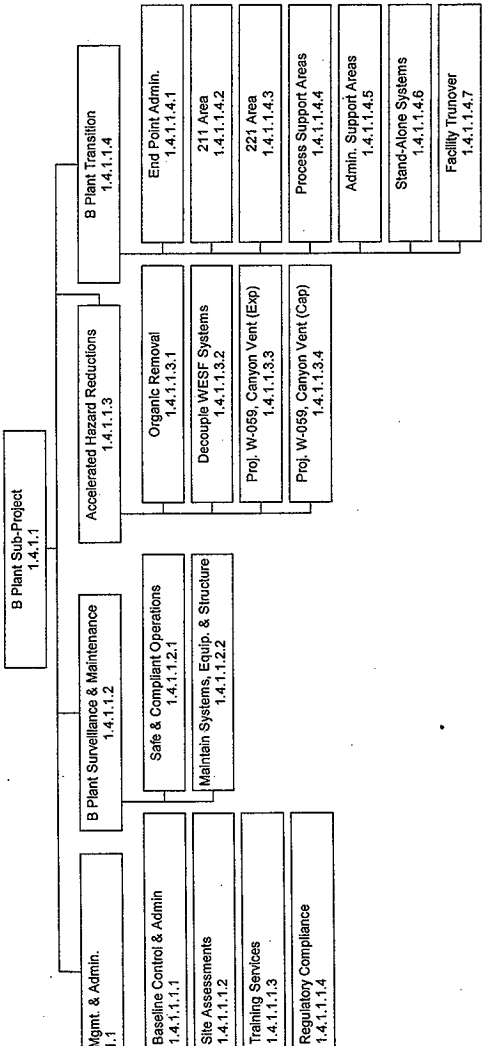
Risk management during and following deactivation requires that an understanding of the levels of risks associated with these activities. Evaluation of those risk levels is done in three categories (Public Health, Worker, and Environmental) for two time periods (deactivation and post deactivation surveillance and maintenance).

The worker risks during deactivation are considered medium and are primarily due to physical events (especially back injuries and slip-trip-fall) and industrial fire/electrical and similar events. The risks following deactivation drop to low and remain at that level until final decommissioning is started. Radiation dose risks for the worker from the design basis earthquake are calculated at 28.6 rem.

The public health and environmental risks are low due to the calculated radiation doses resulting from the earthquake being well within risk acceptance guidelines published by the Department of Energy.

Short term risks due to stopping the deactivation of B Plant prior to completion would be lower for workers since they wouldn't be exposed to the same level of industrial hazards, however longer term worker risks would increase due to restarting the project at a later time, after the experienced workers had left. Environmental and public health risks would stay the same.

B Plant Sub-Project Work Breakdown Structure



HANFORD SITE WORK BREAKDOWN STRUCTURE DICTIONARY
FACILITY STABILIZATION
WBS: 1.4
9/02/1997

1. Activity Title: PROGRAM MANAGEMENT AND ADMINISTRATION	2. Date 7/31/1997	3. PBS Number RL-TP01	4. Dict Rev 0
5. Contract WBS No. 1.4.1.1.1	6. Corresponding FDS No. KN1	7. Baseline CR No.	
8. Organization Name 16000			9. B & R No.

10. Scope of Work

The Program Management and Administration activity includes program management and administrative support; site assessments; training administration and in-plant training services. Program management and administrative support includes schedule development and maintenance, budget/cost development and tracking, change control support, and corrective action management support. Site assessments provides funds for utilities, rail service, and waste disposal. Training Services develops, presents, and evaluates training materials and services necessary to maintain qualified plant personnel per DOE Orders and state and federal regulations.

Ensure operations are conducted in accordance with environmental, safety, Quality Assurance (QA) and security requirements including RCRA, CAA, Clean Water Act (CWA), Safe Drinking Water Act (SDWA), National Environmental Policy Act (NEPA), National Historic Preservation Act (NHPA), safety, RadCon, and QA Code of Federal Regulations (CFRs), and DOE Orders; perform regulatory self-assessments; provide safety and QA support; maintain qualified compliance staff, and administer regulatory compliance officer responsibilities.

HANFORD SITE WORK BREAKDOWN STRUCTURE DICTIONARY
FACILITY STABILIZATION
WBS: 1.4

9/11/1997

1. Activity Title: B PLANT SURVEILLANCE AND MAINTENANCE	2. Date 7/31/1997	3. PBS Number RL-TP01	4. Dict Rev 0
5. Contract WBS No. 1.4.1.1.2	6. Corresponding FDS No. KN2	7. Baseline CR No.	
8. Organization Name 16000			9. B & R No.

10. Scope of Work
Provide for the safe and compliant maintenance operation of the B Plant canyon facility and its associated ancillary buildings pending deactivation. Complete S&M activities on those systems necessary to ensure operations are conducted within the facilities' safety and compliance envelopes which results in proper control of the facility radiological and hazardous inventories. Ensure operational and safety documentation is current and staff is trained in its implementation.

HANFORD SITE WORK BREAKDOWN STRUCTURE DICTIONARY
FACILITY STABILIZATION
WBS: 1.4 9/11/1997

1. Activity Title: B PLANT TRANSITION	2. Date 7/31/1997	3. PBS Number RL-TP01	4. Dict Rev 0
5. Contract WBS No. 1.4.1.1.4	6. Corresponding FDS No. KN4	7. Baseline CR No.	
8. Organization Name 16000			9. B & R No.

10. Scope of Work

The B Plant Transition Project scope includes deactivation of B Plant process buildings (221-B and 212-B), ancillary support structures (271-B, 211-B, 291-B area, etc.), mobile offices, plant systems and utilities, underground filters, and waste sites associated with B Plant.

All deactivation work to be accomplished during B Plant Transition utilizes the end point method. B Plant is applying experience from other EM-60 projects while meeting the requirements of a formal project management approach. The facility end points provide the foundation for the activities and schedules associated with the transition project, as reflected in the MYWP. Details are provided in the 'B-Plant Transition Project Management Plan', WHC-EP-0895 and in the 'B Plant End Point Document', WHC-SD-WM-TPP-054.

HANFORD SITE WORK BREAKDOWN STRUCTURE DICTIONARY
FACILITY STABILIZATION
WBS: 1.4

9/11/1997

1. Activity Title: ACCELERATED HAZARD REDUCTION	2. Date 7/31/1997	3. PBS Number RL-TP01	4. Dict Rev 0
5. Contract WBS No. 1.4.1.1.3	6. Corresponding FDS No. KN3	7. Baseline CR No.	
8. Organization Name 16000			9. B & R No.

10. Scope of Work
Reduce the hazards associated with B Plant and effect an overall reduction of S&M costs by completing the following activities:

1. Remove legacy organics from the B Plant Complex.

2. Eliminate the WESF dependency on B Plant systems and utilities.

3. Isolate the previous and current online High-Efficiency Particulate Air (HEPA) filter banks.

4. Provide a replacement system for ventilation of the B Plant facility.

9/11/1997

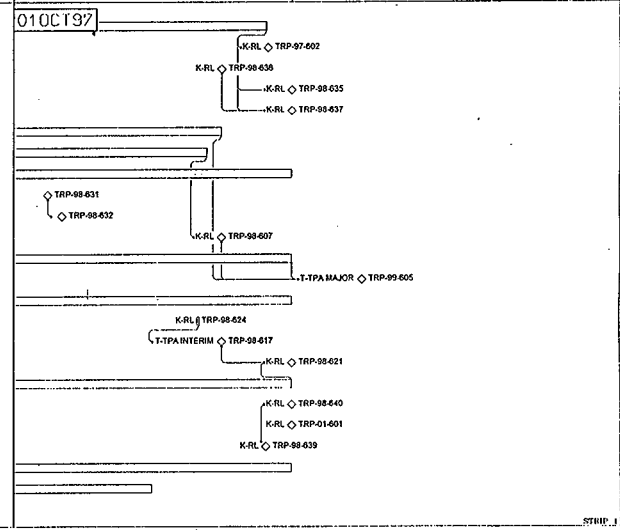
Mission Area Responsibility Assignment Matrix

Proj Lvl (PBS #)	FDS Act Number	Activity Title	Activity Manager	Responsible Organization	Cost Account
RL-TP01		B PLANT SUB-PROJECT			
	KN1	PROGRAM MANAGEMENT AND ADMINISTRATION	D.R. Speer	16000	1KN101 1KN102 1KN103 1KN104
	KN2	B PLANT SURVEILLANCE AND MAINTENANCE	D. K. Smith	16000	1KN201 1KN202
	KN3	ACCELERATED HAZARD REDUCTION	S. D. Godfrey	16000	1KN302 1KN307 1KN308 3KN309
	KN4	B PLANT TRANSITION	S. D. Godfrey	16000	1KN401 1KN402 1KN403 1KN404 1KN405 1KN406 1KN407

FACILITY STABILIZATION PROJECT
RL-TP01 B-Pant Sub-Project
Project Master Baseline Schedule

Time-Phased Logic Diagram
FY 98 MYWP September 1997

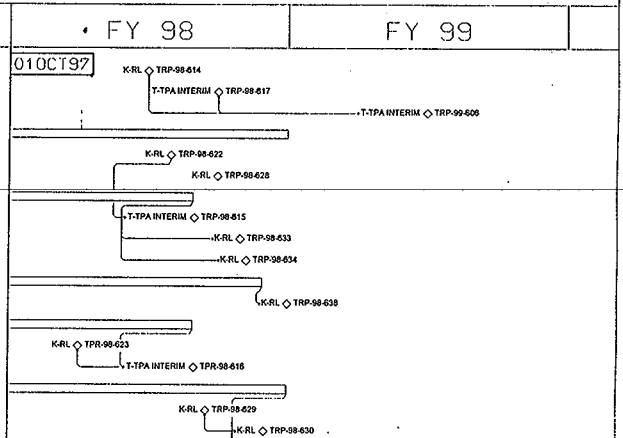
Activity	Description	Start / Finish
BP003	291-BB/BD/BF FILTER ISOLATION & STABILIZATION	10/01/97 / 08/28/98
BP006	MILESTONE: TRP-97-602 PREVENT WATER COLLECTION	08/30/98 / 08/30/98
BP007	MILESTONE:TRP-98-636 COMP DISPOSITION 5 RAILCARS	06/30/98 / 06/30/98
BP008	MILESTONE: TRP-98-635 COMP 291 AREA DEACTIVATION	09/30/98 / 09/30/98
BP010	MILESTONE:TRP-98-637 COMP HPLT YARD DEACTIVATION	09/30/98 / 09/30/98
BP012	WESF DECOUPLING PROJECT	10/01/97 / 09/30/98
BP015	LLLW CONSTRUCTION/PROCUREMENT (FYDR)	10/01/97 / 09/11/98
BP01A	211 AREA	10/01/97 / 09/30/98
BP01C	MILESTONE: TRP-98-631 COMP 211-BA CHEM.SEWER N/D	11/14/97 / 11/14/97
BP01E	MILESTONE: TRP-98-632 COMP 217-B DEMIN BLDG	12/03/97 / 12/03/97
BP024	MILESTONE: TRP-98-607 COMPLETE LLLW SYSTEM	06/30/98 / 06/30/98
BP028	DECOUPLING LOW LEVEL LIQUID WASTE SYSTEM	10/01/97 / 09/30/98
BP030	MILESTONE: TRP-99-605 DECOUPLE WESF (M-92-09)	12/31/98 / 12/31/98
BP036	END POINT ADMINISTRATION	10/01/97 / 09/30/98
BP037	MILESTONE:TRP-98-624 DOC HAZARD/SUBSTANCE/REMAIN	06/01/98 / 05/29/98
BP039	MILESTONE:TRP-98-617 DOC HAZARD/SUBSTANCE/REMAIN	08/30/98 / 08/30/98
BP03D	MILESTONE:TRP-98-621 COMP HPLT TRANSITION PHASE	09/30/98 / 09/30/98
BP040	STAND ALONE SYSTEMS	10/01/97 / 09/30/98
BP041	MILESTONE:TRP-98-640 COMP DEACT STANDALONE SYS.	09/30/98 / 09/30/98
BP042	MILESTONE:TRP-01-601 COMP DEACT B-PLANT CANYON	09/30/98 / 09/30/98
BP043	MILESTONE:TRP-98-639 COMP OPERATIONAL SYSTEMS	08/27/98 / 08/27/98
BP045	ADMINISTRATIVE SUPPORT AREAS	10/01/97 / 09/30/98
BP046	PRECLOSURE WORK PLAN PREPARATION	10/01/97 / 03/31/98



FACILITY STABILIZATION PROJECT
RL-TP01 B-Pant Sub-Project
Project Master Baseline Schedule

Time-Phased Logic Diagram
FY 98 MYWP September 1997

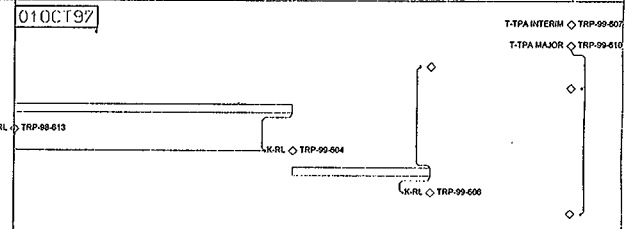
Activity	Description	Start / Finish
BP048	MILESTONE:TRP-98-614 SUBMIT PRECLOSURE WORK PLAN	03/31/98 / 03/31/98
BP051	MILESTONE:TRP-98-617 DOC.HAZ. REMAING (M-82-07)	08/30/98 / 08/30/98
BP054	MILESTONE: TRP-99-606 SUB. PRECLE PLAN(M-20-21A)	03/31/99 / 03/31/99
BP055	221 AREA	10/01/97 / 09/30/98
BP057	MILESTONE:TRP-98-622 COMP. AQUEOUS MAKEUP AREA	04/30/98 / 04/30/98
BP058	MILESTONE: TRP-98-628 COMP DEACT B-PLANT CANYON	08/30/98 / 08/30/98
BP059	271-B B-PLANT SUPPORT BUILDING THIRD FLOOR	10/01/97 / 05/29/98
BP060	MILESTONE:TRP-98-615 DEACT. AQUE.AREA(M-82-05)	05/31/98 / 05/31/98
BP061	MILESTONE:TRP-98-633 COMP 221-B SUPPORT AREA	07/30/98 / 07/30/98
BP062	MILESTONE:TRP-98-634 COMP 221-B STAIRWELL	08/07/98 / 08/07/98
BP063	PROCESS SUPPORT AREAS	10/01/97 / 08/28/98
BP064	MILESTONE: TRP-98-638 COMP DEACT. SUPPORT AREAS	09/30/98 / 09/30/98
BP068	LIQUID EFFLUENT	10/01/97 / 05/29/98
BP069	MILESTONE:TRP-98-623 COMP DEACT LIQ. EFFLNT/AREA	12/31/97 / 12/31/97
BP070	MILESTONE:TRP-98-616 COMP.DEACT. LIQ. E(M-82-06)	05/31/98 / 05/31/98
BP072	W-059 B-PLANT CANYON VENTILATION UPGRADE	10/01/97 / 09/30/98
BP073	MILESTONE:TRP-98-629 W-059 SYSTEM OPERABLE	08/10/98 / 08/10/98
BP074	MILESTONE: TRP-98-630 W-059 CONSTRUCTION COMP.	08/31/98 / 08/31/98
BP078	MILESTONE: TRP-98-620 COMPL ISOLATE/STABILIZE	09/30/98 / 09/30/98
BP080	MILESTONE:TRP-99-609 COMPL ISO/STAB(M-82-10-T01)	09/30/99 / 09/30/99
BP084	ORGANICS REMOVAL	10/01/97 / 05/29/98
BP085	MILESTONE: TRP-98-625 COMPLETE ORGANIC DISPOSITI	07/31/98 / 07/31/98
BP086	MILESTONE: TRP-98-619 DISP ORGANICS (M-82-08)	09/30/98 / 09/30/98



FACILITY STABILIZATION PROJECT
RL-TP01 B-Pant Sub-Project
Project Master Baseline Schedule

Time-Phased Logic Diagram
FY 98 MYWP September 1997

Activity	Description	Start / Finish
BP090	MILESTONE: TRP-99-607 COMP DEACT CANYON(M-82-10)	09/30/99 / 09/30/99
BP093	MILESTONE:TRP-99-610 COMP UPLT, TRANS (M-82-00)	09/30/99 / 09/30/99
BP096	SSS-F1, T/O B-Plant Facilities to EM-40	03/31/99 / 03/31/99
BP099	HSP.ET.4.E, Trans PUREX/B-Plant to Deact/Stab	09/30/99 / 09/30/99
BP0AA	B PLANT SAFE & COMPLIANT OPERATIONS	10/01/97 / 09/30/98
BP0BB	MILESTONE: TRP-98-613 S + M COST REDUCTION 20%	10/01/97 / 10/01/97
BP0CC	MILESTONE: TRP-99-604 S + M COST REDUCTION 50%	10/01/98 / 10/01/98
BP0DD	B-PLANT FACILITY TURNOVER TO ERC	10/01/98 / 03/31/99
BP0EE	MILESTONE:TRP-99-606 UPLT FACILITY T/OVER TO ERC	03/31/99 / 03/31/99
BP10A	Compl of Requested Analytical Support from WSHH	09/30/99 / 09/30/99



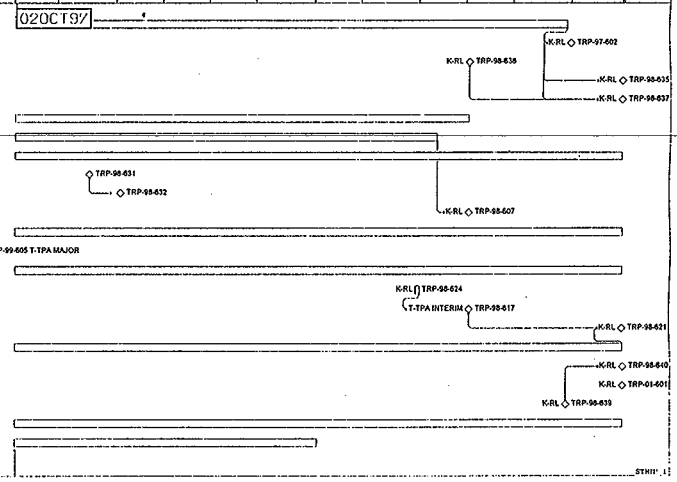
FY 98 | FY 99

STRIP_4

FACILITY STABILIZATION PROJECT
RL-TP01 B-Plant Sub-Project
Project Master Baseline Schedule

Time-Phased Logic Diagram
FY 98 MYWP September 1997

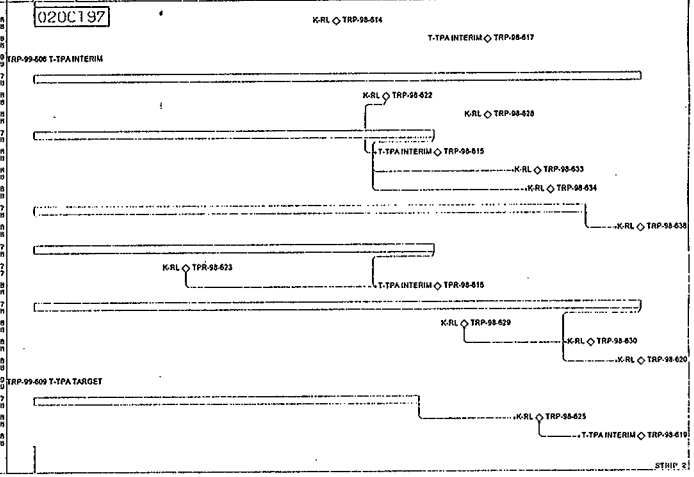
Activity	Description	Start / Finish
BP003	291-BB/BB/BF FILTER ISOLATION & STABILIZATION	10/01/97 / 08/26/98
BP008	MILESTONE: TRP-97-602 PREVENT WATER COLLECTION	05/30/98 / 05/30/98
BP007	MILESTONE:TRP-98-636 COMP DISPOSITION 5 RAILCARS	05/30/98 / 05/30/98
BP006	MILESTONE: TRP-98-635 COMP 291 AREA DEACTIVATION	05/30/98 / 05/30/98
BP010	MILESTONE:TRP-98-637 COMP BPLT YARD DEACTIVATION	05/30/98 / 05/30/98
BP012	WESF DECOUPLING PROJECT	10/01/97 / 06/30/98
BP015	LLLW CONSTRUCTION/PROCUREMENT (FY08)	10/01/97 / 06/11/98
BP01A	211 AREA	10/01/97 / 09/30/98
BP01C	MILESTONE: TRP-98-631 COMP 211-BA CHEM.SEWER R/B	11/14/97 / 11/14/97
BP01E	MILESTONE: TRP-98-632 COMP 217-B DEMIN BLDG	12/03/97 / 12/03/97
BP024	MILESTONE: TRP-98-607 COMPLETE LLLW SYSTEM	05/30/98 / 05/30/98
BP028	DECOUPLING LOW LEVEL LIQUID WASTE SYSTEM	10/01/97 / 02/28/98
BP030	MILESTONE: TRP-99-605 DECOUPLE WESF (M-82-09)	12/01/98 / 12/31/98
BP035	END POINT ADMINISTRATION	10/01/97 / 09/30/98
BP037	MILESTONE:TRP-98-624 DOC HAZARD/SUBSTANCE/REMAIN	08/01/98 / 05/20/98
BP038	MILESTONE:TRP-98-617 DOC HAZARD/SUBSTANCE/REMAIN	09/10/98 / 09/30/98
BP039	MILESTONE:TRP-98-621 COMP BPLT TRANSITION PHASE	09/30/98 / 09/30/98
BP040	STAND ALONE SYSTEMS	10/01/97 / 09/30/98
BP041	MILESTONE:TRP-98-640 COMP DEACT STANDALONE SYS.	09/30/98 / 09/30/98
BP042	MILESTONE:TRP-01-601 COMP DEACT B-PLANT CANYON	09/30/98 / 09/30/01
BP043	MILESTONE:TRP-98-639 COMP OPERATIONAL SYSTEMS	08/27/98 / 08/27/98
BP045	ADMINISTRATIVE SUPPORT AREAS	10/01/97 / 09/30/98
BP046	PRECLOSURE WORK PLAN PREPARATION	10/01/97 / 03/31/98



FACILITY STABILIZATION PROJECT
RL-TP01 B-Plant Sub-Project
Project Master Baseline Schedule

Time-Phased Logic Diagram
FY 98 MYWP September 1997

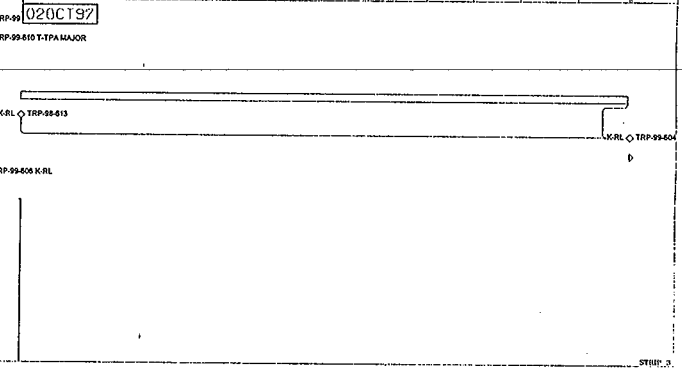
Activity	Description	Start / Finish
BP048	MILESTONE:TRP-98-614 SUBMIT PRECLOSURE WORK PLAN	03/31/98 / 03/31/98
BP051	MILESTONE:TRP-98-617 DOC.HAZ. REMAING (M-62-07)	06/30/98 / 06/30/98
BP054	MILESTONE: TRP-99-606 SUB. PRECLS PLAN(M-20-21A)	03/31/99 / 03/31/99
BP058	221 AREA	10/01/97 / 09/30/98
BP057	MILESTONE:TRP-98-622 COMP. AQUEOUS MAKEUP AREA	01/30/98 / 01/30/98
BP058	MILESTONE: TRP-98-628 COMP DEACT B-PLANT CANYON	09/30/98 / 09/30/98
BP059	271-B B-PLANT SUPPORT BUILDING THIRD FLOOR	10/01/97 / 09/30/98
BP060	MILESTONE:TRP-98-615 DEACT. AQUE.AREA(M-62-05)	05/31/98 / 05/31/98
BP061	MILESTONE:TRP-98-633 COMP 221-B SUPPORT AREA	07/30/98 / 07/30/98
BP062	MILESTONE:TRP-98-634 COMP 221-B STAIRWELL	08/07/98 / 09/17/98
BP063	PROCESS SUPPORT AREAS	10/01/97 / 09/30/98
BP064	MILESTONE: TRP-98-638 COMP DEACT. SUPPORT AREAS	09/30/98 / 09/30/98
BP065	LIQUID EFFLUENT	10/01/97 / 09/30/98
BP069	MILESTONE:TRP-98-623 COMP DEACT LIQ. EFFLNT/ARFA	12/31/97 / 12/31/97
BP070	MILESTONE:TRP-98-610 COMP.DEACT. LIQ. E(M-62-08)	05/31/98 / 05/31/98
BP072	W-059 B-PLANT CANYON VENTILATION UPGRADE	10/01/97 / 09/30/98
BP073	MILESTONE:TRP-98-629 W-059 SYSTEM OPERABLE	06/16/98 / 06/16/98
BP074	MILESTONE: TRP-98-630 W-059 CONSTRUCTION COMP.	08/31/98 / 08/31/98
BP078	MILESTONE: TRP-98-620 COMPL ISOLATE/STABILIZE	09/30/98 / 09/30/98
BP080	MILESTONE:TRP-99-609 COMPL ISO/STAB(M-62-10-T01)	09/30/99 / 09/30/99
BP084	ORGANICS REMOVAL	10/01/97 / 09/30/98
BP085	MILESTONE: TRP-98-625 COMPLETE ORGANIC DISPOSITI	07/31/98 / 07/31/98
BP086	MILESTONE: TRP-98-619 DISP ORGANICS (M-62-08)	09/30/98 / 09/30/98



FACILITY STABILIZATION PROJECT
RL-TP01 B-Plant Sub-Project
Project Master Baseline Schedule

Time-Phased Logic Diagram
FY 98 MYWP September 1997

Activity	Description	Start / Finish
BP03D	MILESTONE: TRP-99-607 COMP DEACT CANYON(M-82-10)	09/30/99 / 09/30/99
BP03S	MILESTONE:TRP-99-610 COMP DPLT. TRANS (M-82-60)	09/30/99 / 09/30/99
BP03S	SSS-FI, T/O B-Plant Facilities to EM-60	03/31/99 / 03/31/00
BP03S	HSP,ET,E,B, Trans PUREX/B-Plant to Deact/Stab	03/30/99 / 03/30/00
BP0AA	B PLANT SAFE & COMPLIANT OPERATIONS	10/01/97 / 09/30/98
BP0BK	MILESTONE: TRP-98-613 S + M COST REDUCTION 20%	10/01/97 / 10/01/97
BP0CC	MILESTONE: TRP-99-604 S + M COST REDUCTION 50%	10/01/98 / 10/01/98
BP0DD	B-PLANT FACILITY TURNOVER TO ERC	10/01/98 / 03/31/03
BP0KE	MILESTONE:TRP-99-606 DPLT FACILITY T/OVER TO ERC	03/31/03 / 03/31/03
BP100	Compl of Requested Analytical Support from WMH	09/30/99 / 09/30/03



STRIP 3

MYWP/SSPP PLANNING MILESTONE LIST
REPORTING PERIOD 10/01/97 TO 9/30/200

MILESTONE CONTROL #	TPA-MS NUMBER	TPA TYPE	MS LEVEL	MS TITLE	TYPE	DATES PLANNED BASELINE	DATES APPROVED BASELINE	DATES REVISED BASELINE	PROJ CIN	PBS #
TRP-97-602			RL	PREVENT WATER COLLECTION IN B-PLANT CANYON EXHAUST FILTERS		8/30/98				RL-TP01
TRP-98-607			FO	DECOUPLE THE WESF LOW LEVEL LIQUID WASTE SYSTEM	OTH	6/30/98	6/30/98			RL-TP01
TRP-98-613			RL	FY97 B PLANT S&M COSTS REDUCED BY 20% FROM FY95 ACTUALS		10/01/97				RL-TP01
TRP-98-614			RL	SUBMIT A B PLANT PRECLOSURE WORK PLAN TO ECOLOGY		3/31/98				RL-TP01
TRP-98-615	M-82-05	I	FO	COMPLETE DEACTIVATION OF THE B PLANT AQUEOUS MAKE-UP AREA	EA	5/31/98	5/31/98			RL-TP01
TRP-98-616	M-82-06	I	FO	COMPLETE DEACTIVATION OF THE B PLANT LIQUID EFFLUENTS AREA	EA	5/31/98	5/31/98			RL-TP01
TRP-98-617	M-82-07	I	FO	DOCMENT HAZARDOUS SUBST./DANGEROUS WASTES REMAINING IN B PLANT	EA	6/30/98	6/30/98			RL-TP01
TRP-98-619	M-82-08	I	FO	COMPLETE DISPOSITION ORGANIC SOLVENT WASTE	EA	9/30/98	9/30/98			RL-TP01
TRP-98-620			RL	ISOLATE/STABILIZE RETRIED FILTERS & PROVIDE CANYON VENT SYSTEM		9/30/98				RL-TP01
TRP-98-621			RL	COMPLETE B PLANT FACILITY TRANSITION PHASE AND INITIATE S&M PHASE		9/30/98				RL-TP01
TRP-98-622			RL	COMPLETE DEACTIVATION OF B-PLANT AQUEOUS MAKE-UP AREA		4/30/98				RL-TP01
TRP-99-604			RL	FY98 B PLANT S&M COSTS REDUCED BY 50% FROM FY95 ACTUALS		10/01/98				RL-TP01
TRP-99-605	M-82-09	I	FO	COMPLETE DECOUPLING OF WESF FROM B PLANT	EA	12/31/98	12/31/98			RL-TP01
TRP-99-606	M-20-21A	I	FO	SUBMIT A B PLANT PRECLOSURE WORK PLAN TO ECOLOGY	EA	3/31/99	3/31/99			RL-TP01
TRP-99-607	M-82-10	I	FO	COMPLETE DEACTIVATION OF THE B PLANT CANYON	EA	9/30/99	9/30/99			RL-TP01
TRP-99-609	M-82-10-T01	T	RL	ISOLATE/STABILIZE RETIRED FILTERS & PROVIDE CANYON VENT SYSTEM		9/30/99				RL-TP01
TRP-99-610	M-82-00	M	FO	COMPLETE B PLANT FAC. TRANSITION PHASE & INITIATE THE S&M PHASE	EA	9/30/99	9/30/99			RL-TP01
TRP-01-601			RL	COMPLETE DEACTIVATION OF B-PLANT CANYON		9/30/98				RL-TP01
TRP-98-623			RL	COMPLETE DEACTIVATION OF B-PLANT LIQUID EFFLUENTS AREA		12/31/97				RL-TP01
TRP-98-624			RL	DOCUMENT HAZ. SUBSTANCES/DANGEROUS WASTES REMAINING IN B-PLANT		5/31/98				RL-TP01
TRP-98-625			RL	COMPLETE DISPOSITION OF ORGANIC SOLVENT WASTE		7/31/98				RL-TP01
TRP-98-629			RL	W-059 VENTILATION SYSTEM OPERABLE		6/16/98				RL-TP01
TRP-98-630			RL	COMPLETE W-059 CONSTRUCTION		8/31/98				RL-TP01
TRP-98-631			RL	COMPLETE 211-BA DEACTIVATION		11/14/97				RL-TP01
TRP-98-632			RL	COMPLETE 217-B DEACTIVATION		12/03/97				RL-TP01
TRP-98-633			RL	COMPLETE 221-B SUPPORT AREA DEACTIVATION		7/30/98				RL-TP01
TRP-98-634			RL	COMPLETE 221-B STARIWELLS DEACTIVATION		8/07/98				RL-TP01
TRP-98-635			RL	COMPLETE 291 AREA DEACTIVATION		9/30/98				RL-TP01
TRP-98-636			RL	COMPLETE DISPOSITION OF FIVE (5) RAILCARS		6/30/98				RL-TP01
TRP-98-637			RL	COMPLETE B-PLANT YARD DEACTIVATION		9/30/98				RL-TP01
TRP-98-638			RL	COMPLETE DEACTIVATION OF ADMINISTRATIVE SUPPORT AREAS		9/30/98				RL-TP01
TRP-98-639			RL	COMPLETE OPERATIONAL SYSTEMS		8/27/98				RL-TP01
TRP-98-640			RL	COMPLETE DEACTIVATION OF STANDALONE SYSTEMS		9/30/98				RL-TP01

PHMC

MILESTONE DESCRIPTION SHEET

Title: PREVENT WATER COLLECTION IN B-PLANT CANYON EXHAUST FILTERS		**Date:** 1/29/96
Assigned To: BWHC/B-Plant Subproject		**CIN:**
Program WBS Designator: 1.4.1.1		**Due Date:** 8/30/98
PBS No: RL-TP01		
MC #: TRP-97-602	**TPA No:**	**Rev:** 2

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): N COMMIT #: RECOMM #:	Report X Letter Drawing(s) Other (Specify)	DOE-HQ X DOE-RL Other (Specify)

Milestone Description:
Provide design and construction activities needed to isolate the retired canyon exhaust filters from water intrusion.

Description of what constitutes completion of this milestone:
All pathways for water intrusion into the retired canyon filter banks have been sealed in accordance with accepted engineering practices. Sealing methods must have been proven in similar applications, must provide engineered barriers and must not rely upon any administrative controls for operability. Procedures which address this area of the plant have been properly revised to reflect the new conditions.

PHMC

MILESTONE DESCRIPTION SHEET

Title: DECOUPLE THE WESF LOW LEVEL LIQUID WASTE SYSTEM				**Date:** 8/29/95
Assigned To: BWHC/B-Plant Subproject				**CIN:**
Program WBS Designator: 1.4.1.1				**Due Date:** 6/30/98
PBS No: RL-TP01				
MC #: TRP-98-607		**TPA No:**		**Rev:** 2
MILESTONE LEVEL: DOE-HQ DOE-RL X DOE-FO CONTRACTOR	**MILESTONE TYPE:** EA PEG X OTHER	**DNFSB STATUS:** DNFSB (Y/N): N COMMIT #: RECOMM #:	**DELIVERABLE:** Report X Letter Drawing(s) Other (Specify)	**ADDRESS TO:** DOE-HQ X DOE-RL Other (Specify)

Milestone Description:
Tri-Party Agreement Milestone M-82-09 requires the decoupling of WESF from B Plant by December 31, 1998. B Plant supports WESF by receiving and disposing of low level liquid waste to Tank Farms. Completion of this milestone will provide capability for low level liquid waste generated in WESF to be collected and disposed to Tank Farms or an alternate disposal site, independent from B Plant, by June 30, 1998.

Description of what constitutes completion of this milestone:
The WESF Operations Manager has declared the new low level waste dipsosal system ready for beneficial use.

PHMC

MILESTONE DESCRIPTION SHEET

Title: COMPLETE DEACTIVATION OF THE B PLANT AQUEOUS MAKE-UP AREA		**Date:** 8/05/96
Assigned To: BWHC/B-Plant Subproject		**CIN:**
Program WBS Designator: 1.4.1.1		**Due Date:** 5/31/98
PBS No: RL-TP01		
MC #: TRP-98-615	**TPA No:** M-82-05	**Rev:** 0

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ DOE-RL X DOE-FO CONTRACTOR	X EA PEG OTHER	DNFSB (Y/N): N COMMIT #: RECOMM #:	Report Letter Drawing(s) X Other (Specify) End Points Closure	DOE-HQ DOE-RL X Other (Specify) End Points Closure Files

Milestone Description:
Tri-Party Agreement Milestone M-82-05 requires deactivation of the B Plant Aqueous Makeup Area by May 31, 1998. Deactivation of the Aqueous Makeup Area includes removal of any remaining chemical inventory, flushing or emptying tanks and supply headers, isolating utilities, and decontaminating or stabilizing surfaces contaminated with hazardous materials. For the purposes of this milestone, the Aqueous Makeup Area includes the 211-BA, 271-B (first and third floors), and 221-B (all three galleries) facilities. Following completion of this milestone a letter will be transmitted to Ecology notifying them of its completion.

Description of what constitutes completion of this milestone:
This milestone is complete when all end points associated with chemical storage tanks and handling systems are completed and signed off by the B Plant/WESF Project and Environmental Restoration Contractor representatives for 211-BA, 271-B (first and third floors) and 221-B (all three galleries) facilities.

PHMC

MILESTONE DESCRIPTION SHEET

Title: COMPLETE DEACTIVATION OF THE B PLANT LIQUID EFFLUENTS AREA		**Date:** 8/05/96
Assigned To: BWHC/B-Plant Subproject		**CIN:**
Program WBS Designator: 1.4.1.1		**Due Date:** 5/31/98
PBS No: RL-TP01		
MC #: TRP-98-616	**TPA No:** M-82-06	**Rev:** 0

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ DOE-RL X DOE-FO CONTRACTOR	X EA PEG OTHER	DNFSB (Y/N): N COMMIT #: RECOMM #:	Report Letter Drawing(s) X Other (Specify) End Points Criteria	DOE-HQ DOE-RL X Other (Specify) End Points Closure Files

Milestone Description:
Tri-Party Agreement Milestone M-82-06 requirees deactivation of the B Plant Liquid Effluents Area by May 31, 1998. Deactiviation of the Liquid Effluents Area includes eliminating B Plant sources to the B Plant cooling water and chemical sewer isolating B Plant from these liquid effluent streams, isolating utilities, deactivating associated support facilities, and decontaminating or stabilizing surfaces contaminated with hazardous materials. Following completion of this milestone a letter will be transmitted to Ecology notifying them of its completion.

Description of what constitutes completion of this milestone:
This Tri-Party Agreement milestone is complete when all liquid effluents end points, 211-BA end points, and 211-B electrical gallery vessels end points are completed and signed off by the B Plant/WESF Project and Environmental Restoration Contractor representatives.

PHMC

MILESTONE DESCRIPTION SHEET

Title: DOCMENT HAZARDOUS SUBST./DANGEROUS WASTES REMAINING IN B PLANT		**Date:** 8/05/96
Assigned To: BWHC/B-Plant Subproject		**CIN:**
Program WBS Designator: 1.4.1.1		**Due Date:** 6/30/98
PBS No: RL-TP01		
MC #: TRP-98-617	**TPA No:** M-82-07	**Rev:** 0

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ DOE-RL X DOE-FO CONTRACTOR	X EA PEG OTHER	DNFSB (Y/N): N COMMIT #: RECOMM #:	Report Letter Drawing(s) X Other (Specify) Inventory Doc. (S&M Plan)	DOE-HQ DOE-RL X Other (Specify) Ecology

Milestone Description:
Tri-Party Agreement Milestone M-82-07 requires the identification of hazardous substances/dangerous wastes remaining within B Plant by June 30, 1998. Hazardous substances include (1) non-dangerous waste components that are highly radioactive, (2) part of the plant structure (e.g., lead shielding walls), (3) intact pieces of equipment (e.g., silver reactors, lead counterweights in jumpers, etc.), and (4) highly radioactive containerized waste stored in Cell 4 (e.g., cesium, strontium and lead).

Description of what constitutes completion of this milestone:
This milestone is complete when documentation of hazardous substances/dangerous waste is submitted to Ecology.

PHMC
MILESTONE DESCRIPTION SHEET

Title: COMPLETE DISPOSITION ORGANIC SOLVENT WASTE		**Date:** 8/05/96
Assigned To: BWHC/B-Plant Subproject		**CIN:**
Program WBS Designator: 1.4.1.1		**Due Date:** 9/30/98
PBS No: RL-TP01		
MC #: TRP-98-619	**TPA No:** M-82-08	**Rev:** 0

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ DOE-RL X DOE-FO CONTRACTOR	X EA PEG OTHER	DNFSB (Y/N): N COMMIT #: RECOMM #:	Report Letter Drawing(s) X Other (Specify) Organic Waste Dispositioned	DOE-HQ DOE-RL X Other (Specify) Ecology

Milestone Description:
Tri-Party Agreement Milestone M-82-08 requires the disposition of organic solvent waste stored at B Plant by September 30, 1998. Organic solvent waste removed from the B Plant canyon and transferred to RCRA compliant storage will be disposed of to another RCRA compliant disposal facility, either on or off the Hanford Site. In the event that organic disposal is not achievable by September 30, 1998, the organic solvent waste will be moved from interim storage at B Plant to another RCRA compliant storage location at a Hanford Site facility.

Description of what constitutes completion of this milestone:
This Tri-Party Agreement Milestone is complete when the B Plant organic solvent is disposed of or moved to a RCRA compliant storage location at Hanford other than B Plant.

PHMC

MILESTONE DESCRIPTION SHEET

Title: ISOLATE/STABILIZE RETRIED FILTERS & PROVIDE CANYON VENT SYSTEM		**Date:** 8/05/96
Assigned To: BWHC/B-Plant Subproject		**CIN:**
Program WBS Designator: 1.4.1.1		**Due Date:** 9/30/98
PBS No: RL-TP01		
MC #: TRP-98-620	**TPA No:**	**Rev:** 0

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): N COMMIT #: RECOMM #:	Report Letter Drawing(s) X Other (Specify) Project completion	DOE-HQ DOE-RL X Other (Specify) Transition files

Milestone Description:
Tri-Party Agreement Milestone M-82-10-T01 requires stabilization/isolation of retired filters and provision for an operating canyon ventilation system for the S&M phase by September 30, 1999. Retired filters (high-efficiency particulate air [HEPA] filter and sand filter) contain radionuclides inventories that must be isolated from the on-line canyon ventilation system and stabilized to ensure safe operations for the S&M phase. Project W-059 will provide for isolation and stabilization of the retired HEPA filters and the sand filter, and will provide an active canyon ventilation system siutable for the S&M phase.

Description of what constitutes completion of this milestone:
This RL milestone is complete when the retired B Plant filters are isolated from the on-line filters, stabilized, and an operating canyon ventilation sytem, suitable for the S&M phase, is provided.

PHMC

MILESTONE DESCRIPTION SHEET

Title: COMPLETE B PLANT FACILITY TRANSITION PHASE AND INITIATE S&M PHASE		**Date:**
Assigned To:		**CIN:**
Program WBS Designator: 1.4.1.1		**Due Date:** 9/30/98
PBS No: RL-TP01		
MC #: TRP-98-621	**TPA No:**	**Rev:** 0

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): COMMIT #: RECOMM #:	Report Letter Drawing(s) X Other (Specify) End Points Closure	DOE-HQ DOE-RL X Other (Specify) End Point Closure files to ERC

Milestone Description:
Tri-Party Agreement Milestone M-82-00 requires completion of B Plant facility transition and initiation of the S&M phase by September 30, 1999. B Plant facility transition includes (1) completion of all activities necessary to achieve end point criteria for placing the B Plant facility in a safe and stable S&M mode, and (2) completion of all M-82 series interim milestones and target actions. The S&M phase is initiated upon completion of facility transition.

Description of what constitutes completion of this milestone:
This milestone is complete when all B Plant end points are completed and signed off by the Transition Projects and Environmental Restoration Contractor (ERC) representatives, and facility turnover to the ERC is initiated.

PHMC

MILESTONE DESCRIPTION SHEET

Title: COMPLETE DEACTIVATION OF B-PLANT AQUEOUS MAKE-UP AREA		**Date:** 8/14/97
Assigned To: BWHC/B-Plant Subproject		**CIN:**
Program WBS Designator: 1.4.1.1		**Due Date:** 4/30/98
PBS No: RL-TP01		
MC #: TRP-98-622	**TPA No:**	**Rev:** 0

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): N COMMIT #: RECOMM #:	Report Letter Drawing(s) X Other (Specify) End Points Closure	DOE-HQ DOE-RL X Other (Specify) End Point Closure Files

Milestone Description:
Tri-Party Agreement Milestone M-82-05 requires deactivation of the B Plant Aqueous Makeup Area by May 31, 1998. Deactivation of the Aqueous Makeup Area includes removal of any remaining chemical inventory, flushing or emptying tanks and supply headers, isolating utilities, and decontaminating or stabilizing surfaces contaminated with hazardous materials. For the purposes of this milestone, the Aqueous Makeup Area includes the chemical storage tanks and handling systems in 211-BA, 271-B (first and third floors), and 221-B (all three galleries) facilities. Following completion of this milestone a letter will be transmitted to Ecology notifying them of its completion.

Description of what constitutes completion of this milestone:
This milestone is complete when all end points associated with chemical storage tanks and handling sytems are completed and signed off by the B Plant/WESF Project and Environmental Restoration Contractor representatives for 211-BA, 271-B (first and third floors) and 221-B (all three galleries) facilities.

PHMC

MILESTONE DESCRIPTION SHEET

Title: FY98 B PLANT S&M COSTS REDUCED BY 50% FROM FY95 ACTUALS		**Date:** 1/29/96
Assigned To: BWHC/B-Plant Subproject		**CIN:**
Program WBS Designator: 1.4.1.1		**Due Date:** 10/01/98
PBS No: RL-TP01		
MC #: TRP-99-604	**TPA No:**	**Rev:** 0

MILESTONE LEVEL:	**MILESTONE TYPE:**	**DNFSB STATUS:**	**DELIVERABLE:**	**ADDRESS TO:**
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): N COMMIT #: RECOMM #:	Report X Letter Drawing(s) Other (Specify)	DOE-HQ X DOE-RL Other (Specify)

Milestone Description:
The overall FY 1998 B Plant operations, S&M costs will be reduced by 50% as a result of completion of accelerated hazard reduction activities, B Plant Transition activities, and other initiatives.

Description of what constitutes completion of this milestone:
The annual costs to operate, maintain, and surveil B Plant have been reduced by 50% when compared to the FY 1995 actual costs of $17,963K.

PHMC

MILESTONE DESCRIPTION SHEET

Title: COMPLETE DECOUPLING OF WESF FROM B PLANT		**Date:** 8/05/96
Assigned To: BWHC/B-Plant Subproject		**CIN:**
Program WBS Designator: 1.4.1.1		**Due Date:** 12/31/98
PBS No: RL-TP01		
MC #: TRP-99-605	**TPA No:** M-82-09	**Rev:** 0

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ DOE-RL X DOE-FO CONTRACTOR	X EA PEG OTHER	DNFSB (Y/N): N COMMIT #: RECOMM #:	Report Letter Drawing(s) X Other (Specify) Project completion	DOE-HQ DOE-RL X Other (Specify) Transition files

Milestone Description:
Tri-Party Agreement Milestone M-82-09 requires the decoupling of WESF from B Plant by December 31, 1998. B Plant currently supports the WESF mission by supplying deionized water, receiving and disposing of low level liquid waste, receiving solid waste, and receiving and monitoring effluent streams. The isolation of 'Decoupling' of WESF from B Plant will involve the relacement of these essential systems/services from a source other than B Plant to allow standalone operation of WESF.

Description of what constitutes completion of this milestone:
This Tri-Party Agreement Milestone is complete when the essential systems/services supplied to WESF from B Plant are replaced and operational. Following completion of all decoupling subprojects, a completion letter will be transmitted to Ecology.

PHMC
MILESTONE DESCRIPTION SHEET

Title: SUBMIT A B PLANT PRECLOSURE WORK PLAN TO ECOLOGY		**Date:** 8/05/96
Assigned To: BWHC/B-Plant Subproject		**CIN:**
Program WBS Designator: 1.4.1.1		**Due Date:** 3/31/99
PBS No: RL-TP01		
MC #: TRP-99-606	**TPA No:** M-20-21A	**Rev:** 0

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ DOE-RL X DOE-FO CONTRACTOR	X EA PEG OTHER	DNFSB (Y/N): N COMMIT #: RECOMM #:	Report Letter Drawing(s) X Other (Specify) Preclosure Work Plan	DOE-HQ DOE-RL X Other (Specify) Ecology

Milestone Description:
Tri-Party Agreement Milestone M-20-21A requires submittal of a Preclosure Work Plan to Ecology by March 31, 1999. The Preclosure Work Plan details actions to be completed during the transition phase in order to facilitate full RCRA closure in the future. These actions pertain to treatment, storage and disposal units and hazardous substances/dangerous wastes which will remain in place following transition.

Description of what constitutes completion of this milestone:
This milestone is complete when Revision 0 of the B Plant Preclosure Work Plan is submitted to Ecology for review and approval.

PHMC
MILESTONE DESCRIPTION SHEET

Title: COMPLETE DEACTIVATION OF THE B PLANT CANYON		**Date:** 8/05/96
Assigned To: BWHC/B-Plant Subproject		**CIN:**
Program WBS Designator: 1.4.1.1		**Due Date:** 9/30/99
PBS No: RL-TP01		
MC #: TRP-99-607	**TPA No:** M-82-10	**Rev:** 0

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ DOE-RL X DOE-FO CONTRACTOR	X EA PEG OTHER	DNFSB (Y/N): N COMMIT #: RECOMM #:	Report Letter Drawing(s) X Other (Specify) End Points Closure	DOE-HQ DOE-RL X Other (Specify) End Points Closure files

Milestone Description:
Tri-Party Agreement Milestone M-82-10 requires deactivation of the B Plant canyon by September 30, 1999. Deactivation of the B Plant canyon includes isolating canyon piping to the external facility interfaces (e.g., Tank Farms, 216-B3 Pond, cribs, etc.), removing organic solvent waste, and emptying vessels with liquid above minimum heel. Liquid will be appropriately disposed to Tank Farms. Sampling and analysis will be performed as necessary to support disposal and to assist in developing an inventory of hazardous substances/dangerous wastes to remain within the facility. Flushing of vessels will not be required, but may be performed at the discretion of the facility, as needed to complete disposal activities. Following completion of this milestone a letter will be transmitted to Ecology notifiying them of its completion.

Description of what constitutes completion of this milestone:
This milestone is complete when all of the 221-B canyon end points are completed and signed off by the B Plant/WESF Project and Environmental Restoration Contractor representatives.

PHMC

MILESTONE DESCRIPTION SHEET

Title: ISOLATE/STABILIZE RETIRED FILTERS & PROVIDE CANYON VENT SYSTEM		**Date:** 8/05/96
Assigned To: BWHC/B-Plant Subproject		**CIN:**
Program WBS Designator: 1.4.1.1		**Due Date:** 9/30/99
PBS No: RL-TP01		
MC #: TRP-99-609	**TPA No:** M-82-10-T01	**Rev:** 0

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): N COMMIT #: RECOMM #:	Report Letter Drawing(s) X Other (Specify) Project completion	DOE-HQ DOE-RL X Other (Specify) Transition Files

Milestone Description:
Tri-Party Agreement Milestone M-82-10-T01 requires stabilization/isolation of retired filters and provision for an operating canyon ventilation system for the S&M phase by September 30, 1999. Retired filters (high-efficiency particulate air [HEPA] filter and sand filter) contain radionuclides inventories that must be isolated from the on-line canyon ventilation system and stabilizated to ensure safe operations for the S&M phase. Project W-059 will provide for isolation and stabilization of the retired HEPA filters and the sand filter, and will provide an active canyon ventilation system suitable for the S&M phase. Following completion of this milestone a letter will be transmitted to Ecology notifying them of its completion.

Description of what constitutes completion of this milestone:
This Tri-Party Agreement Milestone is complete when the retired B Plant filters are isolated from the on-line filters, stabilized, and an operating canyon ventilation system, suitable for the S&M phase, is provided.

PHMC

MILESTONE DESCRIPTION SHEET

Title: COMPLETE B PLANT FAC. TRANSITION PHASE & INITIATE THE S&M PHASE		**Date:** 8/05/96
Assigned To: BWHC/B-Plant Subproject		**CIN:**
Program WBS Designator: 1.4.1.1		**Due Date:** 9/30/99
PBS No: RL-TP01		
MC #: TRP-99-610	**TPA No:** M-82-00	**Rev:** 0

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ DOE-RL X DOE-FO CONTRACTOR	X EA PEG OTHER	DNFSB (Y/N): N COMMIT #: RECOMM #:	Report Letter Drawing(s) X Other (Specify) End Points Closure	DOE-HQ DOE-RL X Other (Specify) End Points Clos. to ERC

Milestone Description:
Tri-Party Agreement Milestone M-82-00 requires completion of B Plant facility transition and initiation of the S&M phase by September 30, 1999. B Plant facility transition includes (1) completion of all activities necessary to achieve end point criteria for placing the B Plant facility in a safe and stable S&M mode, and (2) completion of all M-82 series interim milestones and target actions. The S&M phase is initiated upon completoin of facility transition.

Description of what constitutes completion of this milestone:
This Tri-Party Agreement Milestone is complete when all B Plant end points are completed and signed off by the B-Plant/WESF Project and Environmental Restoration Contractor representatives, and facility turnover to the Environmental Restoration Contractor is initiated.

PHMC
MILESTONE DESCRIPTION SHEET

Title: COMPLETE DEACTIVATION OF B-PLANT CANYON		**Date:** 8/14/95
Assigned To: BWHC/B-Plant Subproject		**CIN:**
Program WBS Designator: 1.4.1.1		**Due Date:** 9/30/98
PBS No: RL-TP01		
MC #: TRP-01-601	**TPA No:**	**Rev:** 0

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): N COMMIT #: RECOMM #:	Report Letter Drawing(s) X Other (Specify) End Points Closure	DOE-HQ DOE-RL X Other (Specify) End Points Closure Files

Milestone Description:
Tri-Party Agreement Milestone M-82-10 requires deactivation of the B Plant canyon by September 30, 1999. Deactivation of the B Plant canyon includes isolating canyon piping to the external facility interfaces (e.g., Tank Farms, 216-B3 Pond, cribs, etc.), removing organic solvent waste, and emptying process vessels. Vessels with liquid (other than organics) above minimum heel will be emptied and the liquid will be qppropriately disposed to disposal and to assist in developing an inventory of hazardous substances/dangerous wastes to remain within the facility. Flushing of vessels will not be required, but may be performed at the discretion of the facility, as needed to complete disposal activities.

Description of what constitutes completion of this milestone:
This RL milestone is complete when all 221-B canyuon end points are completed and signed off by the B Plant/WESF Project and Environmental Restoration Contractor representatives.

PHMC

MILESTONE DESCRIPTION SHEET

Title: COMPLETE DEACTIVATION OF B-PLANT LIQUID EFFLUENTS AREA		**Date:** 8/14/97
Assigned To: BWHC/B-Plant Subproject		**CIN:**
Program WBS Designator: 1.4.1.1		**Due Date:** 12/31/97
PBS No: RL-TP01		
MC #: TRP-98-623	**TPA No:**	**Rev:** 0

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): N COMMIT #: RECOMM #:	Report Letter Drawing(s) X Other (Specify) End Points Closure	DOE-HQ DOE-RL X Other (Specify) End Points Closure Files

Milestone Description:
Tri-Party Agreement Milestone M-82-06 requires deactivation of the B Plant Liquid Effluents Area by May 31, 1998. Deactivation of the Liquid Effluents Area includes eliminating B Plant sources to the B Plant cooling water and chemical sewer, isolating B Plant from these liquid effluent streams, isolating utilities, deactivating associated support facilities, and decontaminating or stabilizing surfaces contaminated with hazardous materials. Following completion of this milestone, a letter will be transmitted to Ecology notifying them of its completion.

Description of what constitutes completion of this milestone:
This milestone is complete when all liquid effluents end points, 211-BA end points, and 211-B electrical gallery vessels end points are completed and signed off by the B Plant/WESF Project and Environmental Restoration Contractor representatives.

PHMC

MILESTONE DESCRIPTION SHEET

Title: DOCUMENT HAZ. SUBSTANCES/DANGEROUS WASTES REMAINING IN B-PLANT		**Date:** 8/14/97
Assigned To: BWHC/B-Plant Subproject		**CIN:**
Program WBS Designator: 1.4.1.1		**Due Date:** 5/31/98
PBS No: RL-TP01		
MC #: TRP-98-624	**TPA No:**	**Rev:** 0

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): N COMMIT #: RECOMM #:	Report X Letter Drawing(s) Other (Specify)	DOE-HQ X DOE-RL Other (Specify)

Milestone Description:
Tri-Party Agreement Milestone M-82-07 requires the identification of hazardous substances/dangerous wastes remaining within B Plant by June 30, 1998. Hazardous substances include (1) non-dangerous waste components that are highly radioactive, (2) part of the plant structure (e.g., lead shielding in walls), (3) intact pieces of equipment (e.g., lead counterweights in jumpers, etc.), and (4) highly radioactive containerized waste stored in Cell 4 (e.g., cesium, strontium and lead).

Description of what constitutes completion of this milestone:
This milestone is complete when documentation of hazardous substances/dangerous waste remaining within B Plant is submitted to RL for approval and subsequent transmittal to Ecology.

PHMC

MILESTONE DESCRIPTION SHEET

Title: COMPLETE DISPOSITION OF ORGANIC SOLVENT WASTE		**Date:** 8/14/97
Assigned To: BWHC/B-Plant Subproject		**CIN:**
Program WBS Designator: 1.4.1.1		**Due Date:** 7/31/98
PBS No: RL-TP01		
MC #: TRP-98-625	**TPA No:**	**Rev:** 0

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): N COMMIT #: RECOMM #:	Report Letter Drawing(s) X Other (Specify) Organic Waste Disposal	DOE-HQ DOE-RL X Other (Specify) Ecology

Milestone Description:
Tri-Party Agreement Milestone M-82-08 requires the disposition of organic solvent waste stored at B Plant by September 30, 1998. Organic solvent waste removed from the B Plant canyon and transferred to RCRA compliant storage will be disposed of to another RCRA compliant disposal facility, either on or off the Hanford Site. In the event that organic disposal is not achievable by September 30, 1998, the organic solvent waste will be transferred from interim storage at B Plant to other RCRA compliant storage at the Hanford Site.

Description of what constitutes completion of this milestone:
This milestone is complete when the B Plant organic solvent is disposed of or moved to a RCRA compliant storage location at Hanford other than B Plant.

PHMC
MILESTONE DESCRIPTION SHEET

Title: W-059 VENTILATION SYSTEM OPERABLE				**Date:** 8/14/97
Assigned To: BWHC/B-Plant Subproject				**CIN:**
Program WBS Designator: 1.4.1.1				**Due Date:** 6/16/98
PBS No: RL-TP01				
MC #: TRP-98-629		**TPA No:**		**Rev:** 0
MILESTONE LEVEL: DOE-HQ X DOE-RL DOE-FO CONTRACTOR	**MILESTONE TYPE:** EA PEG OTHER	**DNFSB STATUS:** DNFSB (Y/N): N COMMIT #: RECOMM #:	**DELIVERABLE:** X Report Letter Drawing(s) Other (Specify)	**ADDRESS TO:** DOE-HQ DOE-RL X Other (Specify)

Milestone Description:
An operating canyon ventilation system will provide contamination containment in the 221-B canyon and allow deactivation of the retired filters and 291-B support facilities. The operating canyon ventilation system will be provided by Project W-059.

Description of what constitutes completion of this milestone:
This milestone is complete when Project W-059 provides an operating canyon ventilation system, as evidenced by completed, accepted operability testing procedures and initiation of retired filters isolation/stabilization.

PHMC
MILESTONE DESCRIPTION SHEET

Title: COMPLETE W-059 CONSTRUCTION		**Date:** 8/14/97
Assigned To: BWHC/B-Plant Subproject		**CIN:**
Program WBS Designator: 1.4.1.1		**Due Date:** 8/31/98
PBS No: RL-TP01		
MC #: TRP-98-630	**TPA No:**	**Rev:** 0

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): N COMMIT #: RECOMM #:	Report X Letter Drawing(s) Other (Specify)	DOE-HQ X DOE-RL Other (Specify)

Milestone Description:
Project W-059 construction includes an operating canyon ventilation system, isolation and passive ventilation of the retired filters, and miscellaneous required system monitoring, as defined in the project design.

Description of what constitutes completion of this milestone:
This milestone is complete when all physical construction is completed for Project W-059, acceptance testing is performed nad accepted, and the project is turned over to and accepted by the facility representative. A letter will be transmitted to RL notifying them of completion of this milestone.

PHMC
MILESTONE DESCRIPTION SHEET

Title: COMPLETE 211-BA DEACTIVATION		**Date:** 8/14/97
Assigned To: BWHC/B-Plant Subproject		**CIN:**
Program WBS Designator: 1.4.1.1		**Due Date:** 11/14/97
PBS No: RL-TP01		
MC #: TRP-98-631	**TPA No:**	**Rev:** 0

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): N COMMIT #: RECOMM #:	Report Letter Drawing(s) X Other (Specify) End Points Closure	DOE-HQ DOE-RL X Other (Specify) End Points Closure Files

Milestone Description:
Deactivation of 211-BA includes removal and/or identification of remaining hazards, disposing of waste, housekeeping, isolating utilities, draining and capping lines, sealing paths to the environment, and documenting the final deactivated condition of this facilitiy.

Description of what constitutes completion of this milestone:
This milestone is complete when all 211-BA end points are completed and signed off by the B Plant/WESF Project and Environmental Restoration Contractor representatives.

PHMC
MILESTONE DESCRIPTION SHEET

Title: COMPLETE 217-B DEACTIVATION		**Date:** 8/14/97
Assigned To: BWHC/B-Plant Subproject		**CIN:**
Program WBS Designator: 1.4.1.1		**Due Date:** 12/03/97
PBS No: RL-TP01		
MC #: TRP-98-632	**TPA No:**	**Rev:** 0

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): N COMMIT #: RECOMM #:	Report Letter Drawing(s) X Other (Specify) End Points Closure	DOE-HQ DOE-RL X Other (Specify) End Points Closure Files

Milestone Description:
Deactivation of 217-B includes removal and/or identification of remaining hazards, disposing of waste, housekeeping, isolating utilities, draining and capping lines, sealing paths to the environment, and documenting the final deactivated condition of this facility.

Description of what constitutes completion of this milestone:
This milestone is complete when all 217-B end points are completed and signed off by the B Plant/WESF Project and Environmental Restoration Contractor representatives.

PHMC

MILESTONE DESCRIPTION SHEET

Title: COMPLETE 221-B SUPPORT AREA DEACTIVATION		**Date:** 8/14/97
Assigned To: BWHC/B-Plant Subproject		**CIN:**
Program WBS Designator: 1.4.1.1		**Due Date:** 7/30/98
PBS No: RL-TP01		
MC #: TRP-98-633	**TPA No:**	**Rev:** 0

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): N COMMIT #: RECOMM #:	Report Letter Drawing(s) X Other (Specify) End Points Closure	DOE-HQ DOE-RL X Other (Specify) End Points Closure Files

Milestone Description:
Deactivation of 221-B Support Area encompasses the 221-B SWP Lobby, 221-B facility exterior, WESF isolation, and 221-B pits. Activities include removal and/or identification of remaining hazards, disposing of waste, housekeeping, isolating utilities, draining and capping lines, sealing paths to the environment, and documenting the final deactivated condition of this facility.

Description of what constitutes completion of this milestone:
This milestone is complete when all end points associated with 221-B SWP Lobby, 221-B pits, 221-B facility exterior, and WESF isolation are completed and signed off by the B Plant/WESF Project and Environmental rEstoration Contractor representatives.

PHMC

MILESTONE DESCRIPTION SHEET

Title: COMPLETE 221-B STARIWELLS DEACTIVATION		**Date:** 8/14/97
Assigned To: BWHC/B-Plant Subproject		**CIN:**
Program WBS Designator: 1.4.1.1		**Due Date:** 8/07/98
PBS No: RL-TP01		
MC #: TRP-98-634	**TPA No:**	**Rev:** 0

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): N COMMIT #: RECOMM #:	Report Letter Drawing(s) X Other (Specify) End Points Closure	DOE-HQ DOE-RL X Other (Specify) End Points Closure Files

Milestone Description:
Deactivation of 221-B Stairwells includes removal and/or identification of remaining hazards, disposing of waste, housekeeping, isolating utilities, draining and capping lines, sealing paths to the environment, and documenting the final deactivated condition of this facility.

Description of what constitutes completion of this milestone:
This milestone is complete when all 221-B Stairwell end points are completed and signed off by the B Plant/WESF Project and Environmental Restoration Contractor representatives.

PHMC

MILESTONE DESCRIPTION SHEET

Title: COMPLETE 291 AREA DEACTIVATION		**Date:** 8/14/97
Assigned To: BWHC/B-Plant Subproject		**CIN:**
Program WBS Designator: 1.4.1.1		**Due Date:** 9/30/98
PBS No: RL-TP01		
MC #: TRP-98-635	**TPA No:**	**Rev:** 0

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): N COMMIT #: RECOMM #:	Report Letter Drawing(s) X Other (Specify) End Points Closure	DOE-HQ DOE-RL X Other (Specify) End Points Closure Files

Milestone Description:
Deactivation of 291 Area encompasses the 291-B stack, fans, steam turbine, yard, retired filters, and associated support buildings. Activities include removal and/or identification of remaining hazards, disposing of waste, housekeeping, isolating utilities, draining and capping lines, sealing paths to the environment, and documenting the final deactivated condition of this facility.

Description of what constitutes completion of this milestone:
This milestone is complete when all 291-B end points are completed and signed off by the B Plant/WESF Project and Environmental Restoration Contractor representatives.

PHMC
MILESTONE DESCRIPTION SHEET

Title: COMPLETE DISPOSITION OF FIVE (5) RAILCARS		**Date:** 8/14/97
Assigned To: BWHC/B-Plant Subproject		**CIN:**
Program WBS Designator: 1.4.1.1		**Due Date:** 6/30/98
PBS No: RL-TP01		
MC #: TRP-98-636	**TPA No:**	**Rev:** 0

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): N COMMIT #: RECOMM #:	Report Letter Drawing(s) X Other (Specify) End Points Closure	DOE-HQ DOE-RL X Other (Specify) End Points Closure Files

Milestone Description:
Disposition of the 5 B Plant regulated railcars will be accomplished by disposal, transfer to antoher on-site program, or transition to the Environmental Restoration Contractor as part of the overall B Plant transition.

Description of what constitutes completion of this milestone:
This milestone is complete when the end points for the 5 B Plant regulated railcars are completed and signed off by the B Plant/WESF Project and Environmental Restoration Contractor representatives.

PHMC

MILESTONE DESCRIPTION SHEET

Title: COMPLETE B-PLANT YARD DEACTIVATION		**Date:** 8/14/97
Assigned To: BWHC/B-Plant Subproject		**CIN:**
Program WBS Designator: 1.4.1.1		**Due Date:** 9/30/98
PBS No: RL-TP01		
MC #: TRP-98-637	**TPA No:**	**Rev:** 0

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): N COMMIT #: RECOMM #:	Report Letter Drawing(s) X Other (Specify) End Points Closure	DOE-HQ DOE-RL X Other (Specify) End Points Closure Files

Milestone Description:
Deactivation of B Plant yard encompasses the yard, miscellaneous streams, and underground storage transfer lines. Activities include removal and/or identification of remaining hazards, disposing of waste, housekeeping, isolating utilities, draining and capping lines, sealing paths to the environment, and documenting the final deactivated condition of this facility.

Description of what constitutes completion of this milestone:
This milestone is complete when all B Plant yard end points are completed and signed off by B Plant/WESF Project and Environmental Restoration Contractor representatives.

PHMC

MILESTONE DESCRIPTION SHEET

Title: COMPLETE DEACTIVATION OF ADMINISTRATIVE SUPPORT AREAS		**Date:** 8/14/97
Assigned To: BWHC/B-Plant Subproject		**CIN:**
Program WBS Designator: 1.4.1.1		**Due Date:** 9/30/98
PBS No: RL-TP01		
MC #: TRP-98-638	**TPA No:**	**Rev:** 0

MILESTONE LEVEL:	**MILESTONE TYPE:**	**DNFSB STATUS:**	**DELIVERABLE:**	**ADDRESS TO:**
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): N COMMIT #: RECOMM #:	Report Letter Drawing(s) X Other (Specify) End Points Closure	DOE-HQ DOE-RL X Other (Specify) End Points Closure Files

Milestone Description:
Deactivation of administrative support areas encompasses 271-B, 271-BA, Mobile Offices, 221-BD, 222-B, 2711-B, 2715-B, and 2716-B. Activities include removal and/or identification of remaining hazards, disposing of waste, housekeeping, isolating facilities, draining and capping lines, sealing paths to the environment, and documenting final deactivated condition of this facility

Description of what constitutes completion of this milestone:
This milestone is complete when all end points associated with 271-B, 271-BA, Mobile Offices, 271-BD, 222-B, 2711-B, 2715-B, and 2716-B are completed and signed off by the B Plant/WESF Project and Environmental Restoration Contractor representatives.

PHMC
MILESTONE DESCRIPTION SHEET

Title: COMPLETE OPERATIONAL SYSTEMS		**Date:** 8/14/97
Assigned To: BWHC/B-Plant Subproject		**CIN:**
Program WBS Designator: 1.4.1.1		**Due Date:** 8/27/98
PBS No: RL-TP01		
MC #: TRP-98-639	**TPA No:**	**Rev:** 0

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): N COMMIT #: RECOMM #:	Report Letter Drawing(s) X Other (Specify) End Points Closure	DOE-HQ DOE-RL X Other (Specify) End Points Closure Files

Milestone Description:
Operational systems required for the post-deactivation S&M phase include operational electrical, operational remote monitoring, and surveillance lighting.

Description of what constitutes completion of this milestone:
This milestone is complete when all end points associated with operational electrical, operational remote monitoring, and surveillance lighting are compelted and signed off by the B Plant/WESF Project and Environmental Restoration Contractor representatives.

PHMC

MILESTONE DESCRIPTION SHEET

Title: COMPLETE DEACTIVATION OF STANDALONE SYSTEMS		**Date:** 8/14/97
Assigned To: BWHC/B-Plant Subproject		**CIN:**
Program WBS Designator: 1.4.1.1		**Due Date:** 9/30/98
PBS No: RL-TP01		
MC #: TRP-98-640	**TPA No:**	**Rev:** 0

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): N COMMIT #: RECOMM #:	Report Letter Drawing(s) X Other (Specify) End Points Closure	DOE-HQ DOE-RL X Other (Specify) End Points Closure Files

Milestone Description:
Deactivation of standalone systems encompasses water, steam, air, electrical, and fire protection systems. Activities include system shutdown, removal and/or identification of remaining hazards, disposing of waste, housekeeping, isolating utilities, draining and capping lines, sealing paths to the environment, and documenting the final deactivated condition of this facility.

Description of what constitutes completion of this milestone:
This milestone is complete when all end points associated with steam, water, air, electrical, and fire protection systems deactivation are complete and signed off by the B Plant/WESF Project and Environmental Restoration Contractor representatives.

EXHIBIT 1

FACILITY STABILIZATION
LIFE CYCLE COST BASELINE (BCWS) BY YEAR BY FUND TYPE
BY PROJECT BASELINE SUMMARY (PBS)
FY 1998

($000s)

PROJECT WBS:	1.4.1.1
PBS NO:	RL-TP01
PBS TITLE:	B-Plant Sub-Project

FUND TYPE	FY2007-FY2010	FY2011-FY2015	FY2016-FY2020	FY2021-FY2025	FY2026-FY2030	FY2031-FY2035	FY2036 FY2040	FY2041-FY2045	FY2046 FY2050	TOTAL FY1997-FY2050
OPERATING EXPENSE										46,878
CENRTC										62
GENERAL PLANT PROJECT										-
LINE ITEM *(List Each One)*										
W-059 B-PLANT VENT PROJECT										4,317
										-
										-
										-
										-
Subtotal Line Items	-	-	-	-	-	-	-	-	-	4,317
TOTAL BCWS/PMB[1]										51,257
MGMT RESERVE[2]										-
LINE ITEM CONTINGENCY[2]										-
OFFSITE TRANSFERS[3]										-
Subtotal	-	-	-	-	-	-	-	-	-	-
TOTAL										51,257

[1]Budgeted Cost of Work Scheduled (BCWS) Equals Performance Measurement Baseline (PMB); Expense Carryover **NOT** Included.

[2]Management Reserve and Line Item Contingency Held by RL.

[3]Work Performed at Sites Other Than Hanford.

FACILITY STABILIZATION
LIFE CYCLE COST BASELINE (BCWS) BY YEAR BY FUND TYPE
BY PROJECT BASELINE SUMMARY (PBS)
FY 1998

($000s)

PROJECT WBS:	1.4.1.1
PBS NO:	RL-TP01
PBS TITLE:	B-Plant Sub-Project

FUND TYPE	FY2007-FY2010	FY2011-FY2015	FY2016-FY2020	FY2021-FY2025	FY2026-FY2030	FY2031-FY2035	FY2036 FY2040	FY2041-FY2045	FY2046 FY2050	TOTAL FY1997-FY2050
OPERATING EXPENSE										46,878
CENRTC										62
GENERAL PLANT PROJECT										-
LINE ITEM *(List Each One)*										
W-059 B-PLANT VENT PROJECT										4,317
										-
										-
										-
										-
Subtotal Line Items	-	-	-	-	-	-	-	-	-	4,317
TOTAL BCWS/PMB[1]										51,257
MGMT RESERVE[2]										-
LINE ITEM CONTINGENCY[2]										-
OFFSITE TRANSFERS[3]										-
Subtotal	-	-	-	-	-	-	-	-	-	-
TOTAL										51,257

[1]Budgeted Cost of Work Scheduled (BCWS) Equals Performance Measurement Baseline (PMB); Expense Carryover **NOT** Included.
[2]Management Reserve and Line Item Contingency Held by RL.
[3]Work Performed at Sites Other Than Hanford.

EXHIBIT 4

FACILITY STABILIZATION
LIFE CYCLE BUDGET AUTHORITY (B/A) BY YEAR BY FUND TYPE
BY PROJECT BASELINE SUMMARY (PBS)
FY 1998

($000s)

PROJECT WBS:	1.4.1.1
PBS NO:	RL-TP01
PBS TITLE:	B-Plant Sub-Project

FUND TYPE	FY1997	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	SUBTOT FY1997-FY2006
OPERATING EXPENSE	22,080	19,981	4,909								46,970
CENRTC	75										75
GENERAL PLANT PROJECT											-
LINE ITEM *(List Each One)*											
SAFETY VENTILATION UPGRADE (W-059)	1,917	2,400									4,317
											-
											-
											-
											-
Subtotal Line Items	1,917	2,400	-	-	-	-	-	-	-	-	4,317
TOTAL REQ'D											

EXHIBIT 4

FACILITY STABILIZATION
LIFE CYCLE BUDGET AUTHORITY (B/A) BY YEAR BY FUND TYPE
BY PROJECT BASELINE SUMMARY (PBS)
FY 1998

($000s)

PROJECT WBS:	1.4.1.1									
PBS NO:	RL-TP01									
PBS TITLE:	B-Plant Sub-Project									TOTAL
FUND TYPE	FY2007-FY2010	FY2011-FY2015	FY2016-FY2020	FY2021-FY2025	FY2026-FY2030	FY2031-FY2035	FY2036 FY2040	FY2041-FY2045	FY2046 FY2050	FY1997-FY2050
OPERATING EXPENSE										46,970
CENRTC										75
GENERAL PLANT PROJECT										-
LINE ITEM *(List Each One)*										
SAFETY VENTILATION UPGRADE (W-059)										4,317
										-
										-
										-
										-
Subtotal Line Items	-	-	-	-	-	-	-	-	-	4,317
TOTAL LINE ITEM										

EXHIBIT 2a

FACILITY STABILIZATION
FY 1998 COST BASELINE (BCWS) BY MONTH
BY PROJECT BASELINE SUMMARY (PBS)
BY ACTIVITY DATA SHEET (ADS)
EXECUTION YEAR

($000s)

PROJECT WBS:	1.4.1.1
PBS NO:	RL-TP01
PBS TITLE:	B-Plant Sub-Project

ADS TITLE	ADS NO	FUND TYPE	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
B-PLANT	66260	OP EXP	1,849	1,636	1,788	1,862	1,594	1,896	1,770	1,641	1,367	921	878	2,008	19,210
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	1,849	1,636	1,788	1,862	1,594	1,896	1,770	1,641	1,367	921	878	2,008	19,210
SAFETY VENTILATION UPGRADE (W-059)	66261														
		OP EXP	82	64	80	63	56	66	62	71	74	51	51	51	771
		CENRTC	-	-	-	-	-	-	-	-	-	-	-	-	-
		GPP	-	-	-	-	-	-	-	-	-	-	-	-	-
		LI	188	229	155	164	164	216	173	215	173	165	226	332	2,400
		SUBTOT	270	293	235	227	220	282	235	286	247	216	277	383	3,171
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-

[1]Budgeted Cost of Work Scheduled (BCWS) Equals Performance Measurement Baseline (PMB); Expense Carryover Is **NOT** Included.

EXHIBIT 2a

FACILITY STABILIZATION
FY 1998 COST BASELINE (BCWS) BY MONTH
BY PROJECT BASELINE SUMMARY (PBS)
BY ACTIVITY DATA SHEET (ADS)
EXECUTION YEAR

($000s)

PROJECT WBS:	1.4.1.1
PBS NO:	RL-TP01
PBS TITLE:	B-Plant Sub-Project

ADS TITLE	ADS NO	FUND TYPE	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL BCWS/PMB [1]			2,119	1,929	2,023	2,089	1,814	2,178	2,005	1,927	1,614	1,137	1,156	2,391	22,381

[1]Budgeted Cost of Work Scheduled (BCWS) Equals Performance Measurement Baseline (PMB); Expense Carryover Is **NOT** Included.

B PLANT SUB-PROJECT

AVERAGE ANNUAL FULL TIME EQUIVALENTS
(includes Major Subcontractors but not Enterprise Companies)

PHBS 1.4.1.1

Submittal Date: 9/10/97

PBS Number	PBS Title	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007
RL-TP01	B-Plant Subproject	120	4	0	0	0	0	0	0	0	0
Total PBS FTEs		120	4	0	0	0	0	0	0	0	0

B.2 WESF Sub-Project (RL-TP02)

B.2.1.0 WESF Sub-Project Technical Baseline (RL-TP02)

B.2.1.1 WESF Sub-Project Organization Mission (RL-TP02)

WThe Waste Encapsulation Storage Facility (WESF) project mission is assuring the safe storage of approximately 147 million curies of encapsulated radioactive material. As part of accomplishing this mission, old systems and structures must be updated to be capable of functioning safely for the next 20 years and without a need for services currently supplied from B Plant. Primary upgrades are planned in the next few years in the areas of response to a potential capsule leak, pool cell monitoring capabilities, and capsule monitoring equipment. Safety analyses are also being upgraded with preparation of a new safety analysis report with accompanying operational safety requirements. These upgrades are necessary to maintain the capsules in a safe storage condition until transfer out for ultimate disposal. Final capsule removal is planned for 2017. After capsule removal the facility will be deactivated and turned over to the ER Project.

WESF will implement interim status requirements upon submittal of a Part A Permit Application at the end of December 1997.

B.2.1.2 WESF Sub-Project End Point Targets from Hanford Strategic Plan

* Transition high cost surplus facilities in the central plateau and south 600 areas to a low cost, stable, deactivated condition.

* Continue to provide safe storage for Cs/Sr capsules in the WESF indefinitely.
    (1) WESF decoupled and a standalone facility.

* Remove non-essential, surplus buildings and facilities that don't have identified post-cleanup uses.

* Dismantle, or close through entombment, D&D facilities in the central plateau areas currently assigned to the ER program.

B.2.1.3 WESF Sub-Project Major Facilities

B.2.1.3.1 Waste Encapsulation and Storage Facility

B.2.1.3.1.1 Waste Encapsulation and Storage Facility Description

WESF was constructed in 1974 in the 200-E Area of Hanford for the purpose of producing and storing Cs and Sr capsules.

B.2.1.3.1.2 Waste Encapsulation and Storage Facility Facility Technical Logic:

The Department of Energy (DOE), in partnership with its contractors, shall plan, acquire, operate, maintain, and dispose of physical assets as valuable national resources. Stewardship of these physical assets shall be accomplished in a cost-effective manner to meet the DOE mission. This shall incorporate industry standards, a

graded approach, and performance objectives.

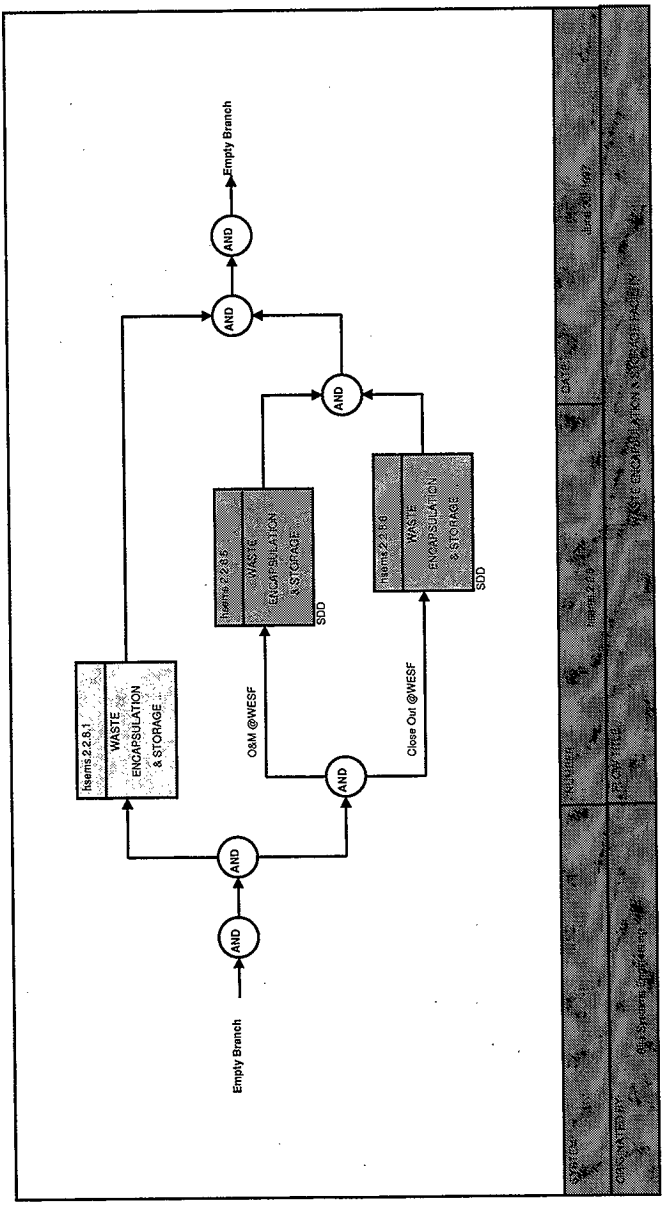


Figure B-2 WASTE ENCAPSULATION & STORAGE FACILITY

B.2.1.3.1.3 Waste Encapsulation and Storage Facility Requirements and Life Cycle Function Descriptions

Requirements:

- Complete WESF hotcell and K3 duct cleanup in support of WESF low level liquid waste system critical activities.
- WESF Solid Waste System declared operational and ready for use by WESF Plant Operations Management.
- WESF Liquid Effluent System declared operational and ready for use by WESF Plant Operations Management.
- Facilities discharging to the 200 Area TEDF shall implement Best Available Technology (BAT)/All Known, Available, and Reasonable Treatment (AKART). The generator shall provide the information required by WAC 173-240, Submission of Plans and Reports for Construction of Waste Water Facilities.
- Central Plateau high cost surplus facilities shall be transitioned to a low cost, stable, deactivated condition
- Central Plateau facilities other than processing facilities shall be dismantled
- WESF shall be decoupled from B Plant by Sep 1998
- WESF pool cell facilities shall be maintained within the approved safety envelope
- WESF infrastructure shall be maintained within the approved safety envelope
- Central Plateau inactive facilities shall be maintained within the approved safety envelope
- Cesium capsules shall be safely stored in WESF.
- Strontium capsules shall be safely stored in WESF.
- Central Plateau asbestos abatement shall be performed as necessary
- Phase II liquid effluent streams shall be treated using "Best Available Technology/All Known, Available, and Reasonable Methods of Prevention, Control, and Treatment (BAT/AKART)"

Life Cycle Function Descriptions:

B.2.1.3.1.3.1 WASTE ENCAPSULATION & STORAGE FACILITY PROGRAM PLANNING WORK SCOPE SUMMARY

Functions that include planning and developing the overall program; establishing broad priorities; providing program technical direction; preparing and defending the program budget; controlling milestones; integrating all components of the program; providing public and private sector policy liaison; expediting interface activities and follow-up actions; and retaining overall accountability for program success.

B.2.1.3.1.3.2 WASTE ENCAPSULATION & STORAGE FACILITY OPERATIONS & MAINTENANCE WORK SCOPE SUMMARY

Day-to-day work, including preventive and predictive maintenance, that is required to maintain and preserve plant and capital equipment in a condition suitable for it to be used for its designated purpose.

WASTE ENCAPSULATION & STORAGE FACILITY OPERATIONS & MAINTENANCE SPECIFIC FUNCTIONS

B.2.1.3.1.3.3 Maintain Safe & Compliant Materials (Cs/Sr Capsules) in WESF

Materials (Sr/Cs Capsules) stored in the WESF facility will be maintained in safe condition until they are removed for disposal or treatment.

B.2.1.3.1.3.4 WASTE ENCAPSULATION & STORAGE FACILITY POST OPERATIONS WORK SCOPE SUMMARY

Day-to-day work, including pre-stabilization surveillance and maintenance, stabilization, post-stabilization surveillance and maintenance, deactivation, and post-deactivation surveillance and maintenance, that is required to allow safe decontamination and decommissioning.

WASTE ENCAPSULATION & STORAGE FACILITY POST OPERATIONS SPECIFIC FUNCTIONS

B.2.1.3.1.3.5 Maintain Safe & Compliant Waste Encapsulation and Storage Facility in CP Areas

Maintain the WESF facility structures, operating systems and equipment, and monitoring systems within the approved safety and compliance requirements until the facilities are made available for clean-up.

B.2.1.3.1.3.6 Transition Waste Encapsulation and Storage Facility

Initiate the transition phase of decontamination and decommissioning for the WESF facility.

B.2.1.3.1.4 Waste Encapsulation and Storage Facility Boundary Diagram

Table B.2-1 Waste Encapsulation and Storage Facility Boundary Diagram

External Interfaces Hanford Legacy Hanford Site Environmental System Interfaces hsems.2.5.3 Central Plateau Steam System hsems.2.5.4 Central Plateau Water System hsems.2.5.5 Central Plateau Office Facilities hsems.2.5.6 Central Plateau Electrical System hsems.2.5.9 Central Plateau Shop Facilities hsems.2.5.13 Central Plateau Road System hsems.4.6.4 327 Building hsems.4.7.1 331 Complex		External Interfaces Hazardous Waste Disposal Contracts Hanford Site Environmental System Interfaces hsems.2.2.7 B Plant hsems.2.3.2 Double Shell Tank (DST) System hsems.2.3.5 Central Waste Complex hsems.2.4.3 200 Area Treated Effluent Disposal Facility hsems.2.5.1 222-S Laboratory hsems.2.5.7 Central Plateau Liquid Sanitary Waste System

B.2.1.3.1.5 Waste Encapsulation and Storage Facility Interface Description and Forecast

EXTERNAL INPUTS

Table B.2-2 External Inputs for Waste Encapsulation and Storage Facility

Stream	Category	Period	Baseline	Units
X.0 Hanford Legacy				
Legacy Strontium Capsules *Strontium (Sr) Transferred by Hanford Legacy.*	Strontium (Sr)	1997 - 1997	601.0	capsules
Legacy Cesium Capsules *Cesium (Cs) Transferred by Hanford Legacy.*	Cesium (Cs)	1998 - 1998	1310	capsules

INTERNAL INPUTS

Table B.2-3 Internal Inputs for Waste Encapsulation and Storage Facility

Stream	Category	Period	Baseline	Units
hsems.2.3 Central Plateau Storage Facilities				
Storage Space (Program Owned) for WESF *Storage Space (Program Owned) for WESF*	Allocated Storage	1998 - 2019	21200	sq. ft.
hsems.2.5.3 Central Plateau Steam System				
Steam for WESF *Steam for WESF*	Steam	1998 - 2019	198.0	Mlbs
hsems.2.5.4 Central Plateau Water System				
Raw Water for WESF *Raw Water for WESF*	Raw Water	1998 - 2019	22.0	Mgal
Potable Water for WESF *Potable Water for WESF*	Potable Water	1998 - 2019	5.45	Mgal
hsems.2.5.5 Central Plateau Office Facilities				
Office Space (Program Owned) for WESF *Office Space (Program Owned) for WESF*	Office Space (Program Owned)	1998 - 2019	77700	sq. ft.
Office Space (Infrastructure Owned) for WESF *Office Space (Infrastructure Owned) for WESF*	Office Space (Infrastructure Owned)	1998 - 2019	154000	sq. ft.
hsems.2.5.6 Central Plateau Electrical System				
Electricity for WESF *Electricity for WESF*	Electricity	1998 - 2019	5250	MW-hr
hsems.2.5.9 Central Plateau Shop Facilities				
Fab Shop Services for WESF *Fab Shop Services for WESF*	Fabrication Services (Other)	1998 - 2019	4040	labor-hrs
Lifting (Cranes) for WESF *Lifting (Cranes) for WESF*	Lifting Services	1998 - 2019	352.0	crane days
Custodial Services for WESF *Custodial Services for WESF*	Custodial Services	1998 - 2019	77700	sq. ft.
hsems.2.5.13 Central Plateau Road System				
Hanford Road Sys. Heavy Traffic for WESF *Hanford Road Sys. Heavy Traffic for WESF*	Hanford Road System (Heavy Traffic)	1998 - 2019	220.0	truck loads
Sedans/Light Trucks for WESF *Sedans/Light Trucks for WESF*	Sedans/Light Trucks	1998 - 2019	44.0	no. of vehicles
Heavy Trucks for WESF *Heavy Trucks for WESF*	Heavy Trucks	1998 - 2019	792.0	vehicle-hrs
Heavy Equipment for WESF *Heavy Equipment for WESF*	Heavy Equipment (Other)	1998 - 2019	880.0	equipment days
hsems.4.6.4 327 Building				
327 Cesium Capsules *Cesium (Cs) Transferred.*	Cesium (Cs)	1998 - 1998	13.0	capsules
hsems.4.7.1 331 Complex				
Non-rad Standards (Calibrations) for WESF *Non-rad Standards (Calibrations) for WESF*	Non-rad Standards Lab Services	1998 - 2019	1340	calibrations

EXTERNAL OUTPUTS

Table B.2-4 External Outputs for Waste Encapsulation and Storage Facility

Stream	Category	Period	Baseline	Units
X Hazardous Waste Disposal Contracts				
WESF Hazardous Waste *HAZ Disposed by Waste Encapsulation and Storage Facility.*	HAZ	1998 - 2019	22.0	cubic meters

INTERNAL OUTPUTS

Table B.2-5 Internal Outputs for Waste Encapsulation and Storage Facility

Stream	Category	Period	Baseline	Units
hsems.2.2.7 B Plant				
WESF LLW (Liquid) *LLW (Liquid) Transferred by Waste Encapsulation and Storage Facility.*	LLW (Liquid)	1999 - 2019	84.0	cubic meters
WESF LLW (Liquid) (to B Plant) *LLW (Liquid) Transferred.*	LLW (Liquid)	1997 - 1997	20.0	cubic meters
WESF CH-LLW-I (to B Plant) *CH LLW I Transferred.*	(none forecasted)			
hsems.2.3.2 Double Shell Tank (DST) System				
WESF HLW, Phase II *HLW from the clean up of WESF during phase II.*	(none forecasted)			
hsems.2.3.5 Central Waste Complex				
WESF, CH-LLW-I *CH LLW I transferred from the WESF as forecasted in the SWIFT report. The forecasts need to be updated to be consistent with the 2019 closeout date for WESF.*	CH LLW I	1997 - 2025	406.0	cubic meters
WESF, CH-LLMW-I *CH LLMW I transferred from the WESF as forecasted in the SWIFT report. The forecasts need to be updated to be consistent with the 2019 closeout date for WESF.*	CH LLMW I	1997 - 2025	29.0	cubic meters
WESF, CH-LLW-III *CH LLW III transferred from the WESF as forecasted in the SWIFT report. The forecasts need to be updated to be consistent with the 2019 closeout date for WESF.*	CH LLW III	1997 - 2025	58.0	cubic meters
hsems.2.4.3 200 Area Treated Effluent Disposal Facility				
B Plant/WESF Cooling Water *Treated Liquid Effluent Transferred by Waste Encapsulation and Storage Facility.*	Treated Liquid Effluent	1998 - 2019	666000	cubic meters
hsems.2.5.1 222-S Laboratory				
Analytical Laboratory Services for WESF *Analytical Laboratory Services for WESF*	Analytical Laboratory Services	1998 - 2019	7320	samples
hsems.2.5.7 Central Plateau Liquid Sanitary Waste System				
WESF Sanitary Liquid Waste *Sanitary Liquid Waste Transferred by Waste Encapsulation and Storage Facility.*	Sanitary Liquid Waste	1998 - 2019	22.0	Mgal

B.2.1.4 Drivers for WESF Sub-Project

Table B.2-6 Source Documents for WESF Sub-Project

Name	Title
DE-AC06-96RL13200	Project Hanford Management Contract, Fluor Daniel Hanford, Inc.
DOE/EIS-0222D	Draft Hanford Remedial Action Environmental Impact Statement and Comprehensive Land Use Plan
DOE/RL-89-10	Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement), Rev.4
DOE/RL-96-14	Updated Draft Mission Direction Document, June 1996
DOE/RL-96-92	Hanford Strategic Plan
ST 4502	State Waste Discharge Permit for the 200 Area TEDF

B.2.1.5 WESF Sub-Project Risk Management

WESF's mission is to store and manage the Cs and Sr capsules until they are transferred to a permanent storage or disposal location. Current Department of Energy plans as outlined in Project Baseline Summary number RL-TW07 shows the development, design, and construction of the Process Waste Privatization Phase II completed in 2013. WESF currently utilizes B Plant (Sub-Project PBS RL-TP01) for management of low level liquid wastes, but that dependency will be eliminated by the end of June 1998.

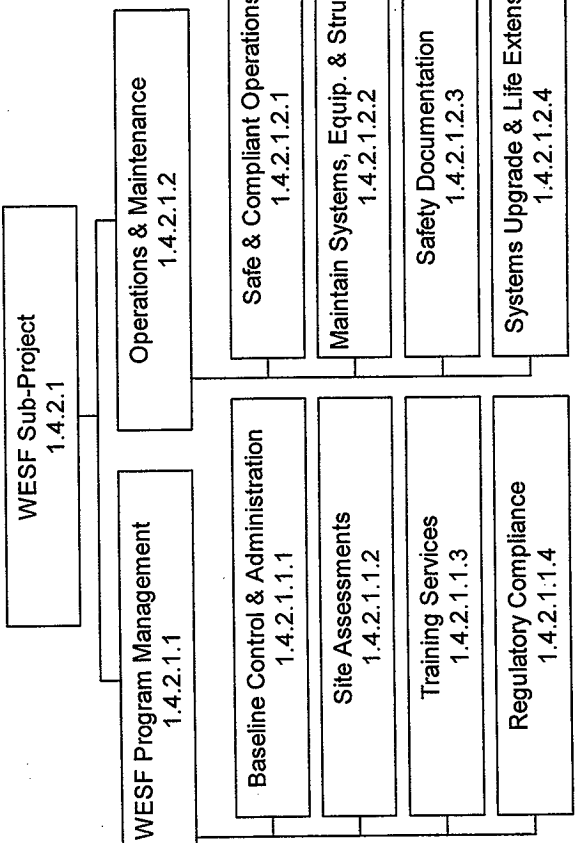
WESF is tasked with the safe and cost effective management of approximately 147 million curies of Cesium-137 and Strontium-90, including their daughter products. This material is double-encapsulated in welded stainless steel canisters (approximately 1300 cesium capsules and 600 strontium capsules). The encapsulated materials are safely maintained in water-filled pools, which require utilities, structures, and other support services. WESF, built in 1974, requires replacement of several systems and structural components due to natural aging and deterioration.

Risk management during the next 25 years while WESF stores and then ships out the capsules requires an understanding of the levels of risks associated with these activities. Evaluation of those risk levels is done in three categories (Public Health, Worker, and Environmental) for three time periods (Baseline operations, Capsule transfer, and End state).

During the Baseline operations the risks are categorized as low with a calculated maximum radiation dose of 0.017 rem to workers and 0.400 rem to the public from an earthquake large enough to damage the facility significantly. During the four years planned for capsule transfer to the treatment and disposal facility, the risk to the workers becomes slightly higher due to additional handling. Following transfer of the capsules out of the facility, the residual risks are very low and are a result of legacy contamination remaining in the facility from past operations.

If facility operations are ceased due to lack of funding and the capsules aren't properly maintained the potential risks become extremely high with a calculated radiation dose of 2200 rem to on site workers and 9.8 rem to the public. This is due to failure to maintain the cooling and shielding water in the pools the capsules are stored in and the subsequent overheating and failure of multiple capsules.

WESF Sub-Project Work Breakdown Structure



HANFORD SITE WORK BREAKDOWN STRUCTURE DICTIONARY
FACILITY STABILIZATION
WBS: 1.4 9/03/1997

1. Activity Title: PROGRAM MANAGEMENT AND ADMINISTRATION	2. Date 7/31/1997	3. PBS Number RL-TP02	4. Dict Rev 0
5. Contract WBS No. 1.4.2.1.1	6. Corresponding FDS No. KW1	7. Baseline CR No.	
8. Organization Name 16000			9. B & R No.

10. Scope of Work

The Program Management and Administration activity includes program management and administrative support; site assessments; and training. Program management and administrative support includes schedule development and maintenance, budget/cost development and tracking, change control support, and corrective action management support. Site assessments provides funds for utilities, rail service, waste disposal, and computer network services. Training Services develops, presents, and evaluates training materials and services necessary to maintain qualified plant personnel per DOE Orders and state and federal regulations.

Ensure operations are conducted in accordance with environmental, safety, QA, and security requirements including RCRA, CAA, CWA, SDWA, NEAP, NHPA, safety, Radcon, and QA CFRs, and DOE Orders; perform regulatory self-assessments; provide safety and QA support; maintain qualified compliance staff; and administer regulatory compliance officer responsibilities.

HANFORD SITE WORK BREAKDOWN STRUCTURE DICTIONARY
FACILITY STABILIZATION
WBS: 1.4

9/03/1997

1. Activity Title: WESF OPERATIONS AND MAINTENANCE	2. Date 7/31/1997	3. PBS Number RL-TP02	4. Dict Rev 0
5. Contract WBS No. 1.4.2.1.2	6. Corresponding FDS No. KW2	7. Baseline CR No.	
8. Organization Name 16000			9. B & R No.

10. Scope of Work
Provide safe and compliant management of the Cs and Sr inventory within the WESF pool cells, hot cells, and ventilation systems pending their removal. Complete S&M activities on those systems necessary to ensure operations are conducted within the facilities' safety and compliance envelopes. Update and implement operational and safety documentation to reflect current facility operations and conditions.

8/25/1997

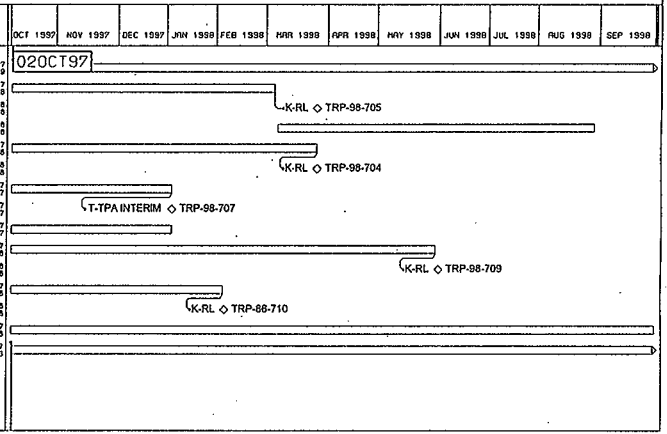
Mission Area Responsibility Assignment Matrix

Proj Lvl (PBS #)	FDS Act Number	Activity Title	Activity Manager	Responsible Organization	Cost Account
RL-TP02		WESF SUB-PROJECT			
	KW1	PROGRAM MANAGEMENT AND ADMINISTRATION	J. L. Pennock	16000	KW101 KW102 KW103 KW104
	KW2	WESF OPERATIONS AND MAINTENANCE	J. L. Pennock	16000	KW201 KW202 KW203 KW204

FACILITY STABILIZATION PROJECT
RL-TP02 WESF Sub-Project
Project Master Baseline Schedule

Time-Phased Logic Diagram
FY 98 MYWP September 1997

Activity	Description	Start / Finish
MF	WESF Sub-Project	10/01/97 / 09/30/19
WF005	COMPLETE THE GAP ANALYSIS AT WESF	10/01/97 / 02/27/98
WF006	MILESTONE:TRP-98-705 COMP THE GAP ANALYSIS/ WESF	03/23/98 / 03/23/98
WF008	COMPLETE DNFSB 95-2/ISMS IMPLEMENTATION	03/01/98 / 08/27/98
WF015	WESF EMERGENCY ION EXCHANGE	10/01/97 / 03/23/98
WF018	M/S TPR-98-704 PROV COMPLETE EIXM W/PROC,HW,TNG	03/23/98 / 03/23/98
WF021	PART A PERMIT APPLICATION	10/01/97 / 12/31/97
WF024	MILESTONE:M-92-03 SUBMIT PART "A" COMPLETE	12/31/97 / 12/31/97
WF027	STRATEGIC HEAT LOAD BALANCING OF CAPSULES	10/01/97 / 12/31/97
WF029	CELL CLEANOUT TO SUPPORT LLLW SYSTEM	10/01/97 / 05/29/98
WF030	MILESTONE: TRP-98-709 COMPETE HOT CELL DEACT.	05/31/98 / 05/31/98
WF037	FY 98 WESF DIO IMPLEMENTATION	10/01/97 / 01/29/98
WF039	MILESTONE: TRP-98-710 COMPLETE DIO IMPLEMENTATN	01/30/98 / 01/30/98
WF045	ULTRASONIC TESTING EQUIPMENT	10/01/97 / 09/30/98
WF103	WESF Cs/Sr CAPSULE SAFE STORAGE OPERATIONS	10/01/97 / 09/30/13



FACILITY STABILIZATION PROJECT
RL-TP02 WESF Sub-Project
Project Master Baseline Schedule

Time-Phased Logic Diagram
FY 98 MYWP September 1997

Activity	Description	Start / Finish	
WF104	HSP.ET.4.D, Cont Safe Storage for Cs/Sr Capsules	12/31/98 12/31/98	
WF106	SSS-F2, WESF Cs/Sr CAPSULE TRANSFER/DISPOSITION	09/30/13 09/30/17	
WF108	WESF DEACTIVATION	09/30/17 09/30/19	
WF112	SSS-F3, T/O WESF FACILITIES TO EM-40	09/30/19 09/30/19	
WF115	Compl of Requested Analytical Support from RFSH	09/30/19 09/30/19	

1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021

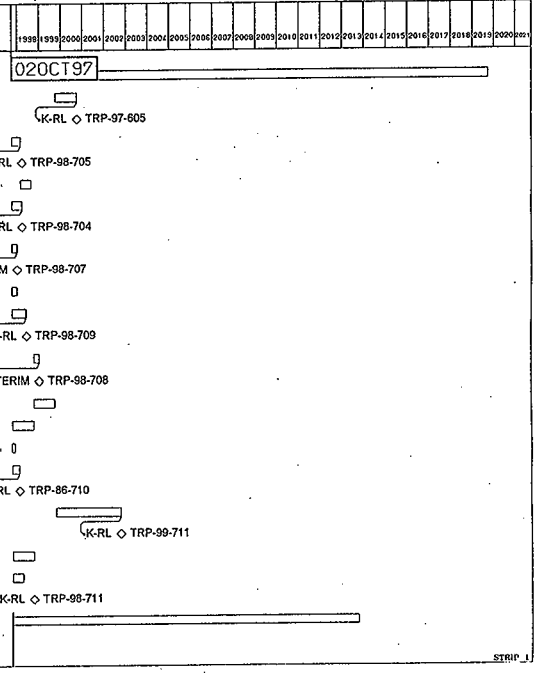
020CT97

STRIP 2

FACILITY STABILIZATION PROJECT
RL-TP02 WESF Sub-Project
Project Master Baseline Schedule

Time-Phased Logic Diagram
FY 98 MYWP September 1997

Activity	Description	Start / Finish
WF	WESF Sub-Project	10/01/97 09/30/19
WF003	WESF SAFETY ANALYSIS REPORT	10/01/98 01/28/00
WF004	MILESTONE:TRP-97-605 SUBMIT WESF SAR TO RL REVIE	09/28/00 09/28/00
WF005	COMPLETE THE CAP ANALYSIS AT WESF	10/01/97 02/27/98
WF006	MILESTONE:TRP-98-705 COMP THE CAP ANALYSIS/ WESF	03/23/98 03/23/98
WF008	COMPLETE DNFSB 95-2/ISMS IMPLEMENTATION	03/01/98 08/27/98
WF015	WESF EMERGENCY ION EXCHANGE	10/01/97 03/23/98
WF018	M/S TPR-98-704 PROV COMPLETE EIXM W/PROC,HW,TNG	03/23/98 03/23/98
WF021	PART A PERMIT APPLICATION	10/01/97 12/31/97
WF024	MILESTONE:M-92-03 SUBMIT PART "A" COMPLETE	12/31/97 12/31/97
WF027	STRATEGIC HEAT LOAD BALANCING OF CAPSULES	10/01/97 12/31/97
WF029	CELL CLEANOUT TO SUPPORT LLLW SYSTEM	10/01/97 05/29/98
WF030	MILESTONE: TRP-98-709 COMPETE HOT CELL DEACT.	03/31/98 03/31/98
WF031	WESF RECEIVE 300 AREA Cs/Sr	10/01/98 12/30/98
WF032	MILESTONE: M-92-04 RECEIVE 300 AREA Cs/Sr	12/31/98 12/31/98
WF034	K-3 DUCT WORK CLEANOUT	10/01/98 09/15/99
WF035	K-3 PIT INSTRUMENTATION	10/01/97 09/30/99
WF036	FY 08 K-3 FLOODING REGRADE	10/01/97 11/15/97
WF037	FY 98 WESF DIO IMPLEMENTATION	10/01/97 01/29/99
WF039	MILESTONE: TRP-98-710 COMPLETE DIO IMPLEMENTATN	01/30/98 01/30/98
WF041	WESF STANDALONE SYSTEM UPGRADES	10/01/99 09/30/02
WF043	MILESTONE: TRP-99-711 COMPLETE STANDALONE UPGS	09/30/02 09/30/02
WF045	ULTRASONIC TESTING EQUIPMENT	10/01/97 09/30/98
WF047	LEVEL INSTRUMENT REPLACEMENT	10/01/97 04/01/98
WF048	MILESTONE: TRP-98-711 DECOUPLE WESF FROM B PLANT	09/30/98 09/30/98
WF103	WESF Cs/Sr CAPSULE SAFE STORAGE OPERATIONS	10/01/97 09/30/19



MILESTONE CONTROL #	TPA-MS NUMBER	TPA TYPE	MS LEVEL	MS TITLE	TYPE	DATES PLANNED BASELINE	DATES APPROVED BASELINE	DATES REVISED BASELINE	PROJ CIN	PBS #
TRP-97-605			RL	SUBMIT THE WESF SAFETY ANALYSIS REPORT (SAR) TO RL FOR REVIEW		9/30/00			TP-97-008	RL-TP02
TRP-98-704			RL	PROVIDE A COMPLETE EMERGENCY ION EXCHANGE SYSTEM FOR WESF		3/23/98			TP-97-014	RL-TP02
TRP-98-705			RL	COMPLETE ISMS GAP ANALYSIS AT WESF		3/23/98				RL-TP02
TRP-99-708	M-92-04	I	FO	RECEIVE 300 AREA CS/SR IN SUPPORT OF TPA-M-92-04 AS REQUIRED	EA	12/31/98				RL-TP02
TRP-98-707	M-92-03	I	FO	COMPLETE PART A PERMIT APPLICATION AND SUBMIT TO ECOLOGY	EA	12/31/97				RL-TP02
TRP-98-709			RL	COMPLETE HOT CELL DEACTIVATION		5/31/98				RL-TP02
TRP-98-710			RL	COMPLETE BIO IMPLEMENTATION		1/30/98				RL-TP02
TRP-99-711			RL	COMPLETE STANDALONE/SHOWCASE UPGRADES		9/30/02				RL-TP02
TRP-98-711			RL	DECOUPLE WESF FROM B-PLANT		9/30/98				RL-TP02

PHMC

MILESTONE DESCRIPTION SHEET

Title: SUBMIT THE WESF SAFETY ANALYSIS REPORT (SAR) TO RL FOR REVIEW		Date: 8/29/97
Assigned To: BWHC/WESF Subproject		CIN: TP-97-008
Program WBS Designator: 1.4.2.1		Due Date: 9/30/00
PBS No: RL-TP02		
MC #: TRP-97-605	TPA No:	Rev: 1

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): N COMMIT #: RECOMM #:	X Report X Letter Drawing(s) Other (Specify)	DOE-HQ X DOE-RL Other (Specify)

Milestone Description:
The WESF SAR will be upgraded to comply with current RL and BWHC requirements.

Description of what constitutes completion of this milestone:
Ten copies of the WESF SAR, approved in accordance with BWHC-MD-015 will be delivered to RL for review.

PHMC

MILESTONE DESCRIPTION SHEET

Title: PROVIDE A COMPLETE EMERGENCY ION EXCHANGE SYSTEM FOR WESF		**Date:** 8/06/96
Assigned To: BWHC/WESF Subproject		**CIN:** TP-97-014
Program WBS Designator: 1.4.2.1		**Due Date:** 3/23/98
PBS No: RL-TP02		
MC #: TRP-98-704	**TPA No:**	**Rev:** 0

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): COMMIT #: RECOMM #:	Report X Letter Drawing(s) Other (Specify)	DOE-HQ X DOE-RL Other (Specify)

Milestone Description:
WESF needs to provide a means to decontaminate the pool cells water in the event that a capsule leaks.

Description of what constitutes completion of this milestone:
Complete design, construction, and operational readiness of an ion exchange system.

PHMC
MILESTONE DESCRIPTION SHEET

Title: COMPLETE ISMS GAP ANALYSIS AT WESF		**Date:** 7/30/97
Assigned To: BWHC/WESF Sub-Project		**CIN:**
Program WBS Designator: 1.4.2.1		**Due Date:** 3/23/98
PBS No: RL-TP02		
MC #: TRP-98-705	**TPA No:**	**Rev:** 0

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): Y COMMIT #: 000.000 RECOMM #: 95-02	X Report Letter Drawing(s) X Other (Specify) GAP Analysis	DOE-HQ X DOE-RL Other (Specify)

Milestone Description:
The DNFSB 95-2 Commitments include a requirement for the WESF facility related to implementation of an Integrated Safety Management System (ISMS). This analysis is intended to provide a listing of requirements necessary for WESF to bring its safety system in compliance with the ISMS.

Description of what constitutes completion of this milestone:
Complete the GAP Analysis.

PHMC
MILESTONE DESCRIPTION SHEET

Title: RECEIVE 300 AREA CS/SR IN SUPPORT OF TPA-M-92-04 AS REQUIRED		**Date:** 8/14/97
Assigned To: BWHC/WESF Subproject		**CIN:**
Program WBS Designator: 1.4.2.1		**Due Date:** 12/31/98
PBS No: RL-TP02		
MC #: TRP-99-708	**TPA No:** M-92-04	**Rev:** 0

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ DOE-RL X DOE-FO CONTRACTOR	X EA PEG OTHER	DNFSB (Y/N): N COMMIT #: RECOMM #:	Report X Letter Drawing(s) X Other (Specify) Documentation of Removal	DOE-HQ X DOE-RL Other (Specify)

Milestone Description:
TPA milestone M-92-04 requires that cesium and strontium be removed from the 300 Area by December 1998. Plans to dispose of this material are under development and may involve WESF.

Description of what constitutes completion of this milestone:
Support, as necessary, removal of cesium and strontium from the 300 Area.

PHMC

MILESTONE DESCRIPTION SHEET

Title: COMPLETE PART A PERMIT APPLICATION AND SUBMIT TO ECOLOGY		**Date:** 4/22/97
Assigned To: BWHC/WESF Sub-Project		**CIN:**
Program WBS Designator: 1.4.2.1		**Due Date:** 12/31/97
PBS No: RL-TP02		
MC #: TRP-98-707	**TPA No:** M-92-03	**Rev:** 0

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ DOE-RL X DOE-FO CONTRACTOR	X EA PEG OTHER	DNFSB (Y/N): N COMMIT #: RECOMM #:	Report Letter Drawing(s) X Other (Specify) Permit Application	DOE-HQ DOE-RL X Other (Specify) Ecology

Milestone Description:
During FY 1996 and Early FY 1997, a change order (M-92-96-01) for the Federal Facility and Consent Order was negotiated between RL and Ecology. The Change Title for this modification is 'Creation of new Major milestone M-92-00 and its sub-elements governing the acquisition of new facilities, modification of existing facilities, and/or modification of planned facilities necessary for the storage, treatment/processing, and disposal of Hanford site Cesium and Strontium capsules (Cs/Sr), Unirradiated Uranium (UU), Bulk Sodium (Na), and 300 Area Special Case Waste (SCW).'
As part of this change order, new milestones were agreed to. One of these milestones (M-92-03) reads as follows: 'Submit modified Hanford facility Part A permit application to Ecology incorporating all Hanford site Cs/Sr capsules (300 Area and unencapsulated salts) for which a commercialization contract has not been executed.' The due date is December 1997.

Description of what constitutes completion of this milestone:
This milestone is complete when the Part A permit application is completed and submitted to Ecology.

PHMC

MILESTONE DESCRIPTION SHEET

Continuation Page

Program WBS Designator: 1.4.2.1	MC #: TRP-98-707

Milestone description: (con't)

This milestone incorporates the above agreement into the FY 1998 MYWP.

PHMC

MILESTONE DESCRIPTION SHEET

Title: COMPLETE HOT CELL DEACTIVATION		Date: 8/14/97
Assigned To: BWHC/WESF Subproject		CIN:
Program WBS Designator: 1.4.2.1		Due Date: 5/31/98
PBS No: RL-TP02		
MC #: TRP-98-709	TPA No:	Rev: 0

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): N COMMIT #: RECOMM #:	Report X Letter Drawing(s) X Other (Specify) Documentation of Deactivation	DOE-HQ X DOE-RL Other (Specify)

Milestone Description:
WESF hot cells A-E are being deactivated to allow facility resources to be focused on capsule storage. This will include removal of combustible waste and isolation of water.

Description of what constitutes completion of this milestone:
Complete hot cell deactivation by the due date.

PHMC

MILESTONE DESCRIPTION SHEET

Title: COMPLETE BIO IMPLEMENTATION		**Date:** 8/14/97
Assigned To: BWHC/WESF Subproject		**CIN:**
Program WBS Designator: 1.4.2.1		**Due Date:** 1/30/98
PBS No: RL-TP02		
MC #: TRP-98-710	**TPA No:**	**Rev:** 0

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): N COMMIT #: RECOMM #:	Report X Letter Drawing(s) Other (Specify)	DOE-HQ X DOE-RL Other (Specify)

Milestone Description:
The WESF BIO has been written to provide WESF with a compliant safety basis. Implementation will include performance of all actions necessary for RL to release WESF from compliance with the current SAR. Implementation by 1/30/98 assumes that RL will approve the BIO by 11/1/97.

Description of what constitutes completion of this milestone:
Letter to RL demonstrating full implementation of BIO requirements and requesting release from the current SAR.

PHMC
MILESTONE DESCRIPTION SHEET

Title: COMPLETE STANDALONE/SHOWCASE UPGRADES		**Date:** 8/14/97
Assigned To: BWHC/WESF Subproject		**CIN:**
Program WBS Designator: 1.4.2.1		**Due Date:** 9/30/02
PBS No: RL-TP02		
MC #: TRP-99-711	**TPA No:**	**Rev:** 0

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): N COMMIT #: RECOMM #:	Report X Letter Drawing(s) X Other (Specify) Documentation of upgrades comp	DOE-HQ X DOE-RL Other (Specify)

Milestone Description:
Complete upgrades in support of WESF standalone operation and attaining showcase status; including pool cell level instrument upgrade, beta monitor upgrades, ventilation system upgrades, communication systems upgrades, and radiation monitoring equipment upgrades.

Description of what constitutes completion of this milestone:
Complete specified upgrades.

PHMC
MILESTONE DESCRIPTION SHEET

Title: DECOUPLE WESF FROM B-PLANT		**Date:** 9/15/97
Assigned To: BWHC/B PLANT SUB-PROJECT		**CIN:**
Program WBS Designator: 1.4.2.1		**Due Date:** 9/30/98
PBS No: RL-TP02		
MC #: TRP-98-711	**TPA No:**	**Rev:** 0

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): COMMIT #: RECOMM #:	Report X Letter Drawing(s) Other (Specify)	DOE-HQ X DOE-RL Other (Specify)

Milestone Description:
Decouple WESF from B Plant, and declare that WESF is a self-sufficient and stand-alone facility. (Declaration by WESF Plant Operations)

Description of what constitutes completion of this milestone:
Complete decoupling of WESF from B Plant. All essential systems/services supplied to WESF from B Plant are replaced and fully operational. Submit letter to DOE-RL declaring that WESF is a self-sufficient and stand-alone facility by September 30, 1998.

EXHIBIT 1

FACILITY STABILIZATION
LIFE CYCLE COST BASELINE (BCWS) BY YEAR BY FUND TYPE
BY PROJECT BASELINE SUMMARY (PBS)
FY 1998

($000s)

PROJECT WBS:	1.4.2.1
PBS NO:	RL-TP02
PBS TITLE:	WESF Sub-Project

FUND TYPE	FY1997	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	SUBTOT FY1997-FY2006
OPERATING EXPENSE	13,574	13,113	10,747	16,157	12,597	12,479	12,467	12,247	13,034	13,254	129,669
CENRTC											-
GENERAL PLANT PROJECT											-
LINE ITEM *(List Each One)*											
											-
											-
											-
											-
											-
Subtotal Line Items	-		-	-	-	-	-	-	-	-	-
TOTAL BCWS/PMB[1]	13,574	13,113	10,747	16,157	12,597	12,479	12,467	12,247	13,034	13,254	129,669
MGMT RESERVE[2]											-
LINE ITEM CONTINGENCY[2]											-
OFFSITE TRANSFERS[3]											-
Subtotal	-		-	-	-	-	-	-	-	-	-
TOTAL	13,574	13,113	10,747	16,157	12,597	12,479	12,467	12,247	13,034	13,254	129,669

[1]Budgeted Cost of Work Scheduled (BCWS) Equals Performance Measurement Baseline (PMB); Expense Carryover NOT Included.
[2]Management Reserve and Line Item Contingency Held by RL.
[3]Work Performed at Sites Other Than Hanford.

EXHIBIT 1

FACILITY STABILIZATION
LIFE CYCLE COST BASELINE (BCWS) BY YEAR BY FUND TYPE
BY PROJECT BASELINE SUMMARY (PBS)
FY 1998

($000s)

PROJECT WBS:	1.4.2.1
PBS NO:	RL-TP02
PBS TITLE:	WESF Sub-Project

FUND TYPE	FY2007-FY2010	FY2011-FY2015	FY2016-FY2020	FY2021-FY2025	FY2026-FY2030	FY2031-FY2035	FY2036 FY2040	FY2041-FY2045	FY2046 FY2050	TOTAL FY1997-FY2050
OPERATING EXPENSE	58,650	82,738	60,552							331,609
CENRTC										-
GENERAL PLANT PROJECT										-
LINE ITEM *(List Each One)*										
										-
										-
										-
										-
										-
Subtotal Line Items	-	-	-	-	-	-	-	-	-	-
TOTAL BCWS/PMB[1]	58,650	82,738	60,552							331,609
MGMT RESERVE[2]										-
LINE ITEM CONTINGENCY[2]										-
OFFSITE TRANSFERS[3]										-
Subtotal	-	-	-	-	-	-	-	-	-	-
TOTAL	58,650	82,738	60,552							331,609

[1]Budgeted Cost of Work Scheduled (BCWS) Equals Performance Measurement Baseline (PMB); Expense Carryover **NOT** Included.

[2]Management Reserve and Line Item Contingency Held by RL.

[3]Work Performed at Sites Other Than Hanford.

EXHIBIT 4

FACILITY STABILIZATION
LIFE CYCLE BUDGET AUTHORITY (B/A) BY YEAR BY FUND TYPE
BY PROJECT BASELINE SUMMARY (PBS)
FY 1998

($000s)

PROJECT WBS:	1.4.2.1
PBS NO:	RL-TP02
PBS TITLE:	WESF Sub-Project

FUND TYPE	FY1997	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	SUBTOT FY1997-FY2006
OPERATING EXPENSE	13,619	13,113	10,747	11,857	11,821	11,643	11,534	11,713	11,870	11,808	119,725
CENRTC											-
GENERAL PLANT PROJECT											-
LINE ITEM *(List Each One)*											
											-
											-
											-
											-
											-
Subtotal Line Items	-	-	-	-	-	-	-	-	-	-	-
TOTAL FY B/A	13,619	13,113	10,747	11,857	11,821	11,643	11,534	11,713	11,870	11,808	119,725

EXHIBIT 4

FACILITY STABILIZATION
LIFE CYCLE BUDGET AUTHORITY (B/A) BY YEAR BY FUND TYPE
BY PROJECT BASELINE SUMMARY (PBS)
FY 1998

($000s)

PROJECT WBS:	1.4.2.1
PBS NO:	RL-TP02
PBS TITLE:	WESF Sub-Project

FUND TYPE	FY2007-FY2010	FY2011-FY2015	FY2016-FY2020	FY2021-FY2025	FY2026-FY2030	FY2031-FY2035	FY2036 FY2040	FY2041-FY2045	FY2046 FY2050	TOTAL FY1997-FY2050
OPERATING EXPENSE	58,650	82,738	60,552							321,665
CENRTC										-
GENERAL PLANT PROJECT										-
LINE ITEM *(List Each One)*										
										-
										-
										-
										-
										-
Subtotal Line Items	-	-	-	-	-	-	-	-	-	-
TOTAL NEW B/A	58,650	82,738	60,552							321,665

EXHIBIT 2a

FACILITY STABILIZATION
FY 1998 COST BASELINE (BCWS) BY MONTH
BY PROJECT BASELINE SUMMARY (PBS)
BY ACTIVITY DATA SHEET (ADS)
EXECUTION YEAR

($000s)

PROJECT WBS: 1.4.2.1
PBS NO: RL-TP02
PBS TITLE: WESF Sub-Project

ADS TITLE	ADS NO	FUND TYPE	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
WESF/Cesium	6627-0	OP EXP	1,317	1,452	923	898	848	1,101	873	1,081	905	815	1,094	1,806	13,113
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	1,317	1,452	923	898	848	1,101	873	1,081	905	815	1,094	1,806	13,113
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-

[1]Budgeted Cost of Work Scheduled (BCWS) Equals Performance Measurement Baseline (PMB); Expense Carryover Is **NOT** Included.

EXHIBIT 2a

FACILITY STABILIZATION
FY 1998 COST BASELINE (BCWS) BY MONTH
BY PROJECT BASELINE SUMMARY (PBS)
BY ACTIVITY DATA SHEET (ADS)
EXECUTION YEAR

($000s)

PROJECT WBS: 1.4.2.1
PBS NO: RL-TP02
PBS TITLE: WESF Sub-Project

ADS TITLE	ADS NO	FUND TYPE	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL BCWS/PMB [1]			1,317	1,452	923	898	848	1,101	873	1,081	905	815	1,094	1,806	13,113

[1]Budgeted Cost of Work Scheduled (BCWS) Equals Performance Measurement Baseline (PMB); Expense Carryover Is **NOT** Included.

WESF SUB-PROJECT

AVERAGE ANNUAL FULL TIME EQUIVALENTS
(includes Major Subcontractors but not Enterprise Companies)

PHBS 1.4.2.1 **Submittal Date: 9/10/97**

PBS Number	PBS Title	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007
RL-TP02	WESF Subproject	76	80	77	71	72	75	75	75	75	75
Total PBS FTEs		76	80	77	71	72	75	75	75	75	75

B.3 PUREX Sub-Project (RL-TP03)

B.3.1.0 PUREX Sub-Project Technical Baseline (RL-TP03)

B.3.1.1 PUREX Sub-Project Organization Mission (RL-TP03)

This program element includes the transition of the PUREX Plant and the necessary S&M throughout transition. The goal of the transition project is to achieve safe and environmentally secure facilities. PUREX surveillance will be assumed by D&D Long-Term Surveillance and Maintenance (RL-ER08) starting in FY 1998.

B.3.1.2 PUREX Sub-Project End Point Targets from Hanford Strategic Plan

-None-

B.3.1.3 PUREX Sub-Project Major Facilities

B.3.1.3.1 Plutonium-Uranium Extraction Plant Facility

B.3.1.3.1.1 Plutonium-Uranium Extraction Plant Facility Description

Commonly referred to as the PUREX facility, it is a surplus facility in the 200-W Area of Hanford which was originally built to separate plutonium and uranium from Hanford reactor fuel. PUREX was deactivated in 1997 and is in a surveillance and maintenance mode awaiting D&D activities. Various ancillary facilities which supported PUREX are included.

B.3.1.3.1.2 Plutonium-Uranium Extraction Plant Facility Technical Logic:

The Department of Energy (DOE), in partnership with its contractors, shall plan, acquire, operate, maintain, and dispose of physical assets as valuable national resources. Stewardship of these physical assets shall be accomplished in a cost-effective manner to meet the DOE mission. This shall incorporate industry standards, a graded approach, and performance objectives.

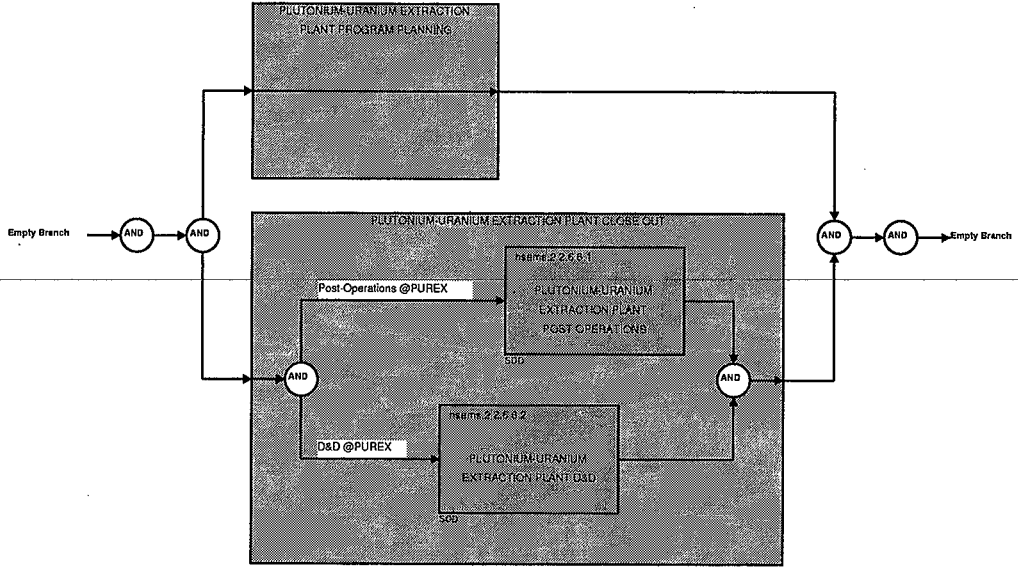


Figure B-3 PLUTONIUM-URANIUM EXTRACTION PLANT

B.3.1.3.1.3 Plutonium-Uranium Extraction Plant Requirements and Life Cycle Function Descriptions

Requirements:

* Facilities discharging to the 200 Area TEDF shall implement Best Available Technology (BAT)/All Known, Available, and Reasonable Treatment (AKART). The generator shall provide the information required by WAC 173-240, Submission of Plans and Reports for Construction of Waste Water Facilities.

* Central Plateau inactive facilities shall be maintained within the approved safety envelope

* PUREX shall be maintained within the approved safety envelope

Life Cycle Function Descriptions:

B.3.1.3.1.3.1 PLUTONIUM-URANIUM EXTRACTION PLANT PROGRAM PLANNING WORK SCOPE SUMMARY

Functions that include planning and developing the overall program; establishing broad priorities; providing program technical direction; preparing and defending the program budget; controlling milestones; integrating all components of the program; providing public and private sector policy liaison; expediting interface activities and follow-up actions; and retaining overall accountability for program success.
Turnover of the PUREX Facility to EM-40 for long-term surveillance and maintenance is anticipated to occur prior to FY 1998.

PLUTONIUM-URANIUM EXTRACTION PLANT PROGRAM PLANNING SPECIFIC FUNCTIONS

B.3.1.3.1.3.2 PLUTONIUM-URANIUM EXTRACTION PLANT POST OPERATIONS WORK SCOPE SUMMARY

Day-to-day work, including post-deactivation surveillance and maintenance, that is required to allow safe decontamination and decommissioning.

PLUTONIUM-URANIUM EXTRACTION PLANT POST OPERATIONS SPECIFIC FUNCTIONS

B.3.1.3.1.3.3 Maintain Safe & Compliant Plutonium Uranium Extraction Plant Facility in CP Areas

Maintain the PUREX facility structures, operating systems and equipment, and monitoring systems within the approved safety and compliance requirements until the facilities are made available for D & D.

B.3.1.3.1.4 Plutonium-Uranium Extraction Plant Boundary Diagram

Table B.3-1 Plutonium-Uranium Extraction Plant Boundary Diagram

External Interfaces -None- Hanford Site Environmental System Interfaces hsems.2.5.4 Central Plateau Water System hsems.2.5.5 Central Plateau Office Facilities hsems.2.5.6 Central Plateau Electrical System hsems.2.5.9 Central Plateau Shop Facilities hsems.2.5.13 Central Plateau Road System hsems.4.7.1 331 Complex		External Interfaces -None- Hanford Site Environmental System Interfaces hsems.2.3.2 Double Shell Tank (DST) System hsems.2.4.3 200 Area Treated Effluent Disposal Facility

B.3.1.3.1.5 Plutonium-Uranium Extraction Plant Interface Description and Forecast

EXTERNAL INPUTS

-None-

INTERNAL INPUTS

Table B.3-2 Internal Inputs for Plutonium-Uranium Extraction Plant

Stream	Category	Period	Baseline	Units
hsems.2.5.4 Central Plateau Water System				
Potable Water for PUREX *Potable Water for PUREX*	(none forecasted)			
Raw Water for PUREX *Raw Water for PUREX*	(none forecasted)			
hsems.2.5.5 Central Plateau Office Facilities				
Office Space (Infrastructure Owned) for PUREX *Office Space (Infrastructure Owned) for PUREX*	(none forecasted)			
hsems.2.5.6 Central Plateau Electrical System				
Electricity for PUREX *Electricity for PUREX*	(none forecasted)			
hsems.2.5.9 Central Plateau Shop Facilities				
Fab Shop Services for PUREX *Fab Shop Services for PUREX*	(none forecasted)			
hsems.2.5.13 Central Plateau Road System				
Heavy Trucks for PUREX *Heavy Trucks for PUREX*	(none forecasted)			
Hanford Road Sys. Heavy Traffic for PUREX *Hanford Road Sys. Heavy Traffic for PUREX*	(none forecasted)			
hsems.4.6 South 600 Area Radiological Labs				
Radioactive Standards (Calibrations) for PUREX *Radioactive Standards (Calibrations) for PUREX*	(none forecasted)			
hsems.4.7.1 331 Complex				
Non-rad Standards (Calibrations) for PUREX *Non-rad Standards (Calibrations) for PUREX*	(none forecasted)			
Industrial Hygiene Services for PUREX *Industrial Hygiene Services for PUREX*	(none forecasted)			

EXTERNAL OUTPUTS

-None-

INTERNAL OUTPUTS

Table B.3-3 Internal Outputs for Plutonium-Uranium Extraction Plant

Stream	Category	Period	Baseline	Units
hsems.2.3.2 Double Shell Tank (DST) System				
PUREX-TCO (DN), HLW *HLW Transferred by Plutonium-Uranium Extraction Plant.*	HLW	1997 - 1997	187.0	cubic meters
hsems.2.4.3 200 Area Treated Effluent Disposal Facility				
PUREX Chemical Sewer *Treated Liquid Effluent Transferred by Plutonium-Uranium Extraction Plant.*	Treated Liquid Effluent	1998 - 1998	0.0	cubic meters

B.3.1.4 Drivers for PUREX Sub-Project

Table B.3-4 Source Documents for PUREX Sub-Project

Name	Title
DOE/RL-96-14	Updated Draft Mission Direction Document, June 1996
ST 4502	State Waste Discharge Permit for the 200 Area TEDF

B.3.1.5 PUREX Sub-Project Risk Management

Because PUREX is now in a log-term, low risk surveillance and maintenance status, any Risk Management information for the PUREX Sub-Project is included in RL-ER05

B.4 300 Area/SNM Sub-Project (RL-TP04)

B.4.1.0 300 Area/SNM Sub-Project Technical Baseline (RL-TP04)

B.4.1.1 300 Area/SNM Sub-Project Organization Mission (RL-TP04)

The history of the 300 Area Fuel Supply Shutdown (FSS) complex began in 1943 when the 313 Building was constructed. Other buildings were added in time to support production of fuel for the Hanford Single Pass Reactor, which began in mid-1944. Starting in 1958, the 333 Building was constructed to support fuel fabrication for the N-Reactor. Fuel fabrication activities continued until 1987 when both N Reactor and the FSS facility began a transition-to-standby status. In 1992, the FSS complex was directed to deactivate in preparation for decontamination and decommissioning (D&D). The complex contains remaining legacies of the fuel fabrication and fuel storage mission and still includes approximately 1200 metric tons (MT) of unirradiated, low enriched fuel, which is stored in five buildings managed by FSS until relocation or final disposition. The original SNM inventory generated from fuel production operations also resulted in significant contamination of buildings and equipment, and large amounts of hazardous, mixed, and low level wastes. Due to the age of the buildings, they are showing signs of structural decay. Unsafe roof conditions in the 313 Building south side represent a large safety risk.

The FSS project's main objective is to complete deactivation/closure activities as described in the "Shutdown Plan for the 300 Area Fuel Supply Facilities," (WHC-SD-FL-SSP-002), and the facility transfer criteria while maintaining the complex in a safe, regulatory-compliant state until turnover to Environmental Restoration (ER) Project is completed. Deactivation of the Fuel Supply complex will decrease human and environmental risk by stabilizing the buildings to levels of contamination consistent with its intended long term surveillance and eventual demolition status. Relocation of the remaining inventory of Special Nuclear Materials (SNM) will reduce risk of any possible contamination to the site, nearby river, and City of Richland.

The project is subdivided into five major objectives:
1. Maintain facilities in a regulatory-compliant state until turnover to the ER Project is completed. This includes the surveillance and storage of the remaining 1200 MT of SNM until relocation of material to the 400 Area or alternate location.
2. Complete the isolation of the 313 South Building to reduce the safety risks of an unsafe roof.
3. Closure of two remaining Resource Conservation and Recovery Act (RCRA) permitted Treatment, Storage, and Disposal (TSD) systems.
4. Complete deactivation/stabilization activities as described in the "Shutdown Plan for the 300 Area Fuel Supply Facilities." This includes stabilization of all facility buildings and deactivation of building systems to meet the predetermined endpoint criteria established with ER.
5. Relocation/disposal of 1200 MT of low level enriched SNM. This material will be packaged and relocated in FY 2000 (under current funding) and will allow final facility shutdown.

This project will be followed by turnover to the ER Project for decontamination and decommissioning.

The planning assumptions for the 300 Area Fuel Supply shutdown are

- Resource Conservation and Recovery Act (RCRA) of 1976 implementation activities shall be carried out in accordance with the following RCRA closure plans:
  - DOE/RL-90-04, 303K Storage Facility Closure Plan
  - DOE/RL-90-11, The 300 Area Waste Acid Treatment System (WATS) Closure Plan

- These RCRA closures involve the north half of 303K Building as well as portions of facilities (333, 303F, 334A, and the 334 and 311 Storage Tanks). The closure plans describe the sampling, characterization, and investigative studies to be performed in these facilities; defines their hazard potential; and identifies required corrective actions. The 300 Area/SNM Sub-Project will perform closure activities for buildings and equipment under EM-60.

- The WATS Plan is listed in the Hanford Facility RCRA permit (Appendix 27) for inclusion in MOD C of the permit. A permit modification is being prepared by Ecology to move WATS Closure to MOD D of the permit.

- The 300 Area FSS facilities are located within 300 FF-2 operable unit, as designated in the Tri-Party Agreement (Ecology et al. 1996). The 300 FF-2 operable unit is scheduled to be remediated by the ERC Contractor under EM-40 using the CERCLA remediation investigation/feasibility study process. Therefore, any soil and groundwater contamination related to the RCRA activities will be deferred to the CERCLA remediation investigation/feasibility study process unless contamination is an imminent threat to human health or the environment. The 300 Area Facility 303M RCRA closure plan has not been prepared, but closure is deferred to the 300 FF-2 CERCLA Operable Unit (M-20-92-05).

- Transition Project Management (RL-TP-12) will assume the funding and risk for storage of the 300 FSS inventory of SNM and the 200 West Area UO3 inventory after 300 Area FSS deactivation is complete. Any inventory of SNM remaining after the date specified in the integrated baseline schedule will be declared waste and packaged for disposal.

- It is assumed that when the 300 Area FSS SNM is relocated, the alternate facility selected will be the responsibility of Transition Project Management. Additional building modifications (if any) will be funded separately and incorporated by Change Request at that time.

B.4.1.2 300 Area/SNM Sub-Project End Point Targets from Hanford Strategic Plan

* Transition high cost surplus facilities in the central plateau and south 600 areas to a low cost, stable, deactivated condition.

* Transfer Special Nuclear Material from the south 600 area facilities to the 200 Area for interim storage.

B.4.1.3 300 Area/SNM Sub-Project Major Facilities

B.4.1.3.1 300 Area Fuel Supply System Facility

B.4.1.3.1.1 300 Area Fuel Supply System Facility Description

The Fuel Fabrication Facility was constructed to manufacture fuel elements for Hanford single pass reactors and later for N Reactor using low enrichment uranium.

B.4.1.3.1.2 300 Area Fuel Supply System Facility Technical Logic:

The Department of Energy (DOE), in partnership with its contractors, shall plan, acquire, operate, maintain, and dispose of physical assets as valuable national resources. Stewardship of these physical assets shall be accomplished in a cost-effective manner to meet the DOE mission. This shall incorporate industry standards, a graded approach, and performance objectives.

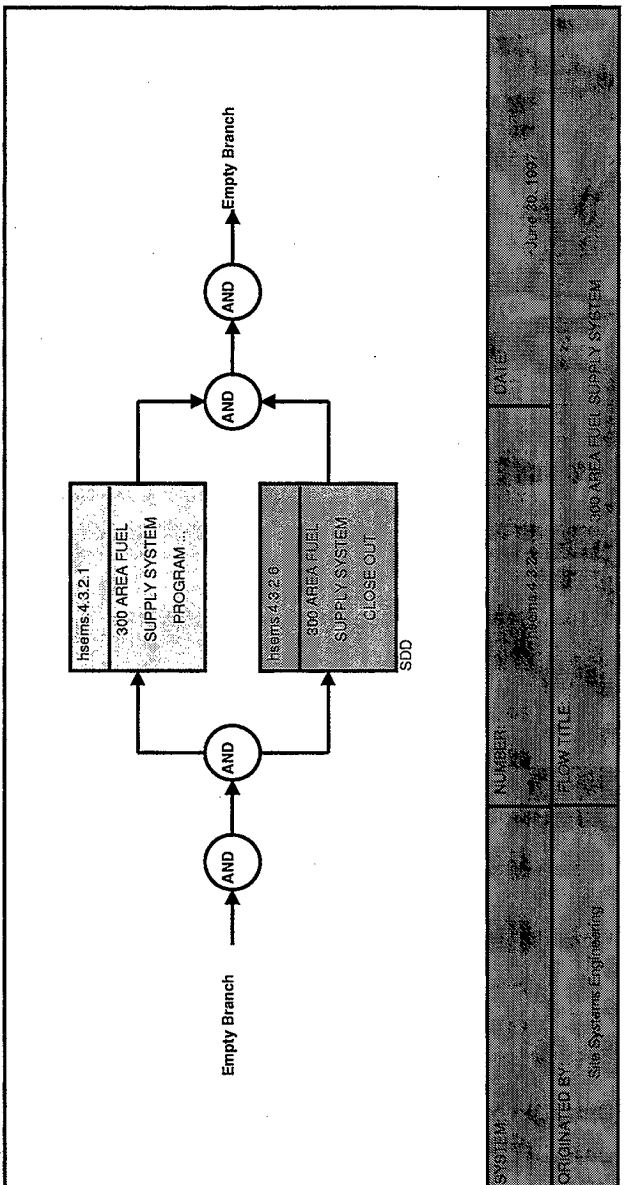


Figure B-4 300 AREA FUEL SUPPLY SYSTEM

B.4.1.3.1.3 300 Area Fuel Supply System Requirements and Life Cycle Function Descriptions

Requirements:

- South 600 Area high cost surplus facilties shall be transitioned to a low cost, stable, deactivated condition
- 300 Area Fuel Supply System special nuclear materials shall be relocated to outside the 300 Area.
- South 600 Area inactive facilities shall be surveillanced and maintained within the approved safety envelope
- 300 Area Fuel Supply System SNM contained in various buildings shall be surveillanced and maintained within the approved safety envelope.

Life Cycle Function Descriptions:

B.4.1.3.1.3.1 300 AREA FUEL SUPPLY SYSTEM PROGRAM PLANNING WORK SCOPE SUMMARY

Functions that include planning and developing the overall program; establishing broad priorities; providing program technical direction; preparing and defending the program budget; controlling milestones; integrating all components of the program; providing public and private sector policy liaison; expediting interface activities and follow-up actions; and retaining overall accountability for program success.

B.4.1.3.1.3.2 300 AREA FUEL SUPPLY SYSTEM POST OPERATIONS WORK SCOPE SUMMARY

Day-to-day work, including pre-stabilization surveillance and maintenance, stabilization, post-stabilization surveillance and maintenance, deactivation, and post-deactivation surveillance and maintenance, that is required to allow safe decontamination and decommissioning.

300 AREA FUEL SUPPLY SYSTEM POST OPERATIONS SPECIFIC FUNCTIONS

B.4.1.3.1.3.3 Maintain Safe & Compliant 300 Area Fuel Supply System

This system includes 303F, 303K, 303M, 304, 313, 333, 334, 334A, 303A, 303B, 303E, 303G, 3707G, 3712, 334TF, 304A, 311TF, MO-052, and 3716 Facilities. These facilities have been used to prepare fuel for the early production reactors.

B.4.1.3.1.3.4 Maintain Safe & Compliant Materials in 300 Area Fuel Supply System

Materials stored in the 300 Area Fuel Supply System facilities will be maintained in safe and compliant state until they are relocated to a warehouse outside the 300 area.

B.4.1.3.1.3.5 Remove Material from 300 Area Fuel Supply System

Remove the nuclear materials from the 300 Area Fuel Supply System Facilities for treatment or disposition.

B.4.1.3.1.3.6 Transition 300 Area Fuel Supply System

Initiate the facility transition phase of decontamination and deactivation for the 300 Area Fuel Supply System Facilities.

B.4.1.3.1.4 300 Area Fuel Supply System Boundary Diagram

Table B.4-1 300 Area Fuel Supply System Boundary Diagram

External Interfaces Hanford Legacy Hanford Site Environmental System Interfaces hsems.4.4.1 South 600 Area Electrical System hsems.4.4.3 South 600 Area Water System hsems.4.4.6 South 600 Area Office Facilities hsems.4.4.7 South 600 Area Shop Facilities hsems.4.4.10 South 600 Area Road System hsems.4.7.1 331 Complex		External Interfaces Offsite Sales Hanford Site Environmental System Interfaces hsems.2.3.5 Central Waste Complex hsems.4.2.1 300 Area Treated Effluent Disposal Facility

B.4.1.3.1.5 300 Area Fuel Supply System Interface Description and Forecast

EXTERNAL INPUTS

Table B.4-2 External Inputs for 300 Area Fuel Supply System

Stream	Category	Period	Baseline	Units
X.0 Hanford Legacy				
Legacy 300/FSS Depleted Uranium *Depleted Uranium (DU) Transferred by Hanford Legacy.*	Depleted Uranium (DU)	1997 - 1997	2.2	MT-U
Legacy 300/FSS Low Enriched Uranium *Low Enriched Uranium (LEU) Transferred by Hanford Legacy.*	Low Enriched Uranium (LEU)	1997 - 1997	1110	MT-U
Legacy 300/FSS Natural Uranium *Natural Uranium (NU) Transferred by Hanford Legacy.*	Natural Uranium (NU)	1997 - 1997	74.0	MT-U

INTERNAL INPUTS

Table B.4-3 Internal Inputs for 300 Area Fuel Supply System

Stream	Category	Period	Baseline	Units
hsems.4.4.1 South 600 Area Electrical System				
Electricity for 300-FSS *Electricity for 300-FSS*	Electricity	1998 - 1999	764.0	MW-hr
hsems.4.4.3 South 600 Area Water System				
Potable Water for 300-FSS *Potable Water for 300-FSS*	Potable Water	1998 - 1999	224.0	Mgal
hsems.4.4.6 South 600 Area Office Facilities				
Office Space (Infrastructure Owned) for 300-FSS *Office Space (Infrastructure Owned) for 300-FSS*	Office Space (Infrastructure Owned)	1998 - 1999	177000	sq. ft.
hsems.4.4.7 South 600 Area Shop Facilities				
Lifting (Cranes) for 300-FSS *Lifting (Cranes) for 300-FSS*	Lifting Services	1998 - 1999	288.0	crane days
hsems.4.4.10 South 600 Area Road System				
Sedans/Light Trucks for 300-FSS *Sedans/Light Trucks for 300-FSS*	Sedans/Light Trucks	1998 - 1999	2.0	no. of vehicles
hsems.4.7.1 331 Complex				
Non-rad Standards (Calibrations) for 300-FSS *Non-rad Standards (Calibrations) for 300-FSS*	Non-rad Standards Lab Services	1998 - 1999	8.0	calibrations

EXTERNAL OUTPUTS

Table B.4-4 External Outputs for 300 Area Fuel Supply System

Stream	Category	Period	Baseline	Units
X Offsite Sales				
300/FSS Low Enriched Uranium (Offsite) *Low Enriched Uranium (LEU) Disposed by 300 Area Fuel Supply System.*	Low Enriched Uranium (LEU)	2000 - 2000	233.0	MT-U
300/FSS Natural Uranium *Natural Uranium (NU) Transferred by 300 Area Fuel Supply System.*	Natural Uranium (NU)	1997 - 1998	148.0	MT-U

INTERNAL OUTPUTS

Table B.4-5 Internal Outputs for 300 Area Fuel Supply System

Stream	Category	Period	Baseline	Units
hsems.2.3.5 Central Waste Complex				
300/FSS Depleted Uranium *Depleted Uranium (DU) Disposed by 300 Area Fuel Supply System.*	Depleted Uranium (DU)	1997 - 2005	19.8	MT-U
300/FSS Low Enriched Uranium *Low Enriched Uranium (LEU) Disposed by 300 Area Fuel Supply System.*	Low Enriched Uranium (LEU)	1997 - 2007	9510	MT-U
hsems.4.2.1 300 Area Treated Effluent Disposal Facility				
300 Area Fuel Supply System Industrial Waste Water Transfer *Industrial waste water generated from ongoing 300 Area Fuel Supply System operations. Waste water volume is estimated from historic 300 TEDF throughput and assuming equal contribution from all inputs to the 300 Area Process Sewer.*	Industrial Waste Water	1998 - 2005	209000	cu meters

B.4.1.4 Drivers for 300 Area/SNM Sub-Project

Table B.4-6 Source Documents for 300 Area/SNM Sub-Project

Name	Title
DOE/EIS-0222D	Draft Hanford Remedial Action Environmental Impact Statement and Comprehensive Land Use Plan
DOE/RL-96-14	Updated Draft Mission Direction Document, June 1996
DOE/RL-96-92	Hanford Strategic Plan

B.4.1.5 300 Area/SNM Sub-Project Risk Management

Risk Evaluation Narrative:

This project will deactivate the 300 Area Fuel Supply Shutdown facility at the end of FY 2000 and turn it over to Environmental Restoration for surveillance and maintenace pending final disposition.

Driving risk scenarios include:) The 313South Building roof which is deteriorating and presently a risk to personnel entering the building to perform compliance assessments and for those located in the north end of the building. The 313 South Building was constructed in the mid 1940s. Of the 1,207 precased concrete roof deck panels, 131 are defective. Of these, 70% could fall at any time. Three structural members have suffered a 25% reduction in capacity. A similar roof failed at 100F area with a loss of life. Worker risks include possible injuries resulting in permanent partial or temporary total disability. Once isolation of this building is completed injuries would still be possible, but the possibility greatly reduced.

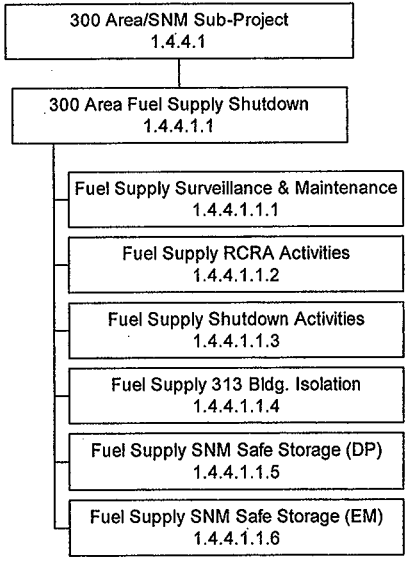
The second driving risk scenario involves the inventory storage of 1200 metric tons of SNM and potential fire. This scenario involves site, public, and environmental health. In the event of fire, a consequent release of airborne, respirable uranium could occur. The FSS facility is approximately 490 meters from the west bank of the Columbia River and approximately 1104 meters from a farm directly across the river. The maximum expected radiological release from a uranium storage building fire is 0.250 rem Effective Dose Equivalent (EDE) offsite (490 meters from the source). The corresponding toxicological consequence (maximum 1-hr airborne concentrations) is 0.21 mg/U/m3 uranium offsite. These release values were calculated in the Interim Safety Basis assuming minimum surveillance and preventive/corrective maintenance activities are being performed. Therefore, without minimum safe surveillance and maintenance, accumulation of additional combustible material and facility deterioration would increase the probability and the severity of its consequences. Public risks include expected injuries/illness that result in partial or temporary reversible impacts or exposures at or below regulatory levels.

In the event that the project stops, and minimum safe surveillance and maintenance including safety assessments, corrective maintenance and surveillance would not be performed. In addition, the facility would be unoccupied, and utilities, including the protection system, are shutdown and unavailable. Accumulation of combustible materials is possible, since no surveillance would occur. The risks to the site and public therefore would be greater with the possibility that a fire in one of the uranium storage buildings would not be promptly extinguished. The probability of such an uncontrolled random fire has been calculated to be 1.6E-07 per year.

With the project ongoing, the possibility of a fire could still occur with risks to the environment. Dispersal of airborne uranium following a uranium storage building would result in a 3.1mg U/m3 onsite (receptor at 100 meters form the fire) and 0.21 mg U/m3 at the site boundary. If accumulation of additional combustible material resulted in a more severe fire and facility deterioration, these values could be larger. Onsite, this uranium would be deposited on a combination of hard surfaces (other buildings and asphalt) and dirt. The hard surfaces require difficult, time consuming decontamination to remove the contamination to the point where radiological contamination is no longer detected. The contamination that falls on dirt is readily removed by simply removing the top few inches of dirt and

disposing of it as low level waste. The quantity of uranium that falls in the Columbia River would be quickly dispersed below levels of detection. Environmental risks are based on the hard surface decontamination with moderate damage with geographic impacts with a two-five year recovery.

300 Area/SNM Sub-Project Work Breakdown Structure



HANFORD SITE WORK BREAKDOWN STRUCTURE DICTIONARY
FACILITY STABILIZATION
WBS: 1.4

9/04/1997

1. Activity Title: FUEL SUPPLY SHUTDOWN ACTIVITIES	2. Date 7/31/1997	3. PBS Number RL-TP04	4. Dict Rev 0
5. Contract WBS No. 1.4.4.1.1	6. Corresponding FDS No. K3A	7. Baseline CR No.	
8. Organization Name 19120			9. B & R No. EW70/DP04

10. Scope of Work

The Fuel Supply Shutdown (FSS) facility is being maintained in a regulatory compliant state and proceeding with Shutdown Activities as described in the 'Shutdown Plan for the 300 Area Fuel Supply Facilities.'

This sub-project includes management, budget support, engineering, maintenance support, health physics, industrial safety, and operational personnel to maintain environmental and personnel safety by complying with State and Federal regulations, including 10CFR rules. Also included are required surveillance and maintenance necessary to manage the safe storage of Special Nuclear Materials (SNM).

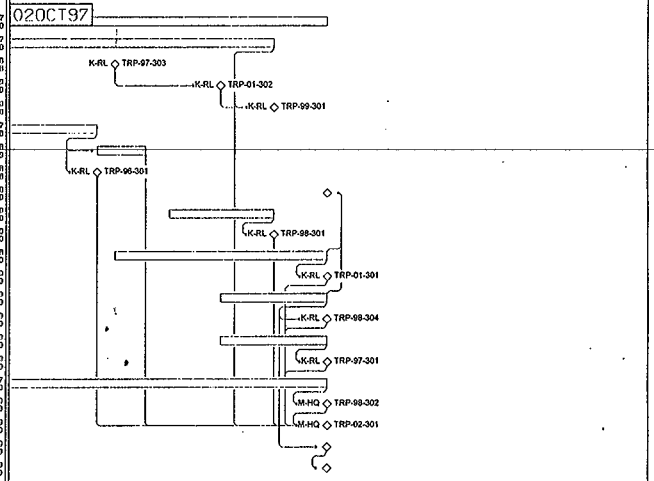
The FSS scope also includes the RCRA Closure of the 303K Facility and the 300 Area Waste Acid Treatment System (WATS). Support is also provided for the continuing monthly meeting with the Washington State Department of Ecology regarding these closure activities. Support is also provided for building isolation of the south portion of the 313 Facility and for necessary roof repairs needed to transfer buildings to EM-40.

Proj Lvl (PBS #)	FDS Act Number	Activity Title	Activity Manager	Responsible Organization	Cost Account
RL-TP04		300 AREA/SNM SUB-PROJECT			
	K3A	FUEL SUPPLY SHUTDOWN ACTIVITIES	I. L. Metcalf	19120	1K3A01 1K3A02 1K3A05 1K3A06

FACILITY STABILIZATION PROJECT
RL-TP04 300 Area FSS / SNM Project
Project Master Baseline Schedule

Time-Phased Logic Diagram
FY 98 MYWP September 1997

Activity	Description	Start / Finish
3A	300 AREA FSS/ SNM PROJECT	10/01/97 09/30/00
3A203	WASTE ACTN TREATMENT RCRA CLOSURE	10/01/97 03/31/00
3A204	TRP-97-303, Comp WATS RCRA Closure 303F,334A,333	09/30/00 09/30/01
3A205	TRP-01-302, Comp WATS RCRA Closure Field Acts	09/30/00 09/30/00
3A206	TRP-99-301, SUBMT WATS CLOSURE FNL RPT	03/31/00 03/31/00
3A209	303K Field Activities	10/01/97 07/31/00
3A210	303K Permit Resolution	07/31/00 01/15/02
3A212	TRP-96-301, Submit 303K Cert. of Closure to RL	07/31/00 07/31/00
3A213	Compl of Requested Analytical Support from WMH	09/30/00 09/30/00
3A221	FSS SURVEILLANCE & MAINTENANCE PLAN	04/07/00 03/30/00
3A224	TRP-98-301, PREPARE FSS SURV & MAINT PLAN	03/31/00 03/31/00
3A239	PREPARE PHASE II BUILDINGS TRNSFR EM-40	10/01/00 09/29/00
3A242	TRP-01-301, PHASE II BLDGS TRNSFR EM-40	09/30/00 09/30/00
3A245	PREPARE PHASE III BLDGS TRNSFR EM-40	10/01/00 09/29/00
3A248	TRP-98-304, PHASE III BLDGS TRNSFR EM-40	09/30/00 09/30/00
3A251	313 S Building Isolation	10/01/00 09/29/00
3A254	TRP-97-301, COMPL 313 BLDG SOUTH ISOL	09/30/00 09/30/00
3A257	SNM SAFE STORAGE	10/01/97 09/30/00
3A260	TRP-98-302,SHIP SNM OUTSIDE 300 AREA	09/30/00 09/30/00
3A266	TRP-02-301, COMPL 300 AREA FSS DEACTIVATION	09/30/00 09/30/00
3A272	HSP.ET.4.1, Complete Transition of 300 Area FSS	09/30/00 09/30/00
3A275	SSS-F14 T/O 300 FSS Phase I & II & III Bldg - ER	09/30/00 09/30/00



FACILITY STABILIZATION PROJECT
RL-TP04 300 Area FSS / SNM Project
Project Master Baseline Schedule

Time-Phased Logic Diagram
FY 98 MYWP September 1997

Activity	Description	Start / Finish
3A	300 AREA FSS/ SNM PROJECT	10/01/97 / 09/30/00
3A203	WASTE ACID TREATMENT RCRA CLOSURE	10/01/97 / 03/31/00
3A204	TRP-97-303, Comp WATS RCRA Closure 303F,334A,333	09/30/98 / 09/30/98
3A205	TRP-01-302, Comp WATS RCRA Closure Field Acts	09/30/99 / 09/30/99
3A206	TRP-99-301, SUBMT WATS CLOSURE FSL RPT	03/31/00 / 03/31/00
3A209	303K Field Activities	10/01/97 / 07/31/98
3A210	303K Permit Resolution	07/31/98 / 01/15/99
3A212	TRP-96-301, Submit 303K Cert. of Closure to RL	07/31/98 / 01/31/98
3A213	Compl of Requested Analytical Support from WMH	09/30/00 / 09/30/00
3A221	FSS SURVEILLANCE & MAINTENANCE PLAN	04/07/98 / 03/30/00
3A224	TRP-98-301, PREPARE FSS SURV & MAINT PLAN	03/31/00 / 03/31/00
3A238	PREPARE PHASE II BUILDINGS TRNSFR EM-40	10/01/99 / 09/29/00
3A242	TRP-01-301, PHASE II BLDGS TRNSFR EM-40	09/30/00 / 09/30/00
3A245	PREPARE PHASE III BLDGS TRNSFR EM-40	10/01/99 / 09/29/00
3A246	TRP-98-304, PHASE III BLDGS TRNSFR EM-40	09/30/00 / 09/30/00
3A251	313 S Building Isolation	10/01/99 / 09/29/00
3A254	TRP-97-301, COMPL 313 BLDG SOUTH ISOL	09/30/00 / 09/30/00
3A257	SNM SAFE STORAGE	10/01/97 / 09/30/00
3A260	TRP-98-302,SHIP SNM OUTSIDE 300 AREA	09/30/00 / 09/30/00
3A266	TRP-02-301, COMPL 300 AREA FSS DEACTIVATION	09/30/00 / 09/30/00
3A272	HSP.ET.4.J, Complete Transition of 300 Area FSS	09/30/00 / 09/30/00
3A275	SSS-F14 T/O 300 FSS Phase I & II & III Bldg - ER	08/30/00 / 09/30/00

MILESTONE CONTROL #	TPA-MS NUMBER	TPA TYPE	MS LEVEL	MS TITLE	TYPE	DATES PLANNED BASELINE	DATES APPROVED BASELINE	DATES REVISED BASELINE	PROJ CIN	PBS #
TRP-97-301			RL	COMPLETE ISOLATION OF 313 BUILDING SOUTH SIDE		9/30/00	12/12/97		TP-97-008	RL-TP04
TRP-98-301			RL	PREPARE FUEL SUPPLY SURVEILLANCE AND MAINTENANCE PLAN		3/31/00				RL-TP04
TRP-98-302			HQ	SHIP BALANCE OF SNM TO WAREHOUSE OUTSIDE 300 AREA	OTH	9/30/00	9/30/98		TP-97-008	RL-TP04
TRP-98-304			RL	PHASE III BUILDINGS PREPARED FOR TRANSFER TO EM-40		9/30/00				RL-TP04
TRP-99-301			RL	SUBMIT FINAL REPORT ON WATS CLOSURE ACTIVITIES TO RL		3/31/00				RL-TP04
TRP-01-301			RL	PHASE II BUILDINGS PREPARED FOR TRANSFER TO EM-40		9/30/00	9/30/97		TP-97-008	RL-TP04
TRP-01-302			RL	COMPLETE WASTE ACID TREATMENT SYSTEM RCRA CLOSURE FIELD ACTYS		9/30/99				RL-TP04
TRP-97-303			RL	COMPLETE WATS CLOSURE FIELD ACTYS IN 303F, 334A AND 333 BLDG		9/30/98	9/30/97		TP-97-008	RL-TP04
TRP-96-301			RL	SUBMIT 303K CERTIFICATE OF CLOSURE TO RL		7/31/98	9/30/96		TP-97-008	RL-TP04
TRP-02-301			HQ	COMPLETE 300 AREA FUEL SUPPLY DEACTIVATION	OTH	9/30/00			TP-97-008	RL-TP04

PHMC

MILESTONE DESCRIPTION SHEET

Title: COMPLETE ISOLATION OF 313 BUILDING SOUTH SIDE				**Date:** 2/19/97
Assigned To: I.L. Metcalf				**CIN:** TP-97-008
Program WBS Designator: 1.4.4.1				**Due Date:** 9/30/00
PBS No: RL-TP04				
MC #: TRP-97-301		**TPA No:**		**Rev:** 3
MILESTONE LEVEL: DOE-HQ X DOE-RL DOE-FO CONTRACTOR	**MILESTONE TYPE:** EA PEG OTHER	**DNFSB STATUS:** DNFSB (Y/N): COMMIT #: RECOMM #:	**DELIVERABLE:** Report X Letter Drawing(s) X Other (Specify) RL Field Verification	**ADDRESS TO:** DOE-HQ X DOE-RL Other (Specify)

Milestone Description:
Isolation of 313 South Building access, removal of 313 South Building utilities, removal of 313 South Building roof loadings (i.e. HVAC units, etc.), completion of NEPA, historical studies, and sampling/ characterization activities, and removal of unattached radiologically contaminated materials.

Description of what constitutes completion of this milestone:
Field verification by RL representative that the major isolation scope (i.e. access control, material stabilization, etc.) has been completed and the building is isolated.

PHMC
MILESTONE DESCRIPTION SHEET

Title: PREPARE FUEL SUPPLY SURVEILLANCE AND MAINTENANCE PLAN		**Date:** 2/19/97
Assigned To: I.L. Metcalf		**CIN:**
Program WBS Designator: 1.4.4.1		**Due Date:** 3/31/00
PBS No: RL-TP04		
MC #: TRP-98-301	**TPA No:**	**Rev:** 1

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): COMMIT #: RECOMM #:	X Report Letter Drawing(s) Other (Specify)	DOE-HQ X DOE-RL Other (Specify)

Milestone Description:
Prepare a supporting document which establishes the surveillance and maintenance (S&M) activities after deactivation of the Fuel Supply Shutdown complex.

Description of what constitutes completion of this milestone:
Transmittal of S&M plan to RL for approval.

PHMC

MILESTONE DESCRIPTION SHEET

Title: SHIP BALANCE OF SNM TO WAREHOUSE OUTSIDE 300 AREA		**Date:** 2/19/97
Assigned To: I.L. Metcalf		**CIN:** TP-97-008
Program WBS Designator: 1.4.4.1		**Due Date:** 9/30/00
PBS No: RL-TP04		
MC #: TRP-98-302	**TPA No:**	**Rev:** 1

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
X DOE-HQ DOE-RL DOE-FO CONTRACTOR	EA PEG X OTHER	DNFSB (Y/N): COMMIT #: RECOMM #:	Report X Letter Drawing(s) Other (Specify)	DOE-HQ X DOE-RL Other (Specify)

Milestone Description:
Package and ship remaining SNM to 400 Area or alternate storage facility.

Description of what constitutes completion of this milestone:
Field verification performed with RL representative ensuring that the following buildings no longer contain SNM materials: 303A, 303B, 303E, 303G, 3712, 3716.

PHMC

MILESTONE DESCRIPTION SHEET

Title: PHASE III BUILDINGS PREPARED FOR TRANSFER TO EM-40				**Date:** 2/19/97
Assigned To: I.L. Metcalf				**CIN:**
Program WBS Designator: 1.4.4.1				**Due Date:** 9/30/00
PBS No: RL-TP04				
MC #: TRP-98-304		**TPA No:**		**Rev:** 3

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): COMMIT #: RECOMM #:	Report X Letter Drawing(s) Other (Specify)	DOE-HQ X DOE-RL Other (Specify)

Milestone Description:
Prepare per agreed upon criteria the following buildings for transfer to EM-40: 3712, 3716, 303A, 303B, 303G, 303K/3707G, 313N, 333, 334A, Fuel Supply Shutdown Trenches, and MO-52.

Description of what constitutes completion of this milestone:
Field verification performed with RL representative ensuring all criteria have been met to transfer the above buildings.

PHMC

MILESTONE DESCRIPTION SHEET

Title: SUBMIT FINAL REPORT ON WATS CLOSURE ACTIVITIES TO RL				**Date:** 7/31/97
Assigned To: I.L. Metcalf				**CIN:**
Program WBS Designator: 1.4.4.1				**Due Date:** 3/31/00
PBS No: RL-TP04				
MC #: TRP-99-301		**TPA No:**		**Rev:** 3

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): COMMIT #: RECOMM #:	X Report Letter Drawing(s) Other (Specify)	DOE-HQ X DOE-RL Other (Specify)

Milestone Description:
Resolve Ecology comments after their review of WATS final report and revise report, if needed. Send Ecology a copy of the Part 'A' permit stamped 'CLOSED' after Ecology agrees that clean closure has been achieved, or transfer Ecology-issued, modified open Part 'A' permit to EM-40.

Description of what constitutes completion of this milestone:
Transmittal letter to RL with modified Part 'A' permit transfer to EM40 or Part 'A' permit stamped 'CLOSED.'

PHMC
MILESTONE DESCRIPTION SHEET

Title: PHASE II BUILDINGS PREPARED FOR TRANSFER TO EM-40				**Date:** 7/31/97
Assigned To: I.L. Metcalf				**CIN:** TP-97-008
Program WBS Designator: 1.4.4.1				**Due Date:** 9/30/00
PBS No: RL-TP04				
MC #: TRP-01-301	**TPA No:**			**Rev:** 4
MILESTONE LEVEL: DOE-HQ X DOE-RL DOE-FO CONTRACTOR	**MILESTONE TYPE:** EA PEG OTHER	**DNFSB STATUS:** DNFSB (Y/N): COMMIT #: RECOMM #:	**DELIVERABLE:** Report X Letter Drawing(s) Other (Specify)	**ADDRESS TO:** DOE-HQ X DOE-RL Other (Specify)

Milestone Description:
Prepare the following buildings in accordance with the shutdown criteria for transfer to EM-40: 313S, 303E, 303F, 334, and 334 Tank Farm.
Note: Activities for the 334 Tank Farm do not include RCRA clean closure activities, which will be completed at a different date.

Description of what constitutes completion of this milestone:
Field verification performed with RL representative ensuring all criteria have been met for transfer of the above buildings.

PHMC

MILESTONE DESCRIPTION SHEET

Title: COMPLETE WASTE ACID TREATMENT SYSTEM RCRA CLOSURE FIELD ACTYS				**Date:** 7/31/97
Assigned To: I.L. Metcalf				**CIN:**
Program WBS Designator: 1.4.4.1				**Due Date:** 9/30/99
PBS No: RL-TP04				
MC #: TRP-01-302		**TPA No:**		**Rev:** 3
MILESTONE LEVEL: DOE-HQ X DOE-RL DOE-FO CONTRACTOR	**MILESTONE TYPE:** EA PEG OTHER	**DNFSB STATUS:** DNFSB (Y/N): COMMIT #: RECOMM #:	**DELIVERABLE:** Report X Letter Drawing(s) X Other (Specify) RL Field Verification	**ADDRESS TO:** DOE-HQ X DOE-RL Other (Specify)

Milestone Description:
Complete the activties for 334 and 311 Tank Farms and piping trench portions of WATS required to attain closure, as stated in Revised Closure Plan.

Description of what constitutes completion of this milestone:
A letter will be transmitted to RL notifying that the above activities have been completed.
Field verification performed with RL representative ensuring that the above activities have been completed.

PHMC

MILESTONE DESCRIPTION SHEET

Title: COMPLETE WATS CLOSURE FIELD ACTYS IN 303F, 334A AND 333 BLDG		**Date:** 2/19/97
Assigned To: I.L. Metcalf		**CIN:** TP-97-008
Program WBS Designator: 1.4.4.1		**Due Date:** 9/30/98
PBS No: RL-TP04		
MC #: TRP-97-303	**TPA No:**	**Rev:** 2

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): COMMIT #: RECOMM #:	Report X Letter Drawing(s) X Other (Specify) RL Field Verification	DOE-HQ X DOE-RL Other (Specify)

Milestone Description:
Complete the field activities for 303F, 334A, and 333 portions of WATS required to attain closure as stated in revised closure plan.

Description of what constitutes completion of this milestone:
A letter will be transmitted to RL notifying that the above activities have been completed.
Field verification by RL representative that the field activities for 303F, 334A, and 333 portions of WATS have been completed as stated in revised closure plan.

PHMC
MILESTONE DESCRIPTION SHEET

Title: SUBMIT 303K CERTIFICATE OF CLOSURE TO RL		**Date:** 7/31/97
Assigned To: I.L. Metcalf		**CIN:** TP-97-008
Program WBS Designator: 1.4.4.1		**Due Date:** 7/31/98
PBS No: RL-TP04		
MC #: TRP-96-301	**TPA No:**	**Rev:** 3

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): COMMIT #: RECOMM #:	X Report X Letter Drawing(s) Other (Specify)	DOE-HQ X DOE-RL Other (Specify)

Milestone Description:
Submit certification of closure to RL for approval. Closure is based upon the assumption that the Hanford Facility Resource, Conservation, and Recovery Act Permit Condition V.14.B.h will not be invoked.

Description of what constitutes completion of this milestone:
Transmittal letter to RL with certification of closure.

PHMC
MILESTONE DESCRIPTION SHEET

Title: COMPLETE 300 AREA FUEL SUPPLY DEACTIVATION		**Date:** 2/19/97
Assigned To: I.L. Metcalf		**CIN:** TP-97-008
Program WBS Designator: 1.4.4.1		**Due Date:** 9/30/00
PBS No: RL-TP04		
MC #: TRP-02-301	**TPA No:**	**Rev:** 3

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
X DOE-HQ DOE-RL DOE-FO CONTRACTOR	EA PEG X OTHER	DNFSB (Y/N): COMMIT #: RECOMM #:	Report X Letter Drawing(s) Other (Specify)	X DOE-HQ DOE-RL Other (Specify)

Milestone Description:
Completion of activities described in the 'Shutdown Plan for the 300 Area Fuel Supply Facilities' for shutdown of the complex.

Description of what constitutes completion of this milestone:
A letter will be transmitted to RL documenting that all turn-over criteria have been met to transfer the 300 Area Fuel Supply Facility to the ERC.

EXHIBIT 1

FACILITY STABILIZATION
LIFE CYCLE COST BASELINE (BCWS) BY YEAR BY FUND TYPE
BY PROJECT BASELINE SUMMARY (PBS)
FY 1998

($000s)

PROJECT WBS:	1.4.4.1
PBS NO:	RL-TP04
PBS TITLE:	300 Area/SNM Sub-Project

FUND TYPE	FY1997	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	SUBTOT FY1997-FY2006
OPERATING EXPENSE	4,216	4,688	4,894	8,935							22,733
CENRTC											-
GENERAL PLANT PROJECT											-
LINE ITEM *(List Each One)*											
											-
											-
											-
											-
											-
Subtotal Line Items	-		-	-	-	-	-	-	-	-	-
TOTAL BCWS/PMB[1]	4,216	4,688	4,894	8,935							22,733
MGMT RESERVE[2]											-
LINE ITEM CONTINGENCY[2]											-
OFFSITE TRANSFERS[3]											-
Subtotal	-		-	-	-	-	-	-	-	-	-
TOTAL	4,216	4,688	4,894	8,935							22,733

[1]Budgeted Cost of Work Scheduled (BCWS) Equals Performance Measurement Baseline (PMB); Expense Carryover **NOT** Included.
[2]Management Reserve and Line Item Contingency Held by RL.
[3]Work Performed at Sites Other Than Hanford.

FACILITY STABILIZATION
LIFE CYCLE COST BASELINE (BCWS) BY YEAR BY FUND TYPE
BY PROJECT BASELINE SUMMARY (PBS)
FY 1998

($000s)

PROJECT WBS:	1.4.4.1									
PBS NO:	RL-TP04									
PBS TITLE:	300 Area/SNM Sub-Project									TOTAL
FUND TYPE	FY2007-FY2010	FY2011-FY2015	FY2016-FY2020	FY2021-FY2025	FY2026-FY2030	FY2031-FY2035	FY2036 FY2040	FY2041-FY2045	FY2046 FY2050	FY1997-FY2050
OPERATING EXPENSE										22,733
CENRTC										-
GENERAL PLANT PROJECT										-
LINE ITEM *(List Each One)*										
										-
										-
										-
										-
										-
Subtotal Line Items	-	-	-	-	-	-	-	-	-	-
TOTAL BCWS/PMB[1]										22,733
MGMT RESERVE[2]										-
LINE ITEM CONTINGENCY[2]										-
OFFSITE TRANSFERS[3]										-
Subtotal	-	-	-	-	-	-	-	-	-	-
TOTAL										22,733

[1]Budgeted Cost of Work Scheduled (BCWS) Equals Performance Measurement Baseline (PMB); Expense Carryover **NOT** Included.
[2]Management Reserve and Line Item Contingency Held by RL.
[3]Work Performed at Sites Other Than Hanford.

EXHIBIT 4

FACILITY STABILIZATION
LIFE CYCLE BUDGET AUTHORITY (B/A) BY YEAR BY FUND TYPE
BY PROJECT BASELINE SUMMARY (PBS)
FY 1998

($000s)

PROJECT WBS:	1.4.4.1										
PBS NO:	RL-TP04										
PBS TITLE:	300 Area/SNM Sub-Project										SUBTOT
FUND TYPE	FY1997	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY1997-FY2006
OPERATING EXPENSE	4,305	4,686	4,894	8,935							22,822
CENRTC											-
GENERAL PLANT PROJECT											-
LINE ITEM *(List Each One)*											
03-Dxxx Other Spent Fuel											-
											-
											-
											-
											-
Subtotal Line Items	-		-	-	-	-	-	-	-	-	-
TOTAL NEW B/A	4,305	4,686	4,894	8,935							22,822

EXHIBIT 4

FACILITY STABILIZATION
LIFE CYCLE BUDGET AUTHORITY (B/A) BY YEAR BY FUND TYPE
BY PROJECT BASELINE SUMMARY (PBS)
FY 1998

($000s)

PROJECT WBS:	1.4.4.1
PBS NO:	RL-TP04
PBS TITLE:	300 Area/SNM Sub-Project

FUND TYPE	FY2007-FY2010	FY2011-FY2015	FY2016-FY2020	FY2021-FY2025	FY2026-FY2030	FY2031-FY2035	FY2036 FY2040	FY2041-FY2045	FY2046 FY2050	TOTAL FY1997-FY2050
OPERATING EXPENSE										22,822
CENRTC										-
GENERAL PLANT PROJECT										-
LINE ITEM *(List Each One)*										
03-Dxxx Other Spent Fuel										-
										-
										-
										-
										-
Subtotal Line Items	-	-	-	-	-	-	-	-	-	-
TOTAL NEW B/A										

EXHIBIT 2a

FACILITY STABILIZATION
FY 1998 COST BASELINE (BCWS) BY MONTH
BY PROJECT BASELINE SUMMARY (PBS)
BY ACTIVITY DATA SHEET (ADS)
EXECUTION YEAR

($000s)

PROJECT WBS: 1.4.4.1
PBS NO: RL-TP04
PBS TITLE: 300 Area/SNM Sub-Project

ADS TITLE	ADS NO	FUND TYPE	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
300 Area SNM Sub Project	6623-0	OP EXP	358	476	399	381	395	449	340	426	364	313	411	376	4,688
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	358	476	399	381	395	449	340	426	364	313	411	376	4,688
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-

[1]Budgeted Cost of Work Scheduled (BCWS) Equals Performance Measurement Baseline (PMB); Expense Carryover Is **NOT** Included.

EXHIBIT 2a

FACILITY STABILIZATION
FY 1998 COST BASELINE (BCWS) BY MONTH
BY PROJECT BASELINE SUMMARY (PBS)
BY ACTIVITY DATA SHEET (ADS)
EXECUTION YEAR

($000s)

PROJECT WBS:	1.4.4.1
PBS NO:	RL-TP04
PBS TITLE:	300 Area/SNM Sub-Project

ADS TITLE	ADS NO	FUND TYPE	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL BCWS/PMB[1]			368	476	399	381	395	449	340	426	364	313	[illegible]	376	4688

[1]Budgeted Cost of Work Scheduled (BCWS) Equals Performance Measurement Baseline (PMB); Expense Carryover Is **NOT** Included.

300 AREA/SNM SUB-PROJECT

AVERAGE ANNUAL FULL TIME EQUIVALENTS
(includes Major Subcontractors but not Enterprise Companies)

PHBS 1.4.4.1 **Submittal Date: 9/10/97**

PBS Number	PBS Title	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007
RL-TP04	300 Area FSS	24	24	32	0	0	0	0	0	0	0
Total PBS FTEs		23.8	23.9	31.7	0	0	0	0	0	0	0

B.5 PFP Deactivation (RL-TP05)

B.5.1.0 PFP Deactivation Technical Baseline (RL-TP05)

B.5.1.1 PFP Deactivation Organization Mission (RL-TP05)

The Plutonium Finishing Plant (PFP) Deactivation Project mission is to provide for the safe and orderly Terminal Cleanout (TCO) and deactivation of eight (8) of the ten (10) major facilities and their associated support structures at the PFP Complex. Due to a lack of FY98 funds there are no work scope activities planned for this project. Once funding is committed, the project will be replanned. The major facilities that will not be deactivated at this time include 2736ZB, Product Shipping and Receiving Facility, and 2736Z, Plutonium Storage Facility due to their mission of safe and secure storage of nuclear materials until at least 2025 (vaults are scheduled to be deactivated at that time). The remainder of the facilities were to undergo TCO and then will be deactivated to a surveillance and maintenance level by FY2011 and prepared for transfer to D&D.

Initial construction on the Plutonium Finishing Plant (PFP, formerly called Z Plant) began in 1949 and was completed 1951. The PFP was the final link in the plutonium manufacturing chain at Hanford, processing plutonium-bearing chemical solutions and converting them into metal and oxide. This process ended in May 1989. Over the years many additions were added to the PFP complex including the 2736Z/ZB vault storage and the 236Z Plutonium Reprocessing Facility as well as a number of lesser additions and/or ancillary buildings. Plutonium finishing included three operations: (1) Plutonium Metal Production--the remote mechanical C (RMC) metal fabrication line, started in 1959, converted plutonium nitrate solutions to metal form, (2) Plutonium Reclamation Facility--added in 1964, recycled scrap plutonium from Hanford and the Rocky Flats Plant in Colorado, and (3) Plutonium Storage and Support Facility--plutonium was received, analyzed, stored, packaged, and shipped.

Although processing has stopped, chemically reactive plutonium-bearing materials remain in the plant. Chemically reactive materials create radiation exposure to workers and present unnecessary risk to the public. The Defense Nuclear Facility Safety Board (DNFSB) in their Recommendation 94-1 stated that imminent hazards could arise in 2-3 years unless certain problems were corrected which result from the chemically reactive Pu-bearing materials held in storage areas and former process areas within the PFP. Until stabilization is complete, the risks from large quantities of stored reactive plutonium liquids/oxides/MOX/metals and holdup materials (plutonium left in process ducting and piping of various quantities) have NOT been reduced. The implementation of DNFSB Recommendation 94-1 at PFP to stabilize special nuclear materials and resolve Plutonium vulnerabilities at the PFP has been identified as a high priority activity at the Hanford Site by the USDOE. In order to eliminate an imminent hazard at the PFP it is necessary that all plutonium at the PFP be dispositioned or stabilized.

The PFP Deactivation Project was developed using the basic principles of a system engineering approach. This entailed continued operation of those parts of the plant needed for surveillance and maintenance, material stabilization and packaging (DNFSB 94-1 activities, material preparations for discard, and vault storage), and those systems and components required to support deactivation tasks. Before each individual facility Project Deactivation Plan is finalized, the facility will be characterized and technical alternatives outlined for major deactivation activities.

Planning Assumptions:

The PFP Deactivation Project was to be completed by the end of FY 2011 with the exception of the vault complex, but due to budget constraints this project will require replanning once funding is committed. Hazardous and radioactive materials need to be removed from the plants or stabilized in place to ensure long-term facility safety and regulatory compliance, enable plant classification as an unoccupied facility, and enable subsequent successful S&M

and ultimately D&D.

The overall objective of facility transition is to achieve a safe, stable, and environmentally sound condition, suitable for an extended period, as quickly and economically as possible. Once transitioned, the facility is to be kept in its stable condition by means of a methodical S&M program implemented by the ERC, pending ultimate disposition. The acceptable facility interim state is defined by a set of end point criteria for that particular facility.

Materials must be removed and/or stabilized sufficiently to ensure that the plant complies with HNF-CM-7-5, Environmental Compliance, and HNF-CM-1-6, Radiological Control Manual, as applicable to an unoccupied facility after completion of deactivation. As a general guide, residual contamination and radiation levels in plant areas are to be no more than the levels encountered during normal operation and occupancy of the plants. End state matrix documents will be used to document systems, structures and component (SSC) condition for turnover to ERC/EM-40.

Permanent radiation zones to be entered for surveillance shall be decontaminated and released or the surface contamination levels reduced or stabilized to minimize re-suspension and/or migration of loose contamination. Temporary radiation zones inside and outside of the buildings will be eliminated.

Loose or damaged (friable) asbestos in areas expected to be entered during surveillance must be removed or stabilized.

Fissile materials need to be removed sufficiently to eliminate the potential for a nuclear criticality excursion and the need for a criticality alarm system.

No related upgrades to PFP dangerous waste tanks systems are required beyond those already planned.

Solid waste at PFP is classified as hazardous, low-level radioactive, TRU radioactive, and mixed (hazardous with radioactive constituents such as LLW and TRU).

Tanks, vessels, and drums need to be drained using installed equipment and features. Heels cannot contain material classified as hazardous waste.

Operations on sludge stabilization and immobilization, in connection with terminal cleanout and deactivation, will be required until the end of the program.

The PFP Transition Project End Point was planned by September 2011, but will require replanning. This end point is NOT the cessation of all activities as with other Hanford Site facilities. Instead, this End Point assumes the continued operation of all SNM shipping, receiving, storage and vault systems, including all safeguards & security (SAS) systems plus laboratory capabilities as needed, for an indefinite period but currently assumed to be approximately FY 2028. This end point condition is also based on the following.

- Full implementation of DNFSB Recommendation 94-1 was completed in FY 2002 and applicable Pu vulnerabilities have been mitigated.

- Deactivation is initiated in FY 1999 in parallel with 94-1 activities. Remaining facility transition to deactivation is initiated immediately following completion of DNFSB Recommendation 94-1 activities.

B.5.1.2 PFP Deactivation End Point Targets from Hanford Strategic Plan

- Transition high cost surplus facilities in the central plateau and south 600 areas to a low cost, stable, deactivated condition.

- Transition production areas of PFP to a low cost, stable, deactivated condition; continue safe, stable, interim storage of plutonium.

B.5.1.3 PFP Deactivation Major Facilities

B.5.1.3.1 Plutonium Finishing Plant Facility

B.5.1.3.1.1 Plutonium Finishing Plant Facility Description

PFP, formerly called Z-Plant, was constructed in 1949-1951 in the 200-W Area of Hanford. It was used to process plutonium-bearing chemical solutions and convert them into metal and oxide. The plant is currently in the process of stabilization and deactivation.

There is no support for facility transition to deactivation in FY98 and FY99. Hence, no progress will be made towards facility deactivation until FY00. Also, facility transition to deactivation activities will be rebaselined in FY98 following facility reengineering.

B.5.1.3.1.2 Plutonium Finishing Plant Facility Technical Logic:

The Department of Energy (DOE), in partnership with its contractors, shall plan, acquire, operate, maintain, and dispose of physical assets as valuable national resources. Stewardship of these physical assets shall be accomplished in a cost-effective manner to meet the DOE mission. This shall incorporate industry standards, a graded approach, and performance objectives.

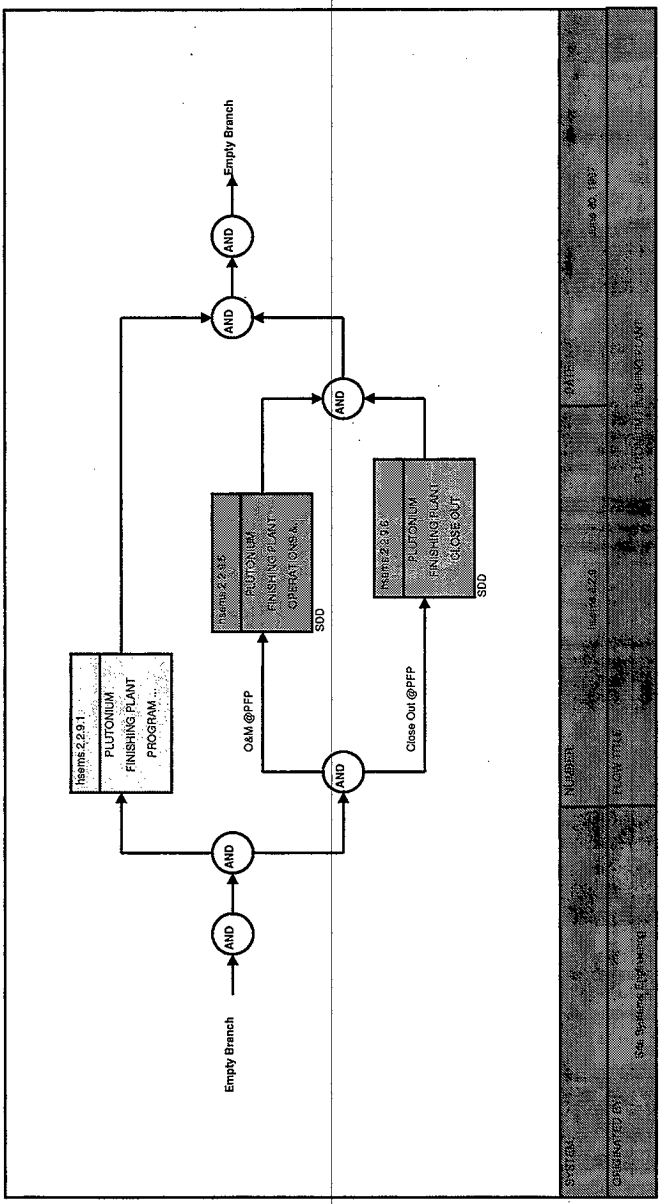


Figure B-5 PLUTONIUM FINISHING PLANT

B.5.1.3.1.3 Plutonium Finishing Plant Requirements and Life Cycle Function Descriptions

Requirements:

- Complete duct segment #4 as defined in WHC SD-CP-PMP-003 by 9/30/00.
- Complete removal of approximately 80 ft of 232-Z Exhaust Ventilation Duct in 291-Z. by 9/30/00.
- Complete removal of approx. 200 ft of inactive Process Vacuum System Segment #5 by 9/30/00.
- Facilities discharging to the 200 Area TEDF shall implement Best Available Technology (BAT)/All Known, Available, and Reasonable Treatment (AKART). The generator shall provide the information required by WAC 173-240, Submission of Plans and Reports for Construction of Waste Water Facilities.
- Deactivation of PFP shall comply with DOE/EIS-0244-D
- PFP was to be transitioned to the surveillance and maintenance phase by Sep 2011 if funding was made available.
- Residue bearing materials was to be removed from identifed 234-5Z exhaust ventilation by Dec 1998
- Central Plateau shall be used for the collection and management of nuclear materials that remain onsite.
- PFP worker safety systems shall be maintained
- PFP safeguard and security systems shall be maintained
- PFP waste management systems shall be maintained
- Central Plateau inactive facilities shall be maintained within the approved safety envelope
- Central Plateau asbestos abatement shall be performed as necessary

Life Cycle Function Descriptions:

B.5.1.3.1.3.1 PLUTONIUM FINISHING PLANT OPERATIONS & MAINTENANCE WORK SCOPE SUMMARY

Day-to-day work, including preventive and predictive maintenance, that is required to maintain and preserve plant and capital equipment in a condition suitable for it to be used for its designated purpose.

PLUTONIUM FINISHING PLANT OPERATIONS & MAINTENANCE SPECIFIC FUNCTIONS

B.5.1.3.1.3.2 Maintain Safe & Compliant Materials in PFP Facility during Deactivation

Materials stored in the PFP facility will be maintained in safe condition until they are removed for disposal or treatment.

B.5.1.3.1.3.3 PLUTONIUM FINISHING PLANT POST OPERATIONS WORK SCOPE SUMMARY

Day-to-day work, including pre-stabilization surveillance and maintenance, stabilization, post-stabilization

surveillance and maintenance, deactivation, and post-deactivation surveillance and maintenance, that is required to allow safe decontamination and decommissioning.

Also maintain 2736-ZB/Z vault facilities including the storage monitoring of SNM at PFP, until final deactivation.

PLUTONIUM FINISHING PLANT POST OPERATIONS SPECIFIC FUNCTIONS

B.5.1.3.1.3.4 Maintain Safe & Compliant Plutonium Finishing Plant Facility in CP Areas

Maintain the PFP facility structures, operating systems and equipment, and monitoring systems within the approved safety and compliance requirements until the facilities are made available for D&D. Also maintain the 2736-ZB/Z vault facilities, including the storage and monitoring of SNM at PFP until final deactivation.

B.5.1.3.1.3.5 Transition Plutonium Finishing Plant Facility

Initiate the transition phase of decontamination and decommissioning for the PFP facility.

B.5.1.3.1.4 Plutonium Finishing Plant Boundary Diagram

Table B.5-1 Plutonium Finishing Plant Boundary Diagram

External Interfaces -None- Hanford Site Environmental System Interfaces -None-		External Interfaces -None- Hanford Site Environmental System Interfaces -None-

B.5.1.3.1.5 Plutonium Finishing Plant Interface Description and Forecast

EXTERNAL INPUTS

-None-

INTERNAL INPUTS

-None-

EXTERNAL OUTPUTS

-None-

INTERNAL OUTPUTS

-None-

B.5.1.4 Drivers for PFP Deactivation

Table B.5-2 Source Documents for PFP Deactivation

Name	Title
DE-AC06-96RL13200	Project Hanford Management Contract, Fluor Daniel Hanford, Inc.
DOE/EIS-0222D	Draft Hanford Remedial Action Environmental Impact Statement and Comprehensive Land Use Plan
DOE/EIS-0244-D	Plutonium Finishing Plant Stabilization Environmental Impact Statement
DOE/RL-89-10	Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement), Rev.4
DOE/RL-96-14	Updated Draft Mission Direction Document, June 1996
DOE/RL-96-92	Hanford Strategic Plan
ST 4502	State Waste Discharge Permit for the 200 Area TEDF

B.5.1.5 PFP Deactivation Risk Management

The PFP Project is to implement cleanup activities, DNSFB Recommendation 94-1, and correct related plutonium vulnerabilities by stabilizing, and /or properly dispositioning, all remaining plutonium residues in storage or holdup, which is the plutonium left in process ducting and piping of varying quantities. These plutonium vulnerabilities (see Plutonium Working Group Report on Environmental, Safety & Health Vulnerabilities Associated with the Department's Plutonium Storage", Vol. 11 Appendix B, Part 2: Hanford Site Assessment Report, September 1994), can lead to "imminent hazards within 2-3 years" (DNSFB).

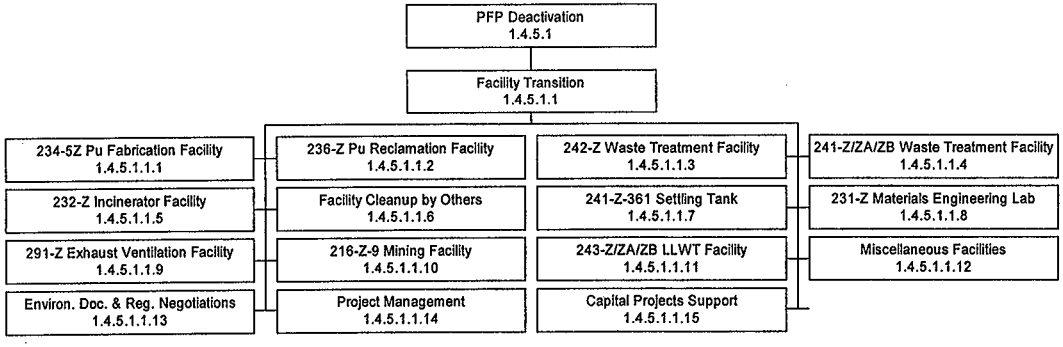
The primary phase of the deactivation process is to perform terminal cleanout (TCO) of those facilities to be deactivated. This activity will remove plutonium from the E-4 ventilation ducting, glove boxes, canyon floor, hoods, process piping, etc. The material retrieved from TCO will be transferred to PFP Stabilization Project (refer PBS#:RL-TP06) to perform stablilization as required, and then to PFP Vault Management Project (refer PBS#:RL-TP07) to provide storage for the SNM and discard the residual. The next phase of the process will deactivate the facilities to a surveillance and maintenance condition in preparation for decommissioning.

The TCO of the PFP Complex will reduce exposure to the worker, decrease the possibility of contamination spread to the environment and decrease the possibility of a nuclear criticality. Risk reduction will be ongoing through FY 2011. Deactivation of the vaults will be accomplished after relocation of the vault material in approximately FY 2028. The risk measurement will be tracked in indirect metrics, such as reduction in square footage of radiation zones, measurement of holdup material and number of deactivated facilities.

Approximately seventy-two (72) kilograms (Kgs) of plutonium are present as holdup in the exhaust ventilation ducting (6.0 Kg of which 2.0 Kg have been removed), process vaccum piping (4.3 Kg), canyon floor (12 Kg), 241-Z-361 Settling Tank (approximately 30 Kg) and the balance in process glove boxes, equipment and piping. Although part of this material could be released due to a loss of ventilation and/or seismic event, the most likely imminent hazard is the potential of a criticality.

Thousands of kilograms of storable, stabilized SNM, mostly plutonium, will remain in the PFP vaults, especially in Buildings 2736-Z and 2736-ZB in a safe and secure condition. The vaults will receive a major upgrade in FY 2015-FY 2019 to maintain the safeguards and security systems for the material and maintain the safety boundary to protect the public, the worker and the environment. The vaults will be utilized for storage until final disposition is determined and the material transferred to a new vault facility currently forcast for FY 2025 or thereafter at which time the vault complex, existing of approximately 11 facilities will be deactivated by approximately FY 2028.

PFP Deactivation Work Breakdown Structure



HANFORD SITE WORK BREAKDOWN STRUCTURE DICTIONARY
FACILITY STABILIZATION
WBS: 1.4 8/25/1997

1. Activity Title: PFP DEACTIVATION	2. Date 7/31/1997	3. PBS Number RL-TP05	4. Dict Rev 0
5. Contract WBS No. 1.4.5.1.1	6. Corresponding FDS No. K6D	7. Baseline CR No.	
8. Organization Name 15000			9. B & R No.

10. Scope of Work
This activity provides for the cleanup, transition deactivation, and turnover of all PFP facilities, except for the 2736-Z vaults and vault support facilities, in accordance with EM-60 guidelines. The following activities are included:
*234-5Z Plutonium Fabrication Facility Cleanup and Transition
*236-Z Plutonium Reclamation Facility Cleanup and Transition
*242-Z Waste Treatment and Americium Facility Cleanup and Transition
*241-Z/ZA Tank Farm Waste Disposal Facility Cleanup and Transition
*232-Z Incinerator Cleanup and Transition
*Facility Cleanup and Transition Performed by Others
*241-Z-361 Settling Tank Cleanup and Transition
*231-Z Cleanup and Transition
*291-Z Exhaust Ventilation Building Cleanup and Transition
*216-Z-9 Mining Facility Cleanup and Transition
*243-Z,ZA,ZB Low Level Wastewater Treatment Facility Cleanup and Transition
*Miscellaneous Buildings Cleanup and Transition
*Environmental Documentation and Regulatory Negotiations
*Project Management

8/25/1997

Mission Area Responsibility Assignment Matrix

Proj Lvl (PBS #)	FDS Act Number	Activity Title	Activity Manager	Responsible Organization	Cost Account
RL-TP05		PFP DEACTIVATION			
	K6D	PFP DEACTIVATION	D. B. Courson	15000	K6D0A K6D0J K6D0R

MILESTONE CONTROL #	TPA-MS NUMBER	TPA TYPE	MS LEVEL	MS TITLE	TYPE	DATES PLANNED BASELINE	DATES APPROVED BASELINE	DATES REVISED BASELINE	PROJ CIN	PBS #
TRP-97-404			FO	COMPLETE DUCT TERMINAL CLEANOUT (TCO), SECTION #4	OTH	9/30/00			TP-97-008	RL-TP05
TRP-97-412			RL	COMPLETE LABORATORY ENGINEERING STUDY		9/30/00			TP-97-008	RL-TP05
TRP-97-414			RL	COMPLETE REMOVAL OF ~80 FT OF 232-Z EXHAUST VENT. DUCT. IN 291-Z		9/30/00			TP-97-008	RL-TP05
TRP-97-415			RL	COMPLETE REMOVAL OF ~200 FT (OF 600FT) OF INACT. PROC. VACUUM SYS		9/30/00			TP-97-008	RL-TP05
TRP-97-408			RL	COMPLETE HF DUCT REMOVAL IN 234-5Z		9/30/00			TP-97-008	RL-TP05

PHMC

MILESTONE DESCRIPTION SHEET

Title: COMPLETE DUCT TERMINAL CLEANOUT (TCO), SECTION #4				**Date:** 7/31/97
Assigned To: FSP/PFP				**CIN:** TP-97-008
Program WBS Designator: 1.4.5.1				**Due Date:** 9/30/00
PBS No: RL-TP05				
MC #: TRP-97-404		**TPA No:**		**Rev:** 3
MILESTONE LEVEL: DOE-HQ DOE-RL X DOE-FO CONTRACTOR	**MILESTONE TYPE:** EA PEG X OTHER	**DNFSB STATUS:** DNFSB (Y/N): COMMIT #: RECOMM #:	**DELIVERABLE:** Report X Letter Drawing(s) Other (Specify)	**ADDRESS TO:** DOE-HQ X DOE-RL Other (Specify)

Milestone Description:
Complete the removal of Segment #4, an ~150 foot length of active process vacuum piping located primarily in room 262 of the 234-5Z building and associated branch lines (~230 feet) as shown on the attached sketch. Segment #4 is clearly defined in the PFP Remediation Project Management Plan (PMP), WHC-SD-CP-PMP-003, dated March 17, 1989, and is anticipated to contain approximately 4.3 Kg of Pu-bearing material.

Description of what constitutes completion of this milestone:
This milestone is considered complete when the ~150 feet of active process vacuum piping and associated branch lines (~230 feet), described above, has been removed, sectioned into pieces, packaged into appropriate containers and readied for shipment to the Hanford Central Waste Complex. Any Pu material removed from this piping is to be either stored as reactive scrap for stabilization (at a later date), or discarded as transuranic (TRU) waste, as appropriate. Specifically excluded from this milestone is any piping that is located between the Duct Level floor and the First Floor ceiling and any piping encased in concrete walls. Replacement of piping as shown on the attached sketch is also excluded from this milestone.
A letter will be issued to DOE-RL documenting completion of this milestone, including the indication of the Pu inventory of the material and piping removed during this activity.

PHMC

MILESTONE DESCRIPTION SHEET

Title: COMPLETE LABORATORY ENGINEERING STUDY				**Date:** 7/31/97
Assigned To: FSP/PFP				**CIN:** TP-97-008
Program WBS Designator: 1.4.5.1				**Due Date:** 9/30/00
PBS No: RL-TP05				
MC #: TRP-97-412	**TPA No:**			**Rev:** 1

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): COMMIT #: RECOMM #:	X Report X Letter Drawing(s) Other (Specify)	DOE-HQ X DOE-RL Other (Specify)

Milestone Description:
Issue an engineering study identifying the location and the necessary laboratory capabilities and equipment required for continued PFP vault storage and control activities, including other Hanford Site and DOE activities that the laboratories will support, following deactivation of the PFP Complex.

Description of what constitutes completion of this milestone:
Issue an engineering study that recommends the location and the laboratory facility and equipment requirements necessary to support continued operation of the PFP vaults, and other Hanford Site and DOE activities that the laboratories will support, following deactivation of the PFP Complex. Include analysis of analytical processes expected, laboratory equipment, storage, support systems, anticipated radioactive process control standards requirements, environmental considerations, personnel access, maintenance, economics, safety and laboratory location. It should also identify the recommended approach, such as the type of Project (i.e., GPP, Line Item, etc.), required to implement the recommendations from this study.
A letter transmitting the engineering study will be issued to DOE-RL documenting completion of this milestone.

PHMC

MILESTONE DESCRIPTION SHEET

Title: COMPLETE REMOVAL OF ~80 FT OF 232-Z EXHAUST VENT. DUCT. IN 291-Z		**Date:** 9/11/96
Assigned To: FSP/PFP		**CIN:** TP-97-008
Program WBS Designator: 1.4.5.1		**Due Date:** 9/30/00
PBS No: RL-TP05		
MC #: TRP-97-414	**TPA No:**	**Rev:** 1

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): COMMIT #: RECOMM #:	Report X Letter Drawing(s) Other (Specify)	DOE-HQ X DOE-RL Other (Specify)

Milestone Description:
Complete the removal of ~80 feet (out of ~80 feet) 232-Z exhaust ventilation ducting located in 291-Z. This ducting is located in the south end of 291-Z (room 506) and extends from the west wall to the exhaust plenum intake near exhaust fan 8. This ducting continues underground to the 232-Z Building which now has its own exhaust system, filters, and stack.

Description of what constitutes completion of this milestone:
This milestone is considered complete when the ~80 feet of contaminated exhaust ducting has been removed, sectioned into pieces, packaged into appropriate containers and readied for shipment to the Central Waste Complex. Any plutonium-bearing material removed from this ducting is to be either stored as reactive scrap for stabilization (at a later date), or discarded as TRU waste, as appropriate. The free ends (the connection to the exhaust plenum and the flange connection at the west wall) of the ducting that is left in place shall be blanked and sealed. An ultrasonic, or equivalent, test shall be performed to document leak tight integrity. If not leak tight, the leaks shall be made leak tight.
A letter will be issued to DOE-RL documenting completion of this milestone, including the quantity of plutonium removed and length of ducting removed.

PHMC

MILESTONE DESCRIPTION SHEET

Title: COMPLETE REMOVAL OF ~200 FT (OF 600FT) OF INACT. PROC. VACUUM SYS				**Date:** 9/11/96
Assigned To: FSP/PFP				**CIN:** TP-97-008
Program WBS Designator: 1.4.5.1				**Due Date:** 9/30/00
PBS No: RL-TP05				
MC #: TRP-97-415		**TPA No:**		**Rev:** 1
MILESTONE LEVEL: DOE-HQ X DOE-RL DOE-FO CONTRACTOR	**MILESTONE TYPE:** EA PEG OTHER	**DNFSB STATUS:** DNFSB (Y/N): COMMIT #: RECOMM #:	**DELIVERABLE:** Report X Letter Drawing(s) Other (Specify)	**ADDRESS TO:** DOE-HQ X DOE-RL Other (Specify)

Milestone Description:
Complete removal of 200 linear feet (out of ~600 linear feet) of inactive Process Vacuum piping, Segment #5. Segment #5 is clearly defined in the Plutonium Finishing Plant (PFP) Remediation Project Management Plan, WHC-SD-CP-PMP-003, dated March 17, 1989.

Description of what constitutes completion of this milestone:
This milestone is considered complete when the 200 linear feet of inactive Process Vacuum piping (4 inch or 6 inch pipe) has been removed, sectioned into pieces, packaged into appropriate containers and readied for shipment to the Central Waste Complex. Any plutonium-bearing material removed from this piping is to be either stored as reactive scrap for stabilization (at a later date), or discarded as TRU waste, as appropriate.
Alternately, either of the two filter boxes defined as part of Segment #5 may be cleaned out and will be considered equivalent to 50 linear feet of piping each. Clean out is defined as filters removed and residual plutonium removed to less than 150 grams as measured by the HIGHEST NDA value (i.e., criticality value not accountability or nominal value). An additional alternative is in-situ decontamination of the piping to Low Level Waste criteria. Low Level Waste determination would be made via analysis of samples taken from the decontaminated piping. The

Description of what constitutes completion of this milestone: (con't)
decontaminated piping meeting the Low Level Waste criteria or cleaner would NOT require removal to meet this milestone.
A combination of the three methods may be used to measure successful completion. Also, a letter will be issued by the operating contractor to RL documenting completion of this milestone per this description including the quantity of Pu removed and remediated that was accomplished (length of piping removed, length of piping decontaminated, and/or number of filter boxes cleaned).

PHMC

MILESTONE DESCRIPTION SHEET

Title: COMPLETE HF DUCT REMOVAL IN 234-5Z				**Date:** 7/31/97
Assigned To: FSP/PFP				**CIN:** TP-97-008
Program WBS Designator: 1.4.5.1				**Due Date:** 9/30/00
PBS No: RL-TP05				
MC #: TRP-97-408		**TPA No:**		**Rev:** 2

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): COMMIT #: RECOMM #:	Report X Letter Drawing(s) Other (Specify)	DOE-HQ X DOE-RL Other (Specify)

Milestone Description:
Complete removal of Hydrogen Fluoride-exposed (termed HF) Ducting (Segment B); and, the cleanout and deactivation of filter boxes 9AB, 9A and 9B in the 234-5Z Building.

Description of what constitutes completion of this milestone:
Removal of the HF ducting Segment B and the remaining approximate 110 feet of HF ducting from filter boxes 9A and 9B to filter box 9AB. All HEPA filters shall be removed from filter boxes 9A, 9B and 9AB. Residual plutonium in filter boxes 9A, 9B and 9AB shall be removed to less than 150 grams plutonium each as measured by the HIGHEST NDA value (i.e., criticality value not accountability or nominal value). The contaminated surfaces inside the filter boxes, and the FB 9A support glovebox, shall be prepared for Polymeric Barrier System (PBS) application and have PBS or equivalent non-strippable fixative applied as a contamination fixative. All penetrations except exhaust shall be sealed equivalent to pie-plating and shrink wrapping. An ultrasonic or equivalent leak test shall be performed to document leak tight integrity. If not leak tight, the leaks shall be made leak tight. All services except one exhaust line to the filter boxes (and FB-9A support glovebox) shall be removed. The finished

Description of what constitutes completion of this milestone: (con't) filter boxes shall be labeled 'Abandoned in Place' with the work package number and the final NDA values identified. Filterbox removal is an acceptable substitute to abandoning in place as described above.

Ducting, filters, and other items removed shall be sectioned into pieces (as required), packaged into appropriate containers and readied for shipment to the Central Waste Complex. Any Pu material removed during this activity is to be either stored as reactive scrap for stabilization (at a later date), or discarded as TRU waste, as appropriate. A letter will be issued from the Contractor to RL documenting the removal of HF ducting consistent with this description, including the quantity of plutonium and ducting removed as a result of this activity.

EXHIBIT 4

FACILITY STABILIZATION
LIFE CYCLE BUDGET AUTHORITY (B/A) BY YEAR BY FUND TYPE
BY PROJECT BASELINE SUMMARY (PBS)
FY 1998

($000s)

PROJECT WBS:	1.4.5.1
PBS NO:	RL-TP05
PBS TITLE:	PFP Deactivation

FUND TYPE	FY1997	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	SUBTOT FY1997-FY2006
OPERATING EXPENSE		-	-	5,494	16,344	21,778	28,258	27,279	15,950	3,320	118,423
CENRTC											-
GENERAL PLANT PROJECT											-
LINE ITEM *(List Each One)*											
											-
											-
											-
											-
											-
Subtotal Line Items	-	-	-	-	-	-	-	-	-	-	-
TOTAL NEW B/A				5,494	16,344	21,778	28,258	27,279	15,950	3,320	118,423

FACILITY STABILIZATION
LIFE CYCLE COST BASELINE (BCWS) BY YEAR BY FUND TYPE
BY PROJECT BASELINE SUMMARY (PBS)
FY 1998

($000s)

PROJECT WBS:	1.4.5.1
PBS NO:	RL-TP05
PBS TITLE:	PFP Deactivation

FUND TYPE	FY2007-FY2010	FY2011-FY2015	FY2016-FY2020	FY2021-FY2025	FY2026-FY2030	FY2031-FY2035	FY2036 FY2040	FY2041-FY2045	FY2046 FY2050	TOTAL FY1997-FY2050
OPERATING EXPENSE										118,423
CENRTC										-
GENERAL PLANT PROJECT										-
LINE ITEM *(List Each One)*										
										-
										-
										-
										-
										-
Subtotal Line Items	-	-	-	-	-	-	-	-	-	-
TOTAL BCWS/PMB[1]										118,423
MGMT RESERVE[2]										-
LINE ITEM CONTINGENCY[2]										-
OFFSITE TRANSFERS[3]										-
Subtotal	-	-	-	-	-	-	-	-	-	-
TOTAL										118,423

[1]Budgeted Cost of Work Scheduled (BCWS) Equals Performance Measurement Baseline (PMB); Expense Carryover NOT Included.
[2]Management Reserve and Line Item Contingency Held by RL.
[3]Work Performed at Sites Other Than Hanford.

EXHIBIT 4

FACILITY STABILIZATION
LIFE CYCLE BUDGET AUTHORITY (B/A) BY YEAR BY FUND TYPE
BY PROJECT BASELINE SUMMARY (PBS)
FY 1998

($000s)

PROJECT WBS:	1.4.5.1
PBS NO:	RL-TP05
PBS TITLE:	PFP Deactivation

FUND TYPE	FY1997	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	SUBTOT FY1997-FY2006
OPERATING EXPENSE			-	5,494	16,344	21,778	28,258	27,279	15,950	3,320	118,423
CENRTC											-
GENERAL PLANT PROJECT											-
LINE ITEM *(List Each One)*											
											-
											-
											-
											-
											-
Subtotal Line Items	-		-	-	-	-	-	-	-	-	-
TOTAL NEW B/A				5,494	16,344	21,778	28,258	27,279	15,950	3,320	118,423

EXHIBIT 4

FACILITY STABILIZATION
LIFE CYCLE BUDGET AUTHORITY (B/A) BY YEAR BY FUND TYPE
BY PROJECT BASELINE SUMMARY (PBS)
FY 1998

($000s)

PROJECT WBS:	1.4.5.1
PBS NO:	RL-TP06
PBS TITLE:	PFP Deactivation

FUND TYPE	FY2007-FY2010	FY2011-FY2015	FY2016-FY2020	FY2021-FY2025	FY2026-FY2030	FY2031-FY2035	FY2036 FY2040	FY2041-FY2045	FY2046 FY2050	TOTAL FY1997-FY2050
OPERATING EXPENSE										118,423
CENRTC										-
GENERAL PLANT PROJECT										-
LINE ITEM *(List Each One)*										
										-
										-
										-
										-
										-
Subtotal Line Items	-	-	-	-	-	-	-	-	-	-
TOTAL NEW B/A										118,423

PFP DEACTIVATION
Revision 0
AVERAGE ANNUAL FULL TIME EQUIVALENTS
(includes Major Subcontractors but not Enterprise Companies)

PHBS 1.4.5.1 **Submittal Date: 9/10/97**

PBS Number	PBS Title	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007
RL-TP05	PFP DEACTIVATION	0	0	37	102	124	115	153	64	24	0
Total PBS FTEs		0	0	37	102	124	115	153	64	24	0

B.6 PFP Stabilization (RL-TP06)

B.6.1.0 PFP Stabilization Technical Baseline (RL-TP06)

B.6.1.1 PFP Stabilization Organization Mission (RL-TP06)

The PFP Stabilization Project mission is to implement Defense Nuclear Facilities Safety Board (DNFSB) Recommendation 94-01 and correct related plutonium vulnerabilities by stabilizing, repackaging, immobilizing and/or properly dispositioning, all remaining plutonium-bearing materials in storage or holdup (left over residues of varying quantities) at the Plutonium Finishing Plant (PFP). Also included is one candidate FY 1998 line item (LI) at the PFP. This LI is required to support the stabilization, packaging and storage of plutonium-bearing materials at PFP in accordance with the schedule and requirements of DNFSB Recommendation 94-01. This FY 1998 line item consists of two parts (1) an automated Plutonium Stabilization & Packaging System (SPS) to meet the requirements of DOE-STD-3013-96; and, (2) 2736-Z Vault upgrades and 2736-ZB facility modifications, as necessary, to support the SPS.

As background information, initial construction on the Plutonium Finishing Plant began in 1949 and was completed in 1951. The PFP was the final link in the plutonium manufacturing chain at Hanford, processing plutonium-bearing chemical solutions and scrap solids into product-grade metal and/or oxide. This process mission, as part of the Defense Program, ended in May 1989. Over the years additional structures were added to the PFP Complex including the 2736-Z/ZB vault storage and handling facility, the 236-Z Plutonium Reclamation Facility and most recently the 243-Z Low Level Waste Treatment Facility, as well as a number of lesser structures and/or ancillary buildings. Plutonium finishing activities at PFP included three major operations: (1) Plutonium Metal Production through the remote mechanical C- & A-Lines, which converted scrap plutonium nitrate solutions into product-grade plutonium metal, (2) the Plutonium Reclamation Facility, added in 1964, which converted scrap plutonium solutions and/or solids from Hanford and other DOE sites into product-grade plutonium nitrate solutions; and, (3) the Plutonium Storage and Handling Facility, used to nondestructively assay, store, package/repackage, and ship/receive plutonium materials to and from the Hanford site.

Although processing has stopped, chemically reactive plutonium-bearing materials remain in the plant. Chemically reactive materials create the potential for increased radiation exposure to workers and present unnecessary risk to the public. The Defense Nuclear Facility Safety Board, in their Recommendation 94-1, stated that imminent hazards could arise in 2-3 years unless identified problems were corrected which result from the chemically reactive plutonium-bearing materials held in storage and former process facilities within the DOE Complex, including the PFP. Until stabilization, packaging, immobilization and/or other appropriate disposition is complete, the risks from these quantities of chemically reactive plutonium materials is NOT mitigated. Therefore, in order to eliminate this imminent hazard at the PFP, it is necessary that all plutonium at the PFP be dispositioned consistent with the DNFSB Recommendation 94-01 Implementation Plan.

Key programmatic assumptions are as follows:

Due to signigicant budget shortfalls in both FY98 and FY99, the implementation of DNFSB Recommendation 94-01 will not be complete by May 2002. Also, as a result of these budget shortfalls, the PFP Project will require a complete rebaseline, following facility reengineering and FY98, in order to establish a new completion date for DNSFB Recommendation 94-01 at PFP.

PFP Laboratory capability restricted solely to the support of PFP programmatic activities.

No related upgrades to PFP dangerous waste tanks systems required beyond those already planned.

Any high-level radioactive liquid wastes generated in support of programmatic activities are discharged through the 241-Z Waste Treatment Facility to the 200 West Area tank farms.

Any nonradioactive or low-level liquid wastes generated in support of programmatic activities are discharged through the 243-Z Low-Level Treatment Waste Treatment facility to the approved TEDF.

Very small quantities of radiological contaminated exhaust effluents are released from PFP stacks at levels well below with the Site's approved gaseous release limits.

Solid waste at PFP is classified as hazardous, low-level radioactive, TRU radioactive, and mixed (hazardous with radioactive constituents such as LLW and TRU).

Any solid wastes generated in support of programmatic activities at PFP are disposed to either the approved Central Waste Storage Complex or the approved Transuranic Waste Storage & Assay Facility (TRUSAF).

Due to significant budget shortfalls in FY98 and FY99, all Pu at the PFP will still be stabilized and packaged for safe storage in accordance with HNF-EP-0853, DNFSB Recommendation 94-1 Hanford Site Integrated Stabilization Management Plan (McCormack 1997); however, the May 2002 completion date will not be met.

Operations on sludge stabilization and immobilization, in connection with terminal cleanout, will continue until the end of the program in TBD.

Plutonium materials will be either stabilized, or dispositioned as waste, and packaged/repackaged to applicable specifications in DOE Standard - Criteria for Safe Storage of Plutonium Metals and Oxides (DOE-STD-3013-96) or WIPP WAC criteria as appropriate. Plutonium-bearing materials >50 wt% Pu and U will continue to be stabilized at 1000 oC and stored in vaults in accordance with DOE-STD-3013-96 criteria. Plutonium residues <50 wt% Pu and U will be dispositioned consistent with applicable WIPP WAC criteria and regulations.

Facility modifications needed for packaging and storage of Pu containers to the DOE Standard, DOE-STD-3013-96, are scheduled to be operational by TBD. Stabilized high-assay material (>50 wt% Pu and U) will be retrieved from storage and restabilized and packaged consistent with DOE-STD-3013-96 criteria and returned to vault storage. Major vault modifications, necessary to handle the new standardized Pu storage container, will be required.

The current laboratory development program will identify and resolve any technology and equipment development issues and will serve as an adequate basis for design of the selected stabilization process systems. The PFP Analytical Laboratory and the Plutonium Process Support Laboratories will be upgraded as required. Additional instrumentation will be provided to support necessary analyses in characterization of miscellaneous solid residues and process support of the stabilization operations.

Programmatic operations will be on a 24-hour-per-day, 5-day-per-week basis (XYZ schedule) and personnel and funding will be provided to support this level of effort.

Work scope contained in the New Facility Planning ADS (6625) is now included within this program element.

The PFP Transition Project End Point is anticipated by TBD. This end point is NOT the cessation of all activities as with other Hanford Site facilities. Instead, this End Point assumes the continued operation of all SNM shipping, receiving, storage and vault systems, including all SAS systems plus laboratory capabilities as needed, for an indefinite period. This end point condition is also based on the following.

- Full implementation of DNFSB Recommendation 94-1 is completed in FY TBD and applicable Pu vulnerabilities are mitigated.

- Deactivation is initiated in parallel with DNFSB Recommendation 94-1 activities.

- The majority of facility transition to deactivation occurs during FYs TBD.

Start-up of the vertical calciner by October 1,1997 does not require a Readiness Review (Readiness Assessment only).

Stabilization End-point

The PFP Stabilization project completes when the plutonium and uranium materials at PFP, as defined by DNSFB Recommendation 94-01, are dispositioned according to the requirements of the Department of Energy's DNSFB Recommended 94-01 Implementation Plan, transmitted to the DNSFB on February 28, 1995. The mandated completion date is May 2002. By this date, all 4,056 Kg of Plutonium at PFP has been stabilized, cemented, immobilized and/or otherwise dispositioned.
Also, assuming no plutonium materials are converted to mixed ozide and burned in reactors, 2940 Kg of plutonium will remain in storage at PFP under PBS RL-TP07 and 1,116 Kg plutonium will have been shipped to Hanford's Central Waste Complex and/or WIPP.

B.6.1.2 PFP Stabilization End Point Targets from Hanford Strategic Plan

* Complete stabilization of plutonium in PFP (DNFSB 94-1 implementation).

B.6.1.3 PFP Stabilization Major Facilities

B.6.1.3.1 Plutonium Finishing Plant Facility

B.6.1.3.1.1 Plutonium Finishing Plant Facility Description

PFP, formerly called Z-Plant, was constructed in 1949-1951 in the 200-W Area of Hanford. It was used to process plutonium-bearing chemical solutions and convert them into metal and oxide. The plant is currently in the process of stabilization and deactivation.

There is no support for facility transition to deactivation in FY98 and FY99. Hence, no progress will be made towards facility deactivation until FY00. Also, facility transition to deactivation activities will be rebaselined in FY98 following facility reengineering.

B.6.1.3.1.2 Plutonium Finishing Plant Facility Technical Logic:

The Department of Energy (DOE), in partnership with its contractors, shall plan, acquire, operate, maintain, and dispose of physical assets as valuable national resources. Stewardship of these physical assets shall be accomplished in a cost-effective manner to meet the DOE mission. This shall incorporate industry standards, a graded approach, and performance objectives.

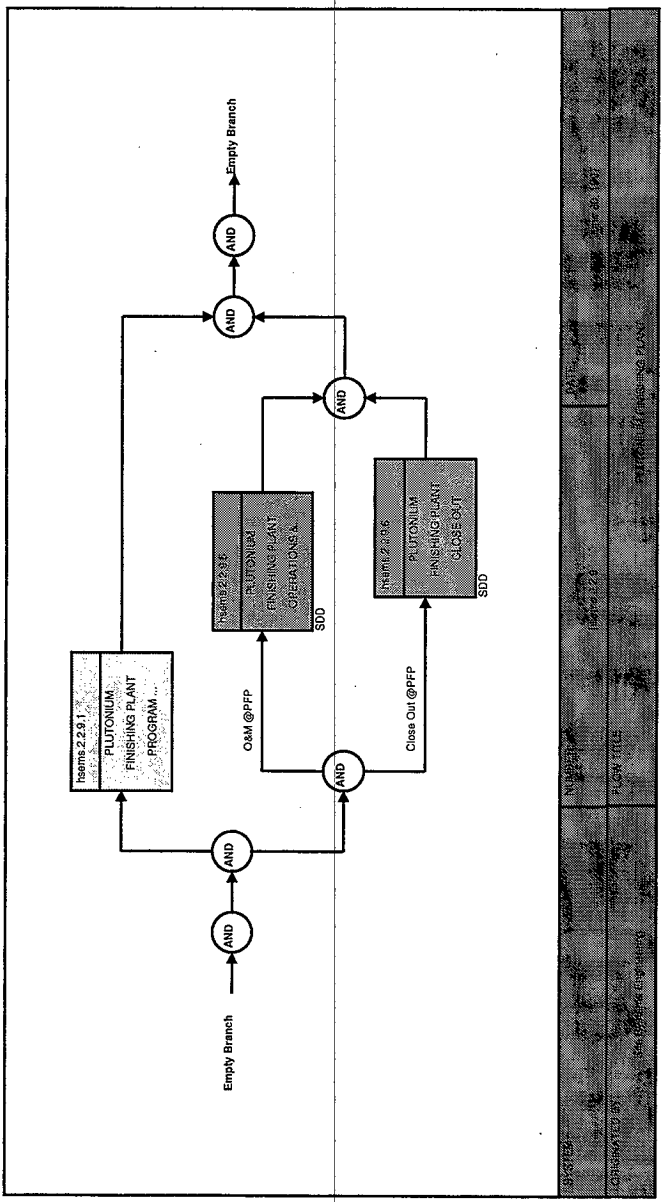


Figure B-6 PLUTONIUM FINISHING PLANT

B.6.1.3.1.3 Plutonium Finishing Plant Requirements and Life Cycle Function Descriptions

Requirements:

- Complete oxidation stabilization of existing plutonium metal button (Pu) inventory within PFP vaults (approx 352 items) by TBD.
- Complete stabilization of 5,363 Kg Pu bulk high assay oxide/mox by TBD.
- Complete shipment of high enriched uranium materials by 1/01.
- Complete stabilization of 1,600 polycubes by TBD.
- Complete metal repackaging by TBD.
- Complete stabilization and packaging of all residues at PFP by TBD.
- Complete thermal stabilization/repackaging of all Pu oxide to meet metal/oxide storage standards at PFP by TBD.
- Complete stabilization and repackaging of interim stabilized material by TBD.
- Complete cementation, discard or otherwise disposition of 3765 kg of bulk plutonium residue materials by TBD.
- Complete cementation of 1269 kg of bulk plutonium-bearing materials (cumulative) by 9/30/98.
- Complete cementation of 2569 kg of bulk plutonium-bearing materials (cumulative) by 9/30/99.
- Complete stabilization of all Pu bearing solutions (~4300 items) by TBD.
- Central Plateau inactive facilities shall be maintained within the approved safety envelope
- Central Plateau asbestos abatement shall be performed as necessary

Life Cycle Function Descriptions:

B.6.1.3.1.3.1 PLUTONIUM FINISHING PLANT OPERATIONS & MAINTENANCE WORK SCOPE SUMMARY

Day-to-day work, including preventive and predictive maintenance, that is required to maintain and preserve plant and capital equipment in a condition suitable for it to be used for its designated purpose.

PLUTONIUM FINISHING PLANT OPERATIONS & MAINTENANCE SPECIFIC FUNCTIONS

B.6.1.3.1.3.2 Maintain Safe & Compliant Materials in PFP Facility during Stabilization

Materials stored in the PFP facility will be maintained in safe condition until they are removed for disposal or treatment.

B.6.1.3.1.3.3 PLUTONIUM FINISHING PLANT POST OPERATIONS WORK SCOPE SUMMARY

Day-to-day work, including pre-stabilization surveillance and maintenance, stabilization, post-stabilization

surveillance and maintenance, deactivation, and post-deactivation surveillance and maintenance, that is required to allow safe decontamination and decommissioning.

Also maintain 2736-ZB/Z vault facilities including the storage monitoring of SNM at PFP, until final deactivation.

PLUTONIUM FINISHING PLANT POST OPERATIONS SPECIFIC FUNCTIONS

B.6.1.3.1.3.4 Maintain Safe & Compliant Plutonium Finishing Plant Facility in CP Areas

Maintain the PFP facility structures, operating systems and equipment, and monitoring systems within the approved safety and compliance requirements until the facilities are made available for D&D. Also maintain the 2736-ZB/Z vault facilities, including the storage and monitoring of SNM at PFP until final deactivation.

B.6.1.3.1.4 Plutonium Finishing Plant Boundary Diagram

Table B.6-1 Plutonium Finishing Plant Boundary Diagram

External Interfaces -None- Hanford Site Environmental System Interfaces -None-		External Interfaces -None- Hanford Site Environmental System Interfaces -None-

B.6.1.3.1.5 Plutonium Finishing Plant Interface Description and Forecast

EXTERNAL INPUTS

-None-

INTERNAL INPUTS

-None-

EXTERNAL OUTPUTS

-None-

INTERNAL OUTPUTS

-None-

B.6.1.4 Drivers for PFP Stabilization

Table B.6-2 Source Documents for PFP Stabilization

Name	Title
DE-AC06-96RL13200	Project Hanford Management Contract, Fluor Daniel Hanford, Inc.
DOE/EM-0199	Plutonium Vulnerability Management Plan
DOE/RL-96-14	Updated Draft Mission Direction Document, June 1996
DOE/RL-96-92	Hanford Strategic Plan

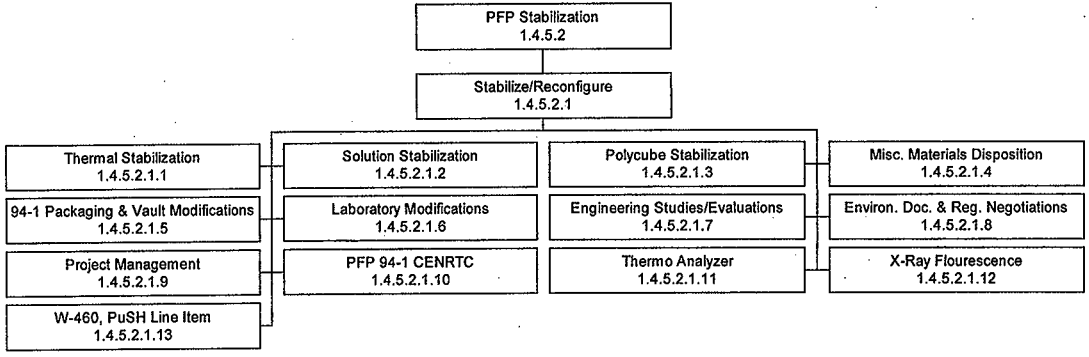
B.6.1.5 PFP Stabilization Risk Management

The PFP Stabilization Project uses primarily the 234-5Z building to stabilize, immobilize and/or otherwise disposition (i.e., pyrolysis, direct denitration calcination, etc.) identified plutonium materials consistent with DNFSB Recommendation 94-01. The total inventory of plutonium-bearing materials involved is approximately 4,056 Kg Pu and 18 Kg U. The main processes to be used are muffle furnace stabilization at 1000 degree centigrade, direct denitration calcination, pyrolysis, cementation and the Stabilization & Packaging System. The primary rooms used in the 234-5Z building are: 227, 228A, 228B, 228C, 230A, 230B, 230C, 232, and 235B and 235C. In addition, this project uses 2736-ZB facilities as necessary to store the stabilized material discard the immobilized materiel as waste and to house the new plutonium Stabilization & Packaging system. The primary hazard, as defined by the PFP Final Safety Analysis Report. is a nuclear criticality.

The PFP Stabilization Project implements DNFSB Recommendation 94-1 and correct related plutonium vulnerabilities by stabilizing, and/or properly dispositioning, all remaining plutonium residues in storage or holdup. These plutonium vulnerabilities (see "Plutonium Working Group Report on Environmental, Safety & Health Vulnerabilities Associated with the Department's Plutonium Storage", Vol. 11 Appendix B. Part 2: Hanford Site Assessment Report, September 1994), can lead to "...imminent hazards within 2-3 years" (DNFSB).

The most likely imminent hazard, according to Chapter 9, "Accident Analysis", PFP Final Safety Analysis Report (FSAR), WHC-SD-CP-SAR-021, resulting from these plutonium residues is a nuclear criticality. We have assumed that the stated impact has a 99 % probability of occurring in 30 Years. This corresponds to an annual probability of 0.14 incidents per year which is the basis of the probability rating for the risk identified (i.e., probability (P) between 0.1 per year and 1.0 Per year). Louis type of hazard is consistent with DNFSB Recommendation 94-1, dated May 1994,- which states "The Board has concluded from observations and discussions with others that imminent hazards could arise within 2-3 years unless certain problems are corrected". While the FSAR Chapter 9 does not have a preferred criticality scenario (i.e., many possible scenarios due to the large variety of plutonium materials), a possible scenario would be an undetected leak of plutonium nitrate from one of the 100+ Product Receiver (PR) Cans with polypropylene inner containers stored at the PFP. The inner container would be breached due to radiation damage and the outer stainless steel container corroded by exposure to corrosive elements within the plutonium nitrate matrix, such as chlorides or fluorides. The subsequent leaking plutonium nitrate would then collect, unnoticed, in some unfavorable geometric container and go critical. The consequences of such a criticality event are based on Chapter 9 historical data. The off site dose consequence is calculated at 53 mrem and the on site dose consequence is calculated at 730 mrem. Also based on previous nuclear criticality events in the DOE Complex and at PFP, extreme over exposure to one or more facility workers would result. There would be minimal environmental impact. However, a nuclear criticality event at PFP would also have significant negative consequences to Compliance, Mission and Mortgage Reduction due to failure to meet regulatory requirements and mission objectives resulting from the magnitude of anticipated recovery actions, the increased costs and the delays to the primary mission.

PFP Stabilization Work Breakdown Structure



HANFORD SITE WORK BREAKDOWN STRUCTURE DICTIONARY
FACILITY STABILIZATION
WBS: 1.4
8/25/1997

1. Activity Title: STABILIZE/RECONFIGURE FOR MIN SURVEILLAN	2. Date 7/31/1997	3. PBS Number RL-TP06	4. Dict Rev 0
5. Contract WBS No. 1.4.5.2.1	6. Corresponding FDS No. K6AB	7. Baseline CR No.	
8. Organization Name 15000			9. B & R No.

10. Scope of Work
This activity entails all plant tasks necessary to prepare for deactivation of nonessential systems, system components, and physical structures, and required to minimize environmental, public, and personnel hazards. These actions are taken consistent with minimizing continuing facility costs while maintaining the facility capabilities sufficient to implement the Record of Decision (ROD) from the PFP Environemental Impact Statement (EIS). This activity includes the following:
*Thermal Treatment
*Solution Treatment
*Polycube Stabilization
*Miscellaneous Materials Disposition
*DNSFB 94-1 Packaging and Vault Modifications (ADS 6625)
*Laboratory Modifications for Minimum Surveillance
*Engineering Studies/Evaluation
*Environmental Documentation and Regulatory Negotiations
*Project Management and Training
*Capital to support stabilization and DNFSB Recommendation 94-01
(1) DNFSB Recommendation 94-01 as used in this WBS includes Plutonium Vulnerability corrective actions.

8/25/1997

Mission Area Responsibility Assignment Matrix

Proj Lvl (PBS #)	FDS Act Number	Activity Title	Activity Manager	Responsible Organization	Cost Account
RL-TP06		PFP STABILIZATION			
	K6AB	STABILIZE/RECONFIGURE FOR MIN SURVEILLANCE	D. B. Courson	15000	1K6B03 1K6B04 1K6B06 1K6B0A 1K6B0B 1K6B0C 1K6B0D 1K6B0F 1K6B0G 2K6307 2K6502 2K6601 3K6B0F

FACILITY STABILIZATION PROJECT
RL-TP06 PFP Stabilization Project
Project Master Baseline Schedule

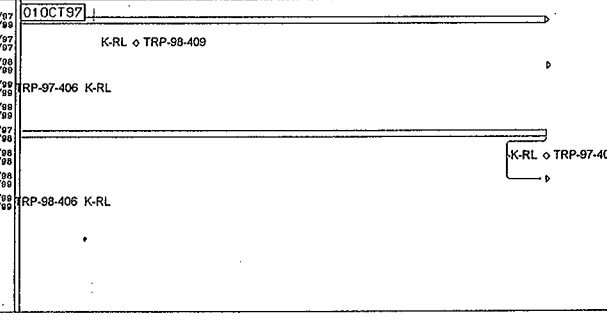
Time-Phased Logic Diagram
FY 98 MYWP September 1997

Activity	Description	Start		FY 98	FY 99	FY 00	FY 01	FY 02	FY03
PS	PFP STABILIZATION PROJECT	10/01/97 09/30/99		01OCT97					
PS403	TRP-98-409, Revise OSD for Oxide Storage	12/19/97 12/19/97	K-RL	◇ TRP-98-409					
PS406	Complete Installation	10/01/98 01/29/99							
PS409	TRP-97-406, Complete Installation of Calciner	01/30/99 01/30/99		K-RL ◇ TRP-97-406					
PS412	Hire/Train/ORR	04/01/99 09/30/99							
PS415	Cementing	10/01/97 09/30/98							
PS418	TRP-97-409, Cement/Discard 1269 Kg	10/01/98 10/01/98		K-RL ◇ TRP-97-409					
PS421	Cementing	10/01/98 05/26/99							
PS424	TRP-98-406, Cement/Discard 2569 Kg	05/27/99 05/27/99		K-RL ◇ TRP-98-406					

FACILITY STABILIZATION PROJECT
RL-TP06 PFP Stabilization Project
Project Master Baseline Schedule

Time-Phased Logic Diagram
FY 98 MYWP September 1997

Activity	Description	Start
PS	PFP STABILIZATION PROJECT	10/01/97 09/30/99
PS403	TRP-98-409, Revise OSD for Oxide Storage	12/18/97 12/18/97
PS406	Complete Installation	10/01/98 01/29/99
PS409	TRP-97-406, Complete Installation of Calciner	01/30/98 01/30/98
PS412	Hire/Train/ORR	04/01/98 09/30/99
PS415	Cementing	10/01/97 09/30/98
PS418	TRP-97-408, Cement/Discard 1269 Kg	10/01/98 10/01/98
PS421	Cementing	10/01/98 09/29/99
PS424	TRP-98-406, Cement/Discard 2569 Kg	08/27/99 08/27/99



MILESTONE CONTROL #	TPA-MS NUMBER	TPA TYPE	MS LEVEL	MS TITLE	TYPE	DATES PLANNED BASELINE	DATES APPROVED BASELINE	DATES REVISED BASELINE	PROJ CIN	PBS #
TRP-98-403			RL	COMPLETE SHIPMENT OF HIGH ENRICHED URANIUM (HEU) MATERIALS		1/31/01				RL-TP06
TRP-97-406			RL	COMPLETE INSTALLATION OF SOLUTION STABILIZATION DENITRATION CALCI	OTH	1/31/99				RL-TP06
TRP-97-409			RL	COMPLETE CEMENTATION/DISCARD OR DISP. OF 1,269 KG BULK PU RESIDUE		9/30/98				RL-TP06
TRP-98-409			RL	REVISE OPERATING SPECIFICATION DOCUMENT FOR OXIDE STORAGE AT PFP		12/19/97				RL-TP06
TRP-98-406			RL	COMPLETE CEMENTATION/DISCARD OR DISP. 2,569 KG BULK RESIDUES		9/30/99				RL-TP06

PHMC

MILESTONE DESCRIPTION SHEET

Title: COMPLETE SHIPMENT OF HIGH ENRICHED URANIUM (HEU) MATERIALS		**Date:**
Assigned To:		**CIN:**
Program WBS Designator: 1.4.5.2		**Due Date:** 1/31/01
PBS No: RL-TP06		
MC #: TRP-98-403	**TPA No:**	**Rev:** 0

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): COMMIT #: RECOMM #:	Report X Letter Drawing(s) Other (Specify)	DOE-HQ X DOE-RL Other (Specify)

Milestone Description:
Begin the stabilization of Pu-bearing solutions at PFP using direct denitration vertical calciner technology with the production unit.

Description of what constitutes completion of this milestone:
The PFP Transition Project has either initiated stabilization of Pu-solutions, using direct denitration vertical calciner technology, been authorized by FDH and DOE to commence stabilization of these solutions (i.e., completed all necessary readiness reviews/assessments, applicable NEPA documentation approved, etc.); or, has submitted a Declaration of Readiness to DOE approved by FDH declaring Contractor readiness to commence solution stabilization. The Declaration of Readiness, following DOE review, is deemed technically adequate by the DOE.
The concept is that the Contractor is to have completed all its required actions to commence stabilization of Pu-solutions at PFP. If conditions, or requirements, beyond the control/responsibility of the Contractor preclude startup then this milestone is to be considered complete. Likewise, it the Contractor has completed all its actions and the DOE has

Description of what constitutes completion of this milestone: (con't)
completed all its actions, but equipment problems, or facility conditions, under the control/responsibility of the Contractor prevent startup, then this milestone is not to be considered complete.

A letter will be issued to DOE-RL documenting completion of this milestone.

PHMC
MILESTONE DESCRIPTION SHEET

Title: COMPLETE CEMENTATION/DISCARD OR DISP. OF 1,269 KG BULK PU RESIDUE		**Date:** 7/31/97
Assigned To: FSP/PFP		**CIN:**
Program WBS Designator: 1.4.5.2		**Due Date:** 9/30/98
PBS No: RL-TP06		
MC #: TRP-97-409	**TPA No:**	**Rev:** 1

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): COMMIT #: RECOMM #:	Report X Letter Drawing(s) Other (Specify)	DOE-HQ X DOE-RL Other (Specify)

Milestone Description:
The cementation/discard or disposition of 1,852 Kg Bulk Pu Residues (total combined for FYs 1997 & 1998) out of a total of 3,765 Kg Bulk will be completed to the applicable discard criteria.

Description of what constitutes completion of this milestone:
The cementing, packaging for discard, or dispositioning of the PFP's inventory of miscellaneous Pu-bearing residues will be performed to criteria acceptable to Hanford's Central Waste Complex and the applicable regulatory agencies. Also included is all necessary stabilization, shipping, packaging and/or waste disposal tasks necessary to support the cementation/discard or disposition.
This milestone provides for the cementing, packaging for discard, and acceptable packaging for shipment to Hanford's Central Waste Complex of approximately 1,633 (1,852 total) Kg Bulk Pu-bearing residues in FY 1998 out of a total 3,765 Kg of residues currently stored in the PFP vaults.
A letter will be issued to DOE-RL documenting completion of this milestone, also indicating the plutonium inventory of the material dispositioned and its packaging configuration.

PHMC
MILESTONE DESCRIPTION SHEET

Title: COMPLETE INSTALLATION OF SOLUTION STABILIZATION DENITRATION CALCI		**Date:** 9/15/97
Assigned To: BWHC/PFP STABILIZATION		**CIN:**
Program WBS Designator: 1.4.5.2		**Due Date:** 1/31/99
PBS No: RL-TP06		
MC #: TRP-97-406	**TPA No:**	**Rev:** 2

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG X OTHER	DNFSB (Y/N): N COMMIT #: RECOMM #:	Report X Letter Drawing(s) Other (Specify)	DOE-HQ X DOE-RL Other (Specify)

Milestone Description:
Complete installation of the solution stabilization denitration calciner in 234-5Z.

Description of what constitutes completion of this milestone:
A production scale denitration calciner has been designed, fabricated and installed in the applicable glovebox(es) in the 234-5Z facility and ready to initiate ATP/OTP testing. This denitration calciner consists of the calciner itself, electrical transformer system for the heaters and any applicable feed and waste storage tanks and associated transfer lines. All equipment and systems necessary for PRETREATMENT of solutions are NOT included in this milestone.
A letter will be issued to DOE-RL documenting installation of the denitration calciner consistent with this milestone description.

PHMC

MILESTONE DESCRIPTION SHEET

Title: REVISE OPERATING SPECIFICATION DOCUMENT FOR OXIDE STORAGE AT PFP		**Date:** 7/31/97
Assigned To: FSP/PFP		**CIN:**
Program WBS Designator: 1.4.5.2		**Due Date:** 12/19/97
PBS No: RL-TP06		
MC #: TRP-98-409	**TPA No:**	**Rev:** 0

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): COMMIT #: RECOMM #:	Report X Letter Drawing(s) Other (Specify)	DOE-HQ X DOE-RL Other (Specify)

Milestone Description:
Revise operating specification document (OSD) for oxide storage at PFP.

Description of what constitutes completion of this milestone:
Revise the operating specification document (OSD) for plutonium oxide storage at PFP consistent with technical basis documentation. The purpose is to insure that the PFP vault storage OSD provides a can configuration so that plutonium dioxide, generated either by direct denitration, oxalate conversion, or thermal stabilization can be safely stored in PFP vaults consistent with accepted technical justification.
A letter will be issued to DOE-RL documenting revision of the OSD for plutonium storage at PFP.

PHMC
MILESTONE DESCRIPTION SHEET

Title: COMPLETE CEMENTATION/DISCARD OR DISP. 2,569 KG BULK RESIDUES		**Date:** 7/31/97
Assigned To: FSP/PFP		**CIN:**
Program WBS Designator: 1.4.5.2		**Due Date:** 9/30/99
PBS No: RL-TP06		
MC #: TRP-98-406	**TPA No:**	**Rev:** 1

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): COMMIT #: RECOMM #:	Report X Letter Drawing(s) Other (Specify)	DOE-HQ X DOE-RL Other (Specify)

Milestone Description:
The cementation/discard or otherwise disposition of accumulative to date 3,476 Kg Bulk Pu Residues, out of a total of 2,569 Kg Bulk, will be completed to the applicable discard criteria.

Description of what constitutes completion of this milestone:
The cementing, packaging for discard, or dispositioning of the PFP's inventory of miscellaneous Pu-bearing residues will be performed to criteria acceptable to Hanford's Central Waste Complex and the applicable regulatory agencies. Also included is all necessary stabilization, shipping, packaging and/or waste disposal tasks necessary to support the cementation/discard or disposition.
This milestone provides for the cementing, packaging for discard, and acceptable packaging for shipment to Hanford's Central Waste Complex of 3,476 Kg Bulk Pu-bearing residues out of a total 2,569 Kg residues currently stored in the PFP vaults (1,300 Kg Bulk cemented in FY 1999). A letter will be issued to DOE-RL documenting completion of this milestone, also indicating the plutonium inventory of the material dispositioned and its packaging configuration.

EXHIBIT 1

FACILITY STABILIZATION
LIFE CYCLE COST BASELINE (BCWS) BY YEAR BY FUND TYPE
BY PROJECT BASELINE SUMMARY (PBS)
FY 1998

($000s)

PROJECT WBS:	1.4.5.2
PBS NO:	RL-TP06
PBS TITLE:	PFP Stabilization

FUND TYPE	FY1997	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	SUBTOT FY1997-FY2006
OPERATING EXPENSE		3,760	8,246	15,250	10,131	7,441					44,828
CENRTC		-	-	269	273	280					822
GENERAL PLANT PROJECT											-
LINE ITEM *(List Each One)*											
W-460, PuSH		8,126	21,814	3,370	2,920	360					36,590
											-
											-
											-
											-
Subtotal Line Items	-	8,126	21,814	3,370	2,920	360	-	-	-	-	36,590
TOTAL BCWS/PMB[1]		11,886	30,060	18,889	13,324	8,081	-	-	-	-	82,240
MGMT RESERVE[2]											-
LINE ITEM CONTINGENCY[2]											-
OFFSITE TRANSFERS[3]											-
Subtotal	-	-	-	-	-	-	-	-	-	-	-
TOTAL	-	11,886	30,060	18,889	13,324	8,081	-	-	-	-	82,240

[1]Budgeted Cost of Work Scheduled (BCWS) Equals Performance Measurement Baseline (PMB); Expense Carryover NOT Included.
[2]Management Reserve and Line Item Contingency Held by RL.
[3]Work Performed at Sites Other Than Hanford.

EXHIBIT 1

FACILITY STABILIZATION
LIFE CYCLE COST BASELINE (BCWS) BY YEAR BY FUND TYPE
BY PROJECT BASELINE SUMMARY (PBS)
FY 1998

($000s)

PROJECT WBS:	1.4.6.2
PBS NO:	RL-TP06
PBS TITLE:	PFP Stabilization

FUND TYPE	FY2007-FY2010	FY2011-FY2015	FY2016-FY2020	FY2021-FY2025	FY2026-FY2030	FY2031-FY2035	FY2036 FY2040	FY2041-FY2045	FY2046 FY2050	TOTAL FY1997-FY2050
OPERATING EXPENSE										44,828
CENRTC										822
GENERAL PLANT PROJECT										-
LINE ITEM *(List Each One)*										
W-460, PuSH										36,590
										-
										-
										-
										-
Subtotal Line Items	-	-	-	-	-	-	-	-	-	36,590
TOTAL BCWS/PMB[1]										82,240
MGMT RESERVE[2]										-
LINE ITEM CONTINGENCY[2]										-
OFFSITE TRANSFERS[3]										-
Subtotal	-	-	-	-	-	-	-	-	-	-
TOTAL	-	-	-	-	-	-	-	-	-	82,240

[1]Budgeted Cost of Work Scheduled (BCWS) Equals Performance Measurement Baseline (PMB); Expense Carryover NOT Included.
[2]Management Reserve and Line Item Contingency Held by RL.
[3]Work Performed at Sites Other Than Hanford.

EXHIBIT 4

FACILITY STABILIZATION
LIFE CYCLE BUDGET AUTHORITY (B/A) BY YEAR BY FUND TYPE
BY PROJECT BASELINE SUMMARY (PBS)
FY 1998

($000s)

PROJECT WBS:	1.4.5.2
PBS NO:	RL-TP06
PBS TITLE:	PFP Stabilization

FUND TYPE	FY1997	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	SUBTOT FY1997-FY2006
OPERATING EXPENSE		3,760	8,246	15,250	10,131	7,441					44,828
CENRTC		-	-	269	273	280					822
GENERAL PLANT PROJECT											-
LINE ITEM *(List Each One)*											
W-460, PuSH		8,126	21,814	3,370	2,920	360					36,590
											-
											-
											-
											-
Subtotal Line Items	-	8,126	21,814	3,370	2,920	360	-	-	-	-	36,590
TOTAL NEW B/A		11,886	30,060	18,889	13,324	8,081					82,240

EXHIBIT 4

FACILITY STABILIZATION
LIFE CYCLE BUDGET AUTHORITY (B/A) BY YEAR BY FUND TYPE
BY PROJECT BASELINE SUMMARY (PBS)
FY 1998

($000s)

PROJECT WBS:	1.4.5.2									
PBS NO:	RL-TP06									
PBS TITLE:	PFP Stabilization									TOTAL
FUND TYPE	FY2007-FY2010	FY2011-FY2015	FY2016-FY2020	FY2021-FY2025	FY2026-FY2030	FY2031-FY2035	FY2036 FY2040	FY2041-FY2045	FY2046 FY2050	FY1997-FY2050
OPERATING EXPENSE										44,828
CENRTC										822
GENERAL PLANT PROJECT										-
LINE ITEM *(List Each One)*										
W-460, PuSH										36,590
										-
										-
										-
										-
Subtotal Line Items	-	-	-	-	-	-	-	-	-	36,590
TOTAL NEW B/A										82,240

EXHIBIT 2a

FACILITY STABILIZATION
FY 1998 COST BASELINE (BCWS) BY MONTH
BY PROJECT BASELINE SUMMARY (PBS)
BY ACTIVITY DATA SHEET (ADS)
EXECUTION YEAR

($000s)

PROJECT WBS:	1.4.5.2
PBS NO:	RL-TP06
PBS TITLE:	PFP Stabilization

ADS TITLE	ADS NO	FUND TYPE	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
PFP PROJECT	6624-0	OP EXP	270	345	270	285	285	375	299	359	299	269	374	330	3,760
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	270	345	270	285	285	375	299	359	299	269	374	330	3,760
PuSH PROJECT L.I.	6625-0														-
		OP EXP													-
		CENRTC													-
		GPP													-
		LI										1,968	3,281	2,877	8,126
		SUBTOT	-	-	-	-	-	-	-	-	-	1,968	3,281	2,877	8,126
															-
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-
															-
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-

[1]Budgeted Cost of Work Scheduled (BCWS) Equals Performance Measurement Baseline (PMB); Expense Carryover Is **NOT** Included.

EXHIBIT 2a

FACILITY STABILIZATION
FY 1998 COST BASELINE (BCWS) BY MONTH
BY PROJECT BASELINE SUMMARY (PBS)
BY ACTIVITY DATA SHEET (ADS)
EXECUTION YEAR

($000s)

PROJECT WBS:	1.4.5.2
PBS NO:	RL-TP06
PBS TITLE:	PFP Stabilization

ADS TITLE	ADS NO	FUND TYPE	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL BCWS/PMB[1]			270	345	270	285	285	375	299	359	299	2,237	3,655	3,207	11,886

[1]Budgeted Cost of Work Scheduled (BCWS) Equals Performance Measurement Baseline (PMB); Expense Carryover Is NOT Included.

PFP STABILIZATION
Revision 0
AVERAGE ANNUAL FULL TIME EQUIVALENTS
(includes Major Subcontractors but not Enterprise Companies)

PHBS 1.4.5.2 **Submittal Date: 9/10/97**

PBS Number	PBS Title	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007
RL-TP06	PFP STABILIZATION	37	64	120	108	75	0	0	0	0	0
Total PBS FTEs		37	64	120	108	75	0	0	0	0	0

THIS PAGE INTENTIONALLY
LEFT BLANK

B.7 PFP Vault Management (RL-TP07)

B.7.1.0 PFP Vault Management Technical Baseline (RL-TP07)

B.7.1.1 PFP Vault Management Organization Mission (RL-TP07)

Due to a lack of funding for PFP Deactivation (RL-TP05) and PFP Stabilization (RL-TP06) subprojects, the vault management support for these subprojects wiill also require replanning.

The Plutonium Finishing Plant (PFP) Vault Management Project mission is to provide for the safe and secure storage for special nuclear materials at the PFP Complex and to provide the basic infrastructure with which the PFP stabilization and deactivation projects are dependent. Nuclear materials will be stored and safequarded at the PFP until at least 2025 (vaults are scheduled to be deactivated at that time); and plant infrastructure support will be proveded until at least fiscal year TBD when all nuclear materials will have been stabilized and the balance ot the PFP Complex (excluding the vaults) will have been deactivated. The PFP will receive, store, and ship SNM and other material forms in support of the overall Hanford site mission as directed.

Initial construction on the Plutonium Finishing Plant (PFP-formerly called Z Plant) began in 1949 and was completed 1951. The PFP was the final link in the plutonium manufacturing chain at Hanford, processing plutonium-bearing chemical solutions and converting them into metal and oxide. This process ended in May 1989. Over the years many additions were added to the PFP complex including the 2736Z/ZB vault storage and the 236Z Plutonium Reprocessing Facility as well as a number of lesser additions or ancillary buildings. Plutonium finishing included three operations: (1) Plutonium Metal Production--the remote mechanical C (RMC) metal fabrication line, started in 1959, converted plutonium nitrate solutions to metal form, (2) Plutonium Reclamation Facility--added in 1964, recycled scrap plutonium from Hanford and the Rocky Flats Plant in Colorado, and (3) Plutonium Storage and Support Facility--plutonium was received, analyzed, stored, packaged, and shipped.

Although processing has stopped, chemically reactive plutonium-bearing materials remain in the plant. Chemically reactive materials create radiation exposure to workers and present unnecessary risk to the public. The Defense Nuclear Facility Safety Board (DNFSB) in their Recommendation 94-1 stated that imminent hazards could arise in 2-3 years unless certain problems were corrected which result from the chemically reactive Pu-bearing materials held in storage areas and former process areas within the PFP. Until stabilization is complete, the risks from large quantities of stored reactive plutonium liquids/oxides/MOX/metals and holdup materials have NOT been reduced. The implementation of DNFSB Recommendation 94-1 at PFP to stabilize special nuclear materials and resolve Plutonium vulnerabilities at the PFP has been identified as a high priority activity at the Hanford Site by the USDOE. Therefore, in order to eliminate an imminent hazard at the PFP it is necessary that all plutonium at the PFP be dispositioned or stabilized.

The PFP Vault Management Project supports the PFP Stabilization Project which will utilize the existing plant systems with some necessary modifications to stabilize and disposition all of the chemically reactive material, provide appropriate packaging, and place the material in the safe and secure vaults for storage until a National decision has been made for its ultimate destiny. The material not stabilized for vault storage will be prepared for disposal, packaged, and transported to a RCRA licensed TSD.

Planning Assumptions:

It is assumed that the facility will be maintained to the minimum safety-compliant configuration at all times. This

will be necessary until the last building at PFP has been deactivated.

Stored Pu will be transported to the onsite High-Level Waste Immobilization Facility and the remaining PFP Vault buildings will be deactivated in accordance with the PFP baseline schedule.

Storage of SNM within existing PFP secure vault areas will continue throughout the foreseeable future. As permitted by the State of Washington and required by site support needs, SNM will be consolidated at PFP to permit the reduction in the number of protected areas throughout the Hanford Site.

Vault 3 will remain under the safeguards of the IAEA during DNFSB Recommendation 94-1 activities at PFP. No more vaults or materials will be made available for IAEA safeguards until after all DNFSB Recommendation 94-1 activities have been completed in FY 2002. Funds for converting additional vaults to IAEA safeguards are not included.

The PFP Deactivation Subproject end point is targeted for completion in FY TBD. This end point is NOT the cessation of all activities as with other Hanford Site facilities. Instead, this End Point assumes the continued operation of all SNM shipping, receiving, storage, and vault systems, including all SAS systems plus laboratory capabilities as needed until at least through 2025. Deactivation of the vaults and associated facilities will commence upon transfer of the materials to the onsite High-Level Waste Immobilization Facility.

There is an activity-based cost estimate to support the costs presented for 1997 only. Cost estimate data for FY98 through 2003 are not supported by an activity-based cost estimate.

A variety of dissimilar fuel types are or will be stored at PFP, including LAMPRE fuel and FFTF unirradiated fuel assemblies. The planning basis assumes that these unirradiated fuel assembly inventories will remain at PFP at least until final disposition is determined through the EIS.

Modifications to receive and store FFTF fuel assemblies will be funded from the Nuclear Energy Program. The Advanced Reactors Transition Project will transfer 285.9 kg of Pu, 860.6 kg of U, and 0.61 MT of heavy metal as disposition-ready material if and when a decision to terminate the FFTF has been made. The storage casks containing FFTF unirradiated fuel assemblies designated for storage at PFP will be transported to an outdoor location inside PFP's protected area for storage on a precast concrete pad. The unirradiated FFTF fuel pins and assemblies at PFP are considered acceptable as-is for long-term storage and no further actions are envisioned for these materials.

The PFP Vault Management Project will be restricted to the operation, maintenance, safeguarding, and securing of the 2736-Z/ZB vault complex. All NM will have been stabilized or dispositioned and the other PFP facilities will have been deactivated. Support will be provided for the IAEA safeguards of Vault 3, and any other vaults/materials that may be turned over to the IAEA. Specifically the scope will be composed of the following activities:

The PFP vault complex will continue to be operated and maintained to ensure the safe and secure receipt, shipping and storage of SNM/NM/NF is implemented. Activities also include SNM inventories, minor vault modifications, and engineering studies/assessments supporting material storage. Analytical Laboratory capabilities will be maintained to support the temporary storage of SNM.

The safety boundaries for the vault complex will receive required maintenance, operation surveillance tasks, environmental compliance tasks, corrective maintenance, procedure maintenance, preventative maintenance, plant specific support, nuclear process/radiation surveillance, project management, ventilation/power surveillance, environmental compliance, and safety boundary and emergency planning.

The SAS direction and oversight activities will continue to ensure safe, secure and compliant storage of stabilized SNM/NM/NF material is maintained.

Only basic services support to the 2736-Z/ZB vault complex including such activities as water, utilities, telephone services, etc., which are made available from outside sources will be provided. It also includes all management, training, administrative support, administrative and progress reporting, project budget/Work scope/schedule baseline control, administrative supplies and equipment, and environmental assessments (e.g., solid waste burials).

Due to a lack of FY98 funds, programmatic work such as SNM shipments, vault modifications for compliance to new/revised security/safeguards requirements, pollution prevention waste minimization compliance, S/RIDs compliance. The Price-Anderson Amendment Act compliance will continue; and DOE Requests implementation will not be performed.

Plutonium storage shall continue in a safe and secure manner pending implementation of a national SNM Programmatic EIS ROD regarding final disposition.

Plutonium and HEU shall be managed in accordance with DOE Order 5660.1B, Management of Nuclear Materials (DOE 1994). Plutonium and HEU S&S shall be in accordance with DOE Orders.

Highly enriched uranium shall continue to be stored at PFP until shipped offsite (Oak Ridge, Tennessee).

B.7.1.2 PFP Vault Management End Point Targets from Hanford Strategic Plan

- Complete stabilization of plutonium in PFP (DNFSB 94-1 implementation).

B.7.1.3 PFP Vault Management Major Facilities

B.7.1.3.1 Plutonium Finishing Plant Facility

B.7.1.3.1.1 Plutonium Finishing Plant Facility Description

PFP, formerly called Z-Plant, was constructed in 1949-1951 in the 200-W Area of Hanford. It was used to process plutonium-bearing chemical solutions and convert them into metal and oxide. The plant is currently in the process of stabilization and deactivation.

There is no support for facility transition to deactivation in FY98 and FY99. Hence, no progress will be made towards facility deactivation until FY00. Also, facility transition to deactivation activities will be rebaselined in FY98 following facility reengineering.

B.7.1.3.1.2 Plutonium Finishing Plant Facility Technical Logic:

The Department of Energy (DOE), in partnership with its contractors, shall plan, acquire, operate, maintain, and dispose of physical assets as valuable national resources. Stewardship of these physical assets shall be accomplished in a cost-effective manner to meet the DOE mission. This shall incorporate industry standards, a graded approach, and performance objectives.

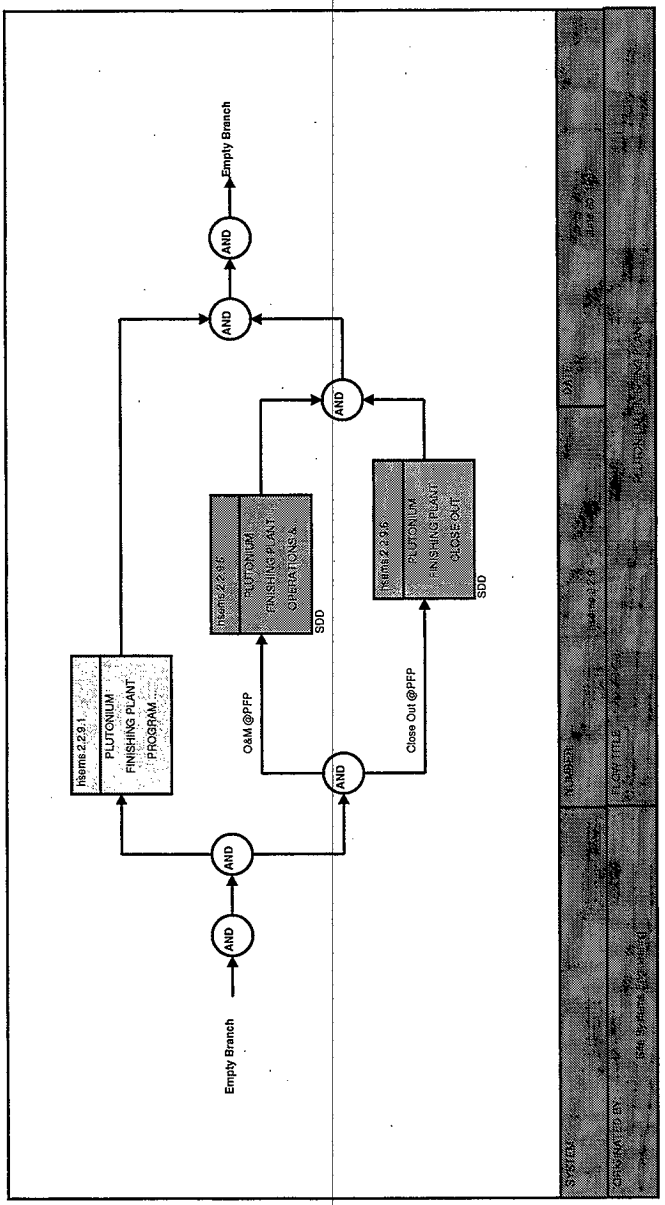


Figure B-7 PLUTONIUM FINISHING PLANT

B.7.1.3.1.3 Plutonium Finishing Plant Requirements and Life Cycle Function Descriptions

Requirements:

* The Occupational Safety and Health Act applies to any action involving the health and safety of employees in the work place. Period inspections are done at the PFP facilities to verify compliance with the OSHA Act. Everything at PFP has to comply with the OSHA Act and access any new starts/restarts of projects to the act. Continuous walk-throughs are done by the Safety Organization to ensure compliance with OSHA. PFP managers periodically review the safety and health issues to ensure compliance with OSHA-and 29-CFR-1910 guidelines Safety and Health assess level of chemicals by PFP Industrial Hygienist.

* Facilities discharging to the 200 Area TEDF shall implement Best Available Technology (BAT)/All Known, Available, and Reasonable Treatment (AKART). The generator shall provide the information required by WAC 173-240, Submission of Plans and Reports for Construction of Waste Water Facilities.

* The Clean Water Act establishes water quality standards for surface water and pretreatment standards for waste waters released to public-owned treatment works. All PFP support necessary to cease all discharges to the 21 6-Z-20 crib was completed prior to June 30 1995.

* Deactivation of PFP shall comply with DOE/EIS-0244-D

* Various DOE Orders provide and/or implement best management practices for policy and guidance to Transition Projects. The work scope, cost, and schedule are a direct result of conforming to these various orders. DOE Conduct of Operations and maintenance activities at PFP are driven by DOE 5480.19 and 4330.4B.-

* Central Plateau shall be used for the collection and management of nuclear materials that remain onsite.

* Central Plateau inactive facilities shall be maintained within the approved safety envelope

* Central Plateau asbestos abatement shall be performed as necessary

* Special nuclear materials shall be safely stored in the PFP

* PFP plutonium shall be stabilized and either placed in vault storage or disposed of properly.

* The Federal Facility Compliance Act establishes the framework for DOE to enter into Federal Facility Compliance Agreements with the individual states to address environmental issues.

All PFP support necessary to complete compliance actions contained in the Hanford Federal Facility Compliance Agreement and Consent Order signed by the U.S. Department of Energy, the U.S. Environmental Protection Agency, and the State of Washington Department of Ecology. All PFP support necessary to complete compliance actions contained in the Federal Facility Compliance Agreement for Radionuclide NESHAP signed by the U.S. Department of Energy and the State of Washington Department of Ecology.

* RCRA All hazardous waste is collected, counted and identified for shipment to the Hanford Site Central Waste Storage complex

* The Comprehensive Environmental Response, Compensation, and Liability Act provides EPA with enforcement authority for remedial and corrective action activities at contaminated subproject waste sites, and is part of the

regulatory authority for the Tri-Party Agreement. PFP support necessary to meet reporting requirements and complete corrective actions under CERCLA.

- The Clean Air Act provides policy and guidance related to release of air emissions that may be present during shutdown and cleanup activities. Prepare and submit Etle 5 operating permit for entire site including PFP, 291-Z Stack Monitoring System is being readied to comply with the NESHAPS section of 40 CFR61.

Life Cycle Function Descriptions:

B.7.1.3.1.3.1 PLUTONIUM FINISHING PLANT PROGRAM PLANNING WORK SCOPE SUMMARY

Functions that include planning and developing the overall program; establishing broad priorities; providing program technical direction; preparing and defending the program budget; controlling milestones; integrating all components of the program; providing public and private sector policy liaison; expediting interface activities and follow-up actions; and retaining overall accountability for program success.

B.7.1.3.1.3.2 PLUTONIUM FINISHING PLANT OPERATIONS & MAINTENANCE WORK SCOPE SUMMARY

Day-to-day work, including preventive and predictive maintenance, that is required to maintain and preserve plant and capital equipment in a condition suitable for it to be used for its designated purpose.

PLUTONIUM FINISHING PLANT OPERATIONS & MAINTENANCE SPECIFIC FUNCTIONS

B.7.1.3.1.3.3 Maintain Safe & Compliant Materials in PFP Facility

Materials stored in the PFP facility will be maintained in safe condition until they are removed for disposal or treatment.

The PFP vault complex will be operated and maintained to ensure the safe and secure receipt, shipping and storage of Special Nuclear Material (SNM) until final disposition of SNM, Nuclear Materials (NM) and Nuclear Fuels (NF) is implemented. Activities also incllude SNM Inventories, minor Vault Modifications, and engineering studies/assessments supporting material storage. Analytical Laboratory capabilities will be maintained to support the temporary storage of SNM.

The safety boundaries for the vault complex and former operation/process areas will receive required maintenance, operation surveillance tasks, environmental compliance tasks, corrective maintenance, procedure maintenance, preventative maintenance, plant specific support, nuclear process/radiation surveillance, project management, ventilation/power surveillance, environmental compliance, and safety boundary and emergency planning.

The Safeguards and Security (SAS) direction and oversite activities will ensure safe, secure and compliant storage of SNM/NM/NF until final disposition of the material is accomplished. SAS includes physical security, safeguards accounting and material control, record keeping, studies, evaluations and assessments.

Basic services support to the facility includes such activities as steam, water, utilities, services, etc., which are made available to the facility from outside sources and costs assessed on a pro rata basis. It also includes a proportional share of senior management, generic training, administrative support, administrative and progress reporting, project budget/Work scope/schedule baseline control, administrative supplies and equipment, and environmental assessments (e.g., solid waste burials).

The PFP Project plant infrastructure systems will be maintained. This includes maintenance of systems or facilities such as steam, water, electrical, fire, vacuum and facility common use items, such as roofs, sidewalks,

stairs, parking lots, elevators, etc., necessary to enable programmatic work to continue. Also included are all general upgrades and/or modifications to these infrastructure systems.

Specific programmatic work is also included. Programmatic work such as all SNM shipments, vault modifications for compliance to new/revised security/safeguards requirements, pollution prevention waste minimization compliance, S/RIDS compliance, Price-Anderson Amendment Act compliance, and DOE Requests implementation.

B.7.1.3.1.3.4 Remove Material from PFP

Remove nuclear material from the PFP vaults.

B.7.1.3.1.3.5 Store Miscellaneous Nuclear Materials (NM)

Upon receipt of Miscellaneous Nuclear Material, provide safe and compliant storage for this material currently stored on the Hanford Site. The transfer of the stored Miscellaneous Nuclear Material to the Disposition Function will be invoked by formal agreement of the Receiving Entity.

B.7.1.3.1.3.6 Store Pu/HEU

Upon receipt of Pu/HEU, provide safe and compliant storage for this material. The transfer of the stored Pu/HEU to the Disposition Function will be invoked by formal agreement of the Receiving Entity.

B.7.1.3.1.3.7 PLUTONIUM FINISHING PLANT POST OPERATIONS WORK SCOPE SUMMARY

Day-to-day work, including pre-stabilization surveillance and maintenance, stabilization, post-stabilization surveillance and maintenance, deactivation, and post-deactivation surveillance and maintenance, that is required to allow safe decontamination and decommissioning.

Also maintain 2736-ZB/Z vault facilities including the storage monitoring of SNM at PFP, until final deactivation.

PLUTONIUM FINISHING PLANT POST OPERATIONS SPECIFIC FUNCTIONS

B.7.1.3.1.3.8 Maintain Safe & Compliant Plutonium Finishing Plant Facility in CP Areas

Maintain the PFP facility structures, operating systems and equipment, and monitoring systems within the approved safety and compliance requirements until the facilities are made available for D&D. Also maintain the 2736-ZB/Z vault facilities, including the storage and monitoring of SNM at PFP until final deactivation.

B.7.1.3.1.3.9 Transition Plutonium Finishing Plant Facility

Initiate the transition phase of decontamination and decommissioning for the PFP facility.

B.7.1.3.1.4 Plutonium Finishing Plant Boundary Diagram

Table B.7-1 Plutonium Finishing Plant Boundary Diagram

External Interfaces Hanford Legacy Hanford Site Environmental System Interfaces hsems.2.5.4 Central Plateau Water System hsems.2.5.5 Central Plateau Office Facilities hsems.2.5.6 Central Plateau Electrical System hsems.2.5.9 Central Plateau Shop Facilities hsems.2.5.13 Central Plateau Road System hsems.4.3.1 Fast Flux Test Facility hsems.4.6.2 325 Building hsems.4.7.1 331 Complex	External Interfaces Hazardous Waste Disposal Contracts Oak Ridge National Laboratory Offsite Landfill Savannah River Site Hanford Site Environmental System Interfaces hsems.2.3.2 Double Shell Tank (DST) System hsems.2.3.5 Central Waste Complex hsems.2.4.3 200 Area Treated Effluent Disposal Facility hsems.2.5.1 222-S Laboratory

B.7.1.3.1.5 Plutonium Finishing Plant Interface Description and Forecast

EXTERNAL INPUTS

Table B.7-2 External Inputs for Plutonium Finishing Plant

Stream	Category	Period	Baseline	Units
X.0 Hanford Legacy				
Legacy PFP Low Enriched Uranium *Low Enriched Uranium (LEU) Transferred by Hanford Legacy.*	Low Enriched Uranium (LEU)	1997 - 1997	0.3	MT-U
Legacy PFP Natural Uranium *Natural Uranium (NU) Transferred by Hanford Legacy.*	Natural Uranium (NU)	1997 - 1997	2.1	MT-U
Legacy PFP Depleted Uranium *Depleted Uranium (DU) Transferred by Hanford Legacy.*	Depleted Uranium (DU)	1997 - 1997	1.6	MT-U
Legacy PFP Plutonium *Plutonium (Pu) Transferred by Hanford Legacy.*	Plutonium (Pu)	1997 - 1997	4060	Kg
Legacy PFP Highly Enriched Uranium *Highly Enriched Uranium (HEU) Transferred by Hanford Legacy.*	Highly Enriched Uranium (HEU)	1997 - 1997	246.0	Kg
Legacy PFP Spent Nuclear Fuel *Spent Nuclear Fuel (SNF) Transferred by Hanford Legacy.*	Spent Nuclear Fuel (SNF)	1997 - 1997	0.0	MTHM

INTERNAL INPUTS

Table B.7-3 Internal Inputs for Plutonium Finishing Plant

Stream	Category	Period	Baseline	Units
hsems.2.5.4 Central Plateau Water System				
Potable Water for PFP *Potable Water for PFP*	Potable Water	1998 - 2028	51000	Mgal
hsems.2.5.5 Central Plateau Office Facilities				
Office Space (Infrastructure Owned) for PFP *Office Space (Infrastructure Owned) for PFP*	Office Space (Infrastructure Owned)	1998 - 2028	146000	sq. ft.
hsems.2.5.6 Central Plateau Electrical System				
Electricity for PFP *Electricity for PFP*	Electricity	1998 - 2028	21200	MW-hr
hsems.2.5.9 Central Plateau Shop Facilities				
Custodial Services for PFP *Custodial Services for PFP*	Custodial Services	1998 - 2028	2430000	sq. ft.
Lifting (Cranes) for PFP *Lifting (Cranes) for PFP*	Lifting Services	1998 - 2028	3620	crane days
Fab Shop Services for PFP *Fab Shop Services for PFP*	Fabrication Services (Other)	1998 - 2028	56400	labor-hrs
hsems.2.5.13 Central Plateau Road System				
Heavy Trucks for PFP *Heavy Trucks for PFP*	Heavy Trucks	1998 - 2028	7600	vehicle-hrs
hsems.4.3.1 Fast Flux Test Facility				
FFTF Natural Uranium *Natural Uranium (NU) Transferred by Fast Flux Test Facility.*	Natural Uranium (NU)	1997 - 1997	0.82	MT-U
FFTF Depleted Uranium (to PFP) *Depleted Uranium (DU) Transferred.*	Depleted Uranium (DU)	1997 - 1997	0.6	MT-U
FFTF Plutonium *Plutonium (Pu) Transferred by Fast Flux Test Facility.*	Plutonium (Pu)	2000 - 2000	288.0	Kg
FFTF Spent Nuclear Fuel (to PFP) *Spent Nuclear Fuel (SNF) Transferred.*	Spent Nuclear Fuel (SNF)	1997 - 2001	64.1	MTHM
FFTF Highly Enriched Uranium *Highly Enriched Uranium (HEU) Transferred by Fast Flux Test Facility.*	Highly Enriched Uranium (HEU)	2000 - 2000	42.5	Kg
hsems.4.6.2 325 Building				
325 Plutonium *Plutonium (Pu) Transferred by 325 Building.*	(none forecasted)			
hsems.4.7.1 331 Complex				
Non-rad Standards (Calibrations) for PFP *Non-rad Standards (Calibrations) for PFP*	Non-rad Standards Lab Services	1998 - 2028	8850	calibrations

EXTERNAL OUTPUTS

Table B.7-4 External Outputs for Plutonium Finishing Plant

Stream	Category	Period	Baseline	Units
X **Hazardous Waste Disposal Contracts**				
PFP Asbestos	Asbestos	1997 - 2028	157.0	cubic meters
Asbestos Disposed by Plutonium Finishing Plant.				
PFP Hazardous Waste	HAZ	1997 - 2028	8.59	cubic meters
HAZ Disposed by Plutonium Finishing Plant.				
X **Oak Ridge National Laboratory**				
PFP Highly Enriched Uranium (to ORNL)	Highly Enriched Uranium (HEU)	2000 - 2001	18.0	Kg
Highly Enriched Uranium (HEU) Transferred by Plutonium Finishing Plant.				
X **Offsite Landfill**				
PFP Sanitary Solid Waste	Sanitary Solid Waste	1997 - 2028	30700	cubic meters
Sanitary Solid Waste Disposed by Plutonium Finishing Plant.				
X **Savannah River Site**				
PFP Highly Enriched Uranium (to SRS)	Highly Enriched Uranium (HEU)	1999 - 1999	77.9	Kg
Highly Enriched Uranium (HEU) Transferred by Plutonium Finishing Plant.				

INTERNAL OUTPUTS

Table B.7-5 Internal Outputs for Plutonium Finishing Plant

Stream	Category	Period	Baseline	Units
hsems.2.3.2 **Double Shell Tank (DST) System**				
PFP Stabilization, HLW	HLW	1996 - 2006	138.0	cubic meters
HLW Transferred by Plutonium Finishing Plant. Dates to be replanned based upon new funding profile.				
hsems.2.3.5 **Central Waste Complex**				
PFP, CH-LLMW-I	CH LLMW I	1997 - 2034	669.0	cubic meters
CH LLMW I transferred from PFP as forecasted in the SWIFT report. The forecasts need to be updated to be consistent with the 2028 closeout date for PFP.				
PFP Plutonium (for Burial)	Plutonium (Pu)	1998 - 2002	208.0	Kg
Plutonium (Pu) Disposed by Plutonium Finishing Plant. Dates to be replanned based upon new funding profile.				
PFP, CH-TRU	CH TRU	1997 - 2034	2740	cubic meters
CH TRU transferred from PFP as forecasted in the SWIFT report. The forecasts need to be updated to be consistent with the 2028 closeout date for PFP.				
PFP, CH-LLMW-III	CH LLMW III	1997 - 2034	36.2	cubic meters
CH LLMW III transferred from PFP as forecasted in the SWIFT report. The forecasts need to be updated to be consistent with the 2028 closeout date for PFP.				
PFP, CH-TRUM	CH TRUM	1997 - 2005	306.0	cubic meters
CH TRUM transferred from PFP as forecasted in the SWIFT report. The forecasts need to be updated to be consistent with the 2028 closeout date for PFP. Dates to be replanned based upon new funding profile.				
PFP, CH-LLW-I	CH LLW I	1997 - 2034	3290	cubic meters
CH LLW I transferred from PFP as forecasted in the SWIFT report. The forecasts need to be updated to be consistent with the 2028 closeout date for PFP.				
PFP Depleted Uranium	-		0.0	cubic meters
	Depleted Uranium (DU)	1997 - 2010	29.4	MT-U
PFP depleted uranium for disposal in the burial grounds. Dates to be replanned based upon new funding profile.				
PFP, CH-LLW-III	CH LLW III	1997 - 2029	579.0	cubic meters
CH LLW III transferred from PFP as forecasted in the SWIFT report. The forecasts need to be updated to be consistent with the 2028 closeout date for PFP.				
PFP Low Enriched Uranium	-		0.0	cubic meters
	Low Enriched Uranium (LEU)	1997 - 2010	4.2	MT-U
PFP Low Enriched Uranium for burial. Dates to be replanned based upon new funding profile.				
hsems.2.4.3 **200 Area Treated Effluent Disposal Facility**				
PFP Wastewater	Treated Liquid Effluent	1998 - 2028	1510000	cubic meters
Treated Liquid Effluent Transferred by Plutonium Finishing Plant.				
hsems.2.5.1 **222-S Laboratory**				
Analytical Laboratory Services for PFP	Analytical Laboratory Services	1998 - 2002	107000	samples
Analytical Laboratory Services for PFP. Dates to be replanned based upon new funding profile.				

B.7.1.4 Drivers for PFP Vault Management

Table B.7-6 Source Documents for PFP Vault Management

Name	Title
29 CFR 1910	Occupational Safety and Health Standards
40 CFR 61	National Emissions Standards for Hazardous Air Pollutants
42 USC 6901, et seq.	Resource Conservation and Recovery Act of 1976 (RCRA)
DOE Order 5400.4	Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Requirements
DOE Order 5480.19	Conduct of Operations Requirements for DOE Facilities
DOE/EIS-0222D	Draft Hanford Remedial Action Environmental Impact Statement and Comprehensive Land Use Plan
DOE/EIS-0229	Storage and Disposition of Weapons Useable Fissile Materials Final Programmatic Environmental Impact Statement
DOE/EIS-0244-D	Plutonium Finishing Plant Stabilization Environmental Impact Statement
DOE/RL-96-14	Updated Draft Mission Direction Document, June 1996
DOE/RL-96-92	Hanford Strategic Plan
FFCA for HESHAP (2/7/94)	The National Emission Standards for Hazardous Air Pollutants: Federal Facility Compliance Agreement for the Hanford Site
PL 92-500	Federal Water Pollution Control Act Amendments of 1972 (Clean Water Act)
ST 4502	State Waste Discharge Permit for the 200 Area TEDF

B.7.1.5 PFP Vault Management Risk Management

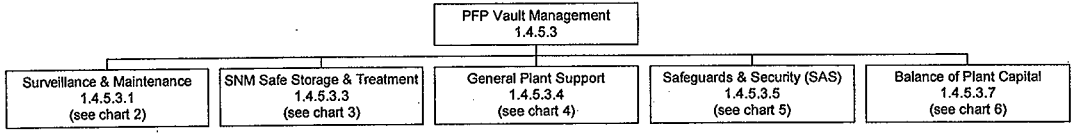
Risk Evaluation Narrative:

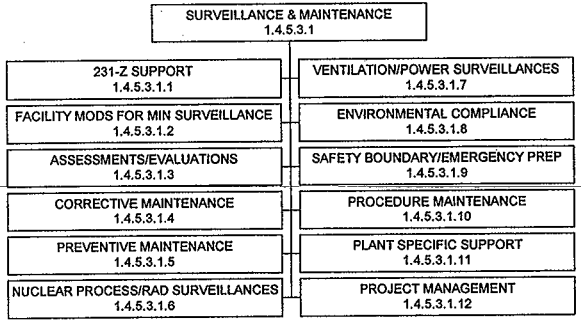
The most significant Safety and Health risk at the PFP would be the theft and/or diversion of a quantity of special nuclear material (SNM) by unknown agents. The theft and/or diversion of a 1 kilogram quantity of SNM material (solid form, plutonium dioxide) from the PFP Complex is possible and represents a very high risk to public safety and health. It is assumed that the theft, and/or diversion, of the SNM material has been undertaken to commit radiological sabotage and/or nuclear blackmail. For this reason, the possibility of theft of unguarded SNM material represents an immediate significant hazard to public safety and health if the Vault Management Project was not funded.

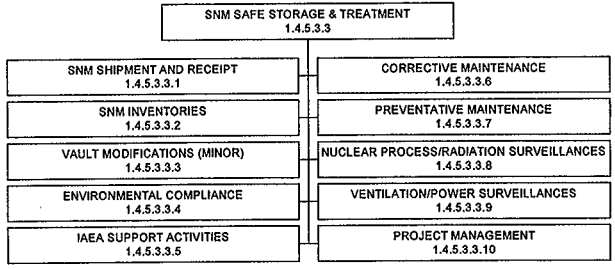
With the Vault Management Project funded the theft and/or diversion of SNM material from the PFP Complex is no longer possible. However, the PFP Transition Project is not actively reducing the risks from its large quantities of stored reactive plutonium residues and holdup materials. Consequently, the most likely hazard, according to Chapter 9 "Accident Analysis", PFP Final Safety Analysis Report (FSAR), WHC-SD-CP-SAR-021, resulting from these plutonium residues is a nuclear criticality. We have assumed that the stated impact has a 99% probability of occurring in 30 years. This corresponds to an annual probability of 0.14 per year which is the basis of the "B." probability rating for the risk identified (i.e., probability (P) between 0.1 per year and 1.0 per year). This type of hazard is consistent with DNFSB Recommendation 94-1, dated May 1994 which states "The Board has concluded from observations and discussions with others that imminent hazards could arise within 2-3 years unless certain problems are corrected". While Chapter 9 does not have a preferred criticality scenario (i.e., many possible scenarios due to the large variety of plutonium materials), a possible scenario would be an undetected leak of plutonium nitrate from one of the 100+ Product Receiver (PR) Cans with inner containers stored at PFP. The inner container would be breached due to radiation damage and the outer stainless steel container corroded by exposure to corrosive elements within the plutonium nitrate matrix, such as chlorides or fluorides. The subsequent leaking plutonium nitrate would then collect, unnoticed, in some unfavorable geometric configuration and go critical. The consequences of such a criticality event are based on FSAR Chapter 9 historical data. The off site dose

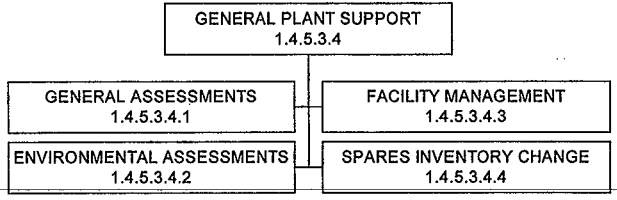
consequence is calculated at 53 mrem and the on site dose consequence is calculated at no mrem. Also, based on previous nuclear criticality events in the DOE Complex and at PFP, extreme over exposure to one or more facility workers would result. There would be minimal environmental impact. Of course, a nuclear criticality event at PFP would also have significant negative consequences to Compliance, Mission and Mortgage Reduction due to failure to meet regulatory requirements and mission objectives resulting from the magnitude of anticipated recovery actions, the increased costs and the delays to the primary mission.

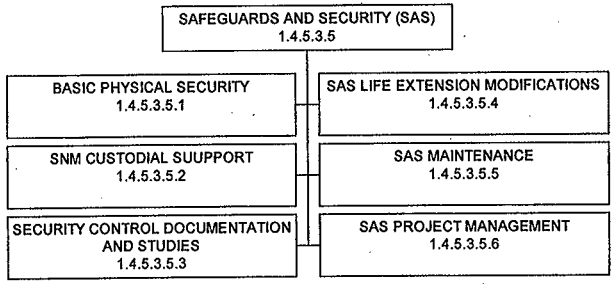
PFP Vault Management Work Breakdown Structure

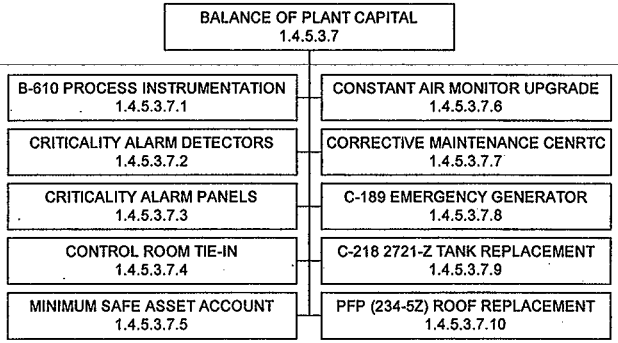



SURVEILLANCE & MAINTENANCE
1.4.5.3.1
231-Z SUPPORT
1.4.5.3.1.1
FACILITY MODS FOR MIN SURVEILLANCE
1.4.5.3.1.2
ASSESSMENTS/EVALUATIONS
1.4.5.3.1.3
CORRECTIVE MAINTENANCE
1.4.5.3.1.4
PREVENTIVE MAINTENANCE
1.4.5.3.1.5
NUCLEAR PROCESS/RAD SURVEILLANCES
1.4.5.3.1.6
VENTILATION/POWER SURVEILLANCES
1.4.5.3.1.7
ENVIRONMENTAL COMPLIANCE
1.4.5.3.1.8
SAFETY BOUNDARY/EMERGENCY PREP
1.4.5.3.1.9
PROCEDURE MAINTENANCE
1.4.5.3.1.10
PLANT SPECIFIC SUPPORT
1.4.5.3.1.11
PROJECT MANAGEMENT
1.4.5.3.1.12


SNM SAFE STORAGE & TREATMENT
1.4.5.3.3
SNM SHIPMENT AND RECEIPT
1.4.5.3.3.1
SNM INVENTORIES
1.4.5.3.3.2
VAULT MODIFICATIONS (MINOR)
1.4.5.3.3.3
ENVIRONMENTAL COMPLIANCE
1.4.5.3.3.4
IAEA SUPPORT ACTIVITIES
1.4.5.3.3.5
CORRECTIVE MAINTENANCE
1.4.5.3.3.6
PREVENTATIVE MAINTENANCE
1.4.5.3.3.7
NUCLEAR PROCESS/RADIATION SURVEILLANCES
1.4.5.3.3.8
VENTILATION/POWER SURVEILLANCES
1.4.5.3.3.9
PROJECT MANAGEMENT
1.4.5.3.3.10


GENERAL PLANT SUPPORT
1.4.5.3.4
GENERAL ASSESSMENTS
1.4.5.3.4.1
FACILITY MANAGEMENT
1.4.5.3.4.3
ENVIRONMENTAL ASSESSMENTS
1.4.5.3.4.2
SPARES INVENTORY CHANGE
1.4.5.3.4.4


SAFEGUARDS AND SECURITY (SAS)
1.4.5.3.5
BASIC PHYSICAL SECURITY
1.4.5.3.5.1
SNM CUSTODIAL SUUPPORT
1.4.5.3.5.2
SECURITY CONTROL DOCUMENTATION AND STUDIES
1.4.5.3.5.3
SAS LIFE EXTENSION MODIFICATIONS
1.4.5.3.5.4
SAS MAINTENANCE
1.4.5.3.5.5
SAS PROJECT MANAGEMENT
1.4.5.3.5.6


BALANCE OF PLANT CAPITAL
1.4.5.3.7
B-610 PROCESS INSTRUMENTATION
1.4.5.3.7.1
CRITICALITY ALARM DETECTORS
1.4.5.3.7.2
CRITICALITY ALARM PANELS
1.4.5.3.7.3
CONTROL ROOM TIE-IN
1.4.5.3.7.4
MINIMUM SAFE ASSET ACCOUNT
1.4.5.3.7.5
CONSTANT AIR MONITOR UPGRADE
1.4.5.3.7.6
CORRECTIVE MAINTENANCE CENRTC
1.4.5.3.7.7
C-189 EMERGENCY GENERATOR
1.4.5.3.7.8
C-218 2721-Z TANK REPLACEMENT
1.4.5.3.7.9
PFP (234-5Z) ROOF REPLACEMENT
1.4.5.3.7.10

HANFORD SITE WORK BREAKDOWN STRUCTURE DICTIONARY
FACILITY STABILIZATION
WBS: 1.4

8/25/1997

1. Activity Title: SURVEILLANCE & MAINTENANCE	2. Date 7/31/1997	3. PBS Number RL-TP07	4. Dict Rev 0
5. Contract WBS No. 1.4.5.3.1	6. Corresponding FDS No. K6A	7. Baseline CR No.	
8. Organization Name 15000			9. B & R No.

10. Scope of Work

This activity entails all planned tasks required to maintain the safety boundary for the PFP Complex, except for the 2736-Z/2736-ZB facilities, all ZB/Z-vault support facilities, such as the 2721-Z facility, and all 234-5Z vaults and/or vault-type rooms as identified, and includes all safety boundary maintenance, operation surveillances and environmental compliance tasks. This activity maintains the facility structure, facility modifications necessary to stabilize and reconfigure the facility for minimum surveillance, qualified staff, safe and compliant equipment, documentation and provides assessment and evaluation of safety and compliance states. Provides all necessary resources for safe and compliant operation in accordance with governing safety codes and regulations. This activity includes the following:

*Corrective Maintenance
*Preventative Maintenance
*Nuclear Process/Radiation Surveillance
*Ventilation/Power Surveillances
*Facility Modifications
*Safety Boundary & Emergency Planning Activities
*Procedure Maintenance
*Plant Specific Support
*Project Management
*Environmental Compliance
*Assessments/Evaluations

HANFORD SITE WORK BREAKDOWN STRUCTURE DICTIONARY
FACILITY STABILIZATION
WBS: 1.4 8/25/1997

1. Activity Title: SNM SAFE STORAGE & TREATMENT	2. Date 7/31/1997	3. PBS Number RL-TP07	4. Dict Rev 0
5. Contract WBS No. 1.4.5.3.3	6. Corresponding FDS No. K6AC	7. Baseline CR No.	
8. Organization Name 15000			9. B & R No.

10. Scope of Work
This activity provides for the management of Special Nuclear Materials (SNM), Nuclear Materials (NM) and Nuclear Fuels (NF) to ensure that this material is received, handled, processed, stored and transferred for ultimate disposition in a safe and efficient way. SNM/NM/NF in this function includes plutonium, uranium and thorium as inventoried, retrieved special materials, irradiated/non-irradiated fuels and nonwaste materials such as neptunium, californium and nuclear standards and sources. The activity includes any area within the PFP complex that is qualified, classified and utilized as a vault, or vault-type storage area. Also covered is any SNM 'treatment' required for the safe storage of SNM within the PFP Complex or to enable final disposition of SNM at, or from, the PFP Complex. The activities include the following:
*SNM Shipment/Receipts
*SNM Inventories
*Vault Modification
*Environmental Compliance
*IAEA Support Activities
*Corrective Maintenance
*Preventative Maintenance
*Nuclear Process/Radiation Surveillance
*Ventilation/Power Surveillances
*Project Management

HANFORD SITE WORK BREAKDOWN STRUCTURE DICTIONARY
FACILITY STABILIZATION
WBS: 1.4

8/25/1997

1. Activity Title: GENERAL PLANT SUPPORT	2. Date 7/31/1997	3. PBS Number RL-TP07	4. Dict Rev 0
5. Contract WBS No. 1.4.5.3.4	6. Corresponding FDS No. K6E	7. Baseline CR No.	
8. Organization Name 15000			9. B & R No.

10. Scope of Work
This activity provides the base support to the facility for which the cost is not directly attributable to an individual project. It includes basic requirements such as steam, water, utilities, solid waste burials, etc. which are made available to the facility from an outside source and costs assessed on a pro rata basis. It also includes senior management, basic training, administrative support, administrative and progress reporting, project baseline control, administrative supplies and equipment, etc. This includes the following:
*General Assessments (e.g., water, steam, electricity, etc.)
*Environmental Assessments (e.g., solid waste burials)
*Facility Management
*Spares Inventory Change

HANFORD SITE WORK BREAKDOWN STRUCTURE DICTIONARY
FACILITY STABILIZATION
WBS: 1.4
8/25/1997

1. Activity Title: SAFEGUARDS & SECURITY	2. Date 7/31/1997	3. PBS Number RL-TP07	4. Dict Rev 0
5. Contract WBS No. 1.4.5.3.5	6. Corresponding FDS No. K6F	7. Baseline CR No.	
8. Organization Name 15000			9. B & R No.

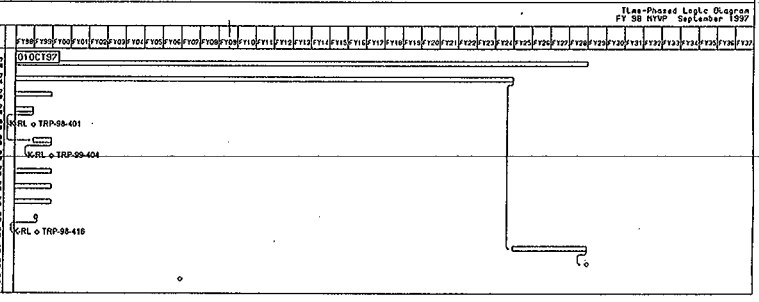
10. Scope of Work
This activity provides the safeguards and security resources, direction and oversight to provide safe, secure and compliant storage of SNM/NM/NF until final disposition of the material is accomplished. Contains resources to provide physical security, safeguards accounting and material control, record keeping, studies, evaluations and assessments. Also included is any facility modifications required to maintain compliance/safety and to meet Site mission goals. This includes the following:
*Basic Physical Security
*SNM Custodial Support
*Security Control Documentation and Studies
*SAS Life Extension Modification
*SAS Maintenance
*Project Management

Proj Lvl (PBS #)	FDS Act Number	Activity Title	Activity Manager	Responsible Organization	Cost Account
RL-TP07		PFP VAULT MANAGEMENT			
	K6A	SURVEILLANCE & MAINTENANCE	D. T. Mildon	15000	1K6A01 1K6A02 1K6A03 1K6A04 1K6A05 1K6A06 1K6A07 1K6A08 1K6A09 1K6A0A 1K6A0B 1K6A0C
	K6AC	SNM SAFE STORAGE & TREATMENT	D. W. Bartlett	15000	1K6C02 1K6C03 1K6C04 1K6C05 1K6C06 1K6C08 1K6C09 1K6C10 1K6C11 1K6C13
	K6E	GENERAL PLANT SUPPORT	P. D. Jensen	15000	1K6E01 1K6E02 1K6E03 1K6E04
	K6F	SAFEGUARDS & SECURITY	W. F. Russell	15000	1K6F01 1K6F02 1K6F03 1K6F04 1K6F05 1K6F06

FACILITY STABILIZATION PROJECT
RL-TP07 PFP Vault Management Project
Project Master Baseline Schedule

Time-Phased Logic Diagram
FY 98 NYVP September 1997

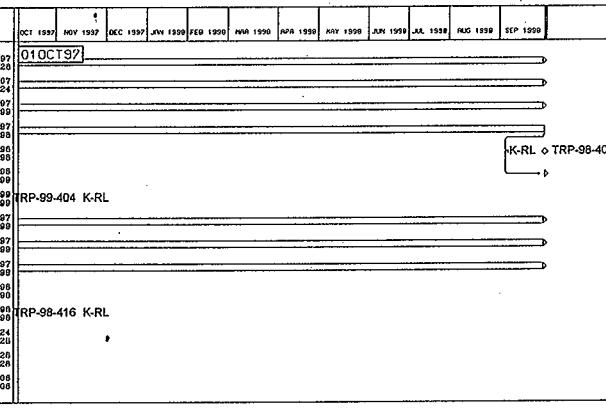
Activity	Description	Start
YW	PFP VAULT MANAGEMENT PROJECT	10/01/97 09/30/28
YW400	PFP Vault Management Project	10/01/97 09/30/28
YW303	PFP Surveillance and Maintenance	10/01/97 09/30/98
YW306	Annual FSAR Update	10/01/97 09/30/98
YW309	TRP-98-401, Complete Annual FSAR Update	10/01/98 10/01/98
YW312	Annual FSAR Update	10/01/98 09/28/99
YW315	TRP-99-404, Complete Annual FSAR Update	04/30/99 09/30/99
YW318	SNM Safe Storage and Treatment	10/01/97 09/30/98
YW321	General Plant Support	10/01/97 09/30/98
YW324	Safeguards and Security (S&S)	10/01/97 09/30/98
YW327	AMS Task Closeout	11/13/98 12/30/98
YW330	TRP-98-410, Provide Beneficial Use AMS	12/31/98 12/31/98
YW333	PFP Vault (2736 Z/ZB) Stabilization	10/01/24 09/30/26
YW336	225-T6, T/O PFP Vaults to EM-40	10/01/28 10/01/28
YW339	Completion of Analytical Support Services, YW00	09/30/06 09/30/06



FACILITY STABILIZATION PROJECT
RL-TP07 PFP Vault Management Project
Project Master Baseline Schedule

Time-Phased Logic Diagram
FY 98 MYWP September 1997

Activity	Description	Start
VM	PFP VAULT MANAGEMNT PROJECT	10/01/97 09/30/28
VM500	PFP Vault Management Project	10/01/97 09/30/24
VM503	PFP Surveillance and Maintenance	10/01/97 09/30/99
VM506	Annual FSAR Update	10/01/97 09/30/98
VM509	TRP-98-401, Complete Annual FSAR Update	10/01/98 10/01/98
VM512	Annual FSAR Update	10/01/98 09/29/99
VM515	TRP-99-404, Complete Annual FSAR Update	09/30/99 09/30/99
VM518	SNM Safe Storage and Treatment	10/01/97 09/30/99
VM521	General Plant Support	10/01/97 09/30/99
VM524	Safeguards and Security (S&S)	10/01/97 09/30/99
VM527	AMS Task Closeout	11/13/98 12/30/98
VM530	TRP-98-416, Provide Beneficial Use ANS	12/31/98 12/31/98
VM533	PFP Vault (2736 Z/ZH) Stabilization	10/01/24 09/30/28
VM536	SSS-F6, T/O PFP Vaults to EM-40	10/01/28 10/01/28
VM539	Completion of Analytical Support Services, WMH	09/30/98 09/30/98



MILESTONE CONTROL #	TPA-MS NUMBER	TPA TYPE	MS LEVEL	MS TITLE	TYPE	DATES PLANNED BASELINE	DATES APPROVED BASELINE	DATES REVISED BASELINE	PROJ CIN	PBS #
TRP-97-416			RL	PROVIDE BENEFICIAL USE OF PC-BASED ALARM MONITORING SYS AT PFP	OTH	3/31/99				RL-TP07
TRP-98-401			FO	COMPLETE ANNUAL FSAR UPDATE		9/30/98				RL-TP07
TRP-99-404			FO	COMPLETE ANNUAL FSAR UPDATE		9/30/99				RL-TP07
TRP-00-403			FO	COMPLETE ANNUAL FSAR UPDATE		9/30/00				RL-TP07
TRP-01-402			FO	COMPLETE ANNUAL FSAR UPDATE		9/30/01				RL-TP07
TRP-02-403			FO	COMPLETE ANNUAL FSAR UPDATE		9/30/02				RL-TP07

PHMC

MILESTONE DESCRIPTION SHEET

Title: PROVIDE BENEFICIAL USE OF PC-BASED ALARM MONITORING SYS AT PFP		**Date:** 7/31/97
Assigned To: BWHC/PFP VAULT MANAGEMENT		**CIN:**
Program WBS Designator: 1.4.5.3		**Due Date:** 3/31/99
PBS No: RL-TP07		
MC #: TRP-97-416	**TPA No:**	**Rev:** 0

MILESTONE LEVEL:	**MILESTONE TYPE:**	**DNFSB STATUS:**	**DELIVERABLE:**	**ADDRESS TO:**
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG X OTHER	DNFSB (Y/N): COMMIT #: RECOMM #:	Report X Letter Drawing(s) Other (Specify)	DOE-HQ X DOE-RL Other (Specify)

Milestone Description:
Complete the installation of the Alarm Monitoring System for beneficial use at the PFP facility by March 31, 1999.

Description of what constitutes completion of this milestone:
The milestone is considered complete when the system design, field installation and final acceptance test report is released.

PHMC

MILESTONE DESCRIPTION SHEET

Title: COMPLETE ANNUAL FSAR UPDATE		**Date:** 9/10/96
Assigned To: FSP/PFP		**CIN:**
Program WBS Designator: 1.4.5.3		**Due Date:** 9/30/98
PBS No: RL-TP07		
MC #: TRP-98-401	**TPA No:**	**Rev:** 1

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ DOE-RL X DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): COMMIT #: RECOMM #:	X Report Letter Drawing(s) Other (Specify)	DOE-HQ X DOE-RL Other (Specify)

Milestone Description:
Issue the annual update of the PFP SAR in accordance with DOE Order 5480.23.

Description of what constitutes completion of this milestone:
Issue updated SAR to RL for approval after providing opportunity for review and comment resolution by RL Transition Program Division on the same schedule as the Contractor review and comment resolution. If RL resources are insufficient to support the Contractor schedule RL comments will be resolved and incorporated as required after completion of the milestone. The SAR will be submitted to RL for approval after securing the approval of the required Contractor SAR committees. SAR Annual Update Requirements: 'Contractors shall be required to review and update as necessary, SARs annually, pursuant to this Order to ensure that the information in each SAR is current and remains applicable. Revisions shall be submitted to the Program Senior Official (PSO) at least annually and shall reflect all changes implemented up to 6 months prior to the filing of the updated SAR. The DOE approval of any unresolved safety question (USQ) pursuant to DOE 5480.21, amendments to the Technical Safety Requirements (TSR), and the

Description of what constitutes completion of this milestone: (con't)
material submitted by the contractor to the PSO in support of these approvals shall be considered and addendum to the SAR until the information is incorporated into the SAR as part of the next annual update.'

A separate letter, from the FSAR update letter, will be issued by the Contractor to RL documenting completion of this specific annual FSAR update.

PHMC
MILESTONE DESCRIPTION SHEET

Title: COMPLETE ANNUAL FSAR UPDATE		**Date:** 9/10/96
Assigned To: FSP/PFP		**CIN:**
Program WBS Designator: 1.4.5.3		**Due Date:** 9/30/99
PBS No: RL-TP07		
MC #: TRP-99-404	**TPA No:**	**Rev:** 1

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ DOE-RL X DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): COMMIT #: RECOMM #:	X Report Letter Drawing(s) Other (Specify)	DOE-HQ X DOE-RL Other (Specify)

Milestone Description:
Issue the annual update of the PFP SAR in accordance with DOE Order 5480.23.

Description of what constitutes completion of this milestone:
Issue updated SAR to RL for approval after providing opportunity for review and comment resolution by RL Transition Program Division on the same schedule as the Contractor review and comment resolution. If RL resources are insufficient to support the Contractor schedule RL comments will be resolved and incorporated as required after completion of the milestone. The SAR will be submitted to RL for approval after securing the approval of the required Contractor SAR committees. SAR Annual Update Requirements: 'Contractors shall be required to review and update as necessary, SARs annually and shall reflect all changes implemented up to 6 months prior to the filing of the updated SAR. The DOE approval of any unresolved safety question (USQ) pursuant to DOE 5480.21, amendments to the Technical Safety Requirements (TSR), and the material submitted by the contractor to the PSO in support of these approvals shall be considered an addendum to the SAR until the information is incorporated into the SAR as part of the next

Description of what constitutes completion of this milestone: (con't)
annual update.

A separate letter, from the FSAR update letter, will be issued to DOE-RL documenting completion of this specific annual FSAR update.

PHMC
MILESTONE DESCRIPTION SHEET

Title: COMPLETE ANNUAL FSAR UPDATE				**Date:** 9/10/96
Assigned To: FSP/PFP				**CIN:**
Program WBS Designator: 1.4.5.3				**Due Date:** 9/30/00
PBS No: RL-TP07				
MC #: TRP-00-403		**TPA No:**		**Rev:** 1

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ DOE-RL X DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): COMMIT #: RECOMM #:	X Report Letter Drawing(s) Other (Specify)	DOE-HQ X DOE-RL Other (Specify)

Milestone Description:
Issue the annual update of the PFP SAR in accordance with DOE Order 5480.23.

Description of what constitutes completion of this milestone:
Issue updated SAR to RL for approval after providing opportunity for review and comment resolution by RL Transition Program Division on the same schedule as the Contractor review and comment resolution. If RL resources are insufficient to support the Contractor schedule RL comments will be resolved and incorporated as required after completion of the milestone. The SAR will be submitted to RL for approval after securing the approval of the required Contractor SAR committees. SAR Annual Update Requirements: 'Contractors shall be required to review to review and update as necessary. SARs annually, pursuant to this Order to ensure that the information in each Official (PSO) at least annually and shall reflect all changes implemented up to 6 months prior to the filing of the updated SAR. The DOE approval of any unresolved safety question (USQ) pursuant to DOE 5480.21, amendments to the Technical Safety Requirements (TSR), and the material submitted by the contractor to the PSO in support of these approvals shall

Description of what constitutes completion of this milestone: (con't)
be considered an addendum to the SAR until the information is incorporated into the SAR as part of the next annual update.'

A separate letter, from the FSAR update letter, will be issued by the Contractor to RL documenting completion of this specific annual FSAR update.

PHMC

MILESTONE DESCRIPTION SHEET

Title: COMPLETE ANNUAL FSAR UPDATE		**Date:** 9/10/96
Assigned To: FSP/PFP		**CIN:**
Program WBS Designator: 1.4.5.3		**Due Date:** 9/30/01
PBS No: RL-TP07		
MC #: TRP-01-402	**TPA No:**	**Rev:** 1

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ DOE-RL X DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): COMMIT #: RECOMM #:	X Report Letter Drawing(s) Other (Specify)	DOE-HQ X DOE-RL Other (Specify)

Milestone Description:
Issue the annual update of the PFP SAR in accordance with DOE Order 5480.23.

Description of what constitutes completion of this milestone:
Issue updated SAR to RL for approval after providing opportunity for review and comment resolution by RL Transition Program Division on the same schedule as the Contractor review and comment resolution. If RL resources are insufficient to support the Contractor schedule RL comments will be resolved and incorporated as required after completion of the milestone. The SAR will be submitted to RL for approval after securing the approval of the required Contractor SAR committees. SAR Annual Update Requirements: 'Contractors shall be required to review and update as necessary, SARs annually, pursuant to this Order to ensure that the information in each SAR is current and remains applicable. Revisions shall be submitted to the Program Senior Official (PSO) at least annually and shall reflect all changes implemented up to 6 months prior to the filing of the updated SAR. The DOE approval of any unresolved safety questions (USQ) pursuant to DOE 5480.21, amendments to the Technical Safety Requirements (TSR), and the

Description of what constitutes completion of this milestone: (con't)
material submitted by the contractor to the PSO in support of these approvals shall be considered an addendum to the SAR until the information is incorporated into the SAR as part of the next annual update.'

A separate letter, from the FSAR update letter, will be issued by the Contractor to RL documenting completion of this specific annual FSAR update.

PHMC

MILESTONE DESCRIPTION SHEET

Title: COMPLETE ANNUAL FSAR UPDATE				**Date:** 9/10/96
Assigned To: FSP/PFP				**CIN:**
Program WBS Designator: 1.4.5.3				**Due Date:** 9/30/02
PBS No: RL-TP07				
MC #: TRP-02-403		**TPA No:**		**Rev:** 1
MILESTONE LEVEL: DOE-HQ DOE-RL X DOE-FO CONTRACTOR	**MILESTONE TYPE:** EA PEG OTHER	**DNFSB STATUS:** DNFSB (Y/N): COMMIT #: RECOMM #:	**DELIVERABLE:** X Report Letter Drawing(s) Other (Specify)	**ADDRESS TO:** DOE-HQ X DOE-RL Other (Specify)

Milestone Description:
Issue the annual update of the PFP SAR in accordance with DOE Order 5480.23.

Description of what constitutes completion of this milestone:
Issue updated SAR to RL for approval after providing opportunity for review and comment resolution by RL Transition Program Division on the same schedule as the Contractor review and comment resolution. If RL resources are insufficient to support the Contractor schedule RL comments will be resolved and incorporated as required after completion of the milestone. The SAR will be submitted to RL for approval after securing the approval of the required Contractor SAR committees. SAR Annual Update Requirements: 'Contractors shall be required to review and update as necessary, SARs annually, pursuant to this Order to ensure that the information in each SAR is current and remains applicable. Revisions shall be submitted to the Program Senior Official (PSO) at least annually and shall reflect all changes implemented up to 6 months prior to the filing of the updated SAR. The SOE approval of any unresolved safety question (USQ) pursuant to DOE 5480.21, amendments to the Technical Safety Requirements (TSR), and the

Description of what constitutes completion of this milestone: (con't)
material submitted by the contractor to the PSO in support of these approvals shall be considered an addendum to the SAR until the information is incorporated into the SAR as part of the next annual update.'

A separate letter, from the FSAR update letter, will be issued to DOE-RL documenting completion of this specific annual FSAR update.

EXHIBIT 1

FACILITY STABILIZATION
LIFE CYCLE COST BASELINE (BCWS) BY YEAR BY FUND TYPE
BY PROJECT BASELINE SUMMARY (PBS)
FY 1998

($000s)

PROJECT WBS:	1.4.5.3
PBS NO:	RL-TP07
PBS TITLE:	PFP Vault Management

FUND TYPE	FY1997	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	SUBTOT FY1997-FY2006
OPERATING EXPENSE		60,975	62,687	75,140	70,120	67,068	61,532	62,406	63,535	27,329	550,792
CENRTC											-
GENERAL PLANT PROJECT											-
LINE ITEM *(List Each One)*											
											-
											-
											-
											-
											-
Subtotal Line Items	-	-	-	-	-	-	-	-	-	-	-
TOTAL BCWS/PMB[1]	85,201	60,975	62,687	75,140	70,120	67,068	61,532	62,406	63,535	27,329	635,993
MGMT RESERVE[2]											-
LINE ITEM CONTINGENCY[2]											-
OFFSITE TRANSFERS[3]											-
Subtotal	-	-	-	-	-	-	-	-	-	-	-
TOTAL	85,201	60,975	62,687	75,140	70,120	67,068	61,532	62,406	63,535	27,329	635,993

[1]Budgeted Cost of Work Scheduled (BCWS) Equals Performance Measurement Baseline (PMB); Expense Carryover NOT Included.
[2]Management Reserve and Line Item Contingency Held by RL.
[3]Work Performed at Sites Other Than Hanford.

FACILITY STABILIZATION
LIFE CYCLE COST BASELINE (BCWS) BY YEAR BY FUND TYPE
BY PROJECT BASELINE SUMMARY (PBS)
FY 1998

($000s)

PROJECT WBS:	1.4.6.3									
PBS NO:	RL-TP07									
PBS TITLE:	PFP Vault Management									TOTAL
FUND TYPE	FY2007-FY2010	FY2011-FY2015	FY2016-FY2020	FY2021-FY2025	FY2026-FY2030	FY2031-FY2035	FY2036 FY2040	FY2041-FY2045	FY2046 FY2050	FY1997-FY2050
OPERATING EXPENSE	185,282	204,667	335,126	545,784	255,362					2,077,013
CENRTC										-
GENERAL PLANT PROJECT										-
LINE ITEM *(List Each One)*										
										-
										-
										-
										-
										-
Subtotal Line Items	-	-	-	-	-	-	-	-	-	-
TOTAL ECWS/PMB	185,282	204,667	335,126	545,784	255,362					2,162,214
MGMT RESERVE[2]										-
LINE ITEM CONTINGENCY[2]										-
OFFSITE TRANSFERS[3]										-
Subtotal	-	-	-	-	-	-	-	-	-	-
TOTAL	185,282	204,667	335,126	545,784	255,362					2,162,214

[1]Budgeted Cost of Work Scheduled (BCWS) Equals Performance Measurement Baseline (PMB); Expense Carryover NOT Included.
[2]Management Reserve and Line Item Contingency Held by RL.
[3]Work Performed at Sites Other Than Hanford.

EXHIBIT 4

FACILITY STABILIZATION
LIFE CYCLE BUDGET AUTHORITY (B/A) BY YEAR BY FUND TYPE
BY PROJECT BASELINE SUMMARY (PBS)
FY 1998

($000s)

PROJECT WBS:	1.4.6.3
PBS NO:	RL-TP07
PBS TITLE:	PFP Vault Management

FUND TYPE	FY1997	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	SUBTOT FY1997-FY2006
OPERATING EXPENSE		68,677	62,687	75,140	70,120	67,068	61,532	62,406	63,535	27,329	548,694
CENRTC											-
GENERAL PLANT PROJECT											-
LINE ITEM *(List Each One)*											
											-
											-
											-
											-
											-
Subtotal Line Items	-	-	-	-	-	-	-	-	-	-	-
TOTAL NEW B/A	57,180	68,677	62,687	75,140	70,120	67,068	61,532	62,406	63,535	27,329	548,674

EXHIBIT 4

FACILITY STABILIZATION
LIFE CYCLE BUDGET AUTHORITY (B/A) BY YEAR BY FUND TYPE
BY PROJECT BASELINE SUMMARY (PBS)
FY 1998

($000s)

PROJECT WBS:	1.4.6.3
PBS NO:	RL-TP07
PBS TITLE:	PFP Vault Management

FUND TYPE	FY2007-FY2010	FY2011-FY2015	FY2016-FY2020	FY2021-FY2025	FY2026-FY2030	FY2031-FY2035	FY2036 FY2040	FY2041-FY2045	FY2046 FY2050	TOTAL FY1997-FY2050
OPERATING EXPENSE	185,282	204,667	335,126	545,784	255,362					2,074,915
CENRTC										-
GENERAL PLANT PROJECT										-
LINE ITEM *(List Each One)*										
										-
										-
										-
										-
										-
Subtotal Line Items	-	-	-	-	-	-	-	-	-	-
TOTAL NEW B/A	185,282	204,667	335,126	545,784	255,362					2,074,915

EXHIBIT 2a

FACILITY STABILIZATION
FY 1998 COST BASELINE (BCWS) BY MONTH
BY PROJECT BASELINE SUMMARY (PBS)
BY ACTIVITY DATA SHEET (ADS)
EXECUTION YEAR

($000s)

PROJECT WBS: 1.4.5.3
PBS NO: RL-TP07
PBS TITLE: PFP Vault Management

ADS TITLE	ADS NO	FUND TYPE	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
PFP PROJECT	6624-0	OP EXP	4,478	5,547	4,478	4,650	4,642	5,910	4,853	5,934	4,864	4,430	5,909	5,280	60,975
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	4,478	5,547	4,478	4,650	4,642	5,910	4,853	5,934	4,864	4,430	5,909	5,280	60,975
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-

[1]Budgeted Cost of Work Scheduled (BCWS) Equals Performance Measurement Baseline (PMB); Expense Carryover Is **NOT** Included.

EXHIBIT 2a

FACILITY STABILIZATION
FY 1998 COST BASELINE (BCWS) BY MONTH
BY PROJECT BASELINE SUMMARY (PBS)
BY ACTIVITY DATA SHEET (ADS)
EXECUTION YEAR

($000s)

PROJECT WBS: 1.4.5.3
PBS NO: RL-TP07
PBS TITLE: PFP Vault Management

ADS TITLE	ADS NO	FUND TYPE	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL BCWS/PMB[1]			4,478	5,547	4,478	4,850	4,642	5,910	4,853	5,934	4,864	4,430	5,909	5,280	60,975

[1]Budgeted Cost of Work Scheduled (BCWS) Equals Performance Measurement Baseline (PMB); Expense Carryover Is **NOT** Included.

PFP VAULT MANAGEMENT
Revision 0
AVERAGE ANNUAL FULL TIME EQUIVALENTS
(includes Major Subcontractors but not Enterprise Companies)

PHBS 1.4.5.3 **Submittal Date: 9/10/97**

PBS Number	PBS Title	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007
RL-TP07	PFP VAULT MANAGEMENT	238	258	365	345	313	263	263	263	71	71
Total PBS FTEs		238	258	365	345	313	263	263	263	71	71

B.8 324/327 Facility Transition Project (RL-TP08)

B.8.1.0 324/327 Facility Transition Project Technical Baseline (RL-TP08)

B.8.1.1 324/327 Facility Transition Project Organization Mission (RL-TP08)

324/327 Facility Transition Project Technical Baseline (RL-TP08)

The purpose of the 324/327 Facilities Stabilization Project is to establish a passively safe and environmentally secure configuration of the 324 and 327 Facilities at the Hanford Site, and to preserve that configuration for 10 years. The 10-year horizon will be used to predict future maintenance requirements and represents the typical time span needed to define, authorize, and initiate the follow-on decontamination and decommissioning (D&D) activities.

The project removes, reduces, and/or stabilizes the radioactive and the nonradioactive hazardous materials within the 324 and 327 Facilities. Completing these activities reduces hazards to workers and the public and allows for a reduced level of surveillance during the extended surveillance period following deactivation. Worker health and safety is a primary goal of deactivation. A Voluntary Protection Program is being implemented. Deactivation places the plant in a condition that no longer requires high levels of surveillance and maintenance (S&M) to maintain safe conditions.

When fully deactivated, the facilities will be unoccupied, empty, and locked. The facilities will contain no active systems or utilities except for surveillance lighting and any necessary monitoring instrumentation.

Enabling Assumptions:

The facility will achieve a radiological facility hazard category. The radiological facility limits given in DOE-STD-1027 are inherently conservative for establishing post-deactivation inventory limits. If the actual conditions at the 324 Facility is such that a lower release fraction can be justified for plausible accident scenarios, then it may be possible to show that higher residual radionuclide inventory than the radiological facility limits may be acceptable through a rigorous hazards analysis. If the hazards analysis shows that adequate safety to workers, offsite individuals, and the environment can be maintained with only passive mitigating facility systems under plausible accident scenarios, then deactivating all safety systems would be acceptable, whether or not the generic radiological inventory limits of DOE-STD-1027 have been attained

The fire hazards analysis will determine that fire detection and suppression systems will not be required post deactivation.

The roof assessment and building exterior structural analysis will not find any significant deficiencies, however, cost for repairs will be estimated at $1-M for contingency planning (per facility).

The asbestos assessment will not find any significant quantities of friable asbestos and that the majority of non-friable and encapsulated asbestos-containing material is in an acceptable end state.

Clean closure requirements for the REC, the HLV and LLV, the piping, and the miscellaneous areas will include removing the waste inventory with subsequent decontamination, as necessary, to meet closure performance standards per WAC 173-303-610 (2). Clean closure of the soil will consist of demonstrating that the Facility's concrete and liners had kept contaminants from reaching the soil. If potential through-thickness cracks indicate containment failure that would preclude subsequent waste storage operations, the soil contamination cleanup will be

coordinated and integrated with the CERCLA remedial action process for the operable unit

324/327 Facility Transition Project Organization Mission (RL-TP08)

The 324 Facility Stabilization Project mission is to achieve a safe, stable, and environmentally sound facility condition by stabilization and deactivation, that would be suitable for an extended period of Surveillance and Maintenance (S&M) pending final decommissioning, as quickly and economically as possible, and to place the facility in a condition acceptable for transfer from the Office of Facility Transition and Management (EM-60) to the Office of Environmental Restoration (EM-40). Final decontamination and decommissioning will be accomplished after transfer to the Office of Environmental Remediation (EM-40).

The 324/327 Project will remove radioactive, along with hazardous waste material, to the extent that the current "fissionable material facility" category may be reduced to a "radiological facility" category in accordance with the guidelines given in DOE-STD-1027-92, Hazard Categorization and Accident Analysis Techniques for Compliance with DOE Order 5480.23, Nuclear Safety Analysis Reports.

The 324 Facility deactivation phase will also include closure actions for areas of the 324 Facility. DOE-RL and Ecology have agreed that these areas are: 1) the B-Cell, 2) two portions of the D-Cell: the waste oil drum storage area and the HLV and liquid treatment process equipment, 3) the airlock, 4) the pipe trench, 5) the HLV, 6) the Low Level Vault (LLV), 7) the piping from the second floor gallery that runs into B-Cell and the HLV, 8) the sample room (Room 145), and 9) the Engineering Development Laboratory (EDL) (Room 146). The strategy and activities required for closure of these portions of the 324 Facility are given in the reference draft Closure Plan, The 324 Building Radiochemical Engineering Cells and High-Level Vault Closure Plan (DOE-RL 1997).

324/327 Facility Transition Project Principle End Point Targets

Reduce the annual 324/327 Surveillance and Maintenance costs for each facility. (Current baseline is $400,000 for both facilities).

Accomplish the deactivation and placement of the 324 and 327 Facilities into low-cost S&M by Oct 1, 2003.

Facility configuration will be established such that active systems are not required for safety and environmental confinement.

Deactivation will be performed in a way that will result in a redesignation of the 324 and 327 Facilities as radiological facilities in accordance with the criteria and guidelines provided in DOE-STD-1027, Hazard Categorization and Accident Analysis Techniques for Compliance with DOE Order 5480.23, Nuclear Safety Analysis Reports.

Closure activities will be completed for the radiochemical engineering cells (REC) and high level vault (HLV) to meet current Tri-Party Agreement (TPA) commitments.

324/327 Facility Transition Project Supported End Point Targets

The acceptable end state is defined by the following programmatic and physical results.

Programmatic:

- The facility stabilization phase was completed with termination of operations, establishment of a Surveillance and Maintenance (S&M) program, achievement of facility-specific end points, and initiation of the S&M Phase.
- The 324 Facility was placed in a condition acceptable for transfer from the Office of Facility Transition and Management (EM-60) to the Office of Environmental Restoration (EM-40).
- The facility stabilization activities placed the facility in a condition that achieves a "radiological facility" category (DOE 1992).

- A memorandum of agreement (MOA) between BWHC and BHI is approved and issued that delineates and transfers responsibilities for the future facility S&M activities to BHI.
- Stabilization activities that required removal and disposal of radioactive, dangerous, and mixed waste (e.g., during tank flushing, excessing, RCRA permitting and waste disposal) complied with Federal, State, and Local regulations and requirements.
- The facility is maintained in a safe and stable condition by means of a methodical surveillance and maintenance (S&M) program.
- Material accountability, such as the SNM inventory, was reconciled.
- Facility structural integrity was verified for a minimum of five years and documented in the facility turnover package.
- Legacy equipment was identified, documented in the turnover package, and abandoned in place.
- The facility was placed in a physical condition adequate to contain and monitor any radioactive contamination.
- The "as left" radiation contamination survey of the facility and surrounding areas was included in the deactivation records as part of the turnover package.
- The SNM, fuels, and solid and liquid radioactive, hazardous, and mixed waste inventories were removed from the facility, or exceptions of nuclear and hazardous material remaining in the facility was identified and characterized by location, type, quantity, and controls for such materials, were documented and approved for which an end condition cannot be determined.
- The facility was left unoccupied, empty, locked, and maintained with minimum entry requirements pending decontamination and decommissioning.
- The facility personnel have been relocated
- Radioactive, dangerous, and mixed wastes were removed using Reasonable Best Effort Methodology and disposed of in compliance with applicable regulations and requirements. Reasonable Best Effort is characterized by reducing parameters to "As Low As Economically Achievable" (ALEA) and implies use of a "Best Management Practices" approach to reach realistic, logical, and cost-effective end states or conclusions.

Physical:

- Fissionable material was removed to the necessary extent to allow the 324 Facility to achieve a "radiological facility" category (DOE 1992).
- Hazards, nuclear and non-nuclear, were eliminated or reduced by removing, isolating, draining, and minimizing hazardous material.
- Radiation fields were eliminated, reduced, shielded or isolated, with proper radiological posting of remaining radiation fields.
- Radioactive contamination was removed, reduced, or isolated/contained to mitigate and prevent spreading.
- Housekeeping was performed and removal of unattached (e.g., portable and/or mobile) material, equipment, office furniture and files, and chemicals was completed.
- Remaining facility hazards were isolated and contained from personnel and the environment using blanking, plugging, covering, removal, screening, and sealing of doors, windows, pipe penetrations, holes, drains, etc.
- Facility doors were locked from the inside except those required for entrance by surveillance personnel.
- To maximum extent possible, unsurveilled areas of the facility were sealed to prevent unauthorized access.
- Areas requiring access for inspection were sufficiently decontaminated.
- Installation of instrumentation such as alarms, windows in ancillary buildings, and surveillance lighting was completed to enable monitoring, surveillance, and control of the facility pending final disposition.
- Structural repairs, roof sealing, and facility modifications (e.g, upgrade the of the ventilation system) were completed to establish a safe and stable facility.
- Proper equipment labeling was provided to enable future D&D activities.
- Chemical and radioactive inventories were stabilized to minimize facility risks and allow for reduced S&M.
- Mobile quantities of SNM and SNF and related items were removed.
- The facility process vessels and tanks were emptied/drained and flushed with some process equipment disassembled to remove inventory.
- Failed equipment/jumpers were removed.
- Piping to external facility interfaces was isolated unless deemed necessary to support D&D.

· Facility supplies were removed.
· Facility high-radiation areas were shielded to enable S&M and D&D activities.
· Facility laboratory hoods containing significant SNM were decontaminated.
· Facility laboratory hoods were decontaminated/isolated and hood exhaust ductwork was isolated/contained.
· Facility floor drains were plugged, removed, or isolated.
· Facility room floors, wall, and ceiling surfaces were decontaminated of hazardous and radioactive materials and resurfaced as necessary to enable S&M and D&D activities.
· Facility system headers were drained and flushed as necessary to hazardous and radioactive materials.
· Facility friable asbestos materials were sealed/stabilized to enable S&M and D&D activities.
· Facility laboratory gloveboxes were decontaminated and residual contamination fixed to enable S&M and D&D activities.
· Facility liquid and gaseous effluent streams were eliminated.
· Facility organic solvents, acid solutions, recovered acid, and chemical and acid inventories were removed.
Utilities/Instrumentation Systems:
· The facility contains no active systems or utilities with the exception of the heating, ventilation, and air conditioning (HVAC) system as required to maintain the final confinement barrier, and systems required for monitoring and emission control.
· Systems required for monitoring and emission control, protection of surveillance personnel, the general public and environment, and vital equipment were sustained.
· Systems required to respond to emergency conditions expected in the facility's deactivated state and to prevent structural degradation were sustained.
· Unnecessary utilities and HVAC system lines were isolated.
· Facility instrument and equipment controls de-energized.
· Facility steam, water, and compressed air service was eliminated.
· Facility emergency electrical loads were minimized or eliminated.
· Facility electrical service was provided for selected lighting panels as necessary to support subsequent S&M and D&D activities.
· Facility monitoring functions consolidated at a single monitoring location.
· Facility security systems and procedures are adequate to prevent unauthorized entry.

The technical strategy for the 324 Facility includes the following objectives:

· Establish a 324 Facility configuration such that active systems are not required for safety and environmental confinement.
· Perform stabilization in a manner that will result in a redesignation of the 324 facility as a "radiological facility" in accordance with the criteria and guidelines provided in DOE-STD-1027, Hazard Categorization and Accident Analysis Techniques for Compliance with DOE Order 5480.23, Nuclear Safety Analysis Reports.
· Complete closure activities for the Radiochemical Engineering Cells (REC) and High Level Vault (HLV) to meet current TPA commitments.
· Protect the environment from contamination during any stabilization activities and associated structure upgrades and modifications required to complete the project goals.
· Sustain the systems required for protection of surveillance personnel, the general public and environment, and vital equipment.
· Sustain the systems required to respond to emergency conditions expected in the facility's deactivated state and to prevent structural degradation.
· Ensure that hazards to personnel or the environment are controlled through partial closure, removal, isolation, mitigation, or stabilization of such hazards.
· Ensure structures be maintained in a safe condition with threats to human health and safety removed or appropriate compensatory measures (barriers, access controls, administrative controls, etc.) implemented.

The technical strategy for 327 Facility includes the following objectives:

- Establish a 327 Facility configuration such that active systems are not required for safety and environmental confinement.
- Perform stabilization in a manner that will result in a redesignation of the 327 facility as a "radiological facility" in accordance with the criteria and guidelines provided in DOE-STD-1027, Hazard Categorization and Accident Analysis Techniques for Compliance with DOE Order 5480.23, Nuclear Safety Analysis Reports.
- Protect the environment from contamination during any stabilization activities and associated structure upgrades and modifications required to complete the project goals.
- Sustain the systems required for protection of surveillance personnel, the general public and environment, and vital equipment.
- Sustain the systems required to respond to emergency conditions expected in the facility's deactivated state and to prevent structural degradation.
- Ensure that hazards to personnel or the environment are controlled through partial closure, removal, isolation, mitigation, or stabilization of such hazards.
- Ensure structures be maintained in a safe condition with threats to human health and safety removed or appropriate compensatory measures (barriers, access controls, administrative controls, etc.) implemented.

B.8.1.2 324/327 Facility Transition Project End Point Targets from Hanford Strategic Plan

- Transition high cost surplus facilities in the central plateau and south 600 areas to a low cost, stable, deactivated condition.

- Transition the 324/327 Buildings to a low cost, stable, deactivated condition and disposition their nuclear materials (including 324 Building radioactive tank wastes).

- Transfer Special Nuclear Material from the south 600 area facilities to the 200 Area for interim storage.

- Reuse facilities in the south 600 area for economic diversification where feasible.

B.8.1.3 324/327 Facility Transition Project Major Facilities

B.8.1.3.1 324 Building Facility

B.8.1.3.1.1 324 Building Facility Description

The 324 Facility, known as the Waste Technology Engineering Laboratory (WTEL), is located in the 300 Area of the Hanford Site. Facility construction was completed in 1965 to begin a mission to support high-level radioactive chemical processing and metallurgical studies. Currently, the 324 Facility supports non-radioactive and waste treatability studies, along with continued Surveillance and Maintenance (S&M) and cleanup activities.

The 324 Facility provides office and laboratory space for scientific and engineering staff who conduct multi-disciplinary research in areas of waste characterization and immobilization, waste remediation and cleanup methodology development, biomass research, spent fuel characterization, tritium production methodology development, and cesium chloride encapsulation.

The 324 Facility is classified as a Hazard Category 2 nonreactor nuclear facility and for criticality safety is designated as a "fissionable material facility" (PNL 1995). A "fissionable material facility," as defined in PNL-MA-25, Criticality Safety (PNL 1992), is a facility that contains or procedurally could contain greater than 45% of a minimum critical mass of fissionable material or greater than 50% of a guaranteed subcritical mass or greater than 10% of a critical mass of sealed sources sealed into welded metal capsules.

B.8.1.3.1.2 324 Building Facility Technical Logic:

The Department of Energy (DOE), in partnership with its contractors, shall plan, acquire, operate, maintain, and dispose of physical assets as valuable national resources. Stewardship of these physical assets shall be accomplished in a cost-effective manner to meet the DOE mission. This shall incorporate industry standards, a graded approach, and performance objectives.

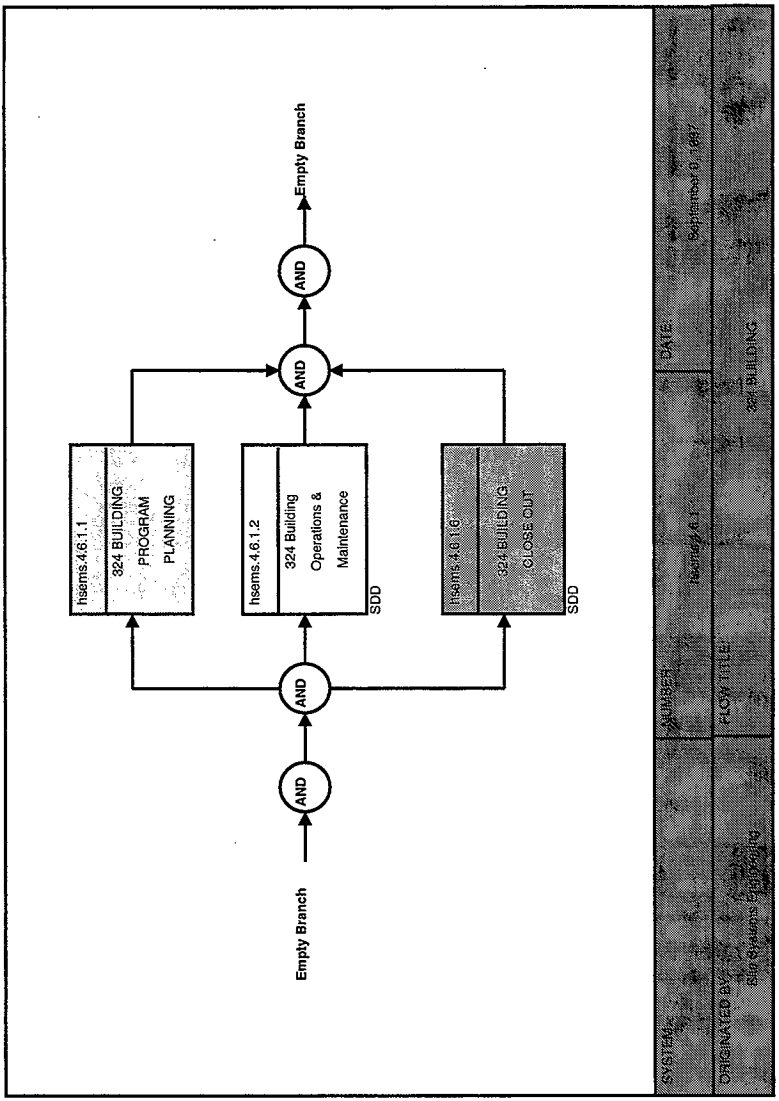


Figure B-8 324 BUILDING

B.8.1.3.1.3 324 Building Requirements and Life Cycle Function Descriptions

Requirements:

- Empty and flush process systems to eliminate the need to generate RCRA permits for storage tanks.
- Establish hazardous material inventories to ensure the location and amount of all material is known
- Remove and dispose of filters and other such equipment that contain radioactive or hazardous materials consistent with facility operation requirements.
- Conduct stabilization activities with consideration for waste minimization and pollution prevention.
- Remove fissionable material to the extent required to enable the 324 facility hazard category to be reduced from a "fissionable material facility" to one of a "radioactive facility."
- Conduct a facility assessment (i.e., characterize the hazards, risks, liabilities, and costs) to provide a technical basis for future 324 Facility Stabilization Project decisions.
- Eliminate or reduce hazards, nuclear and non-nuclear.
- Eliminate, shield, or isolate radiation fields to enable S&M and D&D activities.
- Reduce contamination and prevent its spread or migration.
- Accomplish waste disposal during stabilization and deactivation activities in compliance with applicable laws and regulations.
- Isolate and contain residual, potentially hazardous materials or conditions.
- Provide capability for ongoing monitoring and control of the facility.
- Provide additional facility modification or refurbishment to support future work (S&M or D&D)
- Provide turnover documentation and equipment labeling.
- RCRA , as amended (42 U.S.C., sec. 6901 et seq. and implemented in Washington State through Washington Administrative Code [WAC] 173-303), regulates the generation, transportation, storage, treatment, and disposal of solid and hazardous waste. The RCRA provisions govern cleanup of hazardous waste constituents released to the environment from hazardous or solid waste management units.
- Complete all activities to allow shipment of the Federal Republic of Germany logs from 324.
- Section V of the Clean Air Act of 1977 (CAA), adopted in the 1990 amendments to the CAA, establishes a federal permitting program, which will be administered by the states. Any "major source" of criteria pollutants or of hazardous air pollutants will be required to obtain a permit to operate the source.
- The Clean Water Act of 1977 (CWA) requires any source that discharges a "pollutant" into a surface water body to obtain and operate in compliance with a National Pollution Discharge Elimination System (NPDES) permit. The CWA includes radioactive materials in its definition of pollutant (33 U.S.C. 1362 (6)). However, the EPA has

interpreted "pollutant" to exclude radioactive materials regulated under the Atomic Energy Act of 1954 (AEA). The CWA applies to naturally occurring and accelerator-produced radioisotopes; it does not apply to source, special, or byproduct materials as the AEA defines those terms. Currently, four effluent streams are discharged from the 324 and 327 Facilities.

- Reduce facility cost to the minimum needed to support surveillance and maintenance pending final facility decontamination and decommissioning.

- Complete the 324 facility special case waste (SCW) assessment in support of 324 closure

- The 324 Facility will be clean closed with respect to dangerous waste contamination in specific areas that resulted from the treatment or storage of dangerous waste for greater than 90 days.

- Clean closure requirements for the REC, the high-level vault (HLV) and low-level vault (LLV), the piping, and the miscellaneous areas will include removing the waste inventory with subsequent decontamination, as necessary, to meet closure performance standards per WAC 173-303-610 (2).

- Clean closure of the soil immediately beneath the radiochemical engineering cells (REC) and HLV will consist of demonstrating that the Facility's concrete and liners had kept contaminants from reaching the soil..

- The clean closure performance standard for metal surfaces and concrete will be the "clean debris surface" as defined in 40 CFR 268.45 as follows: "A clean debris surface means the surface, when viewed without magnification, shall be free of all visible contaminated soil and hazardous waste except residual staining from soil and waste consisting of light shadows, slight streaks, or minor discolorations and soil and waste in cracks, crevices, and pits may be present provided that such staining and waste and soil in cracks, crevices, and pits shall be limited to no more that 5% of each square inch of surface area."

- Decontamination of concrete will be done to meet the criteria of the "debris rule".

- Accomplish stabilization and deactivation activities to place the 324 Facility into low cost Surveillance and Maintenance, to achieve a 324 Facility safety class designation of "radiological facility" using the STD 1027 standard and implementation guide, and to place the facility in a condition acceptable for transfer from the Office of Facility Transition and Management (EM-60) to the Office of Environmental Restoration (EM-40) by Oct 1, 2003.

- Complete RCRA closure on specific facility areas (REC/HLV) as the preferred option to meet current TPA Milestone commitments.

- Reduce the annual surveillance and maintenance costs for both the 324 and 327 Facilities to less than $400,000 (PNNL 1997).

- Establish a passively safe (i.e., no active systems required) and environmentally secure facility configuration, including implementation of contamination controls, for safety and environmental confinement that may be retained through the post-deactivation period until final facility disposition activities begin.

- The Hanford Site Infrastructure shall be optimized.

- South 600 Area high cost surplus facilties shall be transitioned to a low cost, stable, deactivated condition

- 324 building shall be transitioned to a low cost and stable deactivated condition

- South 600 area facilities shall be made available for other uses.

- South 600 Area special nuclear materials shall be moved to the Central Plateau
- 300 Area nuclear materials shall be remediated
- 300 area FRG cesium shall be removed
- 324 B Cell dispersible material shall be contained and removed by May 31, 1999
- 324 building shall be maintained within the approved safety envelope
- 324 building shall be operated within the approved safety envelope
- 324 building B Cell safety issues shall be resolved by Dec 1998
- 300 Area SNM contained in various buildings shall be surveilled and maintained within the approved safety envelope
- TPA Milestone M-20-55, completed in December 1995, required submittal of a closure plan for non-permitted mixed waste units located in the 324 Facility REC B-Cell, REC D-Cell, and HLV.
- Complete closure of non-permitted mixed waste units in the 324 Buiding REC B-cell, REC D-cell and high level vault. Due Date:TBD
- TPA Milestone M-89-01, completed September 5, 1996, required removal of 324 Facility HLV Tank mixed waste (e.g., TK-104, TK-105, and TK-107) with the exception of residues which may remain following flushing and draining to the extent possible.
- TPA Milestone M-89-01A, completed March 31, 1995, identifies the HLV tanks that contained mixed waste as tanks 104, 105, and 107, and directs the U.S. Department of Energy, Richland Operations Office (DOE-RL) to flush and drain these tanks.
- TPA Miletone M-89-02, due May 31,1999, requires removal of 324 facility B-Cell mixed waste and equipment. Actions under this milestone include containment and removal of all B Cell dispersible materials, excess equipment and debris. Containerized MW will be managed in compliance with Chapter 173.303 WAC, thereby reducing risks to human health and the environment. Any remaining residues following removal actions will be managed through the final closure process. USDOE's 324 Building Rec B Cell clean-out project (BCCP) will be used as a guide for containerizing dispersible MW and removing unnecessary equipment and materials from B-Cell.

TPA milestone actions include:

- Complete removal of dispersible materials from 324 Building REC B-cell.
- Complete removal of excess equipment from 324 Building REC B-cell.
- Complete removal of debris from 324 Building REC B-cell.
- Containerized MW removed from 324 Building REC B-cell will be managed in compliance with Chapter 173-303 WAC
- Any remaining residues from removal of containerized MW removed from 324 Building REC B-cell will be managed through the final closure process.

* USDOE's 324 Building REC B-cell cleanout project (BCCP) will be used as a guide for containerizing dispersible MW and removing unnecessary equipment and materials from B-cell.

* TPA Milestone M-89-03, completed in March 1995, required compliance with interim-status facility standards for the non-permitted 324 Facility areas. Because of the high radiation fields associated with mixed waste stored in the Radiochemical Engineering Cells (REC) and the HLV, alternative compliance measures for some interim status requirements were used.

* TPA Milestone M-89-04, completed in June 1995, required DOE-RL to identify mixed waste management alternatives and USDOE's proposal for achieving clean closure of the 324 Facility REC B-Cell, D-Cell, and HLV.

* TPA Milestone M-89-05, due June 30, 1998, requires completion of the 324 facility special case waste (SCW) assessment in support of 324 closure.

* TPA Milestone M-92-04: Complete transfer of all 300 Area Cs/Sr to WESF and/or an approved storage location by 12/31/98.

* Complete acquisition of new facilities, modification of existing facilities, and/or modification of planned facilities necessary for consolidated storage prior to disposal of Hanford Site 300 Area Special Case Waste (SCW).

Due Date: 9/30/2006

* M-92-13 Submit 300 Area SCW PMP to Ecology pursuant to Agreement Action Plan, Section 11.5, by September 2000.

* Complete removal and transfer, and initiate storage of Phase I 300 Area SCW and materials (one third of the total inventory) by September 30, 2002.

* Complete removal and transfer, and initiate storage of Phase II 300 Area SCW and materials (one half the total inventory) by September 30, 2004.

* Complete removal and transfer, and initiate storage of Phase III 300 Area SCW and materials by September 30, 2006.

* · Protect workers, the public, and the environment during stabilization and deactivation activities.

* · Facilitate 324 Facility S&M to ensure that remaining process equipment does not fail and release any residual materials.

* · Comply with regulations and requirements during stabilization and deactivation activities.

* · Establish baseline data for S&M to enable record keeping to identify systems and/or components that may be deteriorating and to advise decommissioning personnel about the potential hazards.

* · Hazardous and radioactive materials shall be removed from the facility or reduced and stabilized sufficiently to reduce hazards to workers and the public, to ensure long-term facility safety and regulatory compliance, to reduce the level of required surveillance during the extended surveillance period following deactivation, to enable plant classification as a "radiological facility", and to enable subsequent successful D&D.

* · Promote facility decommissioning by preparing the facility to be one that is cleaned of process materials to the greatest extent possible.

- National Environmental Protection Act/State Environmental Policy Act Status and Strategy. The NEPA is a review and documentation process promulgated under 10 CFR 1021 and 40 CFR 1508.27 and also executed pursuant to DOE Order 5440.1E, Chapter V. This documentation requires that all federal agencies identify the environmental impacts associated with the proposed remedial actions that may significantly affect the environment.

- National Historic Preservation Act (NHPA) provisions found in 36 CFR 800, "Determination of Eligibility for Inclusion in National Register," require federal agencies to survey all lands and structures under their control, and to identify and evaluate all properties for eligibility to be listed in the National Register of Historic Places.

Life Cycle Function Descriptions:

B.8.1.3.1.3.1 324 BUILDING PROGRAM PLANNING WORK SCOPE SUMMARY

Functions that include planning and developing the overall program; establishing broad priorities; providing program technical direction; preparing and defending the program budget; controlling milestones; integrating all components of the program; providing public and private sector policy liaison; expediting interface activities and follow-up actions; and retaining overall accountability for program success.

B.8.1.3.1.3.2 324 Building Operations & Maintenance WORK SCOPE SUMMARY

No Description

324 Building Operations & Maintenance SPECIFIC FUNCTIONS

B.8.1.3.1.3.3 Provide R&D support for the SNF and other Projects

Building 324 has been transferred to the TrP Organization for Post Operations Transition work. Due to the urgent need for the SNF project it has been assigned to PNNL for R&D work.

Past 324 Facility operations activities have supported high-level radioactive chemical processing and metallurgical studies. Currently, operations supports non-radioactive and waste treatability studies, along with continued S&M and cleanup activities. These activities make use of the facility office and laboratory space provided for scientific and engineering staff. The operations objectives are to conduct multi-disciplinary research in areas of waste characterization and immobilization, waste remediation and cleanup methodology development, biomass research, spent fuel characterization, tritium production methodology development, and cesium chloride encapsulation. The stabilization objective is to curtail these operations to enable facility deactivation work tasks to begin.

B.8.1.3.1.3.4 324 BUILDING POST OPERATIONS WORK SCOPE SUMMARY

Day-to-day work, including pre-stabilization surveillance and maintenance, stabilization, post-stabilization surveillance and maintenance, deactivation, and post-deactivation surveillance and maintenance, that is required to allow safe decontamination and decommissioning.

324 BUILDING POST OPERATIONS SPECIFIC FUNCTIONS

B.8.1.3.1.3.5 Maintain Safe & Compliant 324 Building in South 600 Areas

Maintain the 324 facility structures, operating systems and equipment, and monitoring systems within the approved safety and compliance requirements until the facilities are made available for clean-up.

B.8.1.3.1.3.6 Maintain Safe & Compliant Materials in 324 Building

Materials stored in 324 building will be maintained in safe and compliant states until they are made available for clean-up.

B.8.1.3.1.3.7 Remove Material from 324 Building

Remove the nuclear materials from the 324 Building for treatment or disposition.

B.8.1.3.1.3.8 Transition 324 Building

Initiate the transition phase of decontamination and decommissioning for the 324 Building

This phase is characterized by activities associated with removing legacy wastes, residual contamination, facility systems and/or areas from operational service with the intent of being ready for facility stabilization to transition the facility to final decommissioning. The objective of deactivation is to expeditiously reduce the hazards, risks, and costs (i.e., the mortgage) associated with a surplus facility until final disposition can be achieved.

In addition, this phase is characterized by activities necessary to place the 324 facility in a safe, stable, and environmentally sound condition, suitable for an extended period of surveillance and maintenance pending final disposition. Facility stabilization starts with termination of operations, includes the establishment of a S&M program, and ends with the achievement of facility-specific goals, objectives, and end points.

B.8.1.3.1.4 324 Building Boundary Diagram

Table B.8-1 324 Building Boundary Diagram

External Interfaces Hanford Legacy Idaho National Engineering Laboratory Hanford Site Environmental System Interfaces -None-		External Interfaces -None- Hanford Site Environmental System Interfaces hsems.2.3.2 Double Shell Tank (DST) System hsems.2.3.4 200 Interim Storage Area (ISA) hsems.2.3.5 Central Waste Complex hsems.4.2.2 307 Retention Basins

B.8.1.3.1.5 324 Building Interface Description and Forecast

EXTERNAL INPUTS

Table B.8-2 External Inputs for 324 Building

Stream	Category	Period	Baseline	Units
X Idaho National Engineering Laboratory				
INEL Spent Nuclear Fuel *Spent Nuclear Fuel (SNF) Transferred by FFTF*	Spent Nuclear Fuel (SNF)	1997 - 1997	2.3	MTHM
X.0 Hanford Legacy				
Legacy 324 Low Enriched Uranium *Low Enriched Uranium (LEU) Transferred by Hanford Legacy.*	Low Enriched Uranium (LEU)	1997 - 1998	0.5	MT-U
Legacy 324 Misc NM *Misc NM Transferred by Hanford Legacy.*	Misc NM	1997 - 1998	4.2	kilograms
Legacy 324 Plutonium *Plutonium (Pu) Transferred by Hanford Legacy.*	Plutonium (Pu)	1997 - 1998	0.1	kilograms
Legacy 324 Natural Uranium *Natural Uranium (NU) Transferred by Hanford Legacy.*	Natural Uranium (NU)	1997 - 1998	0.005	MT-U
Legacy 324 Highly Enriched Uranium *Highly Enriched Uranium (HEU) Transferred by Hanford Legacy.*	Highly Enriched Uranium (HEU)	1997 - 1998	0.39	kilograms
Legacy 324 Misc SNM *Misc SNM Transferred by Hanford Legacy.*	Misc SNM	1997 - 1998	0.001	kilograms
Legacy 324 Depleted Uranium *Depleted Uranium (DU) Transferred by Hanford Legacy.*	Depleted Uranium (DU)	1997 - 1998	0.01	metric tons

INTERNAL INPUTS

-None-

EXTERNAL OUTPUTS

-None-

INTERNAL OUTPUTS

Table B.8-3 Internal Outputs for 324 Building

Stream	Category	Period	Baseline	Units
hsems.2.3.2 Double Shell Tank (DST) System				
324 Building HLW	HLW	1999 - 2003	174.0	cubic meters
hsems.2.3.4 200 Interim Storage Area (ISA)				
324 Spent Nuclear Fuel *Spent Nuclear Fuel (SNF) Transferred.*	Spent Nuclear Fuel (SNF)	1997 - 1997	2.3	MTHM
hsems.2.3.5 Central Waste Complex				
PNNL 324, CH-LLW-III *CH LLW III Transferred by 324 Building.*	CH LLW III	1997 - 2001	403.0	cubic meters
324 Misc NM *Misc NM Transferred by 324 Building.*	Misc NM	1998 - 1998	4.2	kilograms
324 Misc SNM *Misc SNM Transferred by 324 Building.*	Misc SNM	1998 - 1998	0.001	kilograms
PNNL 324, RH-TRU *RH TRU Transferred by 324 Building.*	RH TRU	1997 - 2001	7.0	cubic meters
324 Depleted Uranium *Depleted Uranium Stored in the 324 building that is available for disposal.*	Depleted Uranium (DU)	1998 - 1998	0.01	metric tons
PNNL 324, CH-LLW-I *CH LLW I Transferred by 324 Building.*	CH LLW I	1997 - 2001	127.0	cubic meters
324 Low Enriched Uranium *Low Enriched Uranium Stored in the 324 Building*	Low Enriched Uranium (LEU)	1998 - 1998	0.128	MT-U
PNNL 324, CH-LLMW-III *CH LLMW III Transferred by 324 Building.*	CH LLMW III	1997 - 2001	20.0	cubic meters
324 Plutonium *Plutonium (Pu) Transferred by 324 Building.*	Plutonium (Pu)	1997 - 1998	0.5	kilograms
PNNL 324, RH-LLW-III *RH LLW III Transferred by 324 Building.*	RH LLW III	1997 - 2001	160.0	cubic meters
324 Natural Uranium *Natural Uranium Stored in the 324 building that is available for disposal.*	Natural Uranium (NU)	1998 - 1998	0.005	MT-U
PNNL 324, RH-TRUM	RH TRUM	1997 - 2001	5.0	cubic meters

Table B.8-3 Internal Outputs for 324 Building (Continued)

Stream	Category	Period	Baseline	Units
RH TRUM Transferred by 324 Building.				
hsems.4.2.2 307 Retention Basins				
324 Potentially Contaminated Waste Water	Industrial Waste Water	1998 - 2003	43900	cu meters
Industrial waste water from 324 Building operations. The volume of waste water is estimated based on historical throughput to the 307 Retention Basins and assuming equal contribution from all inputs to the RPS.				

B.8.1.3.2 327 Building Facility

B.8.1.3.2.1 327 Building Facility Description

The 327 Facility, known as the Post-irradiation Testing Laboratory or PTL (formerly known as the Radiometallurgy Facility), is located in the 300 Area of the Hanford Site. Facility construction was completed in 1953 to begin a mission of examination and testing of irradiated materials, particularly metals. The 327 Facility also performed rupture analysis of fuel elements for the Hanford production reactors, and later, for various U.S. Department of Energy (DOE) test reactors (such as PRTR, SP-100, FFTF, EBR-II). Currently, the 327 Facility supports fuel analysis for several DOE and foreign projects, including the Hanford Site Spent Nuclear Fuel Project.

B.8.1.3.2.2 327 Building Facility Technical Logic:

The Department of Energy (DOE), in partnership with its contractors, shall plan, acquire, operate, maintain, and dispose of physical assets as valuable national resources. Stewardship of these physical assets shall be accomplished in a cost-effective manner to meet the DOE mission. This shall incorporate industry standards, a graded approach, and performance objectives.

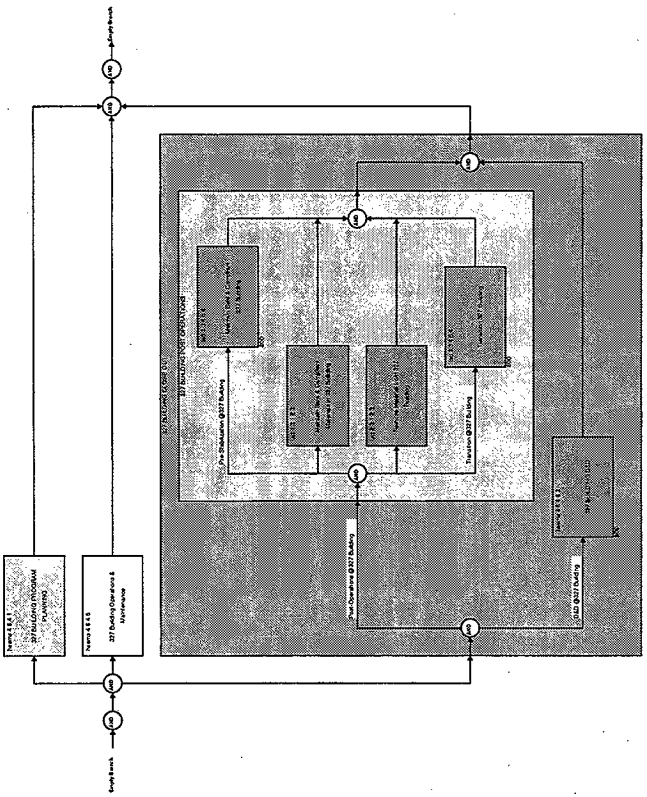


Figure B-9 327 BUILDING

B.8.1.3.2.3 327 Building Requirements and Life Cycle Function Descriptions

Requirements:

- Protect workers, the public, and the environment during stabilization and deactivation activities.
- Comply with regulations and requirements during stabilization and deactivation activities.
- Reduce facility cost to the minimum needed to support surveillance and maintenance pending final facility decontamination and decommissioning.
- Complete the 327 facility special case waste (SCW) assessment in support of 327 closure.
- Accomplish stabilization and deactivation activities to place the 327 Facility into low cost Surveillance and Maintenance, to achieve a 327 Facility safety class designation of "radiological facility" using the STD 1027 standard and implementation guide, and to place the facility in a condition acceptable for transfer from the Office of Facility Transition and Management (EM-60) to the Office of Environmental Restoration (EM-40) by Oct 1, 2003.
- Reduce the annual surveillance and maintenance costs for both the 324 and 327 Facilities to less than $400,000 (PNNL 1997).
- Establish a passively safe (i.e., no active systems required) and environmentally secure facility configuration, including implementation of contamination controls, for safety and environmental confinement that may be retained through the post-deactivation period until final facility disposition activities begin.
- Facilitate 327 Facility S&M to ensure that remaining process equipment does not fail and release any residual materials.
- Establish baseline data for S&M to enable record keeping to identify systems and/or components that may be deteriorating and to advise decommissioning personnel about the potential hazards.
- Hazardous and radioactive materials shall be removed from the facility or reduced and stabilized sufficiently to reduce hazards to workers and the public, to ensure long-term facility safety and regulatory compliance, to reduce the level of required surveillance during the extended surveillance period following deactivation, to enable plant classification as a "radiological facility", and to enable subsequent successful D&D.
- Promote facility decommissioning by preparing the facility to be one that is cleaned of process materials to the greatest extent possible.
- Empty and flush process systems to eliminate the need to generate RCRA permits for storage tanks.
- Establish hazardous material inventories to ensure the location and amount of all material is known.
- Remove and dispose of filters and other such equipment that contain radioactive or hazardous materials consistent with facility operation requirements.
- Conduct stabilization activities with consideration for waste minimization and pollution prevention.
- Remove fissionable material to the extent required to enable the 327 facility hazard category to be reduced from a "fissionable material facility" to one of a "radioactive facility."

- · Eliminate or reduce hazards, nuclear and non-nuclear.

- · Eliminate, shield, or isolate radiation fields to enable S&M and D&D activities.

- · Reduce contamination and prevent its spread or migration.

- · Accomplish waste disposal during stabilization and deactivation activities in compliance with applicable laws and regulations.

- · Isolate and contain residual, potentially hazardous materials or conditions.

- · Provide capability for ongoing monitoring and control of the facility.

- · Provide additional facility modification or refurbishment to support future work (S&M or D&D)

- · Provide turnover documentation and equipment labeling.

- RCRA , as amended (42 U.S.C., sec. 6901 et seq. and implemented in Washington State through Washington Administrative Code [WAC] 173-303), regulates the generation, transportation, storage, treatment, and disposal of solid and hazardous waste. The RCRA provisions govern cleanup of hazardous waste constituents released to the environment from hazardous or solid waste management units.

- Place fuel pins and pieces in 327 basin in casks and ship to TBD storage location.

- Remove Cs capsules from 327 Bldg.

- Section V of the Clean Air Act of 1977 (CAA), adopted in the 1990 amendments to the CAA, establishes a federal permitting program, which will be administered by the states. Any "major source" of criteria pollutants or of hazardous air pollutants will be required to obtain a permit to operate the source.

- The Clean Water Act of 1977 (CWA) requires any source that discharges a "pollutant" into a surface water body to obtain and operate in compliance with a National Pollution Discharge Elimination System (NPDES) permit. The CWA includes radioactive materials in its definition of pollutant (33 U.S.C. 1362 (6)). However, the EPA has interpreted "pollutant" to exclude radioactive materials regulated under the Atomic Energy Act of 1954 (AEA). The CWA applies to naturally occurring and accelerator-produced radioisotopes; it does not apply to source, special, or byproduct materials as the AEA defines those terms. Currently, four effluent streams are discharged from the 324 and 327 Facilities.

- South 600 Area high cost surplus facilties shall be transitioned to a low cost, stable, deactivated condition

- 327 building shall be transitioned to the surveillance and maintenance phase

- South 600 area facilities shall be made available for other uses.

- South 600 Area special nuclear materials shall be moved to the Central Plateau

- 300 Area nuclear materials shall be remediated

- 327 building shall be maintained within the approved safety envelope

- 327 building shall be operated within the approved safety envelope
- 327 inventory system shall be maintained within the approved safety envelope
- 327 HVAC system shall be maintained within the approved safety envelope
- 327 building radiation monitoring system shall be maintained within the approved safety envelope
- 327 building safeguard system shall be maintained within the approved safety envelope
- TPA Milestone M-92-04: Complete transfer of all 300 Area Cs/Sr to WESF and/or an approved storage location by 12/31/98.
- National Environmental Protection Act/State Environmental Policy Act Status and Strategy. The NEPA is a review and documentation process promulgated under 10 CFR 1021 and 40 CFR 1508.27 and also executed pursuant to DOE Order 5440.1E, Chapter V. This documentation requires that all federal agencies identify the environmental impacts associated with the proposed remedial actions that may significantly affect the environment.
- National Historic Preservation Act (NHPA) provisions found in 36 CFR 800, "Determination of Eligibility for Inclusion in National Register," require federal agencies to survey all lands and structures under their control, and to identify and evaluate all properties for eligibility to be listed in the National Register of Historic Places.

Life Cycle Function Descriptions:

B.8.1.3.2.3.1 327 BUILDING PROGRAM PLANNING WORK SCOPE SUMMARY

Functions that include planning and developing the overall program; establishing broad priorities; providing program technical direction; preparing and defending the program budget; controlling milestones; integrating all components of the program; providing public and private sector policy liaison; expediting interface activities and follow-up actions; and retaining overall accountability for program success.

B.8.1.3.2.3.2 327 Building Operations & Maintenance WORK SCOPE SUMMARY

Past 327 Facility operations activities have supported examination and testing of irradiated materials, particularly metals, including rupture analysis of fuel elements for the Hanford production reactors along with various U.S. Department of Energy (DOE) test reactors. Currently, operations supports fuel analysis for several DOE and foreign projects, including the Hanford Site Spent Nuclear Fuel Project. These activities make use of the facility office and laboratory space provided for scientific and engineering staff. The stabilization objective is to curtail these operations to enable facility deactivation work tasks to begin.

B.8.1.3.2.3.3 327 BUILDING POST OPERATIONS WORK SCOPE SUMMARY

Day-to-day work, including pre-stabilization surveillance and maintenance, stabilization, post-stabilization surveillance and maintenance, deactivation, and post-deactivation surveillance and maintenance, that is required to allow safe decontamination and decommissioning.

327 BUILDING POST OPERATIONS SPECIFIC FUNCTIONS

B.8.1.3.2.3.4 Maintain Safe & Compliant 327 Building

Maintain the 327 facility structures, operating systems and equipment, and monitoring systems within the approved safety and compliance requirements until the facilities are made available for clean-up.

Operations Phase

Past 327 Facility operations activities have supported examination and testing of irradiated materials, particularly metals, including rupture analysis of fuel elements for the Hanford production reactors along with various U.S. Department of Energy (DOE) test reactors. Currently, operations supports fuel analysis for several DOE and foreign progects, including the Hanford Site Spent Nuclear Fuel Project. These activities make use of the facility office and laboratory space provided for scientific and engineering staff. The stabilization objective is to curtail these operations to enable facility deactivation work tasks to begin.

B.8.1.3.2.3.5 Remove Material from 327 Building

Remove the nuclear materials from the 3247 Building for treatment or disposition.

B.8.1.3.2.3.6 Transition 327 Building

Initiate the transition phase of decontamination and decommissioning for the 327 Building

This phase is characterized by activities associated with removing of legacy wastes, residual contamination, facility systems and/or areas from operational service with the intent of being ready for facility stabilization to transition the facility to final decommissioning. The objective of deactivation is to expeditiously reduce the hazards, risks, and costs (i.e., the mortgage) associated with a surplus facility until final disposition can be achieved.

In addition, this phase is characterized by activities necessary to place the 327 facility in a safe, stable, and environmentally sound condition, suitable for an extended period of surveillance and maintenance pending final disposition. Facility stabilization starts with termination of operations, includes the establishment of a S&M program, and ends with the achievement of facility-specific goals, objectives, and end points (see Section 2.8.1).

B.8.1.3.2.4 327 Building Boundary Diagram

Table B.8-4 327 Building Boundary Diagram

External Interfaces -None- Hanford Site Environmental System Interfaces -None-		External Interfaces -None- Hanford Site Environmental System Interfaces hsems.2.2.8 Waste Encapsulation and Storage Facility hsems.2.3.2 Double Shell Tank (DST) System hsems.2.3.5 Central Waste Complex hsems.4.2.2 307 Retention Basins

B.8.1.3.2.5 327 Building Interface Description and Forecast

EXTERNAL INPUTS

-None-

INTERNAL INPUTS

-None-

EXTERNAL OUTPUTS

-None-

INTERNAL OUTPUTS

Table B.8-5 Internal Outputs for 327 Building

Stream	Category	Period	Baseline	Units
hsems.2.2.8 Waste Encapsulation and Storage Facility				
327 Cesium Capsules *Cesium (Cs) Transferred.*	Cesium (Cs)	1998 - 1998	13.0	capsules
hsems.2.3.2 Double Shell Tank (DST) System				
327 Radioactive/Mixed Liquid Waste to DSTs *HLW transferred to 204-AR for storage in underground double-shell tanks (DSTs).*	HLW	1999 - 2001	91.8	cubic meters
hsems.2.3.5 Central Waste Complex				
PNNL 327, CH-TRUM *CH TRUM Transferred by 327 Building.*	CH TRUM	1998 - 2004	0.771	cubic meters
PNNL 327, CH-LLW-I *CH LLW I Transferred by 327 Building.*	CH LLW I	1997 - 2005	198.0	cubic meters
PNNL 327, CH-LLW-III *CH LLW III Transferred by 327 Building.*	CH LLW III	1997 - 2005	21.8	cubic meters
PNNL 327, RH-LLW-III *RH LLW III Transferred by 327 Building.*	RH LLW III	1997 - 2005	2.57	cubic meters
PNNL 327, CH-LLMW-I *CH LLMW I Transferred by 327 Building.*	CH LLMW I	1997 - 2005	2.31	cubic meters
PNNL 327, CH-LLMW-III *CH LLMW III Transferred by 327 Building.*	CH LLMW III	1997 - 2005	1.28	cubic meters
PNNL 327, CH-TRU *CH TRU Transferred by 327 Building.*	CH TRU	1997 - 2005	55.5	cubic meters
hsems.4.2.2 307 Retention Basins				
327 Potentially Contaminated Waste Water *Industrial waste water from 327 Building activities. The volume of waste water is estimated based on historical throughput to the 307 Retention Basins and assuming equal contribution from all inputs to the RPS.*	Industrial Waste Water	1998 - 2003	43900	cu meters

B.8.1.4 Drivers for 324/327 Facility Transition Project

Table B.8-6 Source Documents for 324/327 Facility Transition Project

Name	Title
10 CFR 1021	NEPA Implementing Procedures
36 CFR 800	National Historic Preservation Act as amended
42 USC 6901, et seq.	Resource Conservation and Recovery Act of 1976 (RCRA)
BWHC-SD-WM-TPP-TBD	324 Building End Point Specification Document
BWHC-SD-WM-TPP-TBD1	327 Building End Point Specification Document
DE-AC06-96RL13200	Project Hanford Management Contract, Fluor Daniel Hanford, Inc.
DOE/EIS-0222D	Draft Hanford Remedial Action Environmental Impact Statement and Comprehensive Land Use Plan
DOE/RL-89-10	Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement), Rev.4
DOE/RL-96-14	Updated Draft Mission Direction Document, June 1996
DOE/RL-96-73	The 324 Radiological Engineering Cells and High - Level Vault Closure Plan
DOE/RL-96-92	Hanford Strategic Plan
HNF-IP-1289	324/327 Deactivation Project, Draft Project Management Plan
PL 92-500	Federal Water Pollution Control Act Amendments of 1972 (Clean Water Act)
RCW 70.94	Washington Clean Air Act

B.8.1.5 324/327 Facility Transition Project Risk Management

This section outlines a methodology which will be used to qualitatively/subjectively assess and manage project risk. The 324 and 327 Facilities contain significant inventories of high dose rate material. This combined with the close proximity to the Columbia River, public schools, and a residential zone will require risk management and mitigation throughout the life of the facilities. In the context of this section, project risk means risk to one of the project baselines (technical, cost or schedule) and should not be confused with health and safety risks. However, health and safety issues are considered to the extent that they impact the risk to the project baselines.

Risk assessments, as described in section 12.0 of the 324/327 Project Management Plan, HNF-IP-1289, Rev 0, will typically be performed by an assessment team comprised of project managers, technical staff, operating/field staff, customers (RL, DOE-HQ and FDH) and selected stakeholders as appropriate based upon the project element and its position in the baseline hierarchy (i.e., project level, sub-project level or task/activity level). A team leader will be assigned or selected to schedule, lead and document the results of the risk assessment session. The results of all project risk assessments will be maintained in an appendix to this PMP. An initial assessment will be performed at the project level with follow-on assessments performed at other levels of the project baseline hierarchy based on the results of the initial assessment. Assessments will then be performed throughout the life of the project. Typically risk assessments will be performed to support the change request process, when baseline adjustments are necessary or to support the decision process for selection and implementation of technical alternatives.

Although a formal assessment of project risk has not been completed at this point in the project, the items listed below are considered to represent the high risk areas based on the judgement of project personnel. This section will be updated to reflect the high risk areas based upon the results of the risk assessment process prior to final issuance of this PMP document.

The following represents a preliminary list of assumptions/issues that could impact the overall implementation, cost, and schedule of the sub-project. A thorough analysis of project risk that will be managed will be conducted during completion of the final PMP and end point process.

CsCl Legacy Safety/Cleanout Sub-project

- The baseline assumes that existing casks can be obtained for overpacking and interim storage.
- The special form container, for the packaging of the cesium powder and pellets, for interim storage has not been designed.

Legacy Fuel Removal (327)

- The project uses process knowledge to determine the percentage of existing waste containers that will meet the Contact-Handled LLW and remote handled transuranic waste classifications. RH TRU is considerably more expensive for handling and packaging.
- Projects assumes same packaging and storage pathway for the metallurgical mounts as the fuel pin tubes processed in FY 97.

B-Cell (324)

- B Cell Clean out. The Clean out of B cell is considered high risk due to the high radiation levels and regulatory issues.

Special Case Waste Pad

- Currently a study is underway to determine the interim disposition location for the 300 Area SCW. This project describes one viable option.
- The design, construction, and permitting for the FRG Log Pad which was used as a basis for this project has not been approved for use as a permitted (MW) pad.
- The transport casks in the baseline have not been approved for use as a MW storage container.

324/327 Minimum Safe Status

- Implementation of compliance upgrades (Conduct of Operations, Radiological Control and S/RIDs) has been ongoing with full implementation schedule for November 1, 1998. The Facility Evaluation Board (FEB) may conclude that this implementation strategy is inadequate.

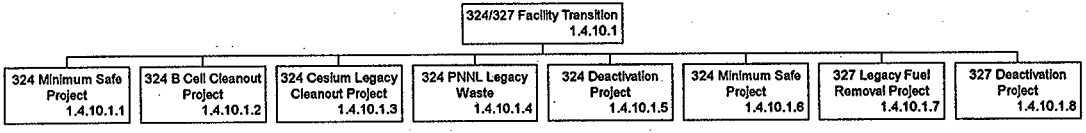
324 Radioactive Liquid Waste system

- This project includes the refurbishment of the liquid waste filtration/treatment system that was used to treat the decontamination fluids used in the cleanout of the HLV tanks. Different system configuration and treatment trains may be required to treat the deactivation fluids.
- This project assumes the use of the LLV tanks for storage prior to loadout and shipment.
- Minimal piping upgrades will be required in 324 and none are planned for 327.

324/327 Deactivation

- A conceptual plan has been developed for the deactivation of the facilities based on known contamination levels. Additional engineering and trade studies will be required to increase reliability of estimate.

324/327 Facility Transition Work Breakdown Structure



HANFORD SITE WORK BREAKDOWN STRUCTURE DICTIONARY
FACILITY STABILIZATION
WBS: 1.4
8/28/1997

1. Activity Title: 324 MINIMUM SAFE PROJECT	2. Date 7/31/1997	3. PBS Number RL-TP08	4. Dict Rev 0
5. Contract WBS No. 1.4.10.1.1	6. Corresponding FDS No. K4A, K4M, K4S	7. Baseline CR No.	
8. Organization Name 19000			9. B & R No.

10. Scope of Work
Minimum safe activities protect the public, workers and environment from exposure posed by loss of containment and control over nuclear material and industrial hazards associated with these facilities. Minimum safe activities will be conducted over the life of the facility, decreasing in scope as risks are removed/reduced within the facilities. This is comprised of the facility surveillance and maintenance required to maintain facility systems and structures. This activity includes required preventative maintenance and calibrations; repair of failed and malfunctioning equipment; walkdown of safety systems, equipment, and facility grounds (operational surveillances); routine radiological surveys, source checks, and dosimetry; facility utilities and assessments; and waste management assessments. This also includes Management and Assessment activities including the project direction, management and controls, and environmental, quality and safety oversight for the minimum safe condition (sub-deactivation project specific oversight is included in the sub-project) . This also includes OSHA, Resource Conservation and Recovery Act (RCRA) and DOE mandated training. Facility orientation, facility specific building emergency, and response training is covered in this activity. This activity also provides safe, secure and compliant storage of nuclear materials until final disposition of the material is accomplished. Contains physical security, safeguards accounting and material control, record keeping, studies, evaluations and assessments.

HANFORD SITE WORK BREAKDOWN STRUCTURE DICTIONARY
FACILITY STABILIZATION
WBS: 1.4

8/28/1997

1. Activity Title: 324 B CELL CLEANOUT PROJECT	2. Date 7/31/1997	3. PBS Number RL-TP08	4. Dict Rev 0
5. Contract WBS No. 1.4.10.1.2	6. Corresponding FDS No. K4B	7. Baseline CR No.	
8. Organization Name 19000			9. B & R No.

10. Scope of Work

The B-Cell Cleanout Project (BCCP) is a multi-year effort to eliminate legacy equipment and disposable nuclear material from the B-Cell in the 324 Facility. The BCCP is the most significant deactivation activity currently being conducted in 324 and is required to meet TPA milestone M-89-02, 'Complete removal of 324 Facility REC B-Cell Mixed Waste (MW) and Equipment,' TPA Milestone by May 31, 1999. B-Cell was designed to handle high activity radioactive wastes and materials in a research setting, with remote handling capabilities, and with appropriate shielding under unique space considerations. During 25 years of Research and Development (R&D) activities, B-Cell has accumulated a significant volume of radioactive and radioactive MW which contains over 2.5 million curies, of which 1.5 million is in a potentially dispersible form.

The current baseline requires the removal of heavily contaminated process racks (1A Rack, 2A Rack, 1B Rack) via several destructive techniques including, plasma arc torches, abrasive cutting blades, reciprocal saws, and cutting shears. Size reduced equipment is then placed in liners that are grouted prior to shipment to the Central Waste Complex as Category III low level waste (LLW). Beneath these racks is over 1.5 million curies of dispersible radioactive material. These Dispersibles will be packaged pending disposition at a to-be-named location (current baseline is the MW storage pad at the Central Waste Complex in the 200 Area of the Hanford Site). In addition 7 fuel assemblies will be packaged and shipped to the 200 Area Interim Storage Pad for storage. Remaining fuel pieces will be packaged and managed as RH-TRU for interim storage at the central waste RH-TRU storage pad.

Upon final cleanout of the legacy materials, equipment and decontamination (to meet TPA Milestone M-89-02) a final cell cleanout effort will be undertaken potentially including removal of the cell liner to meet the overall project objective of obtaining radiological facility status.

HANFORD SITE WORK BREAKDOWN STRUCTURE DICTIONARY
FACILITY STABILIZATION
WBS: 1.4

8/28/1997

1. Activity Title: 324 CESIUM LEGACY CLEANOUT PROJECT	2. Date 7/31/1997	3. PBS Number RL-TP08	4. Dict Rev 0

5. Contract WBS No. 1.4.10.1.3	6. Corresponding FDS No. K4C	7. Baseline CR No.

8. Organization Name 19000	9. B & R No.

10. Scope of Work

The CsCl project is a multi-year risk mitigation/deactivation project. The objective of this project is to assure safe, secure storage of Cs-137 in the 324/327 Facilities prior to permanent storage and/or disposal. In addition, this project will take the steps necessary to prepare the CsCl for removal from the 300 Area. This activity provides disposition of capsules, pellets, and powder that were generated by several DOE programs dealing with CsCl. Originally, approximately 1.5 million curies of Cs-137 existed in the 300 Area inventory. Additional work also includes the decontamination of the 324 Facility South Cell to allow manned entry to replace filters and perform preventative maintenance on the crane, the disposition of the powder and pellets, and the final decontamination and cleanout of the South Cell.

The powder and pellets (resulting form earlier failed capsules) and the Nordion Capsule (CsCl) will be packaged in special form containers and transferred in transfer/interim storage casks to a to-be-named location (current baseline is the MW storage pad at the Central Waste Complex in the 200 Area of the Hanford Site).

HANFORD SITE WORK BREAKDOWN STRUCTURE DICTIONARY
FACILITY STABILIZATION
WBS: 1.4

8/28/1997

1. Activity Title: 324 PNNL LEGACY WASTE	2. Date 7/31/1997	3. PBS Number RL-TP08	4. Dict Rev 0
5. Contract WBS No. 1.4.10.1.4	6. Corresponding FDS No. K4P	7. Baseline CR No.	
8. Organization Name 19000			9. B & R No.

10. Scope of Work

This activity contains three sub-projects required to remove and/or handle (treat and dispose) of legacy wastes currently existing in the 324/327 facilities and liquid wastes to be generated during deactivation.

These projects include completing verification and repackaging of non-compliant waste containers transferred from PNNL with the facilities, design and construction of a waste storage pad for the B-Cell Dispersible wastes and remaining 300 Area Cesium inventory, and refurbishment of the radioactive liquid waste filtration system.

The project for the PNNL legacy waste includes the transportation, verification (examination and assay) and repackaging of the remaining waste containers inherited in the transfer of facilities from the PNNL to the Project Hanford Management Contract (PHMC). PNNL has been cited by the Hanford Solid Waste organization for poor management practices due to the existence of prohibited articles in their LLW stream. The presence of these articles required these containers to be managed as suspect low level mixed waste (LLMW). These containers require 100% verification (examination) and a high percentage will require waste segregation and repackaging.

The project for the Special Case Waste Pad will design, construct, and permit a solid waste storage pad for the receipt and interim storage of the 324 SCW (i.e., B-Cell Dispersibles, CsCl powder and pellets, Nordion Capsule). This pad assumes similar design and construction requirements as was used for the Fiscal Year 1997 FRG Log Pad.

The 324 radioactive liquid waste filtration system previously used for the treatment of liquid waste from the vault sample cleanout activities will be refurbished. It will be used for decontamination fluid processing and will include minor piping reconfiguration to allow for collection, processing and loadout of these fluids generated during deactivation.

HANFORD SITE WORK BREAKDOWN STRUCTURE DICTIONARY
FACILITY STABILIZATION
WBS: 1.4
8/28/1997

1. Activity Title: 324 DEACTIVATION PROJECT	2. Date 7/31/1997	3. PBS Number RL-TP08	4. Dict Rev 0
5. Contract WBS No. 1.4.10.1.5	6. Corresponding FDS No. K4Z	7. Baseline CR No.	
8. Organization Name 19000			9. B & R No.

10. Scope of Work

The 324 deactivation project will remove significant hazards and risks associated with the 324 facility and will greatly reduce the costs of surveillance and maintenance. Activities will include the removal of all residue chemical hazards, decontamination or stabilization of radiological areas, isolation of equipment and utilities, and removal of combustible material and wastes.

Key technical objectives for deactivation will include establishing facility configuration such that active systems are not required for safety and environmental confinement. Deactivation will be performed in a way that will result in a redesignation of the 324 facility as a radiological facility in accordance with the criteria and guidelines provided in DOE-STD-1027, Hazard Categorization and Accident Analysis Techniques for Compliance with DOE Order 5480.23, Nuclear Safety Analysis Reports. Another objective will be closure activities associated with the radiochemical engineering cells (REC) and high level vault (HLV) to meet current Tri-Party Agreement (TPA) commitments.

Applied lessons learned from commercial and other deactivation projects (i.e., Plutonium-Uranium Extraction Facility (PUREX) and B Plant), involvement of regulators and stakeholders, and innovative and cost-effective methods used in a graded approach will be used to meet environmental, safety, and health requirements to reduce overall deactivation costs.

Upon completion of the deactivation project it is anticipated that 324 facility will be in a position for long term low-cost Surveillance and Maintenance.

HANFORD SITE WORK BREAKDOWN STRUCTURE DICTIONARY
FACILITY STABILIZATION
WBS: 1.4

8/28/1997

1. Activity Title: 327 MINIMUM SAFE PROJECT	2. Date 7/31/1997	3. PBS Number RL-TP08	4. Dict Rev 0
5. Contract WBS No. 1.4.10.1.6	6. Corresponding FDS No. K7A, K7M, K7S	7. Baseline CR No.	
8. Organization Name 19000			9. B & R No.

10. Scope of Work

Minimum safe activities protect the public, workers and environment from exposure posed by loss of containment and control over nuclear material and industrial hazards associated with these facilities. Minimum safe activities will be conducted over the life of the facility, decreasing in scope as risks are removed/reduced within the facilities. This is comprised of the facility surveillance and maintenance required to maintain facility systems and structures. This activity includes required preventative maintenance and calibrations; repair of failed and malfunctioning equipment; walkdown of safety systems, equipment, and facility grounds (operational surveillances); routine radiological surveys, source checks, and dosimetry; facility utilities and assessments; and waste management assessments. This also includes Management and Assessment activities including the project direction, management and controls, and environmental, quality and safety oversight for the minimum safe condition (sub-deactivation project specific oversight is included in the sub-project) . This also includes OSHA, Resource Conservation and Recovery Act (RCRA) and DOE mandated training. Facility orientation, facility specific building emergency, and response training is covered in this activity. This activity also provides safe, secure and compliant storage of nuclear materials until final disposition of the material is accomplished. Contains physical security, safeguards accounting and material control, record keeping, studies, evaluations and assessments.

HANFORD SITE WORK BREAKDOWN STRUCTURE DICTIONARY
FACILITY STABILIZATION
WBS: 1.4

8/28/1997

1. Activity Title: 327 LEGACY FUEL REMOVAL PROJECT	2. Date 7/31/1997	3. PBS Number RL-TP08	4. Dict Rev 0
5. Contract WBS No. 1.4.10.1.7	6. Corresponding FDS No. K7F	7. Baseline CR No.	
8. Organization Name 19000			9. B & R No.

10. Scope of Work

The legacy fuel removal project is a multi-year legacy waste cleanout project. The fuel examination mission at 327 Facility has resulted in the accumulation of a significant quantity of radioactive material/waste within the facility. This project includes consolidation and disposal of legacy fuel and materials currently located at the facility. The project will package fuel, fuel segments and pins, and related material; characterize the existing and resultant waste material; and prepare the containers for transport to the 200 area Central Waste Complex. The 327 Facility is continuing programmatic fuels examination work for Spent Nuclear Fuel and fuels examination for other entities as approved by DOE. Spent Nuclear Fuel Project will remove all N-Reactor fuel and associated equipment/waste.

This project will be conducted in two phases. Phase one includes removal, consolidation, packaging, and preparation of the legacy experimental fuel stored dry storage cells primarily in metallurgical mounts and prepared for shipping to the 200 Area Central Waste Complex. Phase two includes removal, packaging, and preparation of the RH-TRU waste buckets located in the facility for shipping to the 200 Area Central Waste Complex.

HANFORD SITE WORK BREAKDOWN STRUCTURE DICTIONARY
FACILITY STABILIZATION
WBS: 1.4

8/28/1997

1. Activity Title: 327 DEACTIVATION PROJECT	2. Date 7/31/1997	3. PBS Number RL-TP08	4. Dict Rev 0
5. Contract WBS No. 1.4.10.1.8	6. Corresponding FDS No. K7Z	7. Baseline CR No.	
8. Organization Name 19000			9. B & R No.

10. Scope of Work

The 327 deactivation project will remove all hazards and risks associated with the 327 facility that will greatly reduce the costs of surveillance and maintenance. Activities will include the removal of all residue chemical hazards, decontamination or stabilization of radiological areas, isolation of equipment and utilities, and combustible and waste removal.

Key technical objectives for deactivation will include establishing facility configuration such that active systems are not required for safety and environmental confinement. Deactivation will be performed in a way that will result in a redesignation of the 327 facility as a radiological facility in accordance with the criteria and guidelines provided in DOE-STD-1027, Hazard Categorization and Accident Analysis Techniques for Compliance with DOE Order 5480.23, Nuclear Safety Analysis Reports.

Applied lessons learned from commercial and other deactivation projects (i.e., Plutonium-Uranium Extraction Facility (PUREX) and B Plant), involvement of regulators and stakeholders, and innovative and cost-effective methods used in a graded approach will be used to meet environmental, safety, and health requirements to reduce overall deactivation costs.

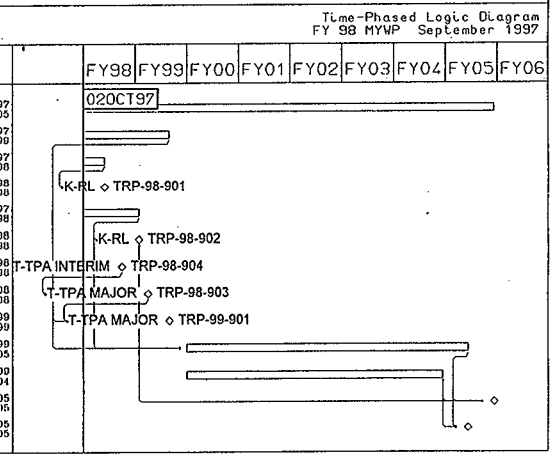
Upon completion of the deactivation project it is anticipated that 324 facility will be in a position for long term low-cost Surveillance and Maintenance.

MILESTONE CONTROL #	TPA-MS NUMBER	TPA TYPE	MS LEVEL	MS TITLE	TYPE	DATES PLANNED BASELINE	DATES APPROVED BASELINE	DATES REVISED BASELINE	PROJ CIN	PBS #
TRP-98-901			RL	SUBMIT FINAL PMP/END-POINTS		2/28/98				RL-TP08
TRP-98-902			RL	COMPLETE REPACKAGING OF CESIUM POWDER AND PELLETS IN 324		9/28/98				RL-TP08
TRP-98-903	M-92-04		RL	SHIPMENT OF ALL CS/SR/TO APPROVED STORAGE LOCATION		12/30/98				RL-TP08
TRP-99-901	M-89-02	I	FO	REMOVE B-CELL EQUIPMENT AND 100% DISPERSIBLES	EA	5/30/99				RL-TP08
TRP-98-904	M-89-05		RL	324 SPECIAL CASE WASTE ASSESSMENT		6/30/98				RL-TP08

FACILITY STABILIZATION PROJECT
RL-TP08 324/327 Facilities Project
Project Master Baseline Schedule

Time-Phased Logic Diagram
FY 98 MYWP September 1997

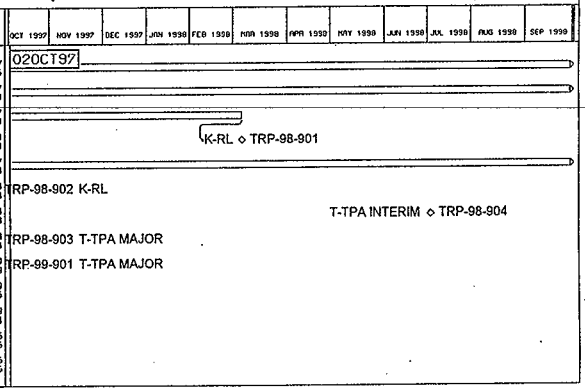
Activity	Description	Start	Finish
BC	324/327 FACILITIES PROJECT	10/01/97	09/09/05
BC603	B-Cell Rack and Equipment Removal	10/01/97	06/28/99
BC621	Prepare Final PMP/End-Points	10/01/97	02/28/98
BC624	Submit Final PMP/End-Points	02/28/98	02/28/98
BC633	NORDIAN CAPSULE/POWDER/PELLETS PROCESSING	10/01/97	10/28/98
BC636	Complete Repackaging Cs Powder/Pellets in 324	10/28/98	10/28/98
BC645	M-89-05, Comp 324 Facility SCW Assmnt	09/30/98	09/30/98
BC647	M-92-04, Compl Xafer 300A Cs/Sr to Appr. Loc.	12/30/98	12/30/98
BC649	M-89-05, Remove B-Cell Equipt/100% Dispersibles	05/30/99	05/30/99
BC672	324 FACILITY DEACTIVATION	10/01/99	09/09/05
BC675	327 FACILITY DEACTIVATION	10/01/99	09/13/04
BC681	SSS-F11, T/O 324/327 FACILITIES TO EM-40	09/09/05	09/09/05
BC682	HSP.ET.4.K 324/327 Fac Deact Cond/Disp Nuc Mat'l	03/10/05	03/10/05



FACILITY STABILIZATION PROJECT
RL-TP08 324/327 Facilities Project
Project Master Baseline Schedule

Time-Phased Logic Diagram
FY 98 MYWP September 1997

Activity	Description	Start
BC	324/327 FACILITIES PROJECT	10/01/97 09/09/05
BC603	B-Cell Rack and Equipment Removal	10/01/97 05/20/99
BC621	Prepare Final PMP/End-Points	10/01/97 02/28/98
BC624	Submit Final PMP/End-Points	02/28/98 02/28/98
BC633	NORDIAN CAPSULE/POWDER/PELLETS PROCESSING	10/01/97 10/20/98
BC636	Complete Repackaging Cs Powder/Pellets in 324	10/20/98 10/20/98
BC645	N-89-05, Comp 324 Facility SCM Assmnt	06/30/98 09/30/98
BC647	N-92-04, Compl Xafer 300A Cs/Sr to Appr. Loc.	12/30/98 12/30/98
BC649	N-89-05, Remove B-Cell Equipt/100% Dispersibles	05/30/99 05/30/99
BC672	324 FACILITY DEACTIVATION	10/01/99 03/09/05
BC675	327 FACILITY DEACTIVATION	10/01/99 09/13/04
BC681	SSS-Fil, T/O 324/327 FACILITIES TO EM-40	09/09/05 09/09/05
BC682	HSP.ET.4.K 324/327 Fac Deact Cond/Disp Nuc Mat'l	03/10/05 03/10/05



MYWP/SSPP PLANNING MILESTONE LIST
REPORTING PERIOD 10/01/97 TO 9/30/200

MILESTONE CONTROL #	TPA-MS NUMBER	TPA TYPE	MS LEVEL	MS TITLE	TYPE	DATES PLANNED BASELINE	DATES APPROVED BASELINE	DATES REVISED BASELINE	PROJ CIN	PBS #
TRP-98-901			RL	SUBMIT FINAL PMP/END-POINTS		2/28/98				RL-TP08
TRP-98-902			RL	COMPLETE REPACKAGING OF CESIUM POWDER AND PELLETS IN 324		9/28/98				RL-TP08
TRP-98-903	M-92-04		RL	SHIPMENT OF ALL CS/SR/TO APPROVED STORAGE LOCATION		12/30/98				RL-TP08
TRP-99-901	M-89-05		RL	REMOVE B-CELL EQUIPMENT AND 100% DISPERSIBLES		5/30/99				RL-TP08
TRP-98-904	M-89-05		RL	324 SPECIAL CASE WASTE ASSESSMENT		6/30/98				RL-TP08

PHMC

MILESTONE DESCRIPTION SHEET

Title: SUBMIT FINAL PMP/END-POINTS				**Date:** 7/31/97
Assigned To: FSP/324/327 Fac. Trans.				**CIN:**
Program WBS Designator: 1.4.10.1				**Due Date:** 2/28/98
PBS No: RL-TP08				
MC #: TRP-98-901		**TPA No:**		**Rev:** 0

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): N COMMIT #: RECOMM #:	Report X Letter Drawing(s) Other (Specify)	DOE-HQ DOE-RL X Other (Specify) Flour Daniel Hanford Company

Milestone Description:
This scope includes finalizing the Project Management Plan (PMP). The final PMP will describe the project objectives, work breakdown structure, responsible organizations, safety and health strategy, environmental compliance strategy, closure plan, and stakeholder involvement. In parallel a facility integrated and resource loaded schedule will be included based on deactivation work and draft facility end point planning. Comments from DOE and FDH will be reviewed and incorporated as appropriate.

Description of what constitutes completion of this milestone:
Complete the PMP including the integrated schedule and activity based estimates for 324 and 327 facilities for the duration of the deactivation project by February 28, 1998. FDH and DOE approval of the PMP will constitute the approved project baseline and will be used as the bases for the MYWP.

PHMC

MILESTONE DESCRIPTION SHEET

Title: COMPLETE REPACKAGING OF CESIUM POWDER AND PELLETS IN 324		**Date:** 7/31/97
Assigned To: FSP/324/327 FAC TRANS		**CIN:**
Program WBS Designator: 1.4.10.1		**Due Date:** 9/28/98
PBS No: RL-TP08		
MC #: TRP-98-902	**TPA No:**	**Rev:** 0

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): N COMMIT #: RECOMM #:	Report X Letter Drawing(s) Other (Specify)	DOE-HQ DOE-RL X Other (Specify) Flour Daniel Hanford Company

Milestone Description:
CsCl powder, pellets, and capsules are currently stored in the 324 shielded material facilities. The powder and pellets (resulting from earlier failed capsules) and the Nordian Capsule (CsCl) will be packaged in special form containers and transferred in transfer/interim storage casks to a to-be-named location (current baseline is the MW storage pad at the Central Waste Complex in the 200 Area of the Hanford Site).

Description of what constitutes completion of this milestone:
Complete design and procurement of the packaging system and be prepared to start packaging of the powder and pellets in special containers for shipment to storage by September 29, 1998.

PHMC
MILESTONE DESCRIPTION SHEET

Title: SHIPMENT OF ALL CS/SR/TO APPROVED STORAGE LOCATION		**Date:** 7/31/97
Assigned To: FSP/324/327 FAC TRANS		**CIN:**
Program WBS Designator: 1.4.10.1		**Due Date:** 12/30/98
PBS No: RL-TP08		
MC #: TRP-98-903	**TPA No:** M-92-04	**Rev:** 0

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): COMMIT #: RECOMM #:	Report X Letter Drawing(s) Other (Specify)	DOE-HQ X DOE-RL Other (Specify)

Milestone Description:
CsCl powder, pellets, and capsules are currently stored in the 324 shielded material facilities. The powder and pellets (resulting from earlier failed capsules) and the Nordian Capsule (CsCl) will be packaged in special form containers and transferred in transfer/interim storage casks to a to-be-named location (current baseline is the MW storage pad at the Central Waste Complex in the 200 Area of the Hanford Site). This milestone is to complete the effort to remove Cs/Sr material from the 324/327 Facilities to an approved storage location. This will consist of packaging remaining material into approved cask, decontamination and release from the SMF, and shipment to the storage location.

Description of what constitutes completion of this milestone:
Complete shipments for the removal of Cs/Sr material from the 324 and 327 facility by December 30, 1998.

PHMC

MILESTONE DESCRIPTION SHEET

Title: REMOVE B-CELL EQUIPMENT AND 100% DISPERSIBLES		**Date:** 7/31/97
Assigned To: FSP/324/327 FAC TRANS		**CIN:**
Program WBS Designator: 1.4.10.1		**Due Date:** 5/30/99
PBS No: RL-TP08		
MC #: TRP-99-901	**TPA No:** M-89-02	**Rev:** 0

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ DOE-RL X DOE-FO CONTRACTOR	X EA PEG OTHER	DNFSB (Y/N): COMMIT #: RECOMM #:	Report X Letter Drawing(s) Other (Specify)	DOE-HQ X DOE-RL Other (Specify)

Milestone Description:
The B-Cell Cleanout sub-project (BCCP) is a multi-year effort to eliminate legacy equipment and potential dispersible nuclear material from the B-Cell in the 324 Facility. B-Cell was designed to handle high activity radioactive wastes and materials in a research setting, with remote handling capabilities, and with appropriate shielding under unique space considerations. Due to a process jumper failure in the mid eighties significant quantities of potential dispersible materials were spilled on the B-Cell liner. This material has accumulated under the large process racks within the cell. This milestone removes, size reduces, and disposes of the process racks and equipment (racks 1-A, 2-A, and 1-B) from B-Cell and collects the Dispersibles underneath the racks.
Tri-Party Agreement milestone M-89-02 was established for the removal of the B-Cell dispersible waste and the associated process equipment. This

Description of what constitutes completion of this milestone:
Complete the removal of Equipment and 100% dispersible material located in B-Cell by 5/30/99.

PHMC

MILESTONE DESCRIPTION SHEET

Continuation Page

Program WBS Designator: 1.4.10.1 **MC #:** TRP-99-901

Milestone description: (con't)
milestone will be to complete the removal of equipment located in B-Cell as well as packaging, and disposal of the material located within the cell.

PHMC

MILESTONE DESCRIPTION SHEET

Title: 324 SPECIAL CASE WASTE ASSESSMENT		**Date:** 7/31/97
Assigned To: FSP/327/327 FAC TRANS		**CIN:**
Program WBS Designator: 1.4.10.1		**Due Date:** 6/30/98
PBS No: RL-TP08		
MC #: TRP-98-904	**TPA No:** M-89-05	**Rev:** 0

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): COMMIT #: RECOMM #:	Report X Letter Drawing(s) Other (Specify)	DOE-HQ X DOE-RL Other (Specify)

Milestone Description:
Currently the 324 REC facility contains several residual or legacy waste forms that have been designated as Special Case Wastes (SCW) currently due to their orphan status. This activity will provide an assessment which will identify special packaging requirements or treatment and a specific disposal path which will enable removal of all SCW from the 324 REC facility.
A Tri-Party Agreement milestone was established to determine the appropriate treatment and/or disposal pathway for these wastes.

Description of what constitutes completion of this milestone:
Complete 324 REC SCW assessment by June 30, 1998.

FACILITY STABILIZATION
LIFE CYCLE COST BASELINE (BCWS) BY YEAR BY FUND TYPE
BY PROJECT BASELINE SUMMARY (PBS)
FY 1998

($000s)

PROJECT WBS:	1.4.10.1
PBS NO:	RL-TP08
PBS TITLE:	324/327 Facility Transition

FUND TYPE	FY1997	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	SUBTOT FY1997-FY2006
OPERATING EXPENSE	23,661	33,481	31,042	38,661	30,329	23,021	14,132	10,188	752		205,267
CENRTC											-
GENERAL PLANT PROJECT											-
LINE ITEM *(List Each One)*											
											-
											-
											-
											-
											-
Subtotal Line Items	-	-	-	-	-	-	-	-	-	-	-
TOTAL BCWS/PMB[1]	23,661	33,481	31,042	38,661	30,329	23,021	14,132	10,188	752		205,267
MGMT RESERVE[2]											-
LINE ITEM CONTINGENCY[2]											-
OFFSITE TRANSFERS[3]											-
Subtotal	-	-	-	-	-	-	-	-	-	-	-
TOTAL	23,661	33,481	31,042	38,661	30,329	23,021	14,132	10,188	752	-	205,267

[1]Budgeted Cost of Work Scheduled (BCWS) Equals Performance Measurement Baseline (PMB); Expense Carryover NOT Included.
[2]Management Reserve and Line Item Contingency Held by RL.
[3]Work Performed at Sites Other Than Hanford.

EXHIBIT 1

FACILITY STABILIZATION
LIFE CYCLE COST BASELINE (BCWS) BY YEAR BY FUND TYPE
BY PROJECT BASELINE SUMMARY (PBS)
FY 1998

($000s)

PROJECT WBS:	1.4.10.1									
PBS NO:	RL-TP08									
PBS TITLE:	324/327 Facility Transition									TOTAL
FUND TYPE	FY2007-FY2010	FY2011-FY2015	FY2016-FY2020	FY2021-FY2025	FY2026-FY2030	FY2031-FY2035	FY2036 FY2040	FY2041-FY2045	FY2046 FY2050	FY1997-FY2050
OPERATING EXPENSE										205,267
CENRTC										-
GENERAL PLANT PROJECT										-
LINE ITEM *(List Each One)*										
										-
										-
										-
										-
										-
Subtotal Line Items	-	-	-	-	-	-	-	-	-	-
TOTAL BCWS/PMB										205,267
MGMT RESERVE[2]										-
LINE ITEM CONTINGENCY[2]										-
OFFSITE TRANSFERS[3]										-
Subtotal	-	-	-	-	-	-	-	-	-	-
TOTAL										205,267

[1]Budgeted Cost of Work Scheduled (BCWS) Equals Performance Measurement Baseline (PMB); Expense Carryover NOT Included.
[2]Management Reserve and Line Item Contingency Held by RL.
[3]Work Performed at Sites Other Than Hanford. .

EXHIBIT 4

FACILITY STABILIZATION
LIFE CYCLE BUDGET AUTHORITY (B/A) BY YEAR BY FUND TYPE
BY PROJECT BASELINE SUMMARY (PBS)
FY 1998

($000s)

PROJECT WBS:	1.4.10.1
PBS NO:	RL-TP08
PBS TITLE:	324/327 Facility Transition

FUND TYPE	FY1997	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	SUBTOT FY1997-FY2006
OPERATING EXPENSE	23,661	33,461	31,042	38,661	30,329	23,021	14,132	10,188	752		205,267
CENRTC											-
GENERAL PLANT PROJECT											-
LINE ITEM *(List Each One)*											
											-
											-
											-
											-
											-
Subtotal Line Items	-		-	-	-	-	-	-	-	-	-
TOTAL NEW B/A	23,661	33,461	31,042	38,661	30,329	23,021	14,132	10,188	752		205,267

EXHIBIT 4

FACILITY STABILIZATION
LIFE CYCLE BUDGET AUTHORITY (B/A) BY YEAR BY FUND TYPE
BY PROJECT BASELINE SUMMARY (PBS)
FY 1998

($000s)

PROJECT WBS:	1.4.10.1
PBS NO:	RL-TP08
PBS TITLE:	324/327 Facility Transition

FUND TYPE	FY2007-FY2010	FY2011-FY2015	FY2016-FY2020	FY2021-FY2025	FY2026-FY2030	FY2031-FY2035	FY2036 FY2040	FY2041-FY2045	FY2046 FY2050	TOTAL FY1997-FY2050
OPERATING EXPENSE										205,267
CENRTC										-
GENERAL PLANT PROJECT										-
LINE ITEM *(List Each One)*										
										-
										-
										-
										-
										-
Subtotal Line Items	-	-	-	-	-	-	-	-	-	-
TOTAL NEW B/A										205,267

EXHIBIT 2a

FACILITY STABILIZATION
FY 1998 COST BASELINE (BCWS) BY MONTH
BY PROJECT BASELINE SUMMARY (PBS)
BY ACTIVITY DATA SHEET (ADS)
EXECUTION YEAR

($000s)

PROJECT WBS: 1.4.10.1
PBS NO: RL-TP08
PBS TITLE: 324/327 Facility Transition

ADS TITLE	ADS NO	FUND TYPE	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
324/327 FacilityTransition	6619-0	OP EXP	2,397	2,893	2,242	2,573	2,389	3,314	2,819	3,105	2,813	2,534	3,429	2,973	33,481
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	2,397	2,893	2,242	2,573	2,389	3,314	2,819	3,105	2,813	2,534	3,429	2,973	33,481
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-

[1]Budgeted Cost of Work Scheduled (BCWS) Equals Performance Measurement Baseline (PMB); Expense Carryover Is **NOT** Included.

EXHIBIT 2a

FACILITY STABILIZATION
FY 1998 COST BASELINE (BCWS) BY MONTH
BY PROJECT BASELINE SUMMARY (PBS)
BY ACTIVITY DATA SHEET (ADS)
EXECUTION YEAR

($000s)

PROJECT WBS:	1.4.10.1
PBS NO:	RL-TP08
PBS TITLE:	324/327 Facility Transition

ADS TITLE	ADS NO	FUND TYPE	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL BCWS/PMB[1]			2,397	2,593	2,242	2,573	2,389	3,314	2,819	3,105	2,813	2,534	3,429	2,973	33,481

[1]Budgeted Cost of Work Scheduled (BCWS) Equals Performance Measurement Baseline (PMB); Expense Carryover Is NOT Included.

324/327 FACILITY TRANSITION

AVERAGE ANNUAL FULL TIME EQUIVALENTS
(includes Major Subcontractors but not Enterprise Companies)

PHBS 1.4.5.3 **Submittal Date: 9/10/97**

PBS Number	PBS Title	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007
RL-TP08	324/327 Facility Transition	193	178	260	207	146	93	63	2	0	0
Total PBS FTEs		193	178	260	207	146	93	63	2	0	0

B.9 K Basin Deactivation (RL-TP09)

B.9.1.0 K Basin Deactivation Technical Baseline (RL-TP09)

B.9.1.1 K Basin Deactivation Organization Mission (RL-TP09)

The purpose of this project is to deactivate the K Basins and associated ancillary facilities beginning in FY 2002, after the fuel and sludge have been removed. Deactivation of these facilities will reduce risk to the public, environment, and on-site workers by removing and/or stabilizing radiological and hazardous contamination, removing the basin water, and placing these high risk facilities into a "caretaker" status until they can be demolished.

There are 18 facilities that will be deactivated by this project. The eleven facilities associated with Fish rearing will be deactivated and/or modified to allow continued operation as economically as possible. There are 14 mobile office trailers which will be dispositioned by this project unless EM-40 wants them to support long-term surveillance and maintenance and future decontamination and decommissioning.

The KE & KW Basins were designed and constructed in the early 1950's for wet storage of Spent Nuclear Fuel (SNF). Each basin contains over 1 million gallons of water. The KE Basin was never coated with any type of sealant. SNF storage in open containers has resulted in the decomposition of SNF and a release of radionuclides into the basin water and concrete. KW Basin had a sealant applied in 1981. Initial characterization activities indicate the spent fuel in the sealed MKII fuel cannisters in KW Basin , has decomposed just like the fuel in the KE Basin. Current Spent Nuclear Fuel Project (SNFP) plans to remove the KW Basin fuel would result in release of radionuclides into the water with the end result that it would be as contaminated as that in KE Basin. Both basins are in close proximity to the Columbia river which is open to the public. Radioactive constituents in the KE Basin water exceeding derived concentration guidelines (DCG's) include: strontium, cesium, uranium, plutonium, americium and tritium. The basins are beyond their design life and episodes of substantial leakage which did not arise from identifiable causes have occurred. Radionuclides could be released over time via air, ground and water pathways if the basin facilities are not maintained and deactivated, potentially overexposing members of the public, on-site workers and the environment. Lack of adequate surveillance and maintenance could result in the loss of basin water and overexposure of the on-site workers (up to 50 operations, surveillance and maintenance, engineering, and radiological personnel) to high radiation and airborne radionuclide releases caused by the existing "bathtub" ring of radionuclides that has built up on the KE Basin walls. The half life of many of these materials is beyond 30 years, and any further contamination spread to the environment or within the basin facility would further complicate and increase the scope of D&D and future operable unit remediation activities.

Planning Assumptions:

Because the total scope to deactivate these facilities to a "caretaker" status has not yet been determined, deactivation end point criteria and project management plans will be developed to establish the project scope, cost, and schedules.

Nuclear materials and SNF inventories in all facilities are assumed to be removed before their transfer into this project.

A reduction in radiation levels through the use of either additional shielding or removal of radionuclides will be necessary to achieve acceptable background radiation levels at the KE Basin. Both basins will require some form of radiological contaminant fixative application on the basin walls before removal of basin water.

Existing NEPA documentation is sufficient to allow deactivation of the CVDF, both basins, and associated ancillary facilities.

Both KE and KW Basin water can be cleaned up by the water purification system at each basin to allow the water to be disposed of at the 200 East Area ETF. The ETF will be able to obtain a permit modification to allow it to accept the basin ion-exchange column treated basin water for disposition.

No additional safety documentation is necessary to deactivate the basins. Only a revision to the existing safety basis will be necessary to allow deactivation to take place under a reduced hazard classification.

Hanford Site assigned radiological dose allocations will not result in impacts to basin deactivation schedules.

The CVDF will not be grossly contaminated when it is turned over for deactivation (i.e., contamination will only reside within process piping, tanks, and ductwork).

B.9.1.2 K Basin Deactivation End Point Targets from Hanford Strategic Plan

- Spent fuel removed and K-Basins cleaned sufficient to transition to D&D.
- Drain, decontaminate, and stabilize K-Basins Facility.

B.9.1.3 K Basin Deactivation Major Facilities

B.9.1.3.1 100 K Area Facilities

B.9.1.3.1.1 100 K Area Facilities Description

The scope of the 100K Area facilities includes the K Basins, Cold Vacuum Drying (CVD) facility, the multi-canister overpacks, cask/transportation system, and ancillary support facilities.

B.9.1.3.1.2 100 K Area Facilities Facility Technical Logic:

The Department of Energy (DOE), in partnership with its contractors, shall plan, acquire, operate, maintain, and dispose of physical assets as valuable national resources. Stewardship of these physical assets shall be accomplished in a cost-effective manner to meet the DOE mission. This shall incorporate industry standards, a graded approach, and performance objectives.

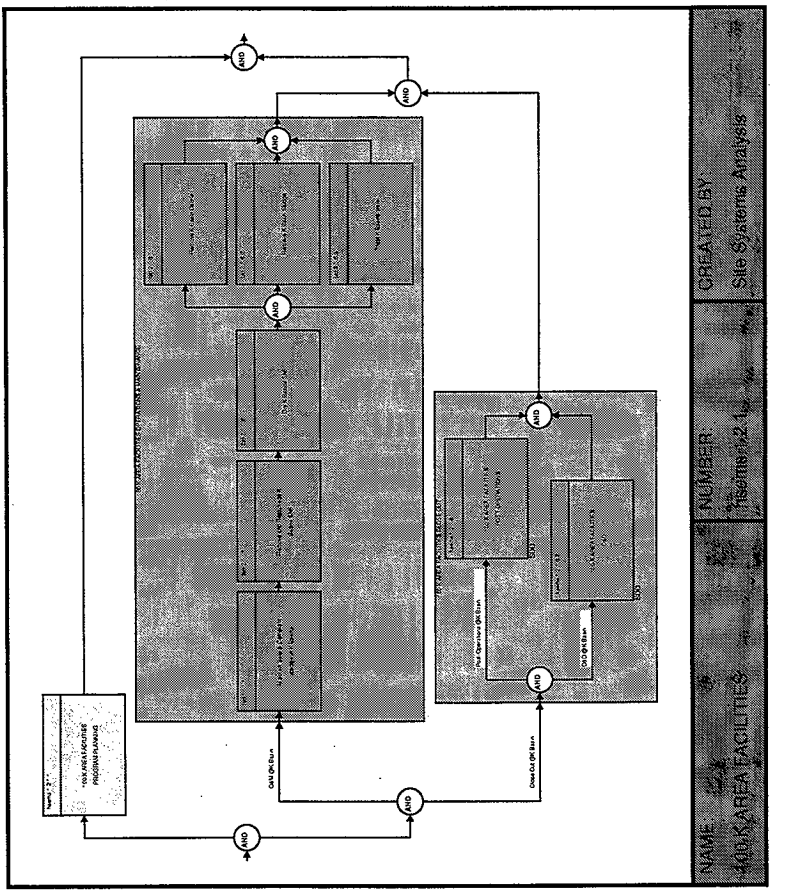


Figure B-10 100 K AREA FACILITIES

B.9.1.3.1.3 100 K Area Facilities Requirements and Life Cycle Function Descriptions

Requirements:

- K Basins shall be cleaned sufficiently to transition to the D&D phase by Dec 31, 2005
- Reactors on the River facilities shall be transitioned to a low cost, stable, deactivated condition.
- K Basins shall be drained
- K Basins shall be stabilized
- Reactors on the River gaseous effluent releases shall be monitored
- K Basins criticality control shall be maintained
- K Basins corrosion control system shall be operated
- K Basins facility shall be monitored for deterioration
- 1706 KE/KEL/KER Facility shall be surveilled and maintained within the approved safety envelope
- Reactors on the River asbestos abatement shall be performed as necessary
- Complete actions specified by agreed interim milestones related to remediation of the K-East basins. Due Date: TBD
- Contaminated K-East basin water will be removed for treatment.. Due Date TBD.
- Accept K-Basins from SNFP after fuel, sludge and debris is removed.
- Characterize facility condition.
- Dispose of basin water.
- Turn over remaining facilities, systems and areas to the Environmental Restoration program for decommissioning.
- Fabricate sludge removal system. Complete sludge characterization '97.
- Procure debris decontamination services.

Life Cycle Function Descriptions:

B.9.1.3.1.3.1 100 K AREA FACILITIES PROGRAM PLANNING WORK SCOPE SUMMARY

Functions that include planning and developing the overall program; establishing broad priorities; providing program technical direction; preparing and defending the program budget; controlling milestones; integrating all components of the program; providing public and private sector policy liaison; expediting interface activities and follow-up actions; and retaining overall accountability for program success.

B.9.1.3.1.3.2 100 K AREA FACILITIES POST OPERATIONS WORK SCOPE SUMMARY

Day-to-day work, including pre-stabilization surveillance and maintenance, stabilization, post-stabilization surveillance and maintenance, deactivation, and post-deactivation surveillance and maintenance, that is required to allow safe decontamination and decommissioning.

100 K AREA FACILITIES POST OPERATIONS SPECIFIC FUNCTIONS

B.9.1.3.1.3.3 Maintain Safe & Compliant K-Basin Facility

Maintain the K-Basin facility structures, operating systems and equipment, and monitoring systems within the approved safety and compliance requirements until the facilities are made available for clean-up.

B.9.1.3.1.3.4 Transition K-Basins

Initiate the facility transition phase of decontamination and deactivation for K-Basins.

B.9.1.3.1.4 100 K Area Facilities Boundary Diagram

Table B.9-1 100 K Area Facilities Boundary Diagram

External Interfaces -None- Hanford Site Environmental System Interfaces -None-		External Interfaces -None- Hanford Site Environmental System Interfaces hsems.2.2.16 Liquid Effluent Retention Facility hsems.2.3.5 Central Waste Complex

B.9.1.3.1.5 100 K Area Facilities Interface Description and Forecast

EXTERNAL INPUTS

-None-

INTERNAL INPUTS

-None-

EXTERNAL OUTPUTS

-None-

INTERNAL OUTPUTS

Table B.9-2 Internal Outputs for 100 K Area Facilities

Stream	Category	Period	Baseline	Units
hsems.2.2.16 Liquid Effluent Retention Facility				
K Basin Deactivation Wastewater *Waste water generated during deactivation of the K Basins.*	Waste Water	2003 - 2005	9080	cubic meters
hsems.2.3.5 Central Waste Complex				
K Basin Deactivation, CH-LLW-I *CH LLW I transferred during deactivation of the K-Basins as forecasted in the SWIFT report.*	CH LLW I	2002 - 2005	833.0	cubic meters
K Basin Deactivation, CH LLMW I *CH LLMW I transferred during deactivation of the K-Basins as forecasted in the SWIFT report.*	CH LLMW I	2004 - 2005	29.0	cubic meters
K Basin Deactivation, CH TRU *CH TRU transferred during deactivation of the K Basins as forecasted in the SWIFT report.*	CH TRU	2004 - 2005	14.2	cubic meters
K OPER, CH-LLMW-I *CH LLMW I Transferred by 100 K Area Facilities.*	CH LLMW I	1997 - 2000	5.14	cubic meters
K Basin Deactivation, RH TRU *RH TRU transferred during deactivation of the K Basins as forecasted in the SWIFT report.*	RH TRU	2004 - 2005	3.4	cubic meters
K PROJECT, CH-TRU *CH TRU Transferred by 100 K Area Facilities.*	CH TRU	1997 - 1999	16.2	cubic meters

B.9.1.4 Drivers for K Basin Deactivation

Table B.9-3 Source Documents for K Basin Deactivation

Name	Title
DOE/RL-89-10	Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement), Rev.4
DOE/RL-96-14	Updated Draft Mission Direction Document, June 1996
DOE/RL-96-92	Hanford Strategic Plan

B.9.1.5 K Basin Deactivation Risk Management

The KE & KW Basins were designed and constructed in the early 1950's for wet storage of Spent Nuclear Fuel (SNF). Each basin contains over 1 million gallons of water. The KE Basin was never coated with any type of sealant. SNF storage in open containers has resulted in the decomposition of SNF and a release of radionuclides into the basin water and concrete. KW Basin had a sealant applied in 1981. Initial characterization activities indicate the spent fuel in the sealed MKII fuel cannisters in KW Basin, has decomposed just like the fuel in the KE Basin. Current Spent Nuclear Fuel Project (SNFP) plans to remove the KW Basin fuel would result in release of radionuclides into the water with the end result that it would be as contaminated as that in KE Basin. Both basins are in close proximity to the Columbia river which is open to the public. Radioactive constituents in the KE Basin water exceeding derived concentration guidelines (DCG's) include: strontium, cesium, uranium, plutonium, americium and tritium. The basins are beyond their design life and episodes of substantial leakage which did not arise from identifiable causes have occurred. Radionuclides could be released over time via air, ground and water pathways if the basin facilities are not maintained and deactivated, potentially overexposing members of the public, on-site workers and the environment.

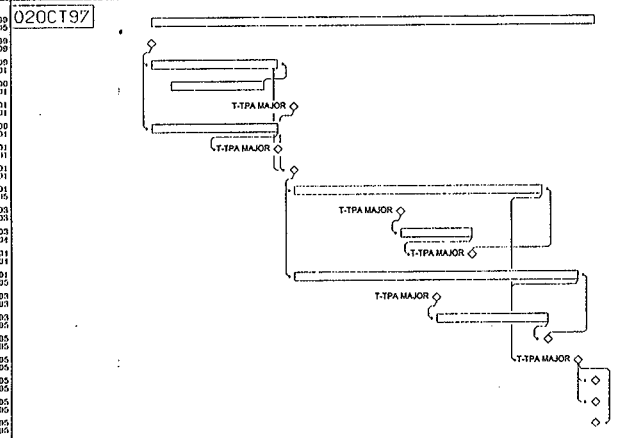
Lack of adequate S&M could result in the loss of basin water and overexposure of the on-site workers (up to 50 operations, surveillance and maintenance, engineering, and radiological personnel) to high radiation and airborne radionuclide releases caused by the existing "bathtub" ring of radionuclides that has built up on the KE Basin walls. The half life of many of these materials is beyond 30 years, and any further contamination spread to the environment or within the basin facility would further complicate and increase the scope of decontamination and decommissioning (D&D) and future operable unit remediation activities as well as the risk associated with performance of these actions.

Work activities likely to place the workers at risk are: removal of fuel processing and retrieval equipment, cannister cleaning equipment, storage racks and associated seismic bracing; removal of residual radionuclides in the KE Basin walls and floor; removal of the water in both basins; disposition of ion-exchange media; and deactivation of water purification systems.

FACILITY STABILIZATION PROJECT
RL-1P09 K-Basins Deactivation Project
Project Master Baseline Schedule

Time-Phased Logic Diagram
FY 98 MYWP September 1997

Activity	Description	Start / Finish
KB	K-BASIN DEACTIVATION PROJECT	10/01/99 / 12/31/05
KB703	INITIATE K-BASIN DEACTIVATION PLANNING	10/01/99 / 10/01/99
KB706	Prepare Deactivation Plan	10/01/99 / 07/09/01
KB709	Define Endpoint Turnover Criteria	01/09/00 / 04/30/01
KB712	SSS-S1, SNF T/O 100K Facilities to BNHC for Dase	10/01/01 / 10/01/01
KB715	Prepare Project Management Plan	10/01/99 / 07/09/01
KB718	Submit DOE Apprvd PMP/S&M Plan to Ecology	07/10/01 / 07/10/01
KB724	Start Deactivation of 100 K area Basin Facilitie	10/01/01 / 10/01/01
KB727	K-Basin West Deactivation	10/01/01 / 05/31/05
KB730	Initiate K-Basin West Water removal	04/01/03 / 04/01/03
KB733	K-Basin West Water removal	04/01/03 / 03/31/04
KB736	Complete K-Basin West Water removal	04/01/01 / 04/01/01
KB739	K-Basin East Deactivation	10/01/01 / 09/30/05
KB742	Initiate K-Basin East Water removal	10/01/03 / 10/01/03
KB745	K-Basin East Water removal	10/01/03 / 01/29/05
KB748	Complete K-Basin East Water removal	04/30/05 / 04/30/05
KB751	K-Basin Deactivation Complete T/O FM-40	10/01/05 / 10/01/05
KB752	HSP,ET,4.A. Drain, Decon/Stabilize K-Basins Fac.	12/30/05 / 12/30/05
KB754	SSS-F6, T/O K-BASIN FACILITIES TO FM-40	12/31/05 / 12/31/05
KB757	Compl of Requested Analytical Support from WMH	12/30/05 / 12/30/05



THIS PAGE INTENTIONALLY
LEFT BLANK

FACILITY STABILIZATION
LIFE CYCLE COST BASELINE (BCWS) BY YEAR BY FUND TYPE
BY PROJECT BASELINE SUMMARY (PBS)
FY 1998

($000s)

PROJECT WBS:	1.4.7.1
PBS NO:	RL-TP09
PBS TITLE:	K Basins Deactivation

FUND TYPE	FY1997	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	SUBTOT FY1997-FY2006
OPERATING EXPENSE				1,196	3,284	25,189	35,341	32,895	24,589	1,158	123,652
CENRTC											-
GENERAL PLANT PROJECT											-
LINE ITEM *(List Each One)*											
											-
											-
											-
											-
											-
Subtotal Line Items	-		-	-	-	-	-	-	-	-	-
TOTAL BCWS/PMB[1]				1,196	3,284	25,189	35,341	32,895	24,589	1,158	123,652
MGMT RESERVE[2]											-
LINE ITEM CONTINGENCY[2]											-
OFFSITE TRANSFERS[3]											-
Subtotal	-		-	-	-	-	-	-	-	-	-
TOTAL				1,196	3,284	25,189	35,341	32,895	24,589	1,158	123,652

[1]Budgeted Cost of Work Scheduled (BCWS) Equals Performance Measurement Baseline (PMB); Expense Carryover **NOT** Included.

[2]Management Reserve and Line Item Contingency Held by RL.

[3]Work Performed at Sites Other Than Hanford.

FACILITY STABILIZATION
LIFE CYCLE COST BASELINE (BCWS) BY YEAR BY FUND TYPE
BY PROJECT BASELINE SUMMARY (PBS)
FY 1998

($000s)

PROJECT WBS:	1.4.7.1
PBS NO:	RL-TP09
PBS TITLE:	K Basins Deactivation

FUND TYPE	FY2007-FY2010	FY2011-FY2015	FY2016-FY2020	FY2021-FY2025	FY2026-FY2030	FY2031-FY2035	FY2036 FY2040	FY2041-FY2045	FY2046 FY2050	TOTAL FY1997-FY2050
OPERATING EXPENSE										123,652
CENRTC										-
GENERAL PLANT PROJECT										-
LINE ITEM *(List Each One)*										
										-
										-
										-
										-
										-
Subtotal Line Items	-	-	-	-	-	-	-	-	-	-
TOTAL BCWS/PMB[1]										123,652
MGMT RESERVE[2]										-
LINE ITEM CONTINGENCY[2]										-
OFFSITE TRANSFERS[3]										-
Subtotal	-	-	-	-	-	-	-	-	-	-
TOTAL										123,652

[1]Budgeted Cost of Work Scheduled (BCWS) Equals Performance Measurement Baseline (PMB); Expense Carryover **NOT** Included.
[2]Management Reserve and Line Item Contingency Held by RL.
[3]Work Performed at Sites Other Than Hanford.

EXHIBIT 4

FACILITY STABILIZATION
LIFE CYCLE BUDGET AUTHORITY (B/A) BY YEAR BY FUND TYPE
BY PROJECT BASELINE SUMMARY (PBS)
FY 1998

($000s)

PROJECT WBS:	1.4.7.1
PBS NO:	RL-TP09
PBS TITLE:	K Basins Deactivation

FUND TYPE	FY1997	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	SUBTOT FY1997-FY2006
OPERATING EXPENSE				1,196	3,284	25,189	35,341	32,895	24,589	1,158	123,652
											-
CENRTC											
											-
GENERAL PLANT PROJECT											
LINE ITEM *(List Each One)*											
03-Dxxx Other Spent Fuel											-
											-
											-
											-
											-
Subtotal Line Items	-		-	-	-	-	-	-	-	-	-
TOTAL REQUEST											

EXHIBIT 4

FACILITY STABILIZATION
LIFE CYCLE BUDGET AUTHORITY (B/A) BY YEAR BY FUND TYPE
BY PROJECT BASELINE SUMMARY (PBS)
FY 1998

($000s)

PROJECT WBS:	1.4.7.1
PBS NO:	RL-TP09
PBS TITLE:	K Basins Deactivation

FUND TYPE	FY2007-FY2010	FY2011-FY2015	FY2016-FY2020	FY2021-FY2025	FY2026-FY2030	FY2031-FY2035	FY2036 FY2040	FY2041-FY2045	FY2046 FY2050	TOTAL FY1997-FY2050
OPERATING EXPENSE										123,652
CENRTC										-
GENERAL PLANT PROJECT										-
LINE ITEM *(List Each One)*										
03-Dxxx Other Spent Fuel										-
										-
										-
										-
										-
Subtotal Line Items	-	-	-	-	-	-	-	-	-	-

B.10 Accelerated Deactivation Project (RL-TP10)

B.10.1.0 Accelerated Deactivation Project Technical Baseline (RL-TP10)

B.10.1.1 Accelerated Deactivation Project Organization Mission (RL-TP10)

The purpose of this project is to provide minimum safe surveillance and maintenance and deactivate all Hanford contaminated facilities not currently being deactivated or scheduled for deactivation under another PBS. Initially, those facilities that no longer have a current mission and those expected to no longer have a viable mission after FY 2000 will be deactivated. All other included radiological and hazardous contaminated facilities expected to have viable missions after FY 2000 will be deactivated upon their mission completion (which could extend 20 years or more into the future). Since these facilities are contaminated and many are beyond their intended design life, deactivation of these facilities reduces risk to the public, environment and on-site workers by removing and/or stabilizing radiological and hazardous contamination and placing these high risk facilities in a low risk "caretaker" status until they can be demolished.

There are 39 non-mobile contaminated facilities that are assumed to either currently no longer have a viable mission or are expected to no longer have viable missions after FY 2000. Four of the 39 (231-Z, 222T, 222U, and 2704C) were recently transferred to Facility Stabilization Project (FSP) and the transfer of four others (242B, 242BL, 209E, and 2718E) is expected during the next fiscal year.

Most of the facilities covered in this project are not in close proximity to the Columbia River or other areas occupied by the general public. However, the facilities are contaminated with both radiological and hazardous materials. Contaminants of concern include cesium, strontium, uranium, mixed fission products, fuels processing and chemical contamination that includes various acids and bases, and a wide variety of cleaning agents and solvents. Many of these facilities have also exceeded their design life. A fire, containment system failure or structural collapse due to natural causes or facility deterioration could result in a release of contaminants to the environment via air, ground and water pathways overexposing on-site workers. Most areas outside these facilities already contain radiological and hazardous contaminants in the soil and an additional release of contaminants would further complicate and increase the scope and risks of future remediation efforts.

B.10.1.2 Accelerated Deactivation Project End Point Targets from Hanford Strategic Plan

* Transition high cost surplus facilities in the central plateau and south 600 areas to a low cost, stable, deactivated condition.

* Remove non-essential, surplus buildings and facilities that don't have identified post-cleanup uses.

* Dismantle, or close through entombment, D&D facilities in the central plateau areas currently assigned to the ER program.

B.10.1.3 Accelerated Deactivation Project Major Facilities

B.10.1.3.1 242-A Evaporator Facility

B.10.1.3.1.1 242-A Evaporator Facility Description

The 242-A Evaporator concentrates dilute liquid tank wastes by evaporation. The volume of tank wastes is reduced to eliminate the need to construct additional storage tanks. The concentrated tank waste is returned to the DSTs for storage. Process condensate from the 242-A Evaporator is sent to the LERF for storage while awaiting treatment in the ETF. The 242-A Evaporator is a RCRA-compliant facility and the only waste volume reduction facility for tank wastes. It began operation in 1977 and has a waste volume reduction capacity of 70,000 gal/day.

B.10.1.3.1.2 242-A Evaporator Facility Technical Logic:

The technical logic for the 242-A Evaporator is captured in the facility's functional flow block diagram which shows the functions performed for each applicable life cycle phase of the facility and the sequence in which the functions are executed.

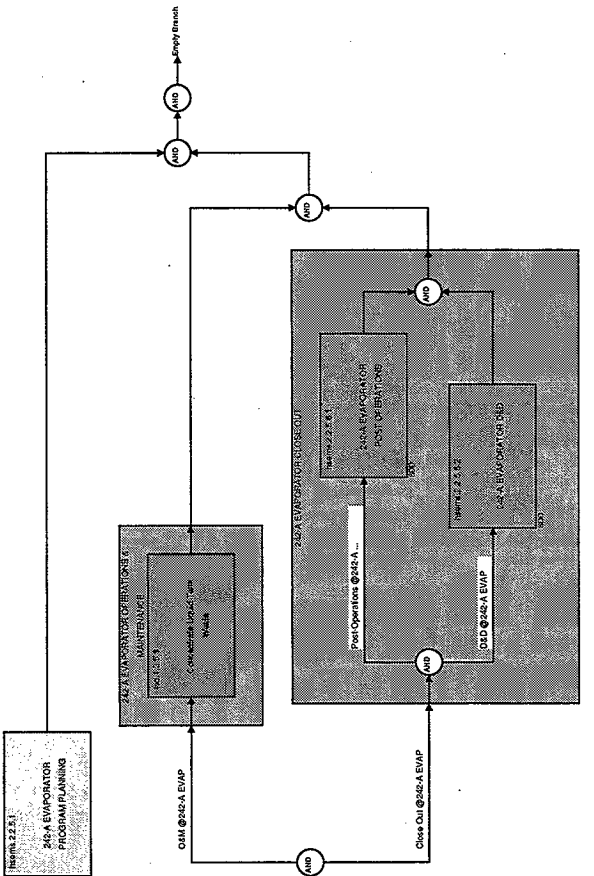


Figure B-11 242-A EVAPORATOR

B.10.1.3.1.3 242-A Evaporator Requirements and Life Cycle Function Descriptions

Requirements:

- Central Plateau high cost surplus facilities shall be transitioned to a low cost, stable, deactivated condition
- Central Plateau facilities other than processing facilities shall be dismantled
- Central Plateau inactive facilities shall be maintained within the approved safety envelope
- 242A Evaporator shall be operated within the approved safety envelope
- 242A Evaporator shall be maintained within the approved safety envelope
- 242A Evaporator feed tanks shall be operated within the approved safety envelope
- 242A Evaporator feed tanks shall be maintained within the approved safety envelope
- 242A Evaporator receiver tanks shall be operated within the approved safety envelope
- 242A Evaporator receiver tanks shall be maintained within the approved safety envelope
- Central Plateau asbestos abatement shall be performed as necessary
- Phase II liquid effluent streams shall be treated using "Best Available Technology/All Known, Available, and Reasonable Methods of Prevention, Control, and Treatment (BAT/AKART)"

Life Cycle Function Descriptions:

B.10.1.3.1.3.1 242-A EVAPORATOR POST OPERATIONS WORK SCOPE SUMMARY

Day-to-day work, including pre-stabilization surveillance and maintenance, stabilization, post-stabilization surveillance and maintenance, deactivation, and post-deactivation surveillance and maintenance, that is required to allow safe decontamination and decommissioning.

242-A EVAPORATOR POST OPERATIONS SPECIFIC FUNCTIONS

B.10.1.3.1.3.2 Maintain Safe & Compliant 242-A Evaporator Facility in CP Areas

Maintain the 242-A facility structures, operating systems and equipment, and monitoring systems within the approved safety and compliance requirements until the facilities are made available for clean-up.

B.10.1.3.1.3.3 Transition 242-A Evaporator Facility

Initiate the transition phase of decontamination and decommissioning for the 242-A evaporator.

B.10.1.3.1.4 242-A Evaporator Boundary Diagram

Table B.10-1 242-A Evaporator Boundary Diagram

External Interfaces -None- Hanford Site Environmental System Interfaces -None-		External Interfaces -None- Hanford Site Environmental System Interfaces -None-

B.10.1.3.1.5 242-A Evaporator Interface Description and Forecast

EXTERNAL INPUTS

-None-

INTERNAL INPUTS

-None-

EXTERNAL OUTPUTS

-None-

INTERNAL OUTPUTS

-None-

B.10.1.3.2 T-Plant Facility

B.10.1.3.2.1 T-Plant Facility Description

T-Plant was constructed in 1944 in the 200-W Area of Hanford. It originally operated as a separation facility for irradiated production reactor fuel. Later it was used for high-level decontamination and repair of equipment as well as storage of fuel assemblies (PWR Core II).

B.10.1.3.2.2 T-Plant Facility Facility Technical Logic:

The technical logic for the T Plant facility is captured in the facility's functional flow block diagram which shows the functions performed for each applicable life cycle phase of the facility and the sequence in which the functions are executed.

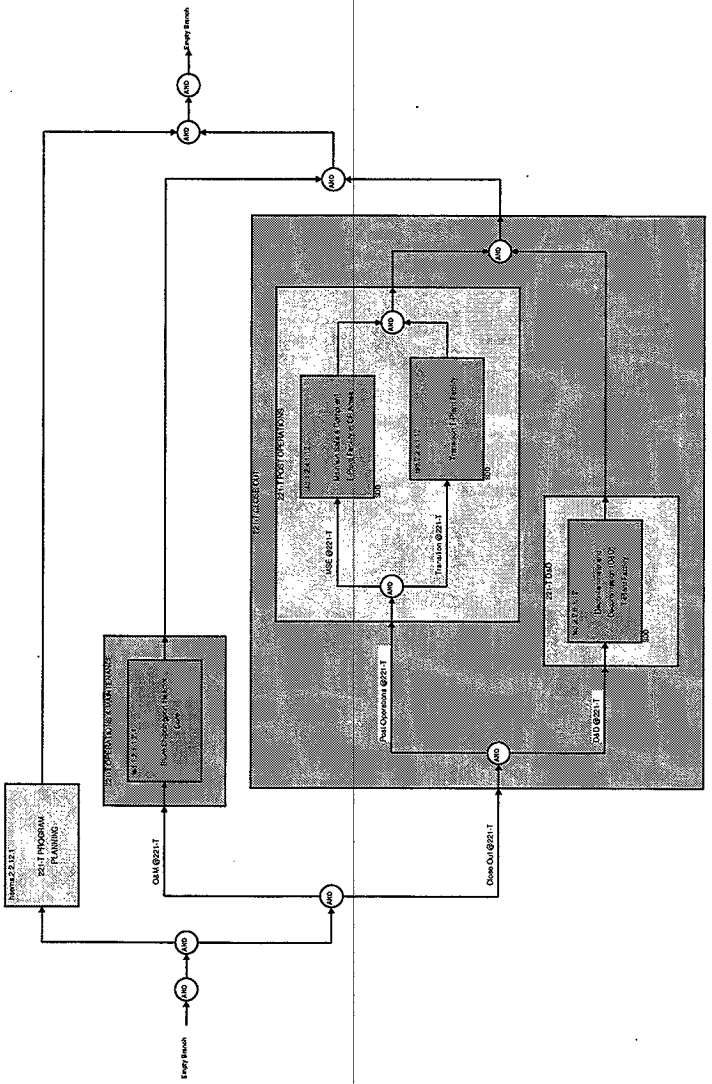


Figure B-12 221-T

B.10.1.3.2.3 T-Plant Facility Requirements and Life Cycle Function Descriptions

Requirements:

-None-

Life Cycle Function Descriptions:

B.10.1.3.2.3.1 221-T POST OPERATIONS WORK SCOPE SUMMARY

Day-to-day work, including pre-stabilization surveillance and maintenance, stabilization, post-stabilization surveillance and maintenance, deactivation, and post-deactivation surveillance and maintenance, that is required to allow safe decontamination and decommissioning.

221-T POST OPERATIONS SPECIFIC FUNCTIONS

B.10.1.3.2.4 T-Plant Facility Boundary Diagram

Table B.10-2 T-Plant Facility Boundary Diagram

External Interfaces -None- Hanford Site Environmental System Interfaces -None-		External Interfaces -None- Hanford Site Environmental System Interfaces -None-

B.10.1.3.2.5 T-Plant Facility Interface Description and Forecast

EXTERNAL INPUTS

-None-

INTERNAL INPUTS

-None-

EXTERNAL OUTPUTS

-None-

INTERNAL OUTPUTS

-None-

B.10.1.3.3 2706-T Facility

B.10.1.3.3.1 2706-T Facility Description

2706-T Facility is located in the 200-W Area of Hanford and is used as an equipment low-level decontamination facility.

B.10.1.3.3.2 2706-T Facility Technical Logic:

The Department of Energy (DOE), in partnership with its contractors, shall plan, acquire, operate, maintain, and dispose of physical assets as valuable national resources. Stewardship of these physical assets shall be accomplished in a cost-effective manner to meet the DOE mission. This shall incorporate industry standards, a graded approach, and performance objectives.

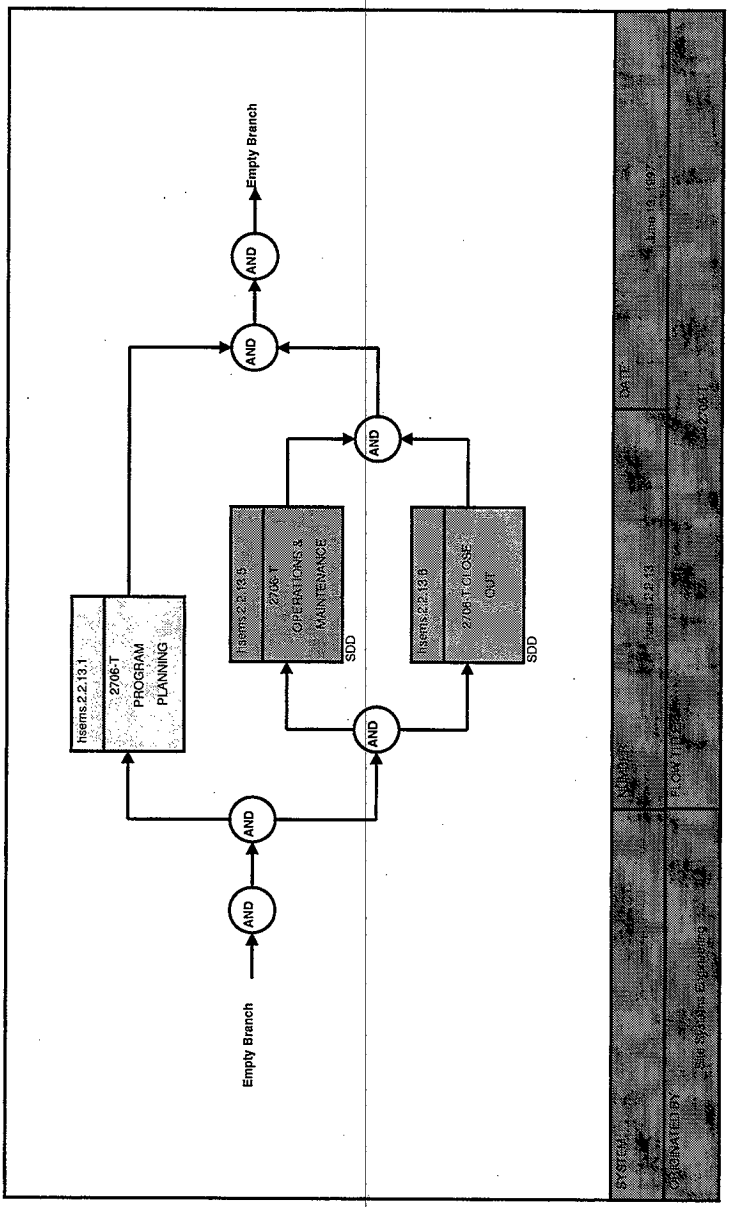


Figure B-13 2706-T

B.10.1.3.3.3 2706-T Requirements and Life Cycle Function Descriptions

Requirements:

-None-

Life Cycle Function Descriptions:

B.10.1.3.3.3.1 2706-T POST OPERATIONS WORK SCOPE SUMMARY

Day-to-day work, including pre-stabilization surveillance and maintenance, stabilization, post-stabilization surveillance and maintenance, deactivation, and post-deactivation surveillance and maintenance, that is required to allow safe decontamination and decommissioning.

2706-T POST OPERATIONS SPECIFIC FUNCTIONS

B.10.1.3.3.4 2706-T Boundary Diagram

Table B.10-3 2706-T Boundary Diagram

External Interfaces -None- Hanford Site Environmental System Interfaces -None-		External Interfaces -None- Hanford Site Environmental System Interfaces -None-

B.10.1.3.3.5 2706-T Interface Description and Forecast

EXTERNAL INPUTS

-None-

INTERNAL INPUTS

-None-

EXTERNAL OUTPUTS

-None-

INTERNAL OUTPUTS

-None-

B.10.1.3.4 M-91 Facility

B.10.1.3.4.1 M-91 Facility Description

The primary functions of M-91 include processing, packaging, and certification of retrieved and newly generated RH-TRU wastes, retrieved and newly generated remote handled radioactive mixed waste, and handling, processing, repackaging, and certification for retrieved and newly generated CH-TRU waste that cannot be processed in WRAP 1 or other commercial options.

B.10.1.3.4.2 M-91 Facility Facility Technical Logic:

The technical logic for the M-91 facility is captured in the facility's functional flow block diagram which shows the functions performed for each applicable life cycle phase of the facility and the sequence in which the functions are executed.

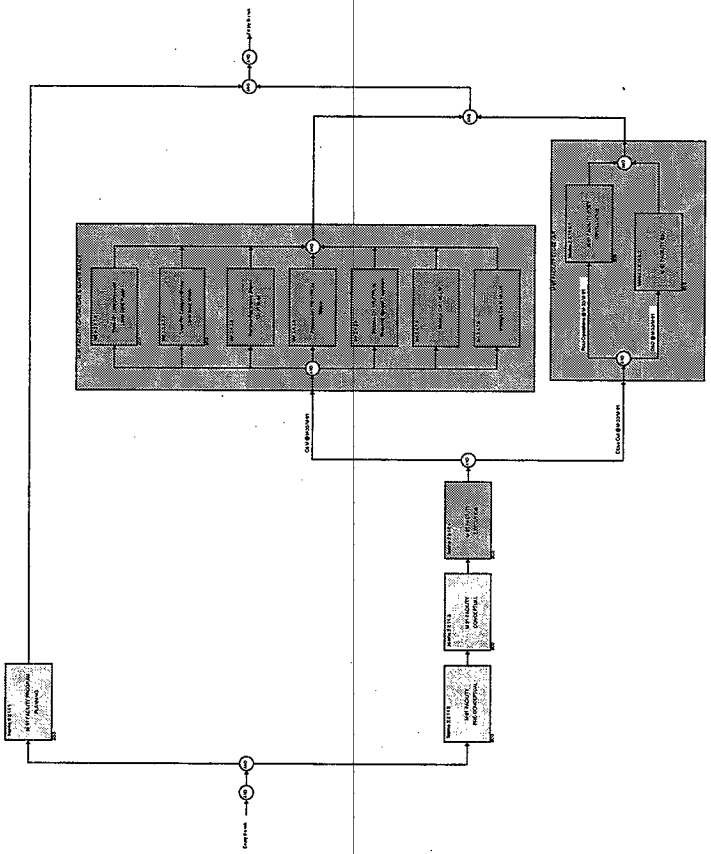


Figure B-14 M-91 FACILITY

B.10.1.3.4.3 M-91 Facility Requirements and Life Cycle Function Descriptions

Requirements:

-None-

Life Cycle Function Descriptions:

B.10.1.3.4.3.1 M-91 FACILITY POST OPERATIONS WORK SCOPE SUMMARY

Day-to-day work, including pre-stabilization surveillance and maintenance, stabilization, post-stabilization surveillance and maintenance, deactivation, and post-deactivation surveillance and maintenance, that is required to allow safe decontamination and decommissioning.

M-91 FACILITY POST OPERATIONS SPECIFIC FUNCTIONS

B.10.1.3.4.4 M-91 Facility Boundary Diagram

Table B.10-4 M-91 Facility Boundary Diagram

External Interfaces -None- Hanford Site Environmental System Interfaces -None-		External Interfaces -None- Hanford Site Environmental System Interfaces -None-

B.10.1.3.4.5 M-91 Facility Interface Description and Forecast

EXTERNAL INPUTS

-None-

INTERNAL INPUTS

-None-

EXTERNAL OUTPUTS

-None-

INTERNAL OUTPUTS

-None-

B.10.1.3.5 WRAP Module 1 Facility

B.10.1.3.5.1 WRAP Module 1 Facility Description

The WRAP I facility will accept contact handled low level and mixed low level waste (CH-LLW and CH-MLLW) and transuranic (CH-TRU and CH-TRUM) waste for inspection, certification, and preparation for final disposal. The facility began processing CH-LLW in March of 1997 and will commence processing of CH-TRU, CH-TRUM waste in 1998. WRAP I will be operational 175 days per year (70% TOE). WRAP I is designed to process annually: 6,825 drums (4,200 drums newly generated waste and 2,625 drums retrieved waste) and 70 standard waste boxes.

B.10.1.3.5.2 WRAP Module 1 Facility Technical Logic:

The technical logic for the WRAP facility is captured in the facility's functional flow block diagram which shows the functions performed for each applicable life cycle phase of the facility and the sequence in which the functions are executed.

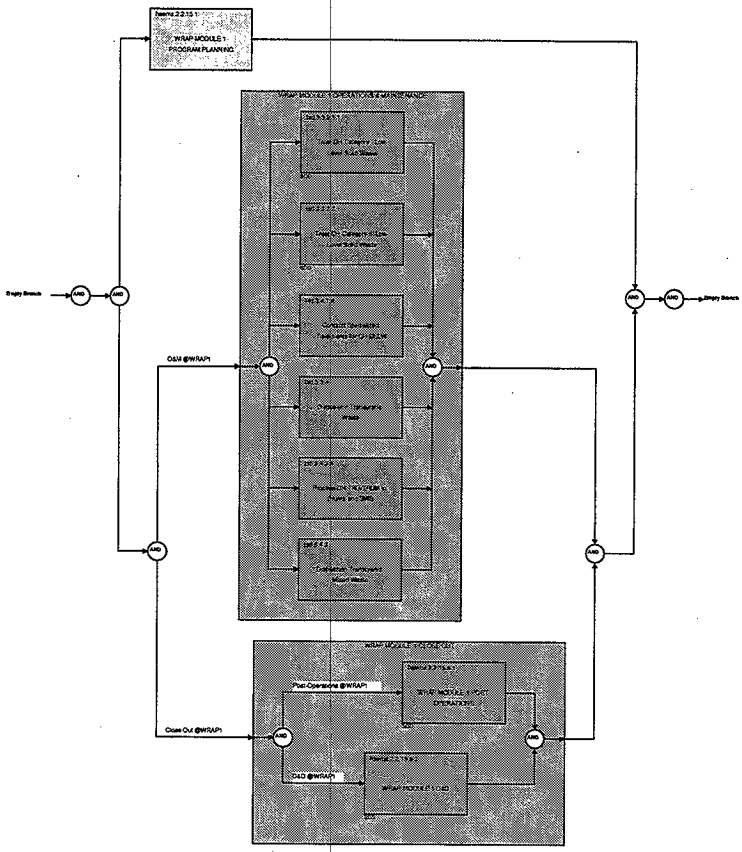


Figure B-15 WRAP MODULE 1

B.10.1.3.5.3 WRAP Module 1 Requirements and Life Cycle Function Descriptions

Requirements:

-None-

Life Cycle Function Descriptions:

B.10.1.3.5.3.1 WRAP MODULE 1 POST OPERATIONS WORK SCOPE SUMMARY

Day-to-day work, including pre-stabilization surveillance and maintenance, stabilization, post-stabilization surveillance and maintenance, deactivation, and post-deactivation surveillance and maintenance, that is required to allow safe decontamination and decommissioning.

WRAP MODULE 1 POST OPERATIONS SPECIFIC FUNCTIONS

B.10.1.3.5.4 WRAP Module 1 Boundary Diagram

Table B.10-5 WRAP Module 1 Boundary Diagram

External Interfaces -None- Hanford Site Environmental System Interfaces -None-		External Interfaces -None- Hanford Site Environmental System Interfaces -None-

B.10.1.3.5.5 WRAP Module 1 Interface Description and Forecast

EXTERNAL INPUTS

-None-

INTERNAL INPUTS

-None-

EXTERNAL OUTPUTS

-None-

INTERNAL OUTPUTS

-None-

B.10.1.3.6 Liquid Effluent Retention Facility

B.10.1.3.6.1 Liquid Effluent Retention Facility Description

The LERF consists of three RCRA-compliant surface impoundments for temporarily storing process condensate from the 242-A Evaporator and other liquid effluents. The LERF provides equalization of the flow and pH of the feed to the ETF. Each LERF basin has a capacity of 6.5 million gallons. Spare capacity is maintained equal to the volume of one LERF basin as contingency in the event a leak should develop in an operational basin. The basins are constructed of two high-density polyethylene (HDPE) flexible membrane liners. A system is provided to detect, collect, and remove leachate from between the primary and secondary liners. Beneath the secondary liner is a 3 ft thick soil/bentonite barrier should the primary and secondary liners fail. Each basin has a mechanically-tensioned floating membrane cover constructed of very low-density polyethylene (VLDPE) to keep out unwanted material and to minimize evaporation of the basin contents. The LERF began operation in April 1994 and is designed for a 20-year life.

B.10.1.3.6.2 Liquid Effluent Retention Facility Facility Technical Logic:

The technical logic for the Liquid Effluent Retention Facility is captured in the facility's functional flow block diagram which shows the functions performed for each applicable life cycle phase of the facility and the sequence in which the functions are executed.

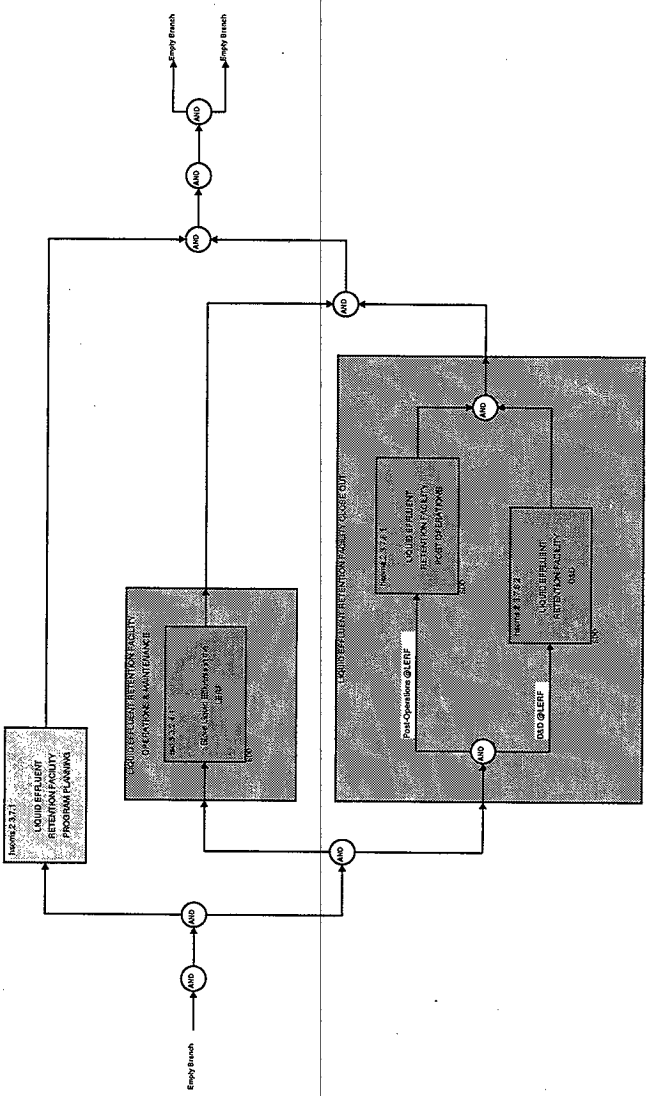


Figure B-16 LIQUID EFFLUENT RETENTION FACILITY

B.10.1.3.6.3 Liquid Effluent Retention Facility Requirements and Life Cycle Function Descriptions

Requirements:

- Central Plateau high cost surplus facilities shall be transitioned to a low cost, stable, deactivated condition
- Central Plateau facilities other than processing facilities shall be dismantled
- Central Plateau inactive facilities shall be maintained within the approved safety envelope
- LERF shall be operated within the approved safety envelope
- Safe Operation of LERF - Operation and maintenance of the LERF shall be in accordance with LERF Safety Analysis Report (Woeland 1991
- Solids shall not be allowed to accumulate in the LERF basins which may require special cleanout actions. [LERF Treatment Exemption (95-LEP-015), 40 CFR 268.4.]
- Waste will be stored in LERF for up to one year prior to treatment in the ETF. [LERF Treatment Exemption (95-LEP-015), 40 CFR 268.4]

Life Cycle Function Descriptions:

B.10.1.3.6.3.1 LIQUID EFFLUENT RETENTION FACILITY POST OPERATIONS WORK SCOPE SUMMARY

Day-to-day work, including pre-stabilization surveillance and maintenance, stabilization, post-stabilization surveillance and maintenance, deactivation, and post-deactivation surveillance and maintenance, that is required to allow safe decontamination and decommissioning.

LIQUID EFFLUENT RETENTION FACILITY POST OPERATIONS SPECIFIC FUNCTIONS

B.10.1.3.6.3.2 Maintain Safe & Compliant Liquid Effluent Retention Facility in CP Areas

Maintain the LERF facility structures, operating systems and equipment, and monitoring systems within the approved safety and compliance requirements until the facilities are made available for clean-up.

B.10.1.3.6.3.3 Transition Liquid Effluent Retention Facility

Initiate the transition phase of decontamination and decommissioning for the Liquid Effluent Retention Facility

B.10.1.3.6.4 Liquid Effluent Retention Facility Boundary Diagram

Table B.10-6 Liquid Effluent Retention Facility Boundary Diagram

External Interfaces -None- Hanford Site Environmental System Interfaces -None-		External Interfaces -None- Hanford Site Environmental System Interfaces -None-

B.10.1.3.6.5 Liquid Effluent Retention Facility Interface Description and Forecast

EXTERNAL INPUTS

-None-

INTERNAL INPUTS

-None-

EXTERNAL OUTPUTS

-None-

INTERNAL OUTPUTS

-None-

B.10.1.3.7 200 Area Effluent Treatment Facility

B.10.1.3.7.1 200 Area Effluent Treatment Facility Description

Liquid effluents from the LERF are treated in the ETF to remove toxic metals, radionuclides, and ammonia and to destroy organics. The ETF treatment process constitutes best available treatment (BAT) technology and includes pH adjustment, filtration, ultraviolet light/peroxide (UV/OX) destruction of organics, reverse osmosis (RO), and ion exchange. Treatment capacity of the ETF is 150 gal/min. Storage tanks allow for holdup of the treated effluent to allow verification that the effluent has been treated to acceptable levels prior to discharge. The treated effluent is discharged under a WAC 173-216 State Waste Discharge Permit to a state-approved land disposal site (SALDS) located north of the 200 West Area. The ETF began operation in December, 1995 and has a 30 year design life.

The LERF/ETF can generally accept low level, RCRA-regulated, mixed low level, and CERCLA-regulated liquid effluents, and also industrial wastewaters for storage and treatment. A delisting petition was specifically approved for treating 242-A Evaporator process condensate for the waste codes F001 through F005, and F039 leachate (as derived from F001 through F005). A truck unloading station enables liquid effluents to be received from other projects and transferred to either the LERF for storage, or directly to the ETF for treatment. A groundwater transfer system is available for transferring groundwater from the 200 West Area to LERF for treatment in the ETF.

B.10.1.3.7.2 200 Area Effluent Treatment Facility Facility Technical Logic:

The technical logic for the 200 Area Effluent Treatment Facility is captured in the facility's functional flow block diagram which shows the functions performed for each applicable life cycle phase of the facility and the sequence in which the functions are executed.

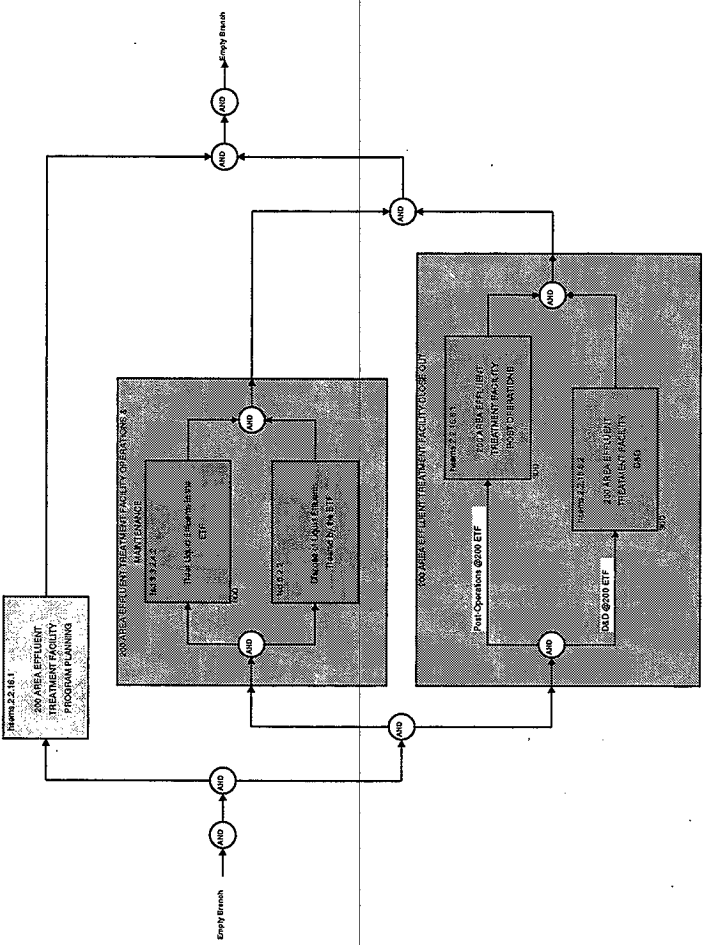


Figure B-17 200 AREA EFFLUENT TREATMENT FACILITY

B.10.1.3.7.3 200 Area Effluent Treatment Facility Requirements and Life Cycle Function Descriptions

Requirements:

- Central Plateau high cost surplus facilities shall be transitioned to a low cost, stable, deactivated condition
- Central Plateau inactive facilities shall be maintained within the approved safety envelope
- 200 Area ETF shall be maintained within the approved safety envelope
- 200 Area ETF shall be operated within the approved safety envelope

Life Cycle Function Descriptions:

B.10.1.3.7.3.1 200 AREA EFFLUENT TREATMENT FACILITY POST OPERATIONS WORK SCOPE SUMMARY

Day-to-day work, including pre-stabilization surveillance and maintenance, stabilization, post-stabilization surveillance and maintenance, deactivation, and post-deactivation surveillance and maintenance, that is required to allow safe decontamination and decommissioning.

200 AREA EFFLUENT TREATMENT FACILITY POST OPERATIONS SPECIFIC FUNCTIONS

B.10.1.3.7.3.2 Maintain Safe & Compliant 200 Area Effluent Treatment Facility in CP Areas

Maintain the 200 Area ETF facility structures, operating systems and equipment, and monitoring systems within the approved safety and compliance requirements until the facilities are made available for clean-up.

B.10.1.3.7.3.3 Transition 200 Area Effluent Treatment Facility

Initiate the transition phase of decontamination and decommissioning for the 200 Area Effluent Treatment Facility

B.10.1.3.7.4 200 Area Effluent Treatment Facility Boundary Diagram

Table B.10-7 200 Area Effluent Treatment Facility Boundary Diagram

External Interfaces -None- Hanford Site Environmental System Interfaces -None-		External Interfaces -None- Hanford Site Environmental System Interfaces hsems.2.5.7 Central Plateau Liquid Sanitary Waste System

B.10.1.3.7.5 200 Area Effluent Treatment Facility Interface Description and Forecast

EXTERNAL INPUTS

-None-

INTERNAL INPUTS

-None-

EXTERNAL OUTPUTS

-None-

INTERNAL OUTPUTS

Table B.10-8 Internal Outputs for 200 Area Effluent Treatment Facility

Stream	Category	Period	Baseline	Units
hsems.2.5.7 Central Plateau Liquid Sanitary Waste System				
ETF, Sanitary Liquid Waste *Sanitary Liquid Waste from day to day operations of treated liquid wastes.*	Sanitary Liquid Waste	1998 - 2032	17.5	Mgal

B.10.1.3.8 Transuranic Storage and Assay Facility

B.10.1.3.8.1 Transuranic Storage and Assay Facility Description

The Transuranic Storage and Assay Facility (TRUSAF) provides storage for TRU and TRUM waste in drums. Limited assay capability is provided. TRUSAF is assumed to have a capacity of 2000 55-gal drums, or 520 cubic meters.

B.10.1.3.8.2 Transuranic Storage and Assay Facility Facility Technical Logic:

The technical logic for the Transuranic Storage and Assay Facility is captured in the facility's functional flow block diagram which shows the functions performed for each applicable life cycle phase of the facility and the sequence in which the functions are executed.

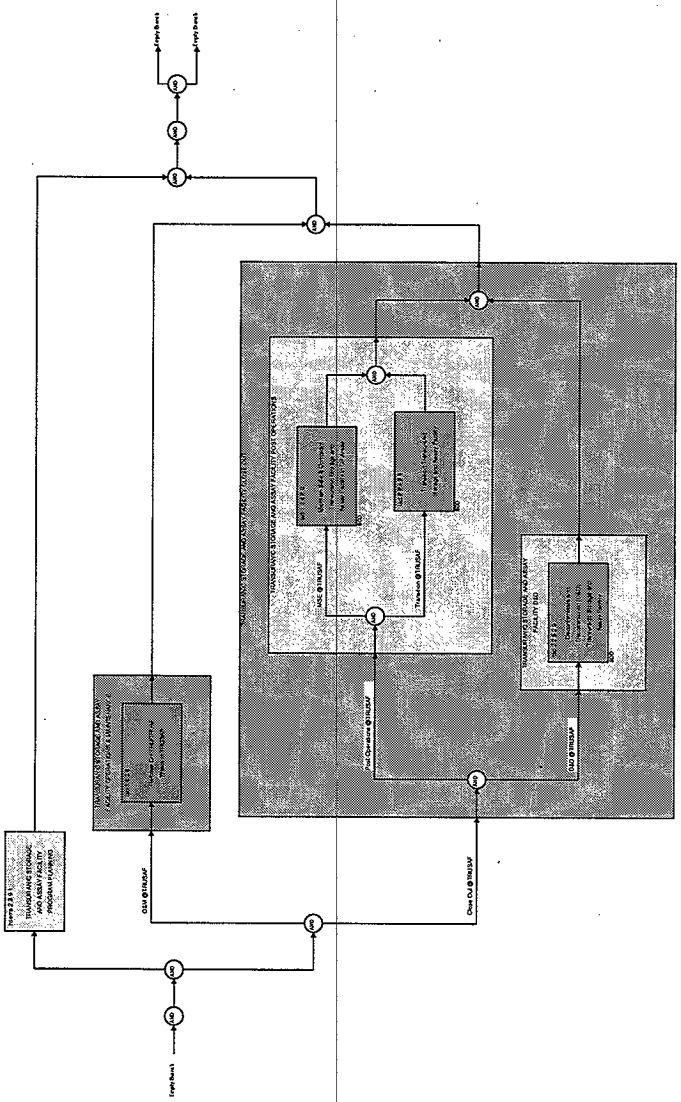


Figure B-18 TRANSURANIC STORAGE AND ASSAY FACILITY

B.10.1.3.8.3 Transuranic Storage and Assay Facility Requirements and Life Cycle Function Descriptions

Requirements:

-None-

Life Cycle Function Descriptions:

B.10.1.3.8.3.1 TRANSURANIC STORAGE AND ASSAY FACILITY POST OPERATIONS WORK SCOPE SUMMARY

Day-to-day work, including pre-stabilization surveillance and maintenance, stabilization, post-stabilization surveillance and maintenance, deactivation, and post-deactivation surveillance and maintenance, that is required to allow safe decontamination and decommissioning.

TRANSURANIC STORAGE AND ASSAY FACILITY POST OPERATIONS SPECIFIC FUNCTIONS

B.10.1.3.8.4 Transuranic Storage and Assay Facility Boundary Diagram

Table B.10-9 Transuranic Storage and Assay Facility Boundary Diagram

External Interfaces -None- Hanford Site Environmental System Interfaces -None-		External Interfaces -None- Hanford Site Environmental System Interfaces -None-

B.10.1.3.8.5 Transuranic Storage and Assay Facility Interface Description and Forecast

EXTERNAL INPUTS

-None-

INTERNAL INPUTS

-None-

EXTERNAL OUTPUTS

-None-

INTERNAL OUTPUTS

-None-

B.10.1.3.9 222-S Laboratory Facility

B.10.1.3.9.1 222-S Laboratory Facility Description

The 222-S Laboratory is a laboratory facility in the 200-W Area of Hanford used for characterization of high level radioactive waste/materials. It was built in 1950-1951 and houses an analytical laboratory and a chemical sciences laboratory. Two of its three general areas contain radionuclides.

B.10.1.3.9.2 222-S Laboratory Facility Technical Logic:

The Department of Energy (DOE), in partnership with its contractors, shall plan, acquire, operate, maintain, and dispose of physical assets as valuable national resources. Stewardship of these physical assets shall be accomplished in a cost-effective manner to meet the DOE mission. This shall incorporate industry standards, a graded approach, and performance objectives.

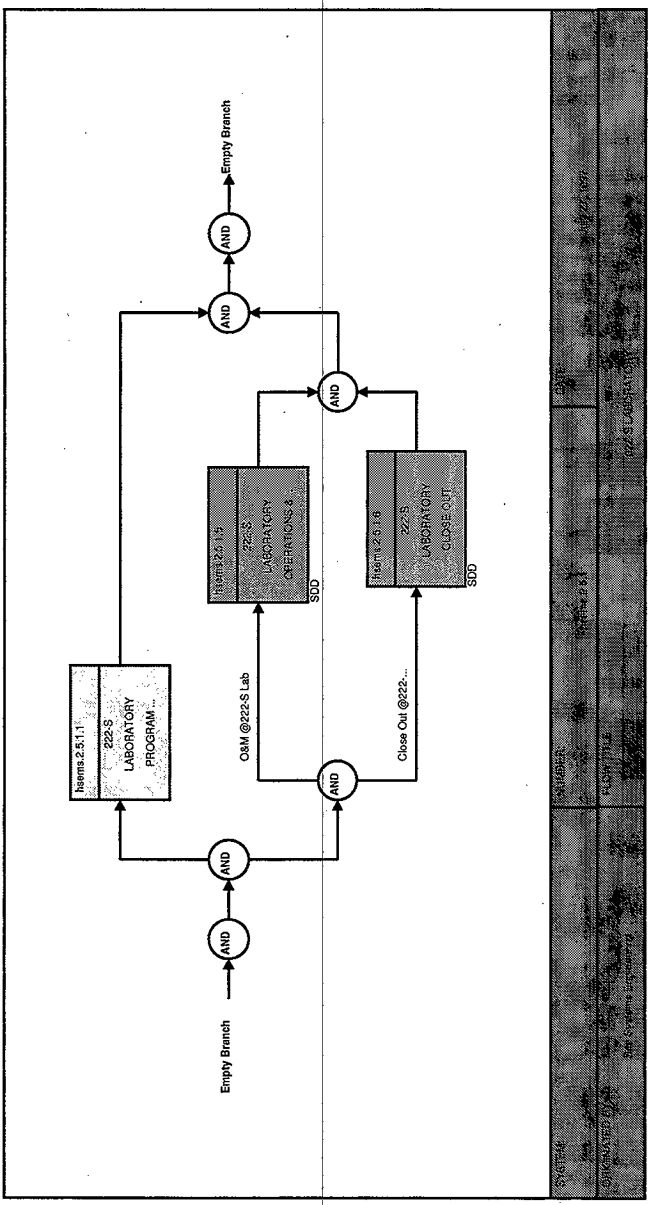


Figure B-19 222-S LABORATORY

B.10.1.3.9.3 222-S Laboratory Requirements and Life Cycle Function Descriptions

Requirements:

-None-

Life Cycle Function Descriptions:

B.10.1.3.9.3.1 222-S LABORATORY POST OPERATIONS WORK SCOPE SUMMARY

Day-to-day work, including pre-stabilization surveillance and maintenance, stabilization, post-stabilization surveillance and maintenance, deactivation, and post-deactivation surveillance and maintenance, that is required to allow safe decontamination and decommissioning.

222-S LABORATORY POST OPERATIONS SPECIFIC FUNCTIONS

B.10.1.3.9.4 222-S Laboratory Boundary Diagram

Table B.10-10 222-S Laboratory Boundary Diagram

External Interfaces -None- Hanford Site Environmental System Interfaces -None-		External Interfaces -None- Hanford Site Environmental System Interfaces -None-

B.10.1.3.9.5 222-S Laboratory Interface Description and Forecast

EXTERNAL INPUTS

-None-

INTERNAL INPUTS

-None-

EXTERNAL OUTPUTS

-None-

INTERNAL OUTPUTS

-None-

B.10.1.4 Drivers for Accelerated Deactivation Project

Table B.10-11 Source Documents for Accelerated Deactivation Project

Name	Title
95-LEP-015	LERF Treatment Exemption
DOE/EIS-0222D	Draft Hanford Remedial Action Environmental Impact Statement and Comprehensive Land Use Plan
DOE/RL-89-10	Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement), Rev.4
DOE/RL-96-14	Updated Draft Mission Direction Document, June 1996
DOE/RL-96-92	Hanford Strategic Plan
WHC-SD-W105-SAR-001	LERF Safety Analysis Report

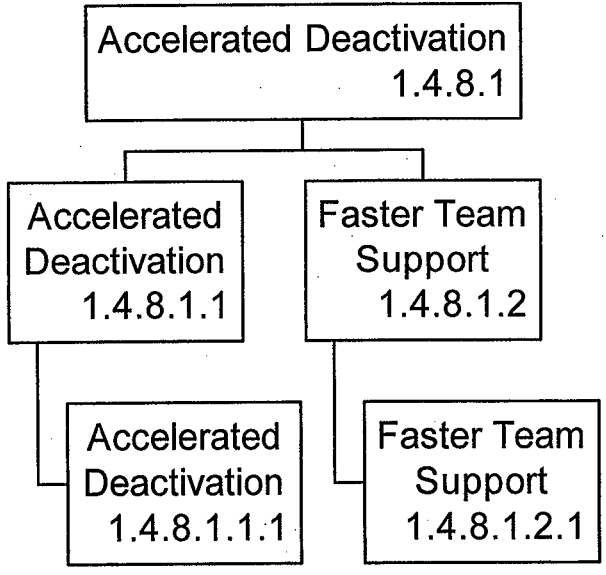
B.10.1.5 Accelerated Deactivation Project Risk Management

There are 39 non-mobile contaminated facilities that are assumed to either currently no longer have a viable mission or are expected to no longer have viable missions after FY 2000.

Most of the facilities covered in this project are not in close proximity to the Columbia River or other areas occupied by the general public. The facilities are contaminated with both radiological and hazardous materials. Contaminants of concern include cesium, strontium, uranium, mixed fission products, fuels processing and chemical contamination that includes various acids and bases, and a wide variety of cleaning agents and solvents. Many of these facilities have also exceeded their design life. A fire , containment system failures or structural collapse due to natural causes or facility deterioration could result in a release of contaminants to the environment via air, ground and water pathways overexposing on-site workers and the environment. Most areas outside these facilities already contain radiological and hazardous contaminants in the soil and an additional release of contaminants would further complicate and increase the scope of decontamination and decommissioning (D&D) and future operable unit remediation activities as well as the risk associated with performance of these actions.

Work activities likely to place the workers at risk include: removing inventory materials [Special Nuclear Materials, Nuclear Materials, Nuclear Fuel (SNM/NM/NF)]; flushing, isolating and blanking of process or subprocess systems; removing radioactive and hazardous materials and mixed wastes; deactivating non-essential systems and utilities; reconfiguring systems to facilitate long-term surveillance and maintenance (LTS&M) and eventual decontamination and decommissioning (D&D); "mothballing" of systems necessary for LTS&M and D&D; limited decontaminating and stabilizing of radioactive contamination; and closing facility penetrations to prevent bird, animal and weather intrusion.

Accelerated Deactivation Work Breakdown Structure



HANFORD SITE WORK BREAKDOWN STRUCTURE DICTIONARY
FACILITY STABILIZATION
WBS: 1.4 9/11/1997

1. Activity Title: ACCELERATED DEACTIVATION	2. Date 7/31/1997	3. PBS Number RL-TP10	4. Dict Rev 0
5. Contract WBS No. 1.4.8.1.1	6. Corresponding FDS No. KA1	7. Baseline CR No.	
8. Organization Name 17000			9. B & R No.

10. Scope of Work
This activity provides support to establish and maintain the facility within the authorization basis and compliant with environmental and regulatory laws and regulations. It includes requirements for project management, compliance activities, evaluations, routine radiological control, operations surveillance, waste handling, and preventative and corrective maintenance activities. This activity also includes facility assessments as well as minimum safe upgrades which may be necessary. Additionally, this activity includes tasks which may result in risk and/or cost reductin for minimum safe surveillance and maintenance.

HANFORD SITE WORK BREAKDOWN STRUCTURE DICTIONARY
FACILITY STABILIZATION
WBS: 1.4

9/11/1997

1. Activity Title: FASTER TEAM SUPPORT	2. Date 7/31/1997	3. PBS Number RL-TP10	4. Dict Rev 0
5. Contract WBS No. 1.4.8.1.2	6. Corresponding FDS No. KA2	7. Baseline CR No.	
8. Organization Name 17000			9. B & R No.

10. Scope of Work

This activity provides support to disseminate deactivation methods and practices throughout the DOE complex. Specifically, it involves 'jumpstarting' projects by assisting with the development of project end points, project management plans, safety authorization bases, regulatory strategies, reengineering of business processes, work breakdown structures and bases for cost estimates, and other project management elements. This activity also includes information transfer through upfront training to project teams, conferences and seminar attendance, development of lessons learned documents, and updating the EM-60 Deactivation Handbook. Additionally, it provides technical assistance to projects with specific and often unique technical issues.

FACILITY STABILIZATION
WBS 1.4

9/11/1997

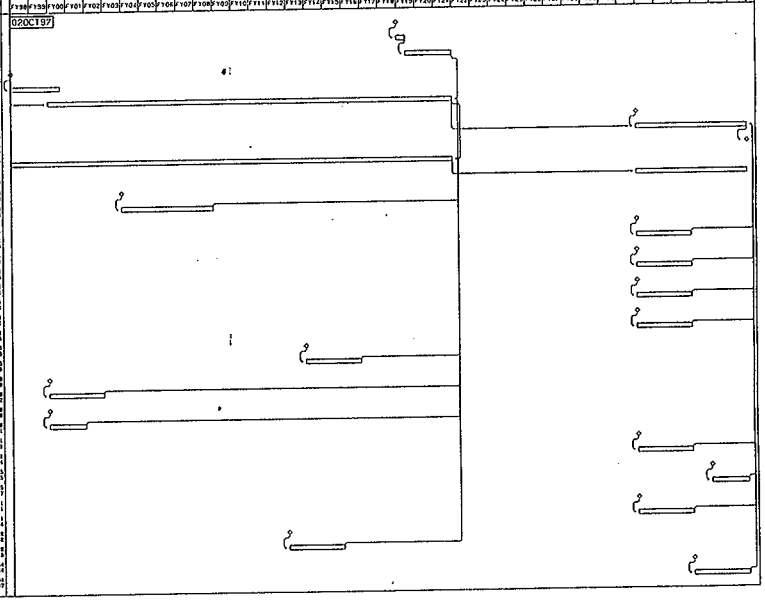
Mission Area Responsibility Assignment Matrix

Proj Lvl (PBS #)	FDS Act Number	Activity Title	Activity Manager	Responsible Organization	Cost Account
RL-TP10		ACCELERATED DEACTIVATION			
	KA1	ACCELERATED DEACTIVATION	J. P. Hayfield	17000	1KA101
	KA2	FASTER TEAM SUPPORT	J. P. Hayfield	17000	1KA201

FACILITY STABILIZATION PROJECT
RL-TP10 Accelerated Deactivation Project
Project Master Baseline Schedule

Time-Phased Logic Diagram
FY 98 MYVP September 1997

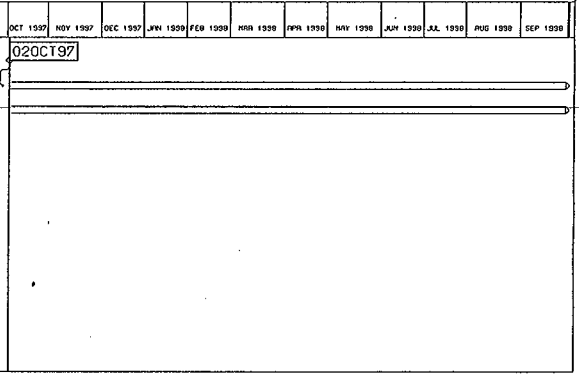
Activity	Description	Start
AD37E	333-93, Receive T Plant from Waste Management	10/01/18 10/01/18
AD335	T Plant Deactivation Planning	10/01/18 03/30/19
AD35B	T Plant Deactivation & Transition	03/30/18 09/29/21
AD800	Initiation of Deactivation Planning	10/02/97 10/02/97
AD803	Deactivation Planning	10/02/97 03/29/00
AD804	Facility Deactivation (41 Facilities)	10/01/99 09/30/21
AD806	Start Deactivation of Remaining Facilities	10/01/21 10/01/21
AD809	Trans Remain Facilities to Deactivated Condition	10/01/21 03/30/37
AD810	SF1-F9, Trans facilities to deactivated. cond	10/01/37 10/01/37
AD812	Long Term Surveillance & Maintenance	10/01/97 10/02/21
AD816	Long Term Surveillance & Maintenance	10/01/22 09/30/37
AD818	T-18, Receive 242-T from Waste Mgmt, Inc.	09/30/03 09/30/08
AD821	242-T Stabilization & Deactivation	09/30/03 09/30/08
AD824	333-V2, Receive TRAP I Facility from Waste Mgt	10/01/21 10/01/21
AD827	TRAP I Facility Stabilization & Deactivation	10/01/21 09/30/24
AD830	333-V14, Receive 200 Area TEDF from Waste Mgmt	09/30/21 09/30/21
AD833	200 Area TEDF Stabilization & Deactivation	09/30/21 09/30/24
AD836	333-V7, Receive 200 Area ETF from Waste Mgmt	10/01/21 10/01/21
AD839	200 Area ETF Stabilization & Deactivation	10/01/21 09/30/24
AD840	333-V7, Receive 200 Area LERF from Waste Mgmt	10/01/21 10/01/21
AD841	200 Area LERF Stabilization and Deactivation	10/01/21 09/30/24
AD842	333-V7, Receive 242-A from Waste Management	10/01/13 10/01/13
AD845	242-A Evaporator Stabilization & Deactivation	10/01/13 09/30/19
AD846	336-V1, Receive TRUSAF from Waste Management	10/01/98 10/01/98
AD851	TRUSAF Stabilization & Deactivation	10/01/98 09/30/01
AD848	333-V18, Receive Building 416 from Waste Mgmt	09/30/98 09/30/98
AD843	Building 416 Stabilization & Deactivation	09/30/98 09/30/01
AD878	Receive LANCE/Treatment from Waste Mgmt	10/01/21 10/01/21
AD879	LANCE/Treatment Stabilization & Deactivation	10/01/21 09/30/24
AD844	333-V8, Receive 2706-T Facility from Waste Mgmt	10/01/25 10/01/25
AD885	2706-T Facility Stabilization	10/01/25 09/30/28
AD887	333-V13, Receive RMT/Treatment Facility from SY	10/01/21 10/01/21
AD888	RMT/Treatment Facility Stabilization	10/01/21 09/30/24
AD890	Receive Retrieval Facilities from Waste Mgmt	10/01/13 10/01/13
AD891	Retrieval Facilities Stabilization/ Deactivation	10/01/13 10/01/23
AD893	325-V2, Receive 222-S Labs from Waste Mgmt	10/01/24 10/01/24
AD894	222-S Labs Stabilization & Deactivation	10/01/24 09/30/27



FACILITY STABILIZATION PROJECT
RL-TP10 Accelerated Deactivation Project
Project Master Baseline Schedule

Time-Phased Logic Diagram
FY 98 MYWP September 1997

Activity	Description	Start
AD000	Initiation of Deactivation Planning	10/02/97 10/02/97
AD003	Deactivation Planning	10/02/97 05/29/00
ADH12	Long Term Surveillance & Maintenance	10/01/97 10/02/21



FACILITY STABILIZATION
LIFE CYCLE COST BASELINE (BCWS) BY YEAR BY FUND TYPE
BY PROJECT BASELINE SUMMARY (PBS)
FY 1998

($000s)

PROJECT WBS:	1.4.8.1
PBS NO:	RL-TP10
PBS TITLE:	Accelerated Deactivation

FUND TYPE	FY1997	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	SUBTOT FY1997-FY2006
OPERATING EXPENSE		2,716	1,445	3,583	2,666	2,503	3,345	3,164	2,971	2,778	25,171
CENRTC											-
GENERAL PLANT PROJECT											-
LINE ITEM *(List Each One)*											
											-
											-
											-
											-
											-
Subtotal Line Items	-		-	-	-	-	-	-	-	-	-
TOTAL BCWS/PMB[1]		2,716	1,445	3,583	2,666	2,503	3,345	3,164	2,971	2,778	25,171
MGMT RESERVE[2]											-
LINE ITEM CONTINGENCY[2]											-
OFFSITE TRANSFERS[3]											-
Subtotal	-		-	-	-	-	-	-	-	-	-
TOTAL	-	2,716	1,445	3,583	2,666	2,503	3,345	3,164	2,971	2,778	25,171

[1]Budgeted Cost of Work Scheduled (BCWS) Equals Performance Measurement Baseline (PMB); Expense Carryover **NOT** Included.

[2]Management Reserve and Line Item Contingency Held by RL.

[3]Work Performed at Sites Other Than Hanford.

FACILITY STABILIZATION
LIFE CYCLE COST BASELINE (BCWS) BY YEAR BY FUND TYPE
BY PROJECT BASELINE SUMMARY (PBS)
FY 1998

($000s)

PROJECT WBS:	1.4.8.1									
PBS NO:	RL-TP10									
PBS TITLE:	Accelerated Deactivation									TOTAL
FUND TYPE	FY2007-FY2010	FY2011-FY2015	FY2016-FY2020	FY2021-FY2025	FY2026-FY2030	FY2031-FY2035	FY2036 FY2040	FY2041-FY2045	FY2046 FY2050	FY1997-FY2050
OPERATING EXPENSE	20,937	6,000	-	-	-	20,000	41,000	45,000	15,400	173,508
CENRTC										-
GENERAL PLANT PROJECT										-
LINE ITEM *(List Each One)*										
										-
										-
										-
										-
										-
Subtotal Line Items	-	-	-	-	-	-	-	-	-	-
TOTAL BCWS/PMB	20,937	6,000				20,000	41,000	45,000	15,400	173,508
MGMT RESERVE[2]										-
LINE ITEM CONTINGENCY[2]										-
OFFSITE TRANSFERS[3]										-
Subtotal	-	-	-	-	-	-	-	-	-	-
TOTAL	20,937	6,000	-	-	-	20,000	41,000	45,000	15,400	173,508

[1]Budgeted Cost of Work Scheduled (BCWS) Equals Performance Measurement Baseline (PMB); Expense Carryover NOT Included.
[2]Management Reserve and Line Item Contingency Held by RL.
[3]Work Performed at Sites Other Than Hanford.

EXHIBIT 4

FACILITY STABILIZATION
LIFE CYCLE BUDGET AUTHORITY (B/A) BY YEAR BY FUND TYPE
BY PROJECT BASELINE SUMMARY (PBS)
FY 1998

($000s)

PROJECT WBS:	1.4.8.1
PBS NO:	RL-TP10
PBS TITLE:	Accelerated Deactivation

FUND TYPE	FY1997	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	SUBTOT FY1997-FY2006
OPERATING EXPENSE	-	2,716	1,445	3,583	2,666	2,503	3,345	3,164	2,971	2,778	25,171
CENRTC											-
GENERAL PLANT PROJECT											-
LINE ITEM *(List Each One)*											
											-
											-
											-
											-
											-
Subtotal Line Items	-		-	-	-	-	-	-	-	-	-
TOTAL NEW B/A		2,716	1,445	3,583	2,666	2,503	3,345	3,164	2,971	2,778	25,171

EXHIBIT 4

FACILITY STABILIZATION
LIFE CYCLE BUDGET AUTHORITY (B/A) BY YEAR BY FUND TYPE
BY PROJECT BASELINE SUMMARY (PBS)
FY 1998

($000s)

PROJECT WBS:	1.4.8.1
PBS NO:	RL-TP10
PBS TITLE:	Accelerated Deactivation

FUND TYPE	FY2007-FY2010	FY2011-FY2015	FY2016-FY2020	FY2021-FY2025	FY2026-FY2030	FY2031-FY2035	FY2036 FY2040	FY2041-FY2045	FY2046 FY2050	TOTAL FY1997-FY2050
OPERATING EXPENSE	20,937	6,000	-	-	-	20,000	41,000	45,000	15,400	173,508
CENRTC										-
GENERAL PLANT PROJECT										-
LINE ITEM *(List Each One)*										
										-
										-
										-
										-
										-
Subtotal Line Items	-	-	-	-	-	-	-	-	-	-
TOTAL NEW B/A	20,937	6,000				20,000	41,000	45,000	15,400	173,505

EXHIBIT 2a

FACILITY STABILIZATION
FY 1998 COST BASELINE (BCWS) BY MONTH BY PROJECT BASELINE SUMMARY (PBS) BY ACTIVITY DATA SHEET (ADS) EXECUTION YEAR

($000s)

PROJECT WBS: 1.4.8.1
PBS NO: RL-TP10
PBS TITLE: Accelerated Deactivation

ADS TITLE	ADS NO	FUND TYPE	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
Accelerated Deactivation	66290	OP EXP	117	138	193	221	230	316	229	264	255	216	245	291	2,716
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	117	138	193	221	230	316	229	264	255	216	245	291	2,716
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-

[1]Budgeted Cost of Work Scheduled (BCWS) Equals Performance Measurement Baseline (PMB); Expense Carryover Is **NOT** Included.

EXHIBIT 2a

FACILITY STABILIZATION
FY 1998 COST BASELINE (BCWS) BY MONTH
BY PROJECT BASELINE SUMMARY (PBS)
BY ACTIVITY DATA SHEET (ADS)
EXECUTION YEAR

($000s)

PROJECT WBS:	1.4.8.1
PBS NO:	RL-TP10
PBS TITLE:	Accelerated Deactivation

ADS TITLE	ADS NO	FUND TYPE	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL BCWS/PMB[1]			117	138	193	221	230	316	229	264	255	216	245	291	2,716

[1]Budgeted Cost of Work Scheduled (BCWS) Equals Performance Measurement Baseline (PMB); Expense Carryover Is **NOT** Included.

ACCELERATED DEACTIVATION

AVERAGE ANNUAL FULL TIME EQUIVALENTS
(includes Major Subcontractors but not Enterprise Companies)

PHBS 1.4.8.1 **Submittal Date: 9/10/97**

PBS Number	PBS Title	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007
RL-TP10	Acc. Deac	14	8	22	22	22	22	22	22	22	22
Total PBS FTEs		14	8	22	22	22	22	22	22	22	22

B.11 Transition Project Management (RL-TP12)

B.11.1.0 Transition Project Management Technical Baseline (RL-TP12)

B.11.1.1 Transition Project Management Organization Mission (RL-TP12)

Transition Project Management provides centralized program, project and business management to plan, execute and control the Facility Stabilization Project (FSP). Transition Project Management provides for common safeguard and security (SAS) support; centralized coordination of environmental, safety, health, radiological control and quality assurance; systems engineering (SE); new technology development and implementation support; policies and procedure development; excess facility and material planning (includes development of special projects such as K Basin deactivation project, Hanford Surplus Facility Program 300 Area Revitalization project, Accelerated Deactivation project, etc.); FSP strategic planning; procurement support; management of Special Nuclear Materials (SNM); and operations integration support. Support for technical development of 200 Area Canyon Entombment, and Fluor Daniel Hanford, Inc. (FDH) project management direction is also provided.

The primary FSP mission is to deactivate contaminated facilities on the Hanford Site, reduce risks to workers, the public and environment, transition the facilities to a low cost, long-term surveillance and maintenance state and to provide safe and secure storage of Special Nuclear Materials, Nuclear Materials, and Nuclear Fuel (SNM/NM/NF). Facility deactivation will protect the health and safety of the public, on-site workers and the environment, and also provides for beneficial use of facilities, equipment and other resources.

As the mission for FSP has shifted from production to support of environmental restoration, each facility is making a transition to support the Site Cleanup Mission. FSP high level mission goals include: achieving deactivation of facilities and turnover of these facilities to EM-40; using Plutonium/Uranium Extraction (PUREX) plant deactivation as a model for future facility deactivation; managing SNM/NM/NF in a safe and secure manner, and where appropriate, in accordance with International Atomic Energy Agency (IAEA) safeguards rules; treating SNM/NM/NF as necessary and storing these materials onsite in long-term storage awaiting final disposition decisions by the U.S. Department of Energy (DOE); implementing nuclear materials disposition directives; working in accordance with the Tri-Party Agreement (TPA), and other compliance agreements; and maintaining compliance with all applicable Federal, state and local laws.

Specific activities include:

Program, Business and Financial Management:
- Prioritize scope and budgets, and support strategic planning.
- Coordinate management of capital-funded activities for FSP.
- Provide direct financial management to all FSP Program activities.
- Prepare budget alternatives and special analyses as requested by DOE or company management.
- Develop and maintain activity-based cost estimates and resource-loaded schedules.
- Prepare and maintain financial documents required by the Site Management System (SMS) and budget planning process including Multi-Year Program Plans (MYPPs), Activity Data Sheets (ADSs), Cost Account Authorizations(CAAs), monthly reporting and budget alternatives and analysis.

Environmental Compliance, Safety, Health, Radiation Control and Quality Assurance:
- Provide central coordination of environmental activities within FSP, including selective central program oversight of the implementation of TPA, environmental protection, facility compliance, and RCRA permitting activities.
- Develop/maintain environmental management system.

- Participate in the Hanford Central Environmental Committee.
- Develop/maintain Environmental, Safety and Health (ES&H) Management Plan.
- Provide Waste Minimiaztion/Pollution Prevention/Dangerous Waste reporting.
- Provide Radiation Control technical support and oversight.
- Provide integration of Radiation Control procedures.
- Interface with FDH on Radiation Control issues.
- Track and trend Radiation Control performance indicators.
- Coordinate and integrate identification and resolution of FSP Quality Assurance (QA) issues.
- Provide oversight and direction on QA issues to facility management and personnel.
- Measure, analyze, evaluate and report on the effectiveness of the FSP QA program.
- Maintain the Occupational Safety and Health Administration (OSHA) 200 Occupational Injuries/Illnesses (OII) log.
- Determine OSHA recordability classification of OII's.
- Coordinate all accident information and interface with FDH Safety, FDH Worker's Compensation and Hanford Environment Health Foundation (HEHF).
- Provide OII case management assistance.

Safeguards and Security:

- Provide support for nonplant-specific administration and coordination of security system engineering, security projects, education and asset protection.
- Provide maintenance and testing support and system development for the Patrol Operations Center (POC) and Alarm Monitoring Operational Support System (AMOSS).
- Maintain the SNM accountability database.
- Develop and maintain policies and procedures governing the use, control, and accountability of SNM.
- Coordinate visits by foreign nationals.

Operations Integration:

- Arrange for expert in plant mentoring & Conduct of Operations (COO) champions.
- Support COO Champions Program.
- Coordinate facility COO Assessments.
- Provide outside commercial nuclear operations perspective in review of plant operations.
- Support Maintenance Champions Program.
- Coordinate Conduct of Maintenance Self-Assessment Program.
- Support facilities reengineering.
- Distribute lessons learned within FSP and provide input to site-wide lessons learned program.
- Assist in development, review and evaluation of operations Performance Indicators.

Technical Integration:

- Support new technology development and implementation.
- Support policies and procedure development.
- Special projects development (i.e. 200 Area Canyon Entombment, K Basin Deactivation project, Hanford Surplus Facility Program 300 Area Revitalization project, Accelerated Deactivation project, and other excess facility planning projects).
- FSP strategic planning.
- Systems engineering.

Systems Engineering:

- Interface with Site SE personnel to develop, under their guidance, Hanford Site specification, interface, and issue documents.
- Maintain the program SE documentation in the Hanford Site Technical Baseline (HSTB).
- Continue development of program-level alternatives, and maintain current selected plant alternatives in accordance with division strategic planning.

- Provide support for Project Project Baseline Summary (PBS) , MYPP and other budget documentation development.
- Provide technical support for further development of the plant-level SE components to determine facility cleanup needs and the optimum cleanup strategy.
- Support development of plant and company interface agreements.
- Provide SE guidance, allowing facility work breakdown structures, resource-loaded activity schedules, and other budget documentation to be revised to ensure that FSP technical, cost, and schedule baselines reflect current SE results.
- Provide SE guidance and assistance in the development of SE documents for other existing contaminated facilities entering the FSP program.
- Support excess facility disposition planning.

Nuclear Materials Management:
- Continue development of Plutonium strategies and strategic analysis for Hanford.
- Coordinate SNM material receipts and shipments.
- Develop DOE Order 5660.1B reports (i.e. Inventory Assessment Report, Material Management Plan, etc.).
- Support DOE in development of Disposition Management Plans.
- Special project development (i.e. uranium disposition projects, etc.).

Canyon Entombment:

- Provide technical design support for development of environmental documentation.
- Provide project management support for technical development of canyon disposition options.

Waste Minimization/Pollution Prevention:

- Identify priority waste streams and perform pollution prevention assessments, evaluate and implement pollution prevention opportunities, and report results to DOE and regulators.

B.11.1.2 Transition Project Management End Point Targets from Hanford Strategic Plan

-None-

B.11.1.3 Transition Project Management Major Facilities

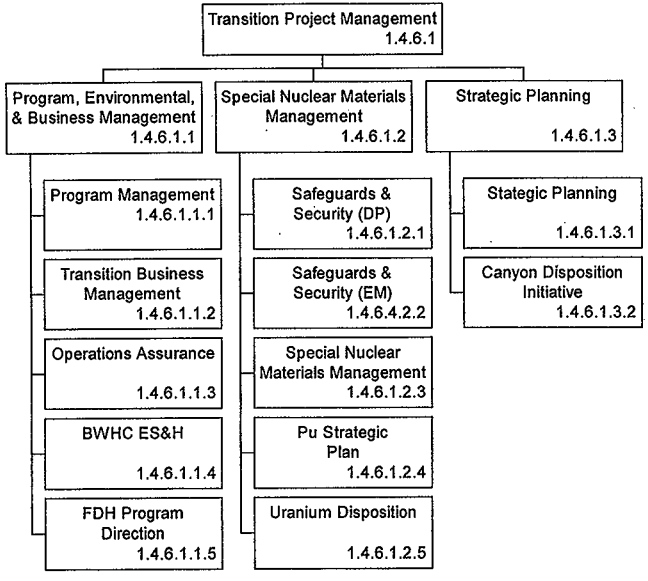
B.11.1.4 Drivers for Transition Project Management

-None-

B.11.1.5 Transition Project Management Risk Management

-None-

Transition Project Management
Work Breakdown Structure



HANFORD SITE WORK BREAKDOWN STRUCTURE DICTIONARY
FACILITY STABILIZATION
WBS: 1.4

9/10/1997

1. Activity Title: PROGRAM, ENVIRONMENTAL, AND BUSINESS MAN	2. Date 7/31/1997	3. PBS Number RL-TP12	4. Dict Rev 0
5. Contract WBS No. 1.4.6.1.1	6. Corresponding FDS No. K1A	7. Baseline CR No.	
8. Organization Name 11000			9. B & R No.

10. Scope of Work

The Program, Environmental, and Business Management activity provides management of common resources such as program and environmental management; business management; project control; conduct of operations; financial management and commitment planning; communications support (media response, outreach, public involvement, and employee communication); centralized coordination of environmental, safety, health and quality assurance; operations integration support, and Fluor Daniel Hanford project direction and coordination. Specific tasks include the standardized preparation of Project Baseline Summaries and the Multi-Year Work Plan (MYWP), administration of the Project Status Report; the centralized integration, negotiation, and planning of Facility Stabilization environmental, health, safety, and quality assurance activities; and conduct of performance assessments, publication of lessons learned, and preparation of performance indicators and agreements.

HANFORD SITE WORK BREAKDOWN STRUCTURE DICTIONARY
FACILITY STABILIZATION
WBS: 1.4

9/10/1997

1. Activity Title: SPECIAL NUCLEAR MATERIALS MANAGEMENT	2. Date 7/31/1997	3. PBS Number RL-TP12	4. Dict Rev 0
5. Contract WBS No. 1.4.6.1.2	6. Corresponding FDS No. K1B	7. Baseline CR No.	
8. Organization Name 11000			9. B & R No.

10. Scope of Work
The Special Nuclear Material (SNM) Management activity provides development, maintenance, and implementation of policies and procedures governing the use, control, and overview of transportation and accountability of SNM to ensure compliance with DOE orders; supports development of disposition strategies for uranium and plutonium and other SNM; supports activities to maintain site security requirements; and supports the design and installation of safeguards and security system upgrades for Facility Stabilization Project facilities.

HANFORD SITE WORK BREAKDOWN STRUCTURE DICTIONARY
FACILITY STABILIZATION
WBS: 1.4 9/10/1997

1. Activity Title: STRATEGIC PLANNING	2. Date 7/31/1997	3. PBS Number RL-TP12	4. Dict Rev 0
5. Contract WBS No. 1.4.6.1.3	6. Corresponding FDS No. K1C	7. Baseline CR No.	
8. Organization Name 11000			9. B & R No.

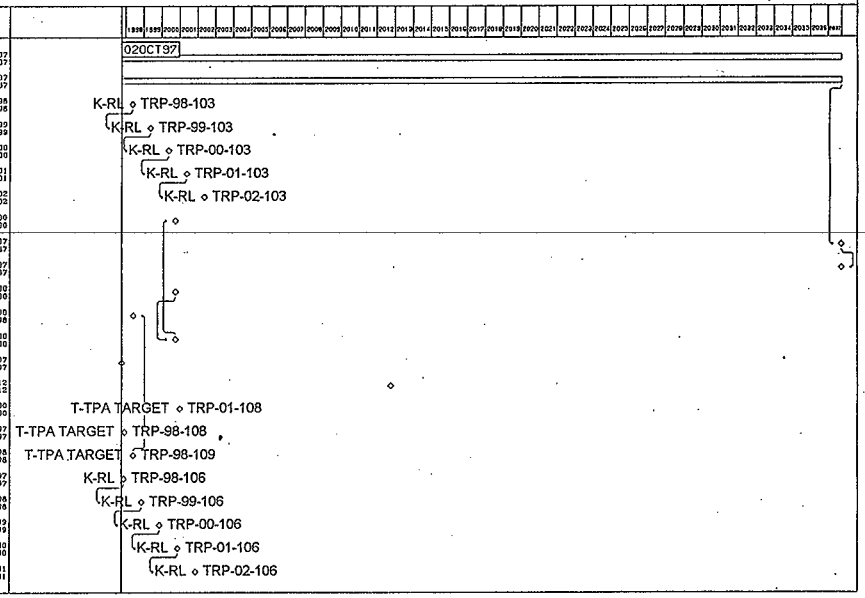
10. Scope of Work
The Strategic Planning activity provides support for further development of the strategy to deactivate facilities and store special nuclear material/nuclear material/spend nuclear fuel. Specific activites include: coordinating and assisting in the development and revision of facility-specific systems engineering (SE) documentation; supporting the further development of the Hanford Site and Facility Stabilization SE effort; supporting revisions to the Hanford Site-level SE documentation; and supporting the development of the 200 Area Canyon Disposition documentation.

Proj Lvl (PBS #)	FDS Act Number	Activity Title	Activity Manager	Responsible Organization	Cost Account
RL-TP12		TRANSITION PROJECT MANAGEMENT			
	K1A	PROGRAM, ENVIRONMENTAL, AND BUSINESS MANAGEMENT	J. O. Lundeen	11000	1K1A01 1K1A02 1K1A03 1K1A04 1K1A05
	K1B	SPECIAL NUCLEAR MATERIALS MANAGEMENT	R. R. Borisch	11000	1K1B01 1K1B02 1K1B03 1K1B04 1K1B05
	K1C	STRATEGIC PLANNING	G. L. McCormick	11000	1K1C01 1K1C02

FACILITY STABILIZATION PROJECT
RL-TP12 Facility Stabilization Project Management
Project Master Baseline Schedule

Time-Phased Logic Diagram
FY 98 MYWP September 1997

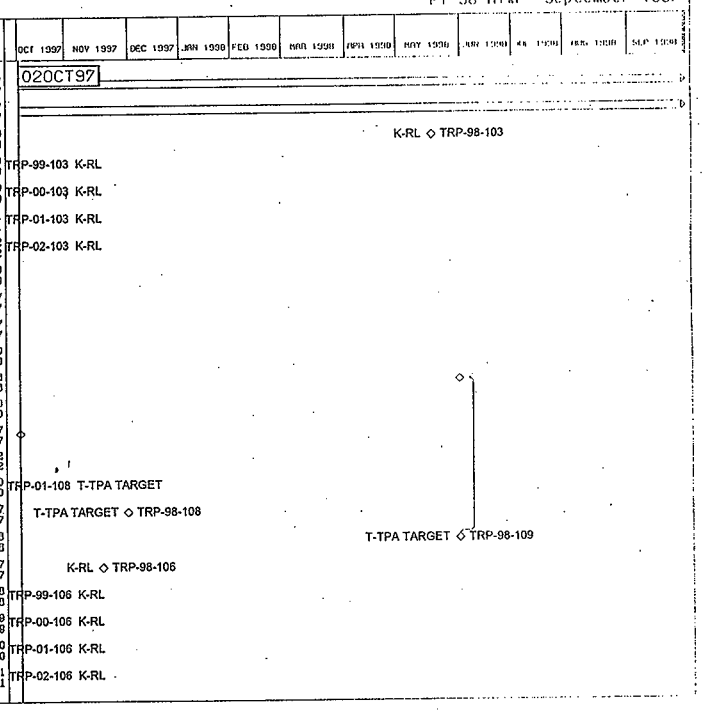
Activity	Description	Start
PK	TRANSITION PROJECT MANAGEMENT	10/02/97 09/30/37
PM000	TRANSITION PROJECT MANAGEMENT	10/02/97 09/30/37
PM003	Submit Hanford Materials Forecast to DOE-RL	05/15/98 09/15/98
PM004	Submit Hanford Materials Forecast to DOE-RL	05/15/99 05/15/99
PM005	Submit Hanford Materials Forecast to DOE-RL	06/15/00 05/15/00
PM006	Submit Hanford Materials Forecast to DOE-RL	05/15/01 05/15/01
PM007	Submit Hanford Materials Forecast to DOE-RL	05/15/02 05/15/02
PM00A	HSP.FAC.A Safe,Stable,Secure Onsite Storage SNM	09/30/00 09/30/00
PM00H	HSP.FAC.H, Fac to stable deactivated condition	10/01/37 10/01/37
PM00C	HSP.FAC.C, Surplus Facilities D&D sufficiently	10/01/37 10/01/37
PM00D	HSP.ET.4.C, Provide Safe,Stable,Storage SNM 200A	09/30/00 09/30/00
PM00G	HSP.ET.4.N, Comp Final Disposition UU Inventorie	05/31/00 05/31/98
PM00N	HSP.ET.4.M, Transfer SNM from South 600A to 200A	09/30/00 09/30/00
PM00J	HSP.ET.4.H, Rem Uranium thru Interim Storage 400	10/02/97 10/02/97
PM00K	HSP.ET.4.H, Trans High Cost Surplus Facilities	09/30/12 09/30/12
PM00M	MX-02-06fComp Disposal/Compliant Storage Site UU	12/31/00 12/31/00
PM00N	MX-92-07i,Submit Site UU FMP to Ecology(Sec 11.5)	11/30/97 11/30/97
PM00P	MX-02-06T, Submit Site UU Disposition Asmnt Rprt	05/31/98 05/31/98
PM010	Submit Hanford Materials Mgmt Plan to DOE-RL	11/15/97 11/15/97
PM011	Submit Hanford Materials Mgmt Plan to DOE-RL	11/15/98 11/15/98
PM012	Submit Hanford Materials Mgmt Plan to DOE-RL	11/15/99 11/15/99
PM013	Submit Hanford Materials Mgmt Plan to DOE-RL	11/15/00 11/15/00
PM014	Submit Hanford Materials Mgmt Plan to DOE-RL	11/15/01 11/15/01



FACILITY STABILIZATION PROJECT
RL-TP12 Facility Stabilization Project Management
Project Master Baseline Schedule

Time Phased Logic Diagram
FY 98 MYWP September 1997

Activity	Description	Start	Finish
PM	TRANSITION PROJECT MANAGEMENT	10/02/97	09/30/37
PM000	TRANSITION PROJECT MANAGEMENT	10/02/97	09/30/37
PM003	Submit Hanford Materials Forecast to DOE-RL	05/15/98	05/15/98
PM004	Submit Hanford Materials Forecast to DOE-RL	05/15/99	05/15/99
PM005	Submit Hanford Materials Forecast to DOE-RL	05/15/00	05/15/00
PM006	Submit Hanford Materials Forecast to DOE-RL	05/15/01	05/15/01
PM007	Submit Hanford Materials Forecast to DOE-RL	05/15/02	05/15/02
PM00A	HSP.FAC.A Safe,Stable,Secure Onsite Storage SNM	09/30/00	09/30/00
PM00B	HSP.FAC.B, Fac to stable deativated condition	10/01/37	10/01/37
PM00C	HSP.FAC.C, Surplus Facilities D&D sufficiently	10/01/37	10/01/37
PM00D	HSP.ET.4.C, Provide Safe,Stable,Storage SNM 200A	09/30/00	09/30/00
PM00G	HSP.ET.4.N, Comp Final Disposition UU Inventorie	05/31/98	05/31/98
PM00H	HSP.ET.4.M, Transfer SNM from South 600A to 200A	09/30/00	09/30/00
PM00J	HSP.ET.4.H, Rem Uranium thru Interim Storage 400	10/02/97	10/02/97
PM00K	HSP.ET.4.D, Trans High Cost Surplus Facilities	09/30/12	09/30/12
PM00M	MX-92-06TComp Disposal/Compliant Storage Site UU	12/31/00	12/31/00
PM00N	MX-92-07T,Submt Site UU PMP to Ecology(Sec 11.5)	11/30/97	11/30/97
PM00P	MX-92-08T, Submit Site UU Disposition Assmt Rprt	05/31/98	05/31/98
PM010	Submit Hanford Materials Mgmt Plan to DOE-RL	11/15/97	11/15/97
PM011	Submit Hanford Materials Mgmt Plan to DOE-RL	11/15/98	11/15/98
PM012	Submit Hanford Materials Mgmt Plan to DOE-RL	11/15/99	11/15/99
PM013	Submit Hanford Materials Mgmt Plan to DOE-RL	11/15/00	11/15/00
PM014	Submit Hanford Materials Mgmt Plan to DOE-RL	11/15/01	11/15/01



MYWP/SSPP PLANNING MILESTONE LIST
REPORTING PERIOD 10/01/97 TO 9/30/205

MILESTONE CONTROL #	TPA-MS NUMBER	TPA TYPE	MS LEVEL	MS TITLE	TYPE	DATES PLANNED BASELINE	DATES APPROVED BASELINE	DATES REVISED BASELINE	PROJ CIN	PBS #
TRP-98-108	M-92-07-T01	T	RL	SUBMIT DRAFT HANFORD SITE UNIRRADIATED URANIUM PROJ. MGMT. PLAN	OTH	11/30/97				RL-TP12
TRP-98-109	M-92-08-T01	T	FO	SUBMIT HANFORD SITE UNIRRADIATED URANIUM DISPOSITION ASSESS. RPT.	OTH	5/31/98				RL-TP12
TRP-98-103			RL	SUBMIT HANFORD MATERIALS FORECAST TO DOE-RL		5/15/98				RL-TP12
TRP-98-106			RL	SUBMIT HANFORD MATERIALS MANAGEMENT PLAN TO DOE-RL		11/15/97				RL-TP12
TRP-99-103			RL	SUBMIT HANFORD MATERIALS FORECAST TO DOE-RL		5/15/99				RL-TP12
TRP-99-106			RL	SUBMIT HANFORD MATERIALS MANAGEMENT PLAN TO DOE-RL		11/15/98				RL-TP12
TRP-00-103			RL	SUBMIT HANFORD MATERIALS FORECAST TO DOE-RL		5/15/00				RL-TP12
TRP-00-106			RL	SUBMIT HANFORD MATERIALS MANAGEMENT PLAN TO DOE-RL		11/15/99				RL-TP12
TRP-01-103			RL	SUBMIT HANFORD MATERIALS FORECAST TO DOE-RL		5/15/01				RL-TP12
TRP-01-106			RL	SUBMIT HANFORD MATERIALS MANAGMENT PLAN TO DOE-RL		11/15/00				RL-TP12
TRP-02-103			RL	SUBMIT HANFORD MATERIALS FORECAST TO RL		5/15/02				RL-TP12
TRP-02-106			RL	SUBMIT HANFORD MATERIALS MANAGEMENT PLAN TO RL		11/15/01				RL-TP12
TRP-01-108	M-92-06-T01	T	RL	COMPLETE DISPOSITION/COMPLIANT STORAGE FOR ALL SITE UU		12/31/00				RL-TP12

PHMC

MILESTONE DESCRIPTION SHEET

Title: SUBMIT DRAFT HANFORD SITE UNIRRADIATED URANIUM PROJ. MGMT. PLAN		**Date:** 8/31/97
Assigned To: FSP/P&EM		**CIN:**
Program WBS Designator: 1.4.6.1		**Due Date:** 11/30/97
PBS No: RL-TP12		
MC #: TRP-98-108	**TPA No:** M-92-07-T01	**Rev:** 1

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG X OTHER	DNFSB (Y/N): COMMIT #: RECOMM #:	Report Letter Drawing(s) X Other (Specify) Document	DOE-HQ X DOE-RL Other (Specify)

Milestone Description:
The Draft Hanford Site Unirradiated Uranium Project Management Plan will establish all major project tasks and deliverables for treatment, storage, and/or disposal of Hanford unirradiated uranium, including sale or commercial sector management activities, modification of existing facilities, and/or construction of new facilities. The delivery date of November 30, 1997, supports RL's committment to submit the Plan to Ecology by December 31, 1997, as required by Tri-Party Agreement Milestone MX-92-07-T01.

Description of what constitutes completion of this milestone:
Submission of a Draft Hanford Site Unirradiated Uranium Project Management Plan to RL will complete this milestone.

PHMC

MILESTONE DESCRIPTION SHEET

Title: SUBMIT HANFORD SITE UNIRRADIATED URANIUM DISPOSITION ASSESS. RPT.		**Date:** 7/31/97
Assigned To: R.R. Borisch		**CIN:**
Program WBS Designator: 1.4.6.1		**Due Date:** 5/31/98
PBS No: RL-TP12		
MC #: TRP-98-109	**TPA No:** M-92-08-T01	**Rev:** 0

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ DOE-RL X DOE-FO CONTRACTOR	EA PEG X OTHER	DNFSB (Y/N): COMMIT #: RECOMM #:	X Report Letter Drawing(s) Other (Specify)	DOE-HQ X DOE-RL Other (Specify)

Milestone Description:
The Hanford Site Unirradiated Uranium Disposition Assessment Report will include a facility needs assessment should unirradiated uranium treatment, repackaging, and/or consolidation be necessary. This report will also include an assessment of expected impacts on other Tri-Party Agreement projects. The delivery date of May 31, 1998, supports RL's committment to submit report to Ecology by June 30, 1998, as required by Tri-Party Agreement Milestone MX-92-08-T01.

Description of what constitutes completion of this milestone:
Submission of a Hanford Site Unirradiated Uranium Disposition Assessment Report to RL will complete this milestone.

PHMC
MILESTONE DESCRIPTION SHEET

Title: SUBMIT HANFORD MATERIALS FORECAST TO DOE-RL		**Date:** 7/31/97
Assigned To: R.R. Borisch		**CIN:**
Program WBS Designator: 1.4.6.1		**Due Date:** 5/15/98
PBS No: RL-TP12		
MC #: TRP-98-103	**TPA No:**	**Rev:** 0

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): COMMIT #: RECOMM #:	X Report Letter Drawing(s) Other (Specify)	DOE-HQ X DOE-RL Other (Specify)

Milestone Description:
The Hanford Nuclear Materials Forecast for the current FY and the next 11 FY is prepared annually per the requirements of DOE Order 5660.1B. The delivery date of May 15, 1998, assumes DOE-HQ provides the guidance for the forecasts by April 1, 1998, and supports RL's committment to submit the Forecast to HQ by June 15, 1998.

Description of what constitutes completion of this milestone:
Submission of the Hanford Nuclear Materials Forecast to RL will complete this milestone.

PHMC

MILESTONE DESCRIPTION SHEET

Title: SUBMIT HANFORD MATERIALS MANAGEMENT PLAN TO DOE-RL				**Date:**
Assigned To:				**CIN:**
Program WBS Designator: 1.4.6.1				**Due Date:** 11/15/97
PBS No: RL-TP12				
MC #: TRP-98-106		**TPA No:**		**Rev:**
MILESTONE LEVEL: DOE-HQ X DOE-RL DOE-FO CONTRACTOR	**MILESTONE TYPE:** EA PEG OTHER	**DNFSB STATUS:** DNFSB (Y/N): COMMIT #: RECOMM #:	**DELIVERABLE:** Report Letter Drawing(s) Other (Specify)	**ADDRESS TO:** DOE-HQ DOE-RL Other (Specify)

Milestone Description:
The Hanford Materials Management Plan is prepared annually per the requirements of DOE Order 5660.1B. This plan addresses nuclear material supply and demand for both weapons and non-weapons programs, nuclear materials management issues, processing options, and inventory management. The delivery date will be approximately 6 weeks after RL provides planning assumptions. For planning purposes it is assumed that RL guidance will be provided no later than October 1, 1998. Changes to this assumption will be documented through change control.

Description of what constitutes completion of this milestone:
Submission of a Hanford Materials Management Plan to RL will complete this milestone.

PHMC

MILESTONE DESCRIPTION SHEET

Title: SUBMIT HANFORD MATERIALS FORECAST TO DOE-RL				Date:
Assigned To:				CIN:
Program WBS Designator: 1.4.6.1				Due Date: 5/15/99
PBS No: RL-TP12				
MC #: TRP-99-103		TPA No:		Rev:

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): COMMIT #: RECOMM #:	Report Letter Drawing(s) Other (Specify)	DOE-HQ DOE-RL Other (Specify)

Milestone Description:
The Hanford Nuclear Materials Forecast for the current FY and the next 11 FY is prepared annually per the requirements of DOE Order 5660.1B. The delivery date of May 15 assumes DOE-HQ provides the guidance for the forecasts by April 1 and allows RL sufficient time for submission of the Forecast to HQ by June 15.

Description of what constitutes completion of this milestone:
Submission of the Hanford Nuclear Materials Forecast to RL will complete this milestone.

PHMC

MILESTONE DESCRIPTION SHEET

Title: SUBMIT HANFORD MATERIALS MANAGEMENT PLAN TO DOE-RL				Date:
Assigned To:				CIN:
Program WBS Designator: 1.4.6.1				Due Date: 11/15/98
PBS No: RL-TP12				
MC #: TRP-99-106		TPA No:		Rev:

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ	EA	DNFSB (Y/N):	Report	DOE-HQ
X DOE-RL	PEG	COMMIT #:	Letter	DOE-RL
DOE-FO	OTHER	RECOMM #:	Drawing(s)	Other (Specify)
CONTRACTOR			Other (Specify)	

Milestone Description:
The Hanford Materials Management Plan is prepared annually per the requirements of DOE Order 5660.1B. This plan addresses nuclear material supply and demand for both weapons and non-weapons programs, nuclear materials management issues, processing opotions, and inventory mangement. The delivery date will be approximately 6 weeks after RL provides planning assumptions. For planning purposes it is assumed that RL guidance will be provided no later than October 1, 1999. Changes to this assumption will be documented through change control.

Description of what constitutes completion of this milestone:
Submission of a Hanford Materials Management Plan to RL will complete this milestone.

PHMC

MILESTONE DESCRIPTION SHEET

Title: SUBMIT HANFORD MATERIALS FORECAST TO DOE-RL				Date:
Assigned To:				CIN:
Program WBS Designator: 1.4.6.1				Due Date: 5/15/00
PBS No: RL-TP12				
MC #: TRP-00-103		TPA No:		Rev:

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): COMMIT #: RECOMM #:	Report Letter Drawing(s) Other (Specify)	DOE-HQ DOE-RL Other (Specify)

Milestone Description:
The Hanford Nuclear Materials Forecast for the current FY and the next 11 FY is prepared annually per the requirements of DOE Order 5660.1B. The delivery date of May 15 assumes DOE-HQ provides the guidance for the forecasts by April 1 and allows RL sufficient time for submission of the Forecast to HQ by June 15.

Description of what constitutes completion of this milestone:
Submission of the Hanford Nuclear Materials Forecast to RL will complete this milestone.

PHMC

MILESTONE DESCRIPTION SHEET

Title: SUBMIT HANFORD MATERIALS MANAGEMENT PLAN TO DOE-RL				**Date:**
Assigned To:				**CIN:**
Program WBS Designator: 1.4.6.1				**Due Date:** 11/15/99
PBS No: RL-TP12				
MC #: TRP-00-106		**TPA No:**		**Rev:**
MILESTONE LEVEL: DOE-HQ X DOE-RL DOE-FO CONTRACTOR	**MILESTONE TYPE:** EA PEG OTHER	**DNFSB STATUS:** DNFSB (Y/N): COMMIT #: RECOMM #:	**DELIVERABLE:** Report Letter Drawing(s) Other (Specify)	**ADDRESS TO:** DOE-HQ DOE-RL Other (Specify)

Milestone Description:
The Hanford Materials Management Plan is prepared annually per the requirements of DOE Order 5660.1B. This plan addresses nuclear material supply and demand for both weapons and non-weapons programs, nuclear materials management issues, processiong options, and inventory magnement. The delivery date will be approximately 6 weeks after RL provides planning assumptions. For planning purposes it is assumed that RL guidance will be provided not later than October 1, 2000. Changes to this assumption will be documented through change control.

Description of what constitutes completion of this milestone:
Submission of a Hanford Materials Management Plan to RL will complete this milestone.

PHMC

MILESTONE DESCRIPTION SHEET

Title: SUBMIT HANFORD MATERIALS FORECAST TO DOE-RL				**Date:**
Assigned To:				**CIN:**
Program WBS Designator: 1.4.6.1				**Due Date:** 5/15/01
PBS No: RL-TP12				
MC #: TRP-01-103		**TPA No:**		**Rev:**

MILESTONE LEVEL:	**MILESTONE TYPE:**	**DNFSB STATUS:**	**DELIVERABLE:**	**ADDRESS TO:**
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): COMMIT #: RECOMM #:	Report Letter Drawing(s) Other (Specify)	DOE-HQ DOE-RL Other (Specify)

Milestone Description:
The Hanford Nuclear Materials Forecast for the current FY and the next 11 FY is prepared annually per the requirements of DOE Order 5660.1B. The delivery date of May 15 assumes DOE-HQ provides the guidance for the forecasts by April 1 and allows RL sufficient time for submission of the Forecast to HQ by June 15.

Description of what constitutes completion of this milestone:
Submission of the Hanford Nuclear Materials Forecast to RL will complete this milestone.

PHMC

MILESTONE DESCRIPTION SHEET

Title: SUBMIT HANFORD MATERIALS MANAGMENT PLAN TO DOE-RL				Date:
Assigned To:				CIN:
Program WBS Designator: 1.4.6.1				Due Date: 11/15/00
PBS No: RL-TP12				
MC #: TRP-01-106		TPA No:		Rev:

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): COMMIT #: RECOMM #:	Report Letter Drawing(s) Other (Specify)	DOE-HQ DOE-RL Other (Specify)

Milestone Description:
The Hanford Materials Management Plan is prepared annually per the requirements of DOE Order 5660.1B. This plan addresses nuclear material supply and demand for both weapons and non-weapons programs, nuclear materials management issues, processing options, and inventory management. The delivery date will be approximately 6 weeks after RL provides planning assumptions. For planning purposes it is assumed that RL guidance will be provided no later than October 1, 2001. Changes to this assumption will be documented through change control.

Description of what constitutes completion of this milestone:
Submission of a Hanford Materials Management Plan to RL will complete this milestone.

PHMC

MILESTONE DESCRIPTION SHEET

Title: SUBMIT HANFORD MATERIALS FORECAST TO RL				Date:
Assigned To:				CIN:
Program WBS Designator: 1.4.6.1				Due Date: 5/15/02
PBS No: RL-TP12				
MC #: TRP-02-103		TPA No:		Rev:

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): COMMIT #: RECOMM #:	Report Letter Drawing(s) Other (Specify)	DOE-HQ DOE-RL Other (Specify)

Milestone Description:
The Hanford Nuclear Materials Forecast for the current FY and the next 11 FYs is prepared annually per the requirements of DOE Order 5660.1B. The delivery date of May 15 assumes DOE-HQ provides the guidance for the forecasts by April 1 and allows RL sufficient time for submission of the Forecast to HQ by June 15.

Description of what constitutes completion of this milestone:
Submission of the Hanford Nuclear Materials Forecast to RL will complete this milestone.

PHMC

MILESTONE DESCRIPTION SHEET

Title: SUBMIT HANFORD MATERIALS MANAGEMENT PLAN TO RL				**Date:**
Assigned To:				**CIN:**
Program WBS Designator: 1.4.6.1				**Due Date:** 11/15/01
PBS No: RL-TP12				
MC #: TRP-02-106		**TPA No:**		**Rev:**
MILESTONE LEVEL: DOE-HQ X DOE-RL DOE-FO CONTRACTOR	**MILESTONE TYPE:** EA PEG OTHER	**DNFSB STATUS:** DNFSB (Y/N): COMMIT #: RECOMM #:	**DELIVERABLE:** Report Letter Drawing(s) Other (Specify)	**ADDRESS TO:** DOE-HQ DOE-RL Other (Specify)

Milestone Description:
The Hanford Materials Management Plan is prepared annually per the requirements of DOE Order 5660.1B. This plan addresses nuclear material supply and demand for both weapons and non-weapons programs, nuclear materials management issues, processing options, and inventory management. The delivery date will be approximately 6 weeks after RL provides planning assumptions. For planning purposes it is assumed that RL guidance will be provided no later than October 1, 2002. Changes to this assumption will be documented through change control.

Description of what constitutes completion of this milestone:
Submission of a Hanford Materials Management Plan to RL will complete this milestone.

PHMC

MILESTONE DESCRIPTION SHEET

Title: COMPLETE DISPOSITION/COMPLIANT STORAGE FOR ALL SITE UU		**Date:** 8/31/97
Assigned To: FSP/P&EM		**CIN:**
Program WBS Designator: 1.4.6.1		**Due Date:** 12/31/00
PBS No: RL-TP12		
MC #: TRP-01-108	**TPA No:** M-92-06-T01	**Rev:** 0

MILESTONE LEVEL:	MILESTONE TYPE:	DNFSB STATUS:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	EA PEG OTHER	DNFSB (Y/N): COMMIT #: RECOMM #:	Report Letter Drawing(s) Other (Specify)	DOE-HQ DOE-RL Other (Specify)

Milestone Description:

Description of what constitutes completion of this milestone:

FACILITY STABILIZATION
LIFE CYCLE COST BASELINE (BCWS) BY YEAR BY FUND TYPE
BY PROJECT BASELINE SUMMARY (PBS)
FY 1998

($000s)

PROJECT WBS:	1.4.6.1
PBS NO:	RL-TP12
PBS TITLE:	Transition Project Management

FUND TYPE	FY1997	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	SUBTOT FY1997-FY2006
OPERATING EXPENSE	10,494	11,698	12,026	11,415	13,564	13,900	14,248	15,108	15,478	13,229	131,058
CENRTC											-
GENERAL PLANT PROJECT											-
LINE ITEM *(List Each One)*											
											-
											-
											-
											-
											-
Subtotal Line Items	-	-	-	-	-	-	-	-	-	-	-
TOTAL BCWS/PMB[1]	10,494	11,698	12,026	11,415	13,564	13,900	14,248	15,108	15,478	13,229	131,058
MGMT RESERVE[2]											-
LINE ITEM CONTINGENCY[2]											-
OFFSITE TRANSFERS[3]											-
Subtotal	-	-	-	-	-	-	-	-	-	-	-
TOTAL	10,494	11,698	12,026	11,415	13,564	13,900	14,248	15,108	15,478	13,229	131,058

[1]Budgeted Cost of Work Scheduled (BCWS) Equals Performance Measurement Baseline (PMB);
Expense Carryover **NOT** Included.
[2]Management Reserve and Line Item Contingency Held by RL.
[3]Work Performed at Sites Other Than Hanford.

FACILITY STABILIZATION
LIFE CYCLE COST BASELINE (BCWS) BY YEAR BY FUND TYPE
BY PROJECT BASELINE SUMMARY (PBS)
FY 1998

($000s)

PROJECT WBS:	1.4.6.1									
PBS NO:	RL-TP12									
PBS TITLE:	Transition Project Management									TOTAL
FUND TYPE	FY2007-FY2010	FY2011-FY2015	FY2016-FY2020	FY2021-FY2025	FY2026-FY2030	FY2031-FY2035	FY2036 FY2040	FY2041-FY2045	FY2046 FY2050	FY1997-FY2050
OPERATING EXPENSE	8,000	10,000	10,000	10,000	10,000					179,058
CENRTC										-
GENERAL PLANT PROJECT										-
LINE ITEM *(List Each One)*										
										-
										-
										-
										-
										-
Subtotal Line Items	-	-	-	-	-	-	-	-	-	-
TOTAL BCWS/PMB[1]	8,000	10,000	10,000	10,000	10,000					179,058
MGMT RESERVE[2]										-
LINE ITEM CONTINGENCY[2]										-
OFFSITE TRANSFERS[3]										-
Subtotal	-	-	-	-	-	-	-	-	-	-
TOTAL	8,000	10,000	10,000	10,000	10,000					179,058

[1]Budgeted Cost of Work Scheduled (BCWS) Equals Performance Measurement Baseline (PMB); Expense Carryover **NOT** Included.

[2]Management Reserve and Line Item Contingency Held by RL.

[3]Work Performed at Sites Other Than Hanford.

EXHIBIT 4

FACILITY STABILIZATION
LIFE CYCLE BUDGET AUTHORITY (B/A) BY YEAR BY FUND TYPE
BY PROJECT BASELINE SUMMARY (PBS)
FY 1998

($000s)

PROJECT WBS:	1.4.6.1
PBS NO:	RL-TP12
PBS TITLE:	Transition Project Management

FUND TYPE	FY1997	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	SUBTOT FY1997-FY2006
OPERATING EXPENSE	10,494	11,596	12,026	11,415	13,564	13,900	14,248	15,108	15,478	13,229	131,058
											-
CENRTC											-
											-
GENERAL PLANT PROJECT											-
											-
LINE ITEM *(List Each One)*											-
03-Dxxx Other Spent Fuel											-
											-
											-
											-
											-
Subtotal Line Items	-	-	-	-	-	-	-	-	-	-	-
TOTAL NEW B/A											

FACILITY STABILIZATION
LIFE CYCLE BUDGET AUTHORITY (B/A) BY YEAR BY FUND TYPE
BY PROJECT BASELINE SUMMARY (PBS)
FY 1998

($000s)

PROJECT WBS:	1.4.6.1									
PBS NO:	RL-TP12									
PBS TITLE:	Transition Project Management									TOTAL
FUND TYPE	FY2007-FY2010	FY2011-FY2015	FY2016-FY2020	FY2021-FY2025	FY2026-FY2030	FY2031-FY2035	FY2036 FY2040	FY2041-FY2045	FY2046 FY2050	FY1997-FY2050
OPERATING EXPENSE	8,000	10,000	10,000	10,000	10,000	-	-	-	-	179,058
CENRTC										-
GENERAL PLANT PROJECT										-
LINE ITEM *(List Each One)*										
03-Dxxx Other Spent Fuel										-
										-
										-
										-
										-
Subtotal Line Items	-	-	-	-	-	-	-	-	-	-
TOTAL NEW B/A	8,000	10,000	10,000	10,000	10,000					179,058

EXHIBIT 2a

FACILITY STABILIZATION
FY 1998 COST BASELINE (BCWS) BY MONTH
BY PROJECT BASELINE SUMMARY (PBS)
BY ACTIVITY DATA SHEET (ADS)
EXECUTION YEAR

($000s)

PROJECT WBS: 1.4.6.1
PBS NO: RL-TP12
PBS TITLE: Transition Project Management

ADS TITLE	ADS NO	FUND TYPE	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
Trans Proj Mgmt	6620-0	OP EXP	774	890	894	784	844	1,103	813	989	891	780	916	1,918	11,596
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	774	890	894	784	844	1,103	813	989	891	780	916	1,918	11,596
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-

[1]Budgeted Cost of Work Scheduled (BCWS) Equals Performance Measurement Baseline (PMB); Expense Carryover Is **NOT** Included.

EXHIBIT 2a

FACILITY STABILIZATION
FY 1998 COST BASELINE (BCWS) BY MONTH
BY PROJECT BASELINE SUMMARY (PBS)
BY ACTIVITY DATA SHEET (ADS)
EXECUTION YEAR

($000s)

PROJECT WBS:	1.4.6.1
PBS NO:	RL-TP12
PBS TITLE:	Transition Project Management

ADS TITLE	ADS NO	FUND TYPE	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL BCWS/PMB[1]			774	890	894	784	844	1,108	818	989	891	780	916	918	11,596

[1]Budgeted Cost of Work Scheduled (BCWS) Equals Performance Measurement Baseline (PMB); Expense Carryover Is **NOT** Included.

TRANSITION PROJECT MANAGEMENT

AVERAGE ANNUAL FULL TIME EQUIVALENTS
(includes Major Subcontractors but not Enterprise Companies)

PHBS 1.4.6.1 **Submittal Date: 9/10/97**

PBS Number	PBS Title	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007
RL-TP12	Trans. Proj. Mgm	61	62	62	81	81	81	81	81	62	62
Total PBS FTEs		61	62	62	81	81	81	81	81	62	62

B.12 Hanford Surplus Facility Program 300 Area Revitalization Project (RL-TP14)

B.12.1.0 Hanford Surplus Facility Program 300 Area Revitalization Project Technical Baseline (RL-TP14)

B.12.1.1 Hanford Surplus Facility Program 300 Area Revitalization Project Organization Mission (RL-TP14)

As a result of Hanford site mission change from defense production to cleanup and downsizing, the 300 area has a number of excess facilities requiring disposition beyond simple removal. These facilities include a reactor building, accelerator building, and numerous buildings used for reactor fuel production and processing activities. Most of the facilities contain significant radiological and chemical contamination, with 8 facilities currently managed under RCRA. The 300 area contains multiple burial grounds and liquid disposal / spill sites, which are managed under CERCLA as 3 separate operable units. There are 156 non-mobile facilities listed in the 300 Area. Of these, 46 facilities are known to contain radioactive and 11 are known to contain hazardous contamination. The remaining 99 buildings are not listed as contaminated but further verification of that condition is warranted on some of them because known historical uses and contamination of nearby grounds make them suspect. Eighteen contaminated buildings are being deactivated (300 Fuel Supply Facilities, 308 Building, 309 Building) and five more contaminated facilities are scheduled to begin deactivation in 1997 (324, 324A, 324D, 327, 3723 buildings) and are not included in the scope of this PBS.

Five facilities were assigned to the Faciltiy Stabilization Project this fiscal year and the minimum surveillance and maintenance for them is funded from this PBS. They are 321, 321B, 321D, 3706 and 3706A.

The purpose of this project is to provide a path forward for all 300 Area facilities not currently being managed under another PBS. This path forward includes:
- Monitoring and maintenance of facilities and grounds as required to assure containment of the radioactive and hazardous material.
- Stabilization and deactivation of contaminated facilities.
- Alternative cleanup of facilities, removing the legacy and liabilities of DOE operations ONLY TO THE EXTENT NECESSARY for facility and area alternative use.
- Final disposition of facilities including sale, dismantlement for salvage, demolition, and alternate use of facilities where facility re-use is economically and practically feasible.

These facilities constitute a risk to the public, environment and on-site workers due to contamination with a variety of materials including cesium, strontium, uranium, thorium, mixed fission products, various acids and bases, and a wide variety of cleaning agents and solvents. The facilities covered in this project are in close proximity to the Columbia River and the city of Richland. With the continual reduction in Hanford Site Security taking place, the likelihood of a member of the public entering this area unescorted without the necessary protective clothing and equipment is very high. A fire, containment system failures or structural collapse due to natural causes or facility deterioration could result in a release of contaminants to the environment via air, ground and water pathways. Many of these facilities have exceeded their design life, and will pose an increasing hazard to site workers as the facilities continue to deteriorate.

The activities in this PBS reduces risk to the public, on-site workers and the environment by removing, stabilizing, or isolating contaminants, providing surveillance and maintenance to assure releases do not occur, keeping facilities in an acceptable material condition or sufficiently isolated to avoid worker hazards due to facility deterioration, and providing a mechanism for final disposition of the facilities. Risk is also reduced by assuring that the cleanup follows a priority based path. The planning and scheduling process for the transition of these facilities includes an assessment of each facility's hazards and associated risk, which are then used in determining where the facility

should be placed on the transition schedule. Another reduction of risk is realized by having the transition activities performed by experienced personnel reducing the risk associated with a lack of experience.

The overall initial cost savings should exceed $60.00 per square foot for this phase of the transition effort. Some additional funding will be required for fencing the area restricting public access to specific areas and for monitoring activities, and these costs are reflected in the overall costs shown on the investment sheet.

Land/Facility/Resource availability is greatly enhanced by making the endpoint for transition the lease, sale, or transfer of DOE property to the public whenever possible.

B.12.1.2 Hanford Surplus Facility Program 300 Area Revitalization Project End Point Targets from Hanford Strategic Plan

- Transition high cost surplus facilities in the central plateau and south 600 areas to a low cost, stable, deactivated condition.
- Remove non-essential, surplus buildings and facilities that don't have identified post-cleanup uses.
- Reuse facilities in the south 600 area for economic diversification where feasible.

B.12.1.3 Hanford Surplus Facility Program 300 Area Revitalization Project Major Facilities

B.12.1.3.1 South 600 Area Steam System Facility

B.12.1.3.1.1 South 600 Area Steam System Facility Description

The South 600 Area steam system includes steam power houses, fuel supply systems, water treatment systems, steam generation systems, steam piping, condensate traps, condensate return systems, exhaust and pollution reduction systems, control systems, and associated office, storage, and shop space in the South 600 Area necessary for operating the system in a safe and compliant manner.

B.12.1.3.1.2 South 600 Area Steam System Facility Technical Logic:

The Department of Energy (DOE), in partnership with its contractors, shall plan, acquire, operate, maintain, and dispose of physical assets as valuable national resources. Stewardship of these physical assets shall be accomplished in a cost-effective manner to meet the DOE mission. This shall incorporate industry standards, a graded approach, and performance objectives.

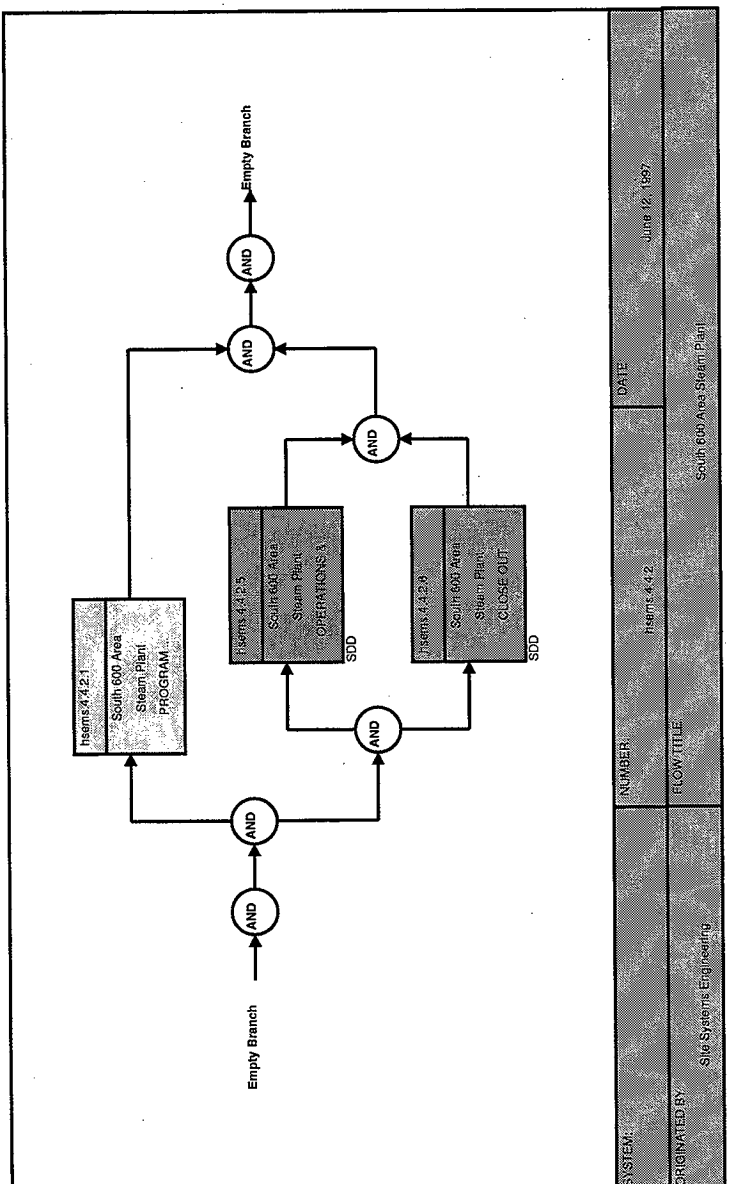


Figure B-20 South 600 Area Steam Plant

B.12.1.3.1.3 South 600 Area Steam System Requirements and Life Cycle Function Descriptions

Requirements:

- South 600 Area high cost surplus facilties shall be transitioned to a low cost, stable, deactivated condition
- South 600 area facilities that can not be used for other purposes, shall be removed
- South 600 area facilities shall be made available for other uses.
- South 600 Area inactive facilities shall be surveillanced and maintained within the approved safety envelope
- South 600 area asbestos abatement shall be performed as necessary

Life Cycle Function Descriptions:

B.12.1.3.1.3.1 South 600 Area Steam Plant OPERATIONS & MAINTENANCE WORK SCOPE SUMMARY

Day-to-day work, including preventive and predictive maintenance, that is required to maintain and preserve plant and capital equipment in a condition suitable for it to be used for its designated purpose.

South 600 Area Steam Plant OPERATIONS & MAINTENANCE SPECIFIC FUNCTIONS

B.12.1.3.1.3.2 South 600 Area Steam Plant POST OPERATIONS WORK SCOPE SUMMARY

Day-to-day work, including pre-stabilization surveillance and maintenance, stabilization, post-stabilization surveillance and maintenance, deactivation, and post-deactivation surveillance and maintenance, that is required to allow safe decontamination and decommissioning.

South 600 Area Steam Plant POST OPERATIONS SPECIFIC FUNCTIONS

B.12.1.3.1.3.3 Maintain Safe & Compliant South 600 Area Steam Plant

Maintain the Steam Plant facility structures, operating systems and equipment, and monitoring systems within the approved safety and compliance requirements until the facilities are made available for clean-up.

B.12.1.3.1.3.4 Transition South 600 Area Steam Plant

Initiate the transition phase of decontamination and decommissioning for the 300 Area Steam Plant

B.12.1.3.1.3.5 South 600 Area Steam Plant D&D WORK SCOPE SUMMARY

Day-to-day work, including remediating, stabilizing, controlling, and managing environmental contamination, that is required to allow future land-use objectives.

South 600 Area Steam Plant D&D SPECIFIC FUNCTIONS

B.12.1.3.1.3.6 Decontaminate and Decommission (D&D) South 600 Area Steam Plant

Initiate the final decontamination and decommissioning of the 300 Area Steam Plant

B.12.1.3.1.4 South 600 Area Steam System Boundary Diagram

Table B.12-1 South 600 Area Steam System Boundary Diagram

External Interfaces -None- Hanford Site Environmental System Interfaces -None-		External Interfaces -None- Hanford Site Environmental System Interfaces -None-

B.12.1.3.1.5 South 600 Area Steam System Interface Description and Forecast

EXTERNAL INPUTS

-None-

INTERNAL INPUTS

-None-

EXTERNAL OUTPUTS

-None-

INTERNAL OUTPUTS

-None-

B.12.1.3.2 South 600 Area Water System Facility

B.12.1.3.2.1 South 600 Area Water System Facility Description

The South 600 Area water system includes river intake/outfall structures, wells, pumps, pipes, reservoirs, treatment facilities, and associated office, storage, and shop space in the South 600 Area necessary for operating the system in a safe and compliant manner.

B.12.1.3.2.2 South 600 Area Water System Facility Technical Logic:

The Department of Energy (DOE), in partnership with its contractors, shall plan, acquire, operate, maintain, and dispose of physical assets as valuable national resources. Stewardship of these physical assets shall be accomplished in a cost-effective manner to meet the DOE mission. This shall incorporate industry standards, a graded approach, and performance objectives.

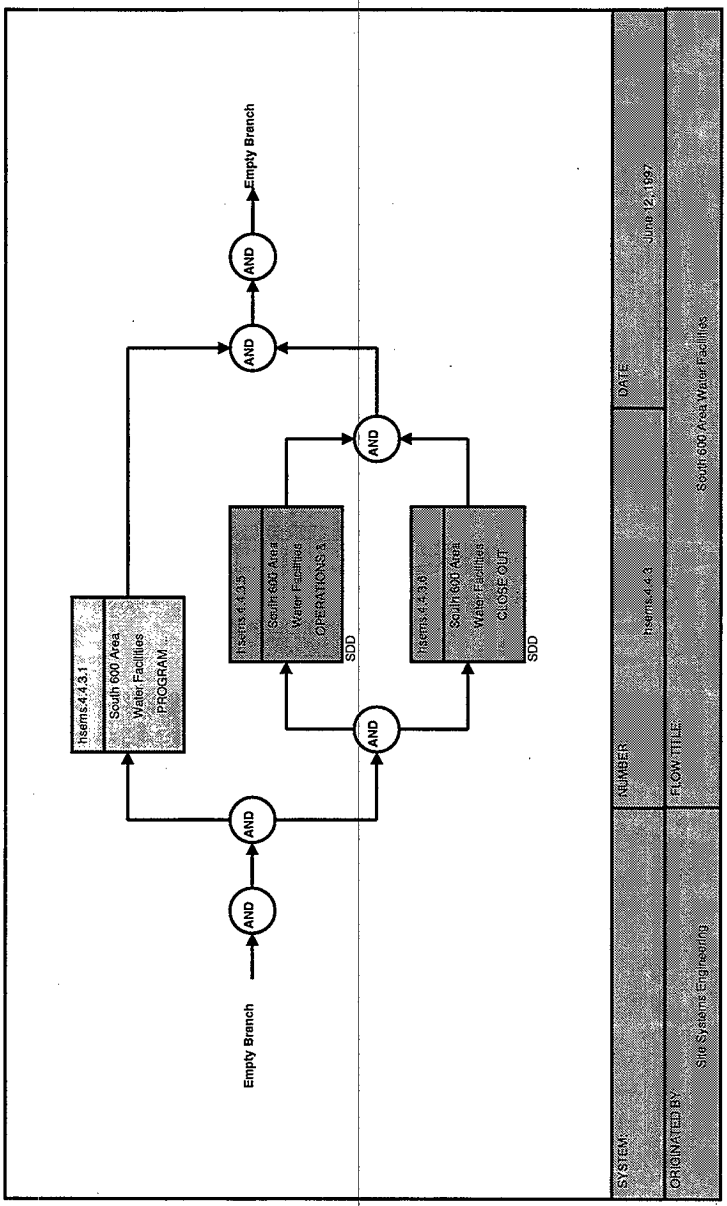


Figure B-21 South 600 Area Water Facilities

B.12.1.3.2.3 South 600 Area Water System Requirements and Life Cycle Function Descriptions

Requirements:

- South 600 Area high cost surplus facilties shall be transitioned to a low cost, stable, deactivated condition
- South 600 area facilities that can not be used for other purposes, shall be removed
- South 600 area facilities shall be made available for other uses.
- South 600 Area inactive facilities shall be surveillanced and maintained within the approved safety envelope
- South 600 area asbestos abatement shall be performed as necessary

Life Cycle Function Descriptions:

B.12.1.3.2.3.1 South 600 Area Water Facilities OPERATIONS & MAINTENANCE WORK SCOPE SUMMARY

Day-to-day work, including preventive and predictive maintenance, that is required to maintain and preserve plant and capital equipment in a condition suitable for it to be used for its designated purpose.

South 600 Area Water Facilities OPERATIONS & MAINTENANCE SPECIFIC FUNCTIONS

B.12.1.3.2.3.2 South 600 Area Water Facilities POST OPERATIONS WORK SCOPE SUMMARY

Day-to-day work, including pre-stabilization surveillance and maintenance, stabilization, post-stabilization surveillance and maintenance, deactivation, and post-deactivation surveillance and maintenance, that is required to allow safe decontamination and decommissioning.

South 600 Area Water Facilities POST OPERATIONS SPECIFIC FUNCTIONS

B.12.1.3.2.3.3 Maintain Safe & Compliant South 600 Area Water Facilities

Maintain the Raw Water Supply facility structures, operating systems and equipment, and monitoring systems within the approved safety and compliance requirements until the facilities are made available for clean-up.

B.12.1.3.2.3.4 Transition South 600 Area Water Facilities

Initiate the transition phase of decontamination and decommissioning for the 300 Area Raw Water Facilities

B.12.1.3.2.3.5 South 600 Area Water Facilities D&D WORK SCOPE SUMMARY

Day-to-day work, including remediating, stabilizing, controlling, and managing environmental contamination, that is required to allow future land-use objectives.

South 600 Area Water Facilities D&D SPECIFIC FUNCTIONS

B.12.1.3.2.3.6 Decontaminate and Decommission (D&D) South 600 Area Water Facilities

Initiate the final decontamination and decommissioning of the 300 Area Raw Water Facilities

B.12.1.3.2.4 South 600 Area Water System Boundary Diagram

Table B.12-2 South 600 Area Water System Boundary Diagram

External Interfaces -None- Hanford Site Environmental System Interfaces -None-		External Interfaces -None- Hanford Site Environmental System Interfaces -None-

B.12.1.3.2.5 South 600 Area Water System Interface Description and Forecast

EXTERNAL INPUTS

-None-

INTERNAL INPUTS

-None-

EXTERNAL OUTPUTS

-None-

INTERNAL OUTPUTS

-None-

B.12.1.3.3 South 600 Area Liquid Sanitary Waste System Facility

B.12.1.3.3.1 South 600 Area Liquid Sanitary Waste System Facility Description

The South 600 Area liquid sanitary waste disposal system includes piping, septic tanks, pumps, soil absorption systems, Publicly Operated Treatment Works, lagoons, monitoring systems, and associated office, storage, and shop space in the South 600 Area necessary for operating the system in a safe and compliant manner.

B.12.1.3.3.2 South 600 Area Liquid Sanitary Waste System Facility Technical Logic:

The Department of Energy (DOE), in partnership with its contractors, shall plan, acquire, operate, maintain, and dispose of physical assets as valuable national resources. Stewardship of these physical assets shall be accomplished in a cost-effective manner to meet the DOE mission. This shall incorporate industry standards, a graded approach, and performance objectives.

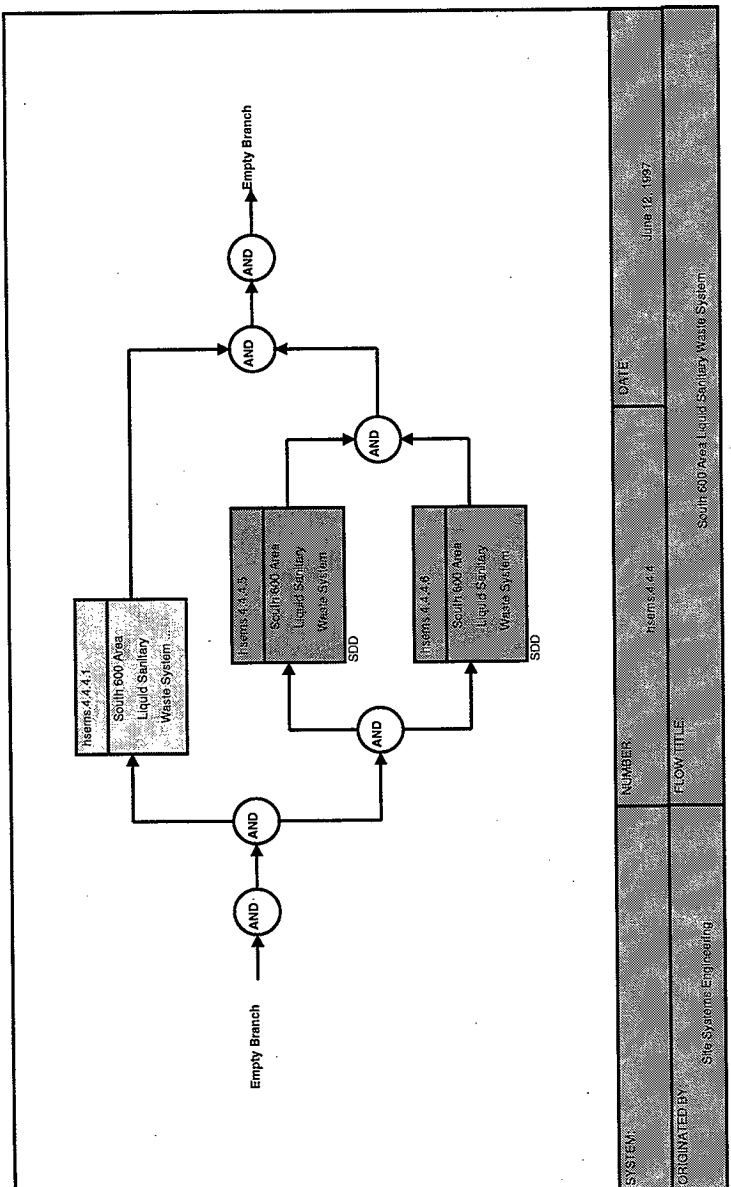


Figure B-22 South 600 Area Liquid Sanitary Waste System

B.12.1.3.3.3 South 600 Area Liquid Sanitary Waste System Requirements and Life Cycle Function Descriptions

Requirements:

- South 600 Area high cost surplus facilties shall be transitioned to a low cost, stable, deactivated condition
- South 600 area facilities that can not be used for other purposes, shall be removed
- South 600 area facilities shall be made available for other uses.
- South 600 Area inactive facilities shall be surveillanced and maintained within the approved safety envelope
- South 600 area asbestos abatement shall be performed as necessary

Life Cycle Function Descriptions:

B.12.1.3.3.3.1 South 600 Area Liquid Sanitary Waste System OPERATIONS & MAINTENANCE WORK SCOPE SUMMARY

Day-to-day work, including preventive and predictive maintenance, that is required to maintain and preserve plant and capital equipment in a condition suitable for it to be used for its designated purpose.

South 600 Area Liquid Sanitary Waste System OPERATIONS & MAINTENANCE SPECIFIC FUNCTIONS

B.12.1.3.3.3.2 South 600 Area Liquid Sanitary Waste System POST OPERATIONS WORK SCOPE SUMMARY

Day-to-day work, including pre-stabilization surveillance and maintenance, stabilization, post-stabilization surveillance and maintenance, deactivation, and post-deactivation surveillance and maintenance, that is required to allow safe decontamination and decommissioning.

South 600 Area Liquid Sanitary Waste System POST OPERATIONS SPECIFIC FUNCTIONS

B.12.1.3.3.3.3 Maintain Safe & Compliant South 600 Area Liquid Sanitary Waste System

Maintain the South 600 Area Sanitary System facility structures, operating systems and equipment, and monitoring systems within the approved safety and compliance requirements until the facilities are made available for clean-up.

B.12.1.3.3.3.4 Transition South 600 Area Liquid Sanitary Waste System

Initiate the facility transition phase of decontamination and deactivation for South 600 Area Liquid Sanitary Waste System Facilities.

B.12.1.3.3.3.5 South 600 Area Liquid Sanitary Waste System D&D WORK SCOPE SUMMARY

Day-to-day work, including remediating, stabilizing, controlling, and managing environmental contamination, that is required to allow future land-use objectives.

South 600 Area Liquid Sanitary Waste System D&D SPECIFIC FUNCTIONS

B.12.1.3.3.3.6 Decontaminate and Decommission (D&D) South 600 Area Liquid Sanitary Waste System

Initiate the final decontamination and decommissioning of the South 600 Area Liquid Sanitary Waste System Facilities

B.12.1.3.3.4 South 600 Area Liquid Sanitary Waste System Boundary Diagram

Table B.12-3 South 600 Area Liquid Sanitary Waste System Boundary Diagram

External Interfaces -None- Hanford Site Environmental System Interfaces -None-		External Interfaces -None- Hanford Site Environmental System Interfaces -None-

B.12.1.3.3.5 South 600 Area Liquid Sanitary Waste System Interface Description and Forecast

EXTERNAL INPUTS

-None-

INTERNAL INPUTS

-None-

EXTERNAL OUTPUTS

-None-

INTERNAL OUTPUTS

-None-

B.12.1.3.4 South 600 Area Telecommunication System Facility

B.12.1.3.4.1 South 600 Area Telecommunication System Facility Description

The South 600 Area telecommunications system includes wire, fiber optic cable, towers and transmission equipment, computers, radios, cameras, switches, and associated office, storage, and shop space in the South 600 Area necessary for operating the system in a safe and compliant manner.

B.12.1.3.4.2 South 600 Area Telecommunication System Facility Technical Logic:

The Department of Energy (DOE), in partnership with its contractors, shall plan, acquire, operate, maintain, and dispose of physical assets as valuable national resources. Stewardship of these physical assets shall be accomplished in a cost-effective manner to meet the DOE mission. This shall incorporate industry standards, a graded approach, and performance objectives.

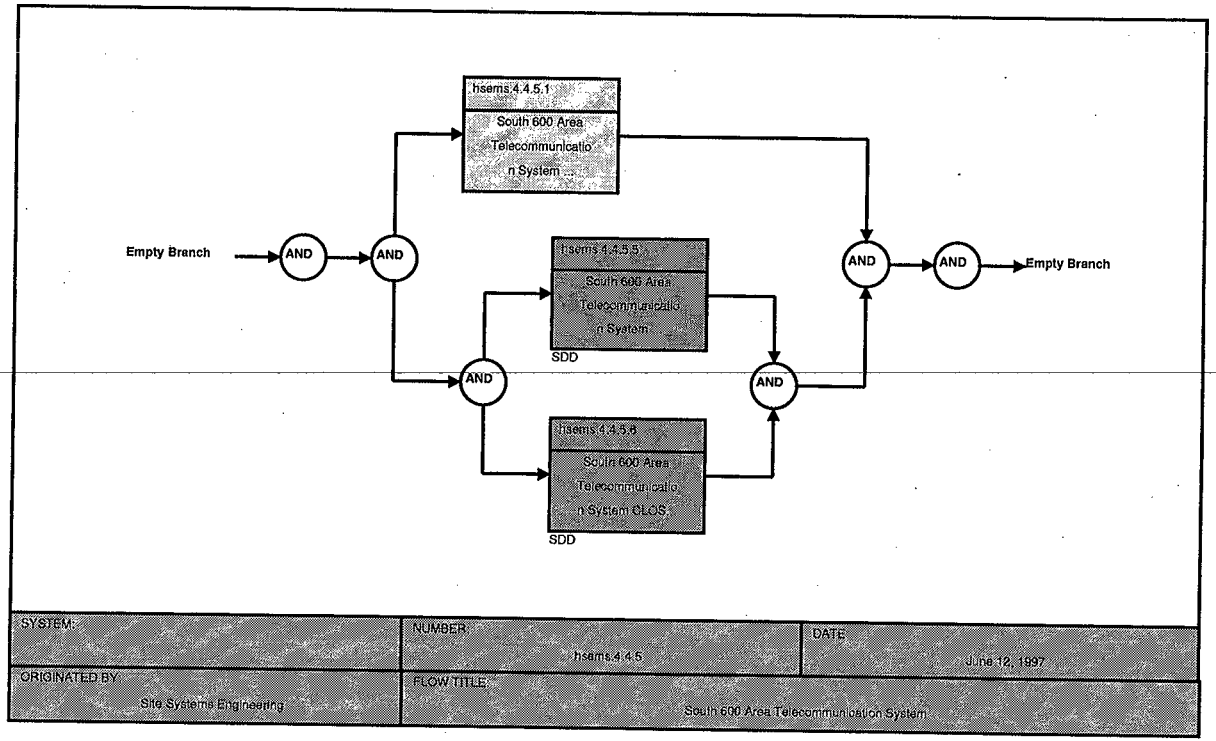


Figure B-23 South 600 Area Telecommunication System

B.12.1.3.4.3 South 600 Area Telecommunication System Requirements and Life Cycle Function Descriptions

Requirements:

- South 600 Area high cost surplus facilties shall be transitioned to a low cost, stable, deactivated condition
- South 600 area facilities that can not be used for other purposes, shall be removed
- South 600 area facilities shall be made available for other uses.
- South 600 Area inactive facilities shall be surveillanced and maintained within the approved safety envelope
- South 600 area asbestos abatement shall be performed as necessary

Life Cycle Function Descriptions:

B.12.1.3.4.3.1 South 600 Area Telecommunication System OPERATIONS & MAINTENANCE WORK SCOPE SUMMARY

Day-to-day work, including preventive and predictive maintenance, that is required to maintain and preserve plant and capital equipment in a condition suitable for it to be used for its designated purpose.

South 600 Area Telecommunication System OPERATIONS & MAINTENANCE SPECIFIC FUNCTIONS

B.12.1.3.4.3.2 South 600 Area Telecommunication System POST OPERATIONS WORK SCOPE SUMMARY

Day-to-day work, including pre-stabilization surveillance and maintenance, stabilization, post-stabilization surveillance and maintenance, deactivation, and post-deactivation surveillance and maintenance, that is required to allow safe decontamination and decommissioning.

South 600 Area Telecommunication System POST OPERATIONS SPECIFIC FUNCTIONS

B.12.1.3.4.3.3 Maintain Safe & Compliant South 600 Area Telecommunication System

The telecommunication system that includes facilities, structures, and equipment will be maintained until it is removed for cleanup.

B.12.1.3.4.3.4 Transition South 600 Area Telecommunication System

Initiate the facility transition phase of decontamination and deactivation for South 600 Area Telecommunications System.

B.12.1.3.4.3.5 South 600 Area Telecommunication System D&D WORK SCOPE SUMMARY

Day-to-day work, including remediating, stabilizing, controlling, and managing environmental contamination, that is required to allow future land-use objectives.

South 600 Area Telecommunication System D&D SPECIFIC FUNCTIONS

B.12.1.3.4.3.6 Decontaminate and Decommission (D&D) South 600 Area Telecommunication System

Initiate the final decontamination and decommissioning of the South 600 Area Telecommunications System Facilities

B.12.1.3.4.4 South 600 Area Telecommunication System Boundary Diagram

Table B.12-4 South 600 Area Telecommunication System Boundary Diagram

External Interfaces -None- Hanford Site Environmental System Interfaces -None-		External Interfaces -None- Hanford Site Environmental System Interfaces -None-

B.12.1.3.4.5 South 600 Area Telecommunication System Interface Description and Forecast

EXTERNAL INPUTS

-None-

INTERNAL INPUTS

-None-

EXTERNAL OUTPUTS

-None-

INTERNAL OUTPUTS

-None-

B.12.1.3.5 South 600 Area Office Facilities

B.12.1.3.5.1 South 600 Area Office Facilities Description

South 600 Area office facilities include buildings used to house employees involved in administrative, engineering, training, or similar functions.

B.12.1.3.5.2 South 600 Area Office Facilities Facility Technical Logic:

The Department of Energy (DOE), in partnership with its contractors, shall plan, acquire, operate, maintain, and dispose of physical assets as valuable national resources. Stewardship of these physical assets shall be accomplished in a cost-effective manner to meet the DOE mission. This shall incorporate industry standards, a graded approach, and performance objectives.

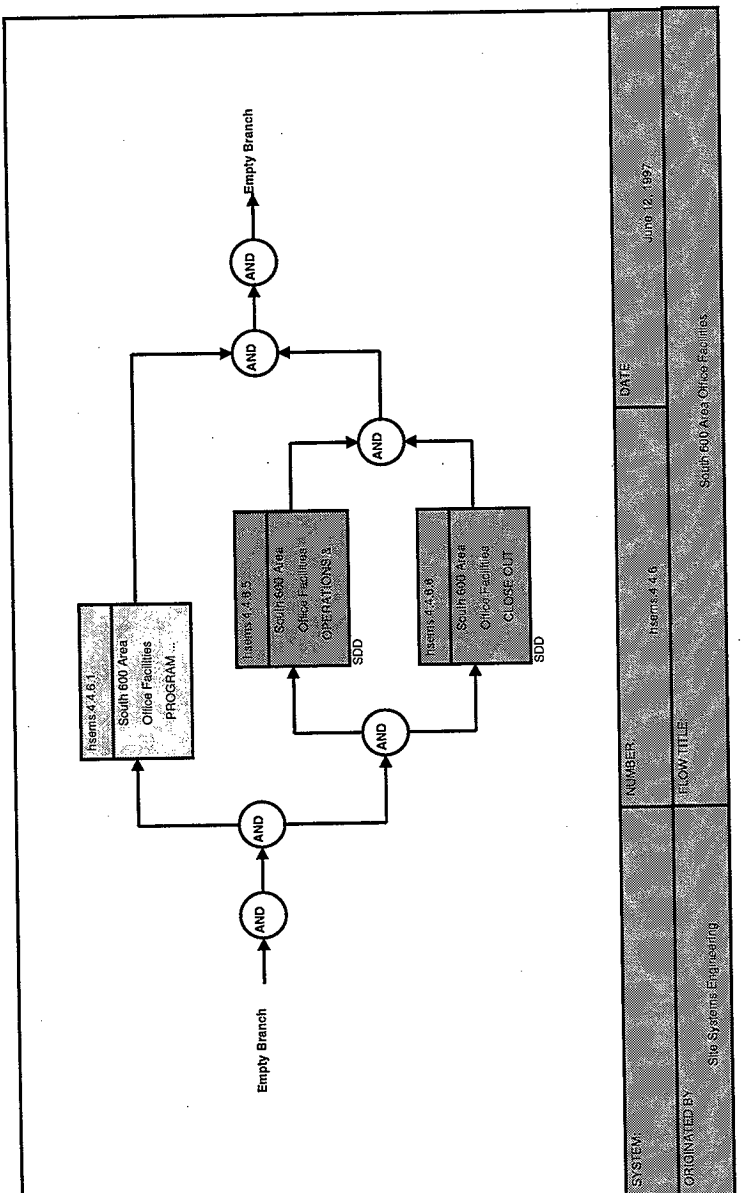


Figure B-24 South 600 Area Office Facilities

B.12.1.3.5.3 South 600 Area Office Facilities Requirements and Life Cycle Function Descriptions

Requirements:

- South 600 Area high cost surplus facilties shall be transitioned to a low cost, stable, deactivated condition
- South 600 area facilities that can not be used for other purposes, shall be removed
- South 600 area facilities shall be made available for other uses.
- South 600 Area inactive facilities shall be surveillanced and maintained within the approved safety envelope
- South 600 area asbestos abatement shall be performed as necessary

Life Cycle Function Descriptions:

B.12.1.3.5.3.1 South 600 Area Office Facilities OPERATIONS & MAINTENANCE WORK SCOPE SUMMARY

Day-to-day work, including preventive and predictive maintenance, that is required to maintain and preserve plant and capital equipment in a condition suitable for it to be used for its designated purpose.

South 600 Area Office Facilities OPERATIONS & MAINTENANCE SPECIFIC FUNCTIONS

B.12.1.3.5.3.2 South 600 Area Office Facilities POST OPERATIONS WORK SCOPE SUMMARY

Day-to-day work, including pre-stabilization surveillance and maintenance, stabilization, post-stabilization surveillance and maintenance, deactivation, and post-deactivation surveillance and maintenance, that is required to allow safe decontamination and decommissioning.

South 600 Area Office Facilities POST OPERATIONS SPECIFIC FUNCTIONS

B.12.1.3.5.3.3 Maintain Safe & Compliant South 600 Area Office Facilities

Maintain the South 600 Area Office facility structures, operating systems and equipment, and monitoring systems within the approved safety and compliance requirements until the facilities are made available for clean-up.

B.12.1.3.5.3.4 Transition South 600 Area Office Facilities

Initiate the transition phase of decontamination and decommissioning for the 300 Area Office Facilities

B.12.1.3.5.3.5 South 600 Area Office Facilities D&D WORK SCOPE SUMMARY

Day-to-day work, including remediating, stabilizing, controlling, and managing environmental contamination, that is required to allow future land-use objectives.

South 600 Area Office Facilities D&D SPECIFIC FUNCTIONS

B.12.1.3.5.3.6 Decontaminate and Decommission (D&D) South 600 Area Office Facilities

Initiate the final decontamination and decommissioning of the 300 Area Office Facilities

B.12.1.3.5.4 South 600 Area Office Facilities Boundary Diagram

Table B.12-5 South 600 Area Office Facilities Boundary Diagram

External Interfaces -None- Hanford Site Environmental System Interfaces -None-		External Interfaces -None- Hanford Site Environmental System Interfaces -None-

B.12.1.3.5.5 South 600 Area Office Facilities Interface Description and Forecast

EXTERNAL INPUTS

-None-

INTERNAL INPUTS

-None-

EXTERNAL OUTPUTS

-None-

INTERNAL OUTPUTS

-None-

B.12.1.3.6 South 600 Area Shop Facilities

B.12.1.3.6.1 South 600 Area Shop Facilities Description

South 600 Area shop facilities include buildings used to house maintenance, fabrication, modeling, and associated office, storage, and shop space necessary for operating the facilities in a safe and compliant manner.

B.12.1.3.6.2 South 600 Area Shop Facilities Facility Technical Logic:

The Department of Energy (DOE), in partnership with its contractors, shall plan, acquire, operate, maintain, and dispose of physical assets as valuable national resources. Stewardship of these physical assets shall be accomplished in a cost-effective manner to meet the DOE mission. This shall incorporate industry standards, a graded approach, and performance objectives.

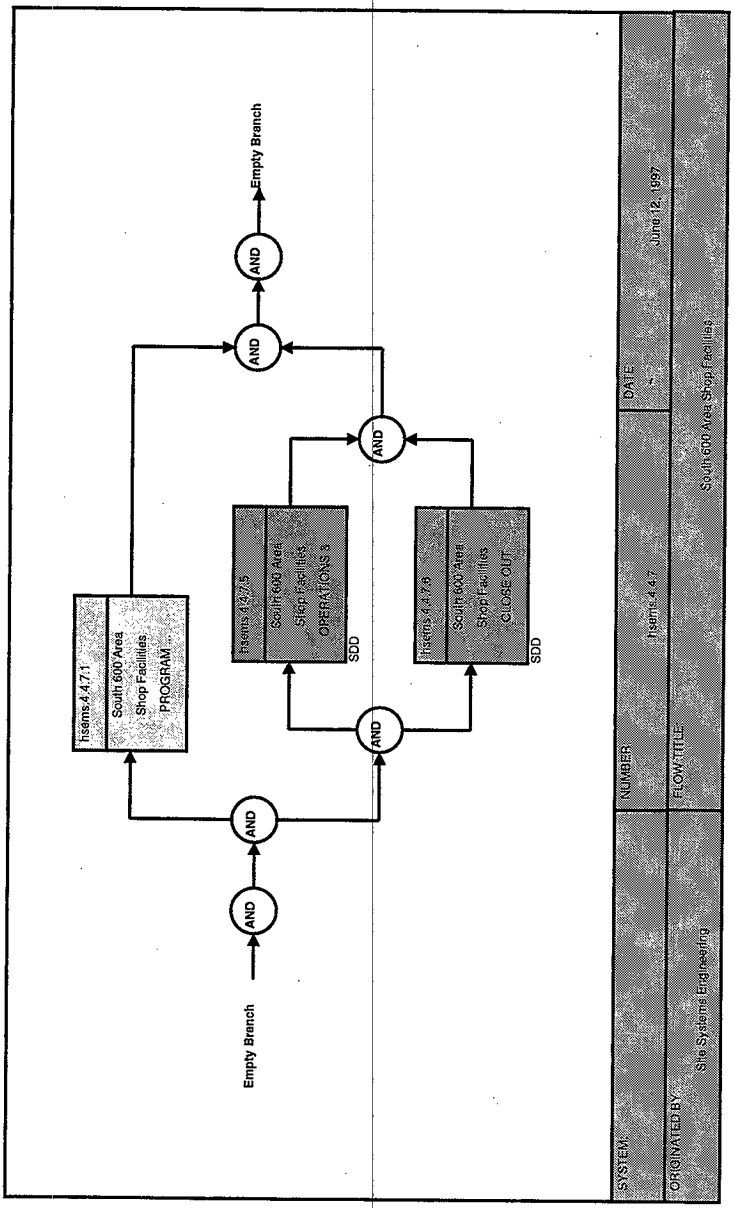


Figure B-25 South 600 Area Shop Facilities

B.12.1.3.6.3 South 600 Area Shop Facilities Requirements and Life Cycle Function Descriptions

Requirements:

- South 600 Area high cost surplus facilties shall be transitioned to a low cost, stable, deactivated condition
- South 600 area facilities that can not be used for other purposes, shall be removed
- South 600 area facilities shall be made available for other uses.
- South 600 Area inactive facilities shall be surveillanced and maintained within the approved safety envelope
- South 600 area asbestos abatement shall be performed as necessary

Life Cycle Function Descriptions:

B.12.1.3.6.3.1 South 600 Area Shop Facilities OPERATIONS & MAINTENANCE WORK SCOPE SUMMARY

Day-to-day work, including preventive and predictive maintenance, that is required to maintain and preserve plant and capital equipment in a condition suitable for it to be used for its designated purpose.

South 600 Area Shop Facilities OPERATIONS & MAINTENANCE SPECIFIC FUNCTIONS

B.12.1.3.6.3.2 South 600 Area Shop Facilities POST OPERATIONS WORK SCOPE SUMMARY

Day-to-day work, including pre-stabilization surveillance and maintenance, stabilization, post-stabilization surveillance and maintenance, deactivation, and post-deactivation surveillance and maintenance, that is required to allow safe decontamination and decommissioning.

South 600 Area Shop Facilities POST OPERATIONS SPECIFIC FUNCTIONS

B.12.1.3.6.3.3 Maintain Safe & Compliant South 600 Area Shop Facilities

Maintain the South 600 Area Shop facility structures, operating systems and equipment, and monitoring systems within the approved safety and compliance requirements until the facilities are made available for clean-up.

B.12.1.3.6.3.4 Transition South 600 Area Shop Facilities

Initiate the transition phase of decontamination and decommissioning for the 300 Area Shop Facilities.

B.12.1.3.6.3.5 South 600 Area Shop Facilities D&D WORK SCOPE SUMMARY

Day-to-day work, including remediating, stabilizing, controlling, and managing environmental contamination, that is required to allow future land-use objectives.

South 600 Area Shop Facilities D&D SPECIFIC FUNCTIONS

B.12.1.3.6.3.6 Decontaminate and Decommission (D&D) South 600 Area Shop Facilities

Initiate the final decontamination and decommissioning of the South 600 Area Shop Facilities

B.12.1.3.6.4 South 600 Area Shop Facilities Boundary Diagram

Table B.12-6 South 600 Area Shop Facilities Boundary Diagram

External Interfaces -None- Hanford Site Environmental System Interfaces -None-		External Interfaces -None- Hanford Site Environmental System Interfaces -None-

B.12.1.3.6.5 South 600 Area Shop Facilities Interface Description and Forecast

EXTERNAL INPUTS

-None-

INTERNAL INPUTS

-None-

EXTERNAL OUTPUTS

-None-

INTERNAL OUTPUTS

-None-

B.12.1.3.7 South 600 Area Storage Facilities

B.12.1.3.7.1 South 600 Area Storage Facilities Description

Facilities in the South 600 Area of Hanford used for the storage of waste and materials.

B.12.1.3.7.2 South 600 Area Storage Facilities Facility Technical Logic:

The Department of Energy (DOE), in partnership with its contractors, shall plan, acquire, operate, maintain, and dispose of physical assets as valuable national resources. Stewardship of these physical assets shall be accomplished in a cost-effective manner to meet the DOE mission. This shall incorporate industry standards, a graded approach, and performance objectives.

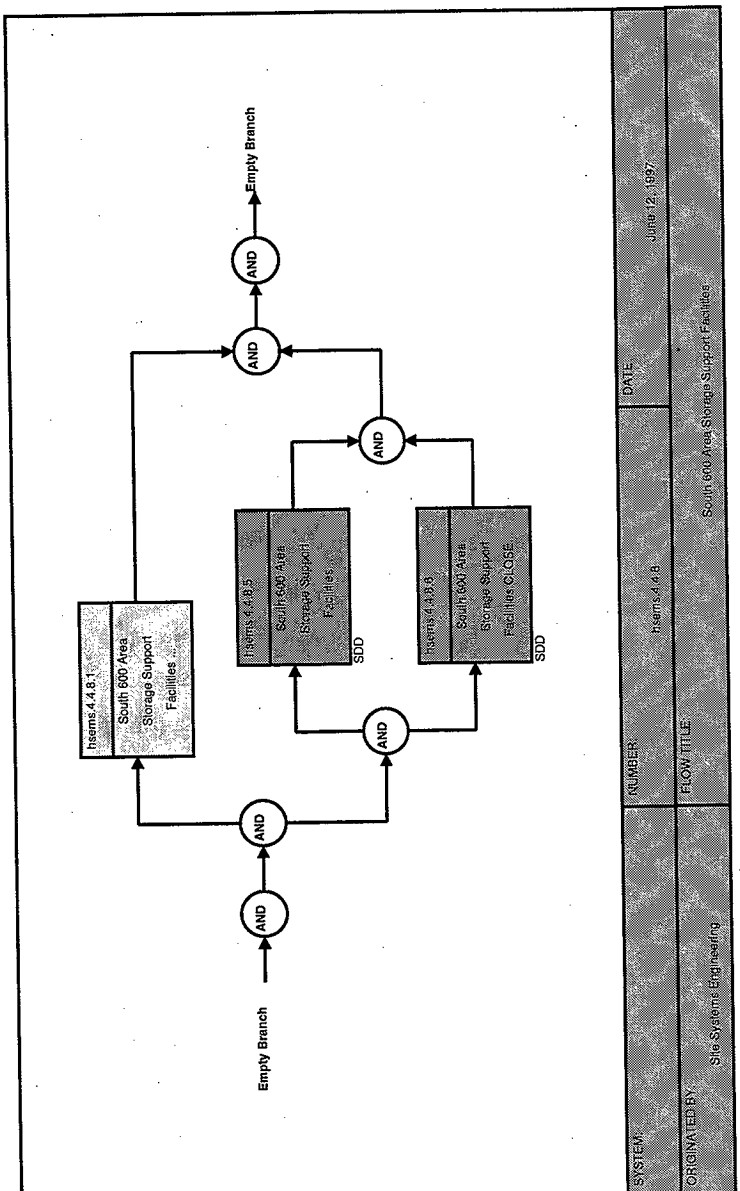


Figure B-26 South 600 Area Storage Support Facilities

B.12.1.3.7.3 South 600 Area Storage Facilities Requirements and Life Cycle Function Descriptions

Requirements:

- South 600 Area high cost surplus facilties shall be transitioned to a low cost, stable, deactivated condition
- South 600 area facilities that can not be used for other purposes, shall be removed
- South 600 area facilities shall be made available for other uses.
- South 600 Area inactive facilities shall be surveillanced and maintained within the approved safety envelope
- South 600 area asbestos abatement shall be performed as necessary

Life Cycle Function Descriptions:

B.12.1.3.7.3.1 South 600 Area Storage Support Facilities OPERATIONS & MAINTENANCE WORK SCOPE SUMMARY

Day-to-day work, including preventive and predictive maintenance, that is required to maintain and preserve plant and capital equipment in a condition suitable for it to be used for its designated purpose.

South 600 Area Storage Support Facilities OPERATIONS & MAINTENANCE SPECIFIC FUNCTIONS

B.12.1.3.7.3.2 South 600 Area Storage Support Facilities POST OPERATIONS WORK SCOPE SUMMARY

Day-to-day work, including pre-stabilization surveillance and maintenance, stabilization, post-stabilization surveillance and maintenance, deactivation, and post-deactivation surveillance and maintenance, that is required to allow safe decontamination and decommissioning.

South 600 Area Storage Support Facilities POST OPERATIONS SPECIFIC FUNCTIONS

B.12.1.3.7.3.3 Maintain Safe & Compliant South 600 Area Storage Facilities

Maintain the South 600 Area Storage facility structures, operating systems and equipment, and monitoring systems within the approved safety and compliance requirements until the facilities are made available for clean-up.

B.12.1.3.7.3.4 Transition South 600 Area Storage Facilities

Initiate the transition phase of decontamination and decommissioning for the South 600 Area Storage Facilities

B.12.1.3.7.3.5 South 600 Area Storage Support Facilities D&D WORK SCOPE SUMMARY

Day-to-day work, including remediating, stabilizing, controlling, and managing environmental contamination, that is required to allow future land-use objectives.

South 600 Area Storage Support Facilities D&D SPECIFIC FUNCTIONS

B.12.1.3.7.3.6 Decontaminate and Decommission (D&D) South 600 Area Storage Facilities

Initiate the final decontamination and decommissioning of the South 600 Area Storage Facilities

B.12.1.3.7.4 South 600 Area Storage Facilities Boundary Diagram

Table B.12-7 South 600 Area Storage Facilities Boundary Diagram

External Interfaces -None- Hanford Site Environmental System Interfaces -None-		External Interfaces -None- Hanford Site Environmental System Interfaces -None-

B.12.1.3.7.5 South 600 Area Storage Facilities Interface Description and Forecast

EXTERNAL INPUTS

-None-

INTERNAL INPUTS

-None-

EXTERNAL OUTPUTS

-None-

INTERNAL OUTPUTS

-None-

B.12.1.3.8 South 600 Area Land Facility

B.12.1.3.8.1 South 600 Area Land Facility Description

South 600 Area land includes land, including rights-of-way, easements, quit claims, zoning, offsets, culturally sensitive areas, ecologically sensitive areas, and assignment for the use thereof.

B.12.1.3.8.2 South 600 Area Land Facility Technical Logic:

The Department of Energy (DOE), in partnership with its contractors, shall plan, acquire, operate, maintain, and dispose of physical assets as valuable national resources. Stewardship of these physical assets shall be accomplished in a cost-effective manner to meet the DOE mission. This shall incorporate industry standards, a graded approach, and performance objectives.

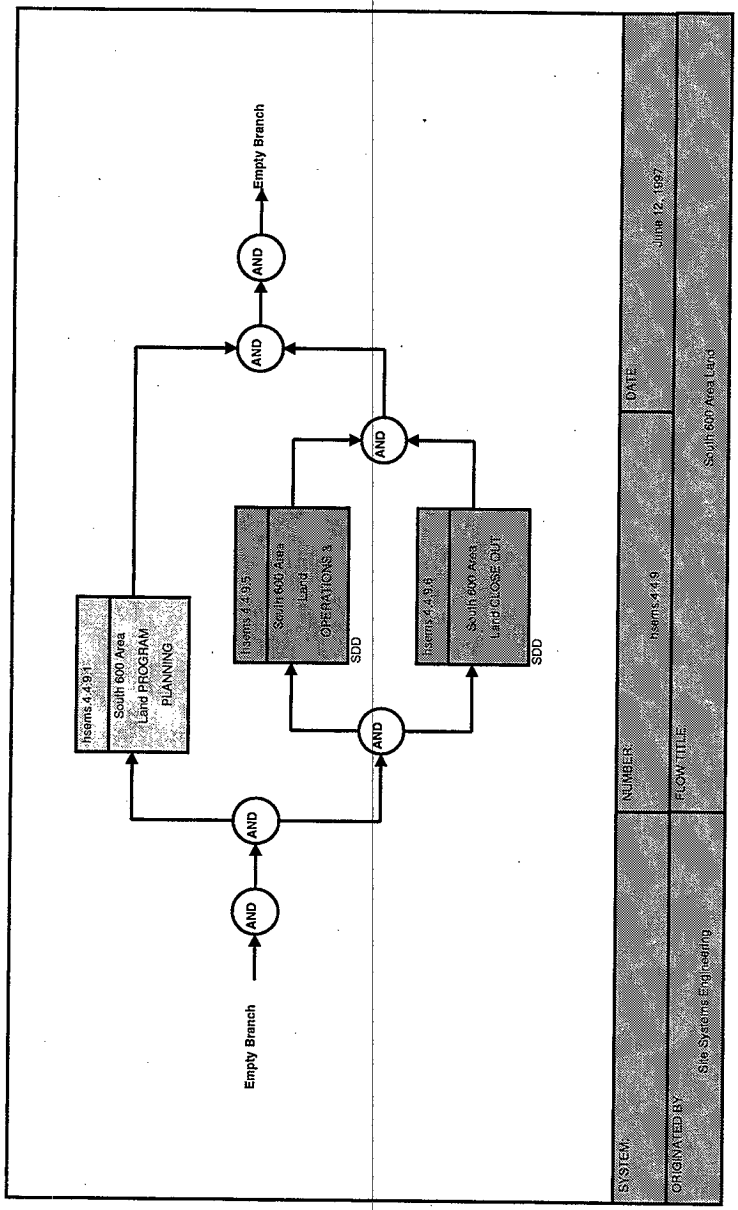


Figure B-27 South 600 Area Land

B.12.1.3.8.3 South 600 Area Land Requirements and Life Cycle Function Descriptions

Requirements:

- 1100 Area excess land shall be transitioned to non-federal ownership
- South 600 area facilities that can not be used for other purposes, shall be removed
- South 600 area facilities shall be made available for other uses.
- Meteorological services shall be provided for the Hanford Site
- Ecosystem management services shall be provided for the Hanford Site
- Arid Lands Ecology Reserve land ownership shall be retained
- North Slope Area land ownership shall be retained
- Arid Lands Ecology Reserve cultural resources shall be protected
- Arid Lands Ecology Reserve ecological resources shall be protected
- Arid Lands Ecology Reserve scientific resources shall be protected
- North Slope scientific resources shall be protected
- North Slope ecological resources shall be protected
- North Slope cultural resources shall be protected
- 300 Area land ownership shall be retained
- 400 Area land ownership shall be retained
- 300 Area land shall be leased for other uses
- 400 Area land shall be leased for other uses
- South 600 Area land ownership shall be retained
- South 600 area asbestos abatement shall be performed as necessary

Life Cycle Function Descriptions:

B.12.1.3.8.3.1 South 600 Area Land OPERATIONS & MAINTENANCE WORK SCOPE SUMMARY

Day-to-day work, including preventive and predictive maintenance, that is required to maintain and preserve plant and capital equipment in a condition suitable for it to be used for its designated purpose.

South 600 Area Land OPERATIONS & MAINTENANCE SPECIFIC FUNCTIONS

B.12.1.3.8.3.2 Control Access to the South 600 Areas

Access to the South 600 areas and facilities will be controlled to protect the public and the workers

B.12.1.3.8.3.3 South 600 Area Land POST OPERATIONS WORK SCOPE SUMMARY

Day-to-day work, including pre-stabilization surveillance and maintenance, stabilization, post-stabilization surveillance and maintenance, deactivation, and post-deactivation surveillance and maintenance, that is required to allow safe decontamination and decommissioning.

South 600 Area Land POST OPERATIONS SPECIFIC FUNCTIONS

B.12.1.3.8.3.4 Maintain Safe & Compliant South 600 Area Land

The Land Access Control System including fences, structures, and equipment will be maintained until it is removed for cleanup.

B.12.1.3.8.3.5 Transition South 600 Area Land

Initiate the transition phase of decontamination and decommissioning for the South 600 Area Land.

B.12.1.3.8.3.6 South 600 Area Land D&D WORK SCOPE SUMMARY

Day-to-day work, including remediating, stabilizing, controlling, and managing environmental contamination, that is required to allow future land-use objectives.

South 600 Area Land D&D SPECIFIC FUNCTIONS

B.12.1.3.8.3.7 Decontaminate and Decommission (D&D) South 600 Area Land

Initiate the final decontamination and decommissioning of the South 600 Area Land.

B.12.1.3.8.4 South 600 Area Land Boundary Diagram

Table B.12-8 South 600 Area Land Boundary Diagram

External Interfaces -None- Hanford Site Environmental System Interfaces -None-		External Interfaces -None- Hanford Site Environmental System Interfaces -None-

B.12.1.3.8.5 South 600 Area Land Interface Description and Forecast

EXTERNAL INPUTS

-None-

INTERNAL INPUTS

-None-

EXTERNAL OUTPUTS

-None-

INTERNAL OUTPUTS

-None-

B.12.1.3.9 South 600 Area Road System Facility

B.12.1.3.9.1 South 600 Area Road System Facility Description

The South 600 Area road system includes driving surfaces and associated office, storage, and shop space necessary for operating the system in a safe and compliant manner.

B.12.1.3.9.2 South 600 Area Road System Facility Technical Logic:

The Department of Energy (DOE), in partnership with its contractors, shall plan, acquire, operate, maintain, and dispose of physical assets as valuable national resources. Stewardship of these physical assets shall be accomplished in a cost-effective manner to meet the DOE mission. This shall incorporate industry standards, a graded approach, and performance objectives.

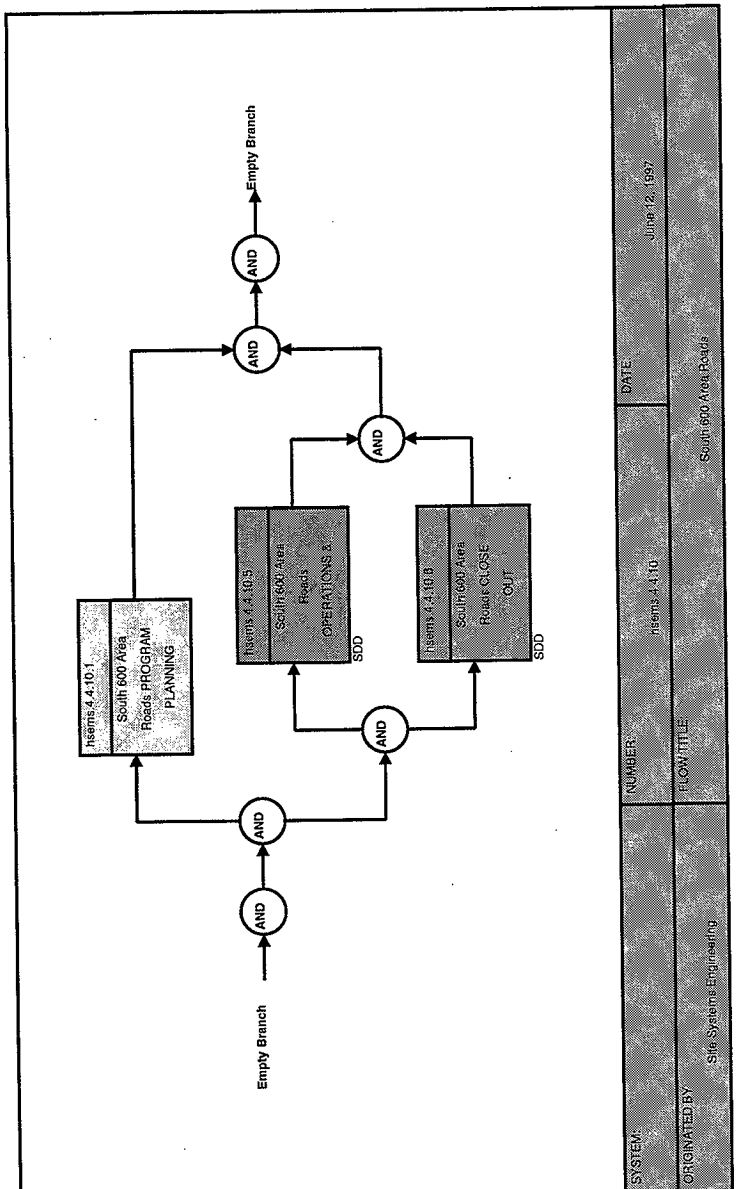


Figure B-28 South 600 Area Roads

B.12.1.3.9.3 South 600 Area Road System Requirements and Life Cycle Function Descriptions

Requirements:

- The Hanford Site Infrastructure shall be optimized.
- South 600 area facilities that can not be used for other purposes, shall be removed
- South 600 area facilities shall be made available for other uses.
- South 600 Area inactive facilities shall be surveillanced and maintained within the approved safety envelope
- South 600 area asbestos abatement shall be performed as necessary

Life Cycle Function Descriptions:

B.12.1.3.9.3.1 South 600 Area Roads OPERATIONS & MAINTENANCE WORK SCOPE SUMMARY

Day-to-day work, including preventive and predictive maintenance, that is required to maintain and preserve plant and capital equipment in a condition suitable for it to be used for its designated purpose.

South 600 Area Roads OPERATIONS & MAINTENANCE SPECIFIC FUNCTIONS

B.12.1.3.9.3.2 Maintain Road System at South 600 Area

Maintain primary and secondary roads in the South 600 Area.

B.12.1.3.9.3.3 South 600 Area Roads POST OPERATIONS WORK SCOPE SUMMARY

Day-to-day work, including pre-stabilization surveillance and maintenance, stabilization, post-stabilization surveillance and maintenance, deactivation, and post-deactivation surveillance and maintenance, that is required to allow safe decontamination and decommissioning.

South 600 Area Roads POST OPERATIONS SPECIFIC FUNCTIONS

B.12.1.3.9.3.4 Maintain Safe & Compliant South 600 Area Roads

The Road System that includes road surface, signs, and equipment will be maintained until it is removed for cleanup.

B.12.1.3.9.3.5 Transition South 600 Area Roads

Initiate the transition phase of decontamination and decommissioning for the South 600 Area Roads.

B.12.1.3.9.3.6 300 Area Roads D&D WORK SCOPE SUMMARY

Day-to-day work, including remediating, stabilizing, controlling, and managing environmental contamination, that is required to allow future land-use objectives.

300 Area Roads D&D SPECIFIC FUNCTIONS

B.12.1.3.9.3.7 Decontaminate and Decommission (D&D) South 600 Area Roads

Initiate the final decontamination and decommissioning of the South 600 Area Roads.

B.12.1.3.9.4 South 600 Area Road System Boundary Diagram

Table B.12-9 South 600 Area Road System Boundary Diagram

External Interfaces Hanford Legacy Hanford Site Environmental System Interfaces -None-		External Interfaces -None- Hanford Site Environmental System Interfaces hsems.4.2.1 300 Area Treated Effluent Disposal Facility hsems.4.3.2 300 Area Fuel Supply System hsems.4.4.13 HAMMER

B.12.1.3.9.5 South 600 Area Road System Interface Description and Forecast

EXTERNAL INPUTS

Table B.12-10 External Inputs for South 600 Area Road System

Stream	Category	Period	Baseline	Units
X.0 Hanford Legacy				
Legacy Roads in the South 600 Area *Roads in the south 600 area that is managed by the Hanford Site contractor.*	(none forecasted)			

INTERNAL INPUTS

-None-

EXTERNAL OUTPUTS

-None-

INTERNAL OUTPUTS

Table B.12-11 Internal Outputs for South 600 Area Road System

Stream	Category	Period	Baseline	Units
hsems.4.2.1 300 Area Treated Effluent Disposal Facility				
Hanford Road Sys. Heavy Traffic for 300A-LEF *Hanford Road Sys. Heavy Traffic for 300A-LEF*	Hanford Road System (Heavy Traffic)	1998 - 2025	336.0	truck loads
Heavy Equipment for 300A-LEF *Heavy Equipment for 300A-LEF*	(none forecasted)			
Heavy Trucks for 300A-LEF *Heavy Trucks for 300A-LEF*	Heavy Trucks	1998 - 2025	504.0	vehicle days
Sedans/Light Trucks for 300A-LEF *Sedans/Light Trucks for 300A-LEF*	Sedans/Light Trucks	1998 - 2025	84.0	no. of vehicles
hsems.4.3.2 300 Area Fuel Supply System				
Sedans/Light Trucks for 300-FSS *Sedans/Light Trucks for 300-FSS*	Sedans/Light Trucks	1998 - 1999	2.0	no. of vehicles
hsems.4.4.13 HAMMER				
Heavy Trucks for HAMMER *Heavy Trucks for HAMMER*	Heavy Trucks	1997 - 1997	265.0	vehicle-hrs
Heavy Equipment for HAMMER *Heavy Equipment for HAMMER*	Heavy Equipment (Other)	1997 - 1997	6.0	equipment days
Sedans/Light Trucks for HAMMER *Sedans/Light Trucks for HAMMER*	Sedans/Light Trucks	1997 - 1997	4.0	no. of vehicles

B.12.1.3.10 South 600 Area Rail System Facility

B.12.1.3.10.1 South 600 Area Rail System Facility Description

The South 600 Area rail system includes track, bridges, crossings, sidings, locomotives, rolling stock, and associated office, storage, and shop space necessary for operating the system in a safe and compliant manner.

B.12.1.3.10.2 South 600 Area Rail System Facility Technical Logic:

The Department of Energy (DOE), in partnership with its contractors, shall plan, acquire, operate, maintain, and dispose of physical assets as valuable national resources. Stewardship of these physical assets shall be accomplished in a cost-effective manner to meet the DOE mission. This shall incorporate industry standards, a graded approach, and performance objectives.

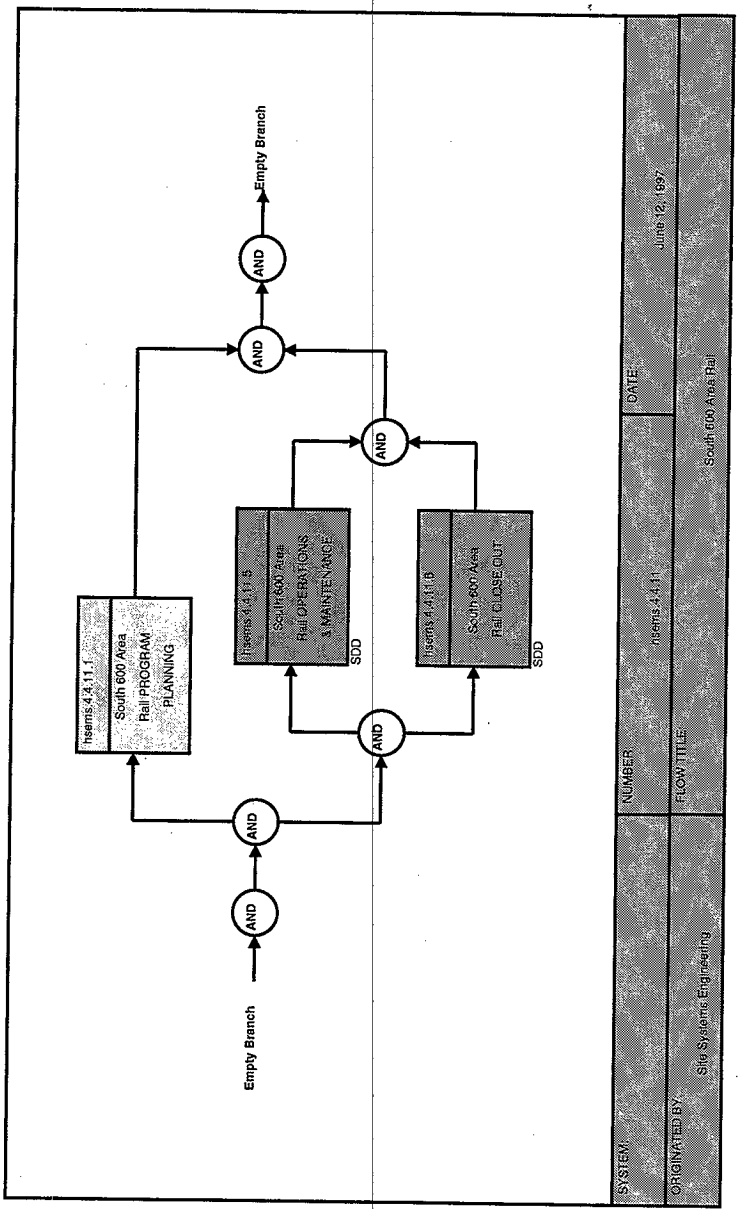


Figure B-29 South 600 Area Rail

B.12.1.3.10.3 South 600 Area Rail System Requirements and Life Cycle Function Descriptions

Requirements:

- The Hanford Site Infrastructure shall be optimized.
- South 600 area facilities that can not be used for other purposes, shall be removed
- South 600 area facilities shall be made available for other uses.
- South 600 Area inactive facilities shall be surveillanced and maintained within the approved safety envelope
- South 600 area asbestos abatement shall be performed as necessary

Life Cycle Function Descriptions:

B.12.1.3.10.3.1 South 600 Area Rail OPERATIONS & MAINTENANCE WORK SCOPE SUMMARY

Day-to-day work, including preventive and predictive maintenance, that is required to maintain and preserve plant and capital equipment in a condition suitable for it to be used for its designated purpose.

South 600 Area Rail OPERATIONS & MAINTENANCE SPECIFIC FUNCTIONS

B.12.1.3.10.3.2 Provide Rail Transportation at South 600 Area

Operate and maintain the Hanford Rail System in the South 600 Area.

B.12.1.3.10.3.3 South 600 Area Rail POST OPERATIONS WORK SCOPE SUMMARY

Day-to-day work, including pre-stabilization surveillance and maintenance, stabilization, post-stabilization surveillance and maintenance, deactivation, and post-deactivation surveillance and maintenance, that is required to allow safe decontamination and decommissioning.

South 600 Area Rail POST OPERATIONS SPECIFIC FUNCTIONS

B.12.1.3.10.3.4 Maintain Safe & Compliant South 600 Area Rail

The Rail System that includes tracks, structures, and equipment will be maintained until it is removed for cleanup.

B.12.1.3.10.3.5 Transition South 600 Area Rail

Initiate the transition phase of decontamination and decommissioning for the South 600 Area Rail.

B.12.1.3.10.3.6 South 600 Area Rail D&D WORK SCOPE SUMMARY

Day-to-day work, including remediating, stabilizing, controlling, and managing environmental contamination, that is required to allow future land-use objectives.

South 600 Area Rail D&D SPECIFIC FUNCTIONS

B.12.1.3.10.3.7 Decontaminate and Decommission (D&D) South 600 Area Rail

Initiate the final decontamination and decommissioning of the South 600 Area Rail.

B.12.1.3.10.4 South 600 Area Rail System Boundary Diagram

Table B.12-12 South 600 Area Rail System Boundary Diagram

External Interfaces Hanford Legacy Hanford Site Environmental System Interfaces -None-		External Interfaces -None- Hanford Site Environmental System Interfaces hsems.4.2.3. 340 Waste Handling Facility

B.12.1.3.10.5 South 600 Area Rail System Interface Description and Forecast

EXTERNAL INPUTS

Table B.12-13 External Inputs for South 600 Area Rail System

Stream	Category	Period	Baseline	Units
X.0 Hanford Legacy				
Legacy Railroads in the South 600 Area	(none forecasted)			
Railroads in the censouth 600 area that is managed by the Hanford Site contractor.				

INTERNAL INPUTS

-None-

EXTERNAL OUTPUTS

-None-

INTERNAL OUTPUTS

Table B.12-14 Internal Outputs for South 600 Area Rail System

Stream	Category	Period	Baseline	Units
hsems.4.2.3 340 Waste Handling Facility				
Rail Transportation for 300A-340	Rail Transportation Services	1998 - 2001	24.0	shipments
Rail Transportation for 300A-340				

B.12.1.3.11 325 Building Facility

B.12.1.3.11.1 325 Building Facility Description

The Radiochemistry Building provides specially shielded, ventilated, and equipped laboratories for radiochemical experiments. The building consists of a central portion containing general purpose laboratories for low level radiochemical work, a wing containing office space, and two wings containing shielded cells for high level radiochemical work.

B.12.1.3.11.2 325 Building Facility Technical Logic:

The Department of Energy (DOE), in partnership with its contractors, shall plan, acquire, operate, maintain, and dispose of physical assets as valuable national resources. Stewardship of these physical assets shall be accomplished in a cost-effective manner to meet the DOE mission. This shall incorporate industry standards, a graded approach, and performance objectives.

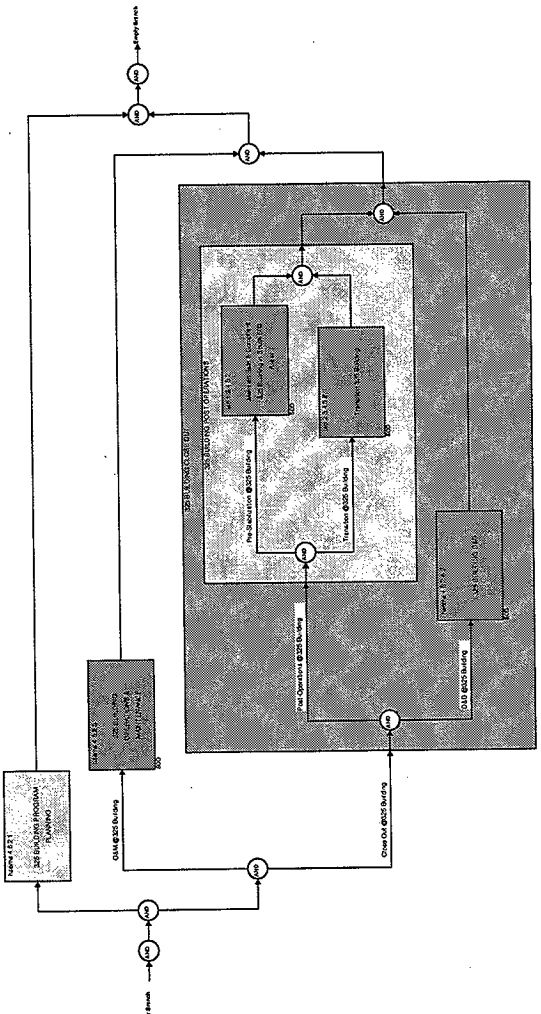


Figure B-30 325 BUILDING

B.12.1.3.11.3 325 Building Requirements and Life Cycle Function Descriptions

Requirements:

- South 600 Area high cost surplus facilties shall be transitioned to a low cost, stable, deactivated condition
- South 600 area facilities shall be made available for other uses.
- South 600 Area gaseous effluent releases shall be monitored
- 325 building shall be maintained within the approved safety envelope
- 325 building shall be operated within the approved safety envelope
- 325 inventory system shall be maintained within the approved safety envelope
- 325 building HVAC system shall be maintained within the approved safety envelope
- 325 building radiation monitoring system shall be maintained within the approved safety envelope
- 325 building safeguard system shall be maintained within the approved safety envelope

Life Cycle Function Descriptions:

B.12.1.3.11.3.1 325 BUILDING POST OPERATIONS WORK SCOPE SUMMARY

Day-to-day work, including pre-stabilization surveillance and maintenance, stabilization, post-stabilization surveillance and maintenance, deactivation, and post-deactivation surveillance and maintenance, that is required to allow safe decontamination and decommissioning.

325 BUILDING POST OPERATIONS SPECIFIC FUNCTIONS

B.12.1.3.11.3.2 Maintain Safe & Compliant 325 Building in South 600 Areas

Maintain the 325 facility structures, operating systems and equipment, and monitoring systems within the approved safety and compliance requirements until the facilities are made available for clean-up.

B.12.1.3.11.3.3 Transition 325 Building

Initiate the transition phase of decontamination and decommissioning for the 325 Building

B.12.1.3.11.4 325 Building Boundary Diagram

Table B.12-15 325 Building Boundary Diagram

External Interfaces -None- Hanford Site Environmental System Interfaces -None-		External Interfaces -None- Hanford Site Environmental System Interfaces -None-

B.12.1.3.11.5 325 Building Interface Description and Forecast

EXTERNAL INPUTS

-None-

INTERNAL INPUTS

-None-

EXTERNAL OUTPUTS

-None-

INTERNAL OUTPUTS

-None-

B.12.1.3.12 326 Building Facility

B.12.1.3.12.1 326 Building Facility Description

The 326 Building was completed in 1953 with major renovations in 1995. The building consists primarily of offices, dry labs, and wet labs with its main occupant the Environmental and Energy Sciences Division of PNNL.

B.12.1.3.12.2 326 Building Facility Technical Logic:

The Department of Energy (DOE), in partnership with its contractors, shall plan, acquire, operate, maintain, and dispose of physical assets as valuable national resources. Stewardship of these physical assets shall be accomplished in a cost-effective manner to meet the DOE mission. This shall incorporate industry standards, a graded approach, and performance objectives.

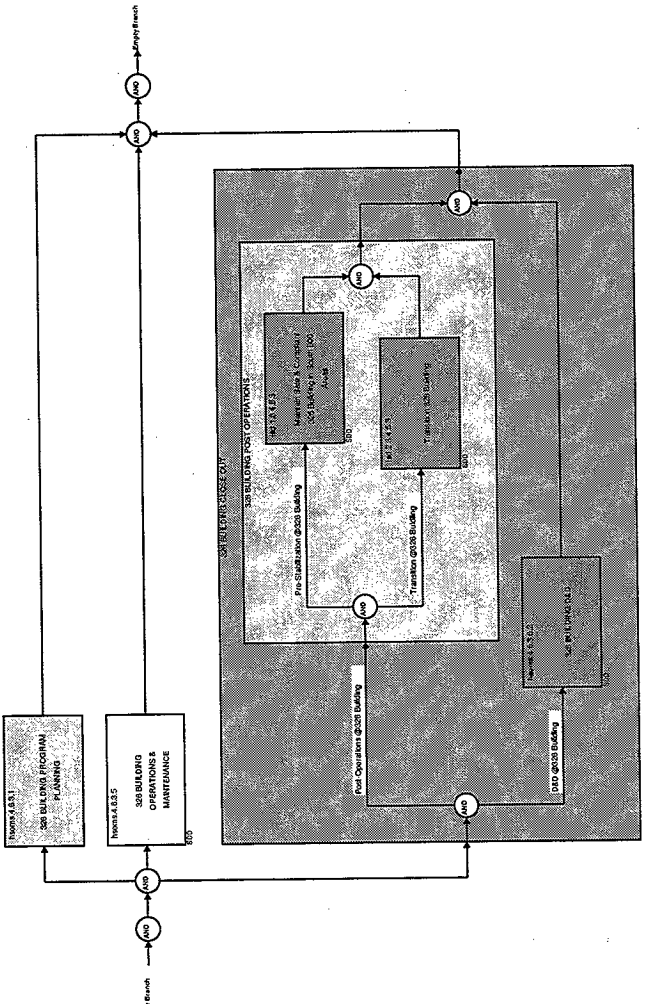


Figure B-31 326 BUILDING

B.12.1.3.12.3 326 Building Requirements and Life Cycle Function Descriptions

Requirements:

- South 600 Area high cost surplus facilties shall be transitioned to a low cost, stable, deactivated condition
- South 600 area facilities shall be made available for other uses.
- South 600 Area gaseous effluent releases shall be monitored
- South 600 Area inactive facilities shall be surveillanced and maintained within the approved safety envelope

Life Cycle Function Descriptions:

B.12.1.3.12.3.1 326 BUILDING POST OPERATIONS WORK SCOPE SUMMARY

Day-to-day work, including pre-stabilization surveillance and maintenance, stabilization, post-stabilization surveillance and maintenance, deactivation, and post-deactivation surveillance and maintenance, that is required to allow safe decontamination and decommissioning.

326 BUILDING POST OPERATIONS SPECIFIC FUNCTIONS

B.12.1.3.12.3.2 Maintain Safe & Compliant 326 Building in South 600 Areas

Maintain the 326 facility structures, operating systems and equipment, and monitoring systems within the approved safety and compliance requirements until the facilities are made available for clean-up.

B.12.1.3.12.3.3 Transition 326 Building

Initiate the transition phase of decontamination and decommissioning for the 326 Building

B.12.1.3.12.4 326 Building Boundary Diagram

Table B.12-16 326 Building Boundary Diagram

External Interfaces Hanford Legacy Hanford Site Environmental System Interfaces -None-		External Interfaces -None- Hanford Site Environmental System Interfaces -None-

B.12.1.3.12.5 326 Building Interface Description and Forecast

EXTERNAL INPUTS

Table B.12-17 External Inputs for 326 Building

Stream	Category	Period	Baseline	Units
X.0 Hanford Legacy Legacy/SS 326	(none forecasted)			

INTERNAL INPUTS

-None-

EXTERNAL OUTPUTS

-None-

INTERNAL OUTPUTS

-None-

B.12.1.3.13 AEROSOL WIND TUNNEL RESEARCH FACIL Facility

B.12.1.3.13.1 AEROSOL WIND TUNNEL RESEARCH FACIL Facility Description

The 329 Building is a chemical sciences facility, occupied by the Nuclear Chemistry Division of PNNL. Two Nuclear Chemistry groups are located in the facility, the Chemical Process and Environmental Technology Group and the Radiation Instrument and Application Group. The activities conducted by these groups involve design and engineering of special purpose radiation detectors and sampling systems, development of electronics to enhance neutron detector performance, and the development of software with analyses for the developed detectors. Solid, liquid and gas samples are analyzed in the laboratories and counting room.

B.12.1.3.13.2 329 Building Facility Technical Logic:

The Department of Energy (DOE), in partnership with its contractors, shall plan, acquire, operate, maintain, and dispose of physical assets as valuable national resources. Stewardship of these physical assets shall be accomplished in a cost-effective manner to meet the DOE mission. This shall incorporate industry standards, a graded approach, and performance objectives.

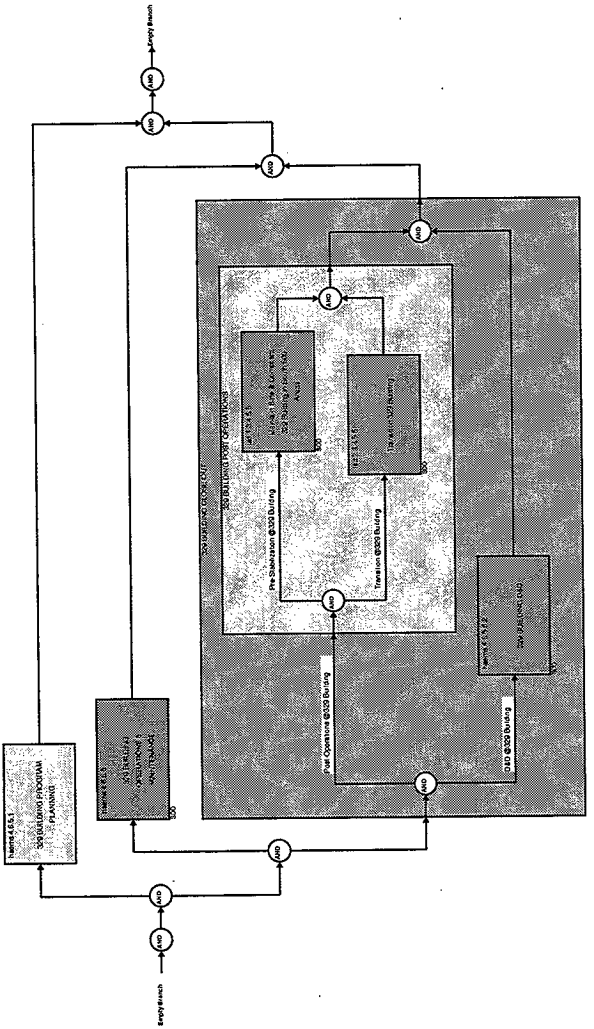


Figure B-32 329 BUILDING

B.12.1.3.13.3 329 Building Requirements and Life Cycle Function Descriptions

Requirements:

* South 600 Area high cost surplus facilties shall be transitioned to a low cost, stable, deactivated condition
* South 600 area facilities shall be made available for other uses.
* South 600 Area gaseous effluent releases shall be monitored
* South 600 Area inactive facilities shall be surveillanced and maintained within the approved safety envelope

Life Cycle Function Descriptions:

B.12.1.3.13.3.1 329 BUILDING POST OPERATIONS WORK SCOPE SUMMARY

Day-to-day work, including pre-stabilization surveillance and maintenance, stabilization, post-stabilization surveillance and maintenance, deactivation, and post-deactivation surveillance and maintenance, that is required to allow safe decontamination and decommissioning.

329 BUILDING POST OPERATIONS SPECIFIC FUNCTIONS

B.12.1.3.13.3.2 Maintain Safe & Compliant 329 Building in South 600 Areas

Maintain the 329 facility structures, operating systems and equipment, and monitoring systems within the approved safety and compliance requirements until the facilities are made available for clean-up.

B.12.1.3.13.3.3 Transition 329 Building

Initiate the transition phase of decontamination and decommissioning for the 329 Building

B.12.1.3.13.4 329 Building Boundary Diagram

Table B.12-18 329 Building Boundary Diagram

External Interfaces -None- Hanford Site Environmental System Interfaces -None-		External Interfaces -None- Hanford Site Environmental System Interfaces -None-

B.12.1.3.13.5 329 Building Interface Description and Forecast

EXTERNAL INPUTS

-None-

INTERNAL INPUTS

-None-

EXTERNAL OUTPUTS

-None-

INTERNAL OUTPUTS

-None-

B.12.1.3.14 ANALYTICAL & NUCLEAR RESEARCH LAB Facility

B.12.1.3.14.1 ANALYTICAL & NUCLEAR RESEARCH LAB Facility Description

The 320/3720/3745 complex is categorized as a radiological laboratory and is comprised of 320, 3720, and 3745..

B.12.1.3.14.2 320 / 3720 / 3745 Facility Technical Logic:

The Department of Energy (DOE), in partnership with its contractors, shall plan, acquire, operate, maintain, and dispose of physical assets as valuable national resources. Stewardship of these physical assets shall be accomplished in a cost-effective manner to meet the DOE mission. This shall incorporate industry standards, a graded approach, and performance objectives.

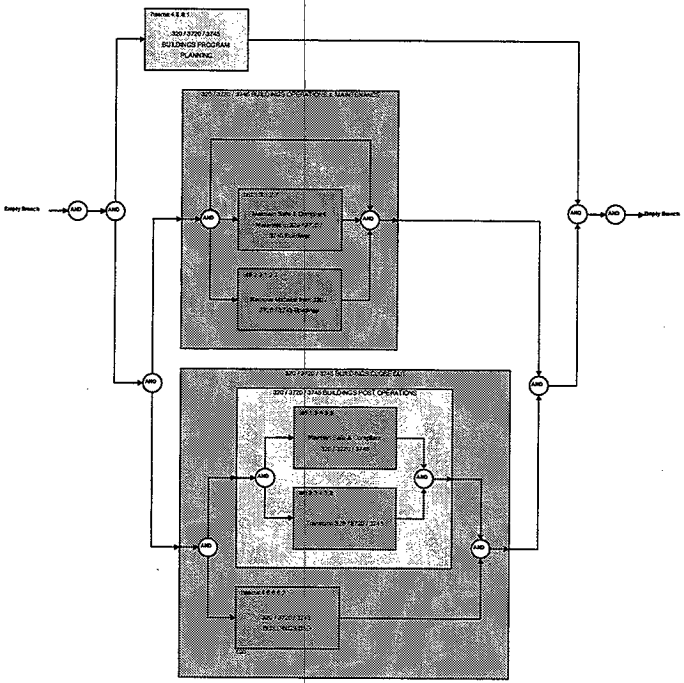


Figure B-33 320 / 3720 / 3745 Buildings

B.12.1.3.14.3 320 / 3720 / 3745 Requirements and Life Cycle Function Descriptions

Requirements:

- South 600 Area high cost surplus facilties shall be transitioned to a low cost, stable, deactivated condition
- South 600 area facilities shall be made available for other uses.
- South 600 Area inactive facilities shall be surveillanced and maintained within the approved safety envelope

Life Cycle Function Descriptions:

B.12.1.3.14.3.1 320 / 3720 / 3745 BUILDINGS POST OPERATIONS WORK SCOPE SUMMARY

Day-to-day work, including pre-stabilization surveillance and maintenance, stabilization, post-stabilization surveillance and maintenance, deactivation, and post-deactivation surveillance and maintenance, that is required to allow safe decontamination and decommissioning.

320 / 3720 / 3745 BUILDINGS POST OPERATIONS SPECIFIC FUNCTIONS

B.12.1.3.14.3.2 Maintain Safe & Compliant 320 / 3720 / 3745

Maintain the 320 facility structures, operating systems and equipment, and monitoring systems within the approved safety and compliance requirements until the facilities are made available for clean-up.

B.12.1.3.14.3.3 Transition 320 / 3720 / 3745

Initiate the transition phase of decontamination and decommissioning for the 3708 Building

B.12.1.3.14.4 320 / 3720 / 3745 Boundary Diagram

Table B.12-19 320 / 3720 / 3745 Boundary Diagram

External Interfaces -None- Hanford Site Environmental System Interfaces -None-		External Interfaces -None- Hanford Site Environmental System Interfaces hsems.2.3.5 Central Waste Complex hsems.4.2.1 300 Area Treated Effluent Disposal Facility

B.12.1.3.14.5 320 / 3720 / 3745 Interface Description and Forecast

EXTERNAL INPUTS

-None-

INTERNAL INPUTS

-None-

EXTERNAL OUTPUTS

-None-

INTERNAL OUTPUTS

Table B.12-20 Internal Outputs for 320 / 3720 / 3745

Stream	Category	Period	Baseline	Units
hsems.2.3.5 Central Waste Complex				
NP 300 TR, CH-TRU *CH TRU Transferred.*	CH TRU	2011 - 2015	631.0	cubic meters
NP 300 TR, CH-LLMW-I *CH LLMW I Transferred.*	CH LLMW I	2011 - 2015	60.0	cubic meters
hsems.4.2.1 300 Area Treated Effluent Disposal Facility				
320, 3720, 3745 building industrial waste water transfers *Industrial waste water generated from ongoing 320, 3720, 3745 Building operations. Waste water volume is estimated from historic 300 TEDF throughput and assuming equal contribution from all inputs to the 300 Area Process Sewer.*	Industrial Waste Water	1998 - 2025	726000	cu meters

B.12.1.3.15 Misc. Rad Labs Facility

B.12.1.3.15.1 Misc. Rad Labs Facility Description

Radiological laboratories that have been used to support the Hanford Site Mission.

B.12.1.3.15.2 Misc. Rad Labs Facility Technical Logic:

The Department of Energy (DOE), in partnership with its contractors, shall plan, acquire, operate, maintain, and dispose of physical assets as valuable national resources. Stewardship of these physical assets shall be accomplished in a cost-effective manner to meet the DOE mission. This shall incorporate industry standards, a graded approach, and performance objectives.

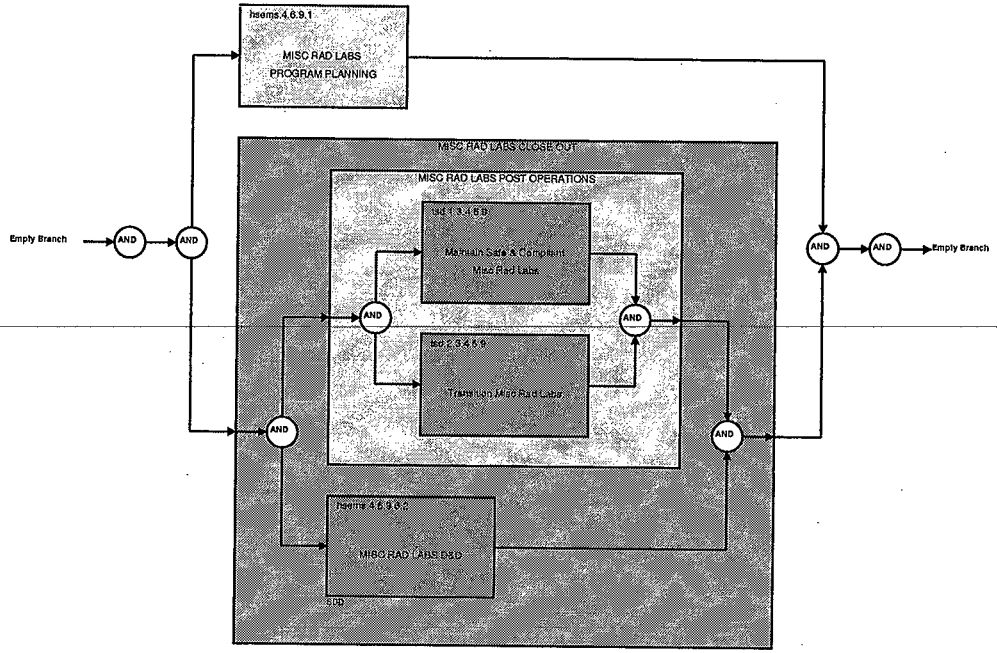


Figure B-34 Misc Rad Labs

B.12.1.3.15.3 Misc. Rad Labs Requirements and Life Cycle Function Descriptions

Requirements:

* South 600 Area high cost surplus facilties shall be transitioned to a low cost, stable, deactivated condition
* South 600 area facilities shall be made available for other uses.
* South 600 Area inactive facilities shall be surveillanced and maintained within the approved safety envelope

Life Cycle Function Descriptions:

B.12.1.3.15.3.1 MISC RAD LABS POST OPERATIONS WORK SCOPE SUMMARY

Day-to-day work, including pre-stabilization surveillance and maintenance, stabilization, post-stabilization surveillance and maintenance, deactivation, and post-deactivation surveillance and maintenance, that is required to allow safe decontamination and decommissioning.

MISC RAD LABS POST OPERATIONS SPECIFIC FUNCTIONS

B.12.1.3.15.3.2 Maintain Safe & Compliant Misc Rad Labs

Maintain the Miscellaneous Radiological Laboratories within the South 600 Area in a safe and compliant condition in support of the ongoing environmental management mission.

B.12.1.3.15.3.3 Transition Misc Rad Labs

Initiate the transition phase of decontamination and decommissioning for the 323 Building

B.12.1.3.15.4 Misc. Rad Labs Boundary Diagram

Table B.12-21 Misc. Rad Labs Boundary Diagram

External Interfaces Hanford Legacy Hanford Site Environmental System Interfaces -None-		External Interfaces -None- Hanford Site Environmental System Interfaces hsems.2.2.5 242-A Evaporator hsems.4.2.1 300 Area Treated Effluent Disposal Facility hsems.4.2.3 340 Waste Handling Facility

B.12.1.3.15.5 Misc. Rad Labs Interface Description and Forecast

EXTERNAL INPUTS

Table B.12-22 External Inputs for Misc. Rad Labs

Stream	Category	Period	Baseline	Units
X.0 Hanford Legacy				
Legacy/SS Misc Rad Lab	(none forecasted)			
Legacy material contained in South 600 area miscellaneous radiological laboratories				

INTERNAL INPUTS

-None-

EXTERNAL OUTPUTS

-None-

INTERNAL OUTPUTS

Table B.12-23 Internal Outputs for Misc. Rad Labs

Stream	Category	Period	Baseline	Units
hsems.2.2.5 242-A Evaporator				
Bioassay and Dosimetry Services for 242-A Evap	Bioassay and Dosimetry Services	1998 - 2013	57600	samples
Bioassay and Dosimetry Services for 242-A Evap				
Radioactive Standards (Calibrations) for 242-A Evap	Radioactive Standards Lab Services	1998 - 2013	67200	calibrations
Radioactive Standards (Calibrations) for 242-A Evap				
hsems.4.2.1 300 Area Treated Effluent Disposal Facility				
Misc Rad Lab Industrial Waste Water Transfers	Industrial Waste Water	1998 - 2025	726000	cu meters
Industrial waste water generated from ongoing Miscellaneous Radiological Laboratory operations. Waste water volume is estimated from historic 300 TEDF throughput and assuming equal contribution from all inputs to the 300 Area Process Sewer.				
hsems.4.2.3 340 Waste Handling Facility				
Radioactive Standards (Calibrations) for 300A-340	Radioactive Standards Lab Services	1998 - 2001	40.0	calibrations
Radioactive Standards (Calibrations) for 300A-340				

B.12.1.3.16 331 Complex Facility

B.12.1.3.16.1 331 Complex Facility Description

The 331 complex is categorized as a non-radiological laboratory and is comprised of 331A, 331B, 331C, 331D, 331G, and 331H.

B.12.1.3.16.2 331 Complex Facility Technical Logic:

The Department of Energy (DOE), in partnership with its contractors, shall plan, acquire, operate, maintain, and dispose of physical assets as valuable national resources. Stewardship of these physical assets shall be accomplished in a cost-effective manner to meet the DOE mission. This shall incorporate industry standards, a graded approach, and performance objectives.

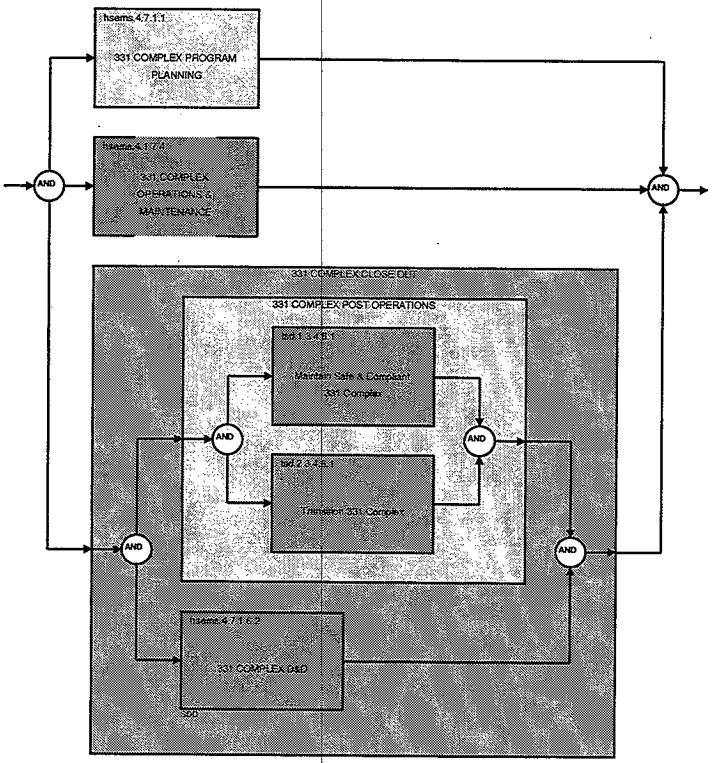


Figure B-35 331 Complex

B.12.1.3.16.3 331 Complex Requirements and Life Cycle Function Descriptions

Requirements:

- South 600 Area high cost surplus facilities shall be transitioned to a low cost, stable, deactivated condition
- South 600 area facilities shall be made available for other uses.
- South 600 Area inactive facilities shall be surveillanced and maintained within the approved safety envelope

Life Cycle Function Descriptions:

B.12.1.3.16.3.1 331 COMPLEX POST OPERATIONS WORK SCOPE SUMMARY

Day-to-day work, including pre-stabilization surveillance and maintenance, stabilization, post-stabilization surveillance and maintenance, deactivation, and post-deactivation surveillance and maintenance, that is required to allow safe decontamination and decommissioning.

331 COMPLEX POST OPERATIONS SPECIFIC FUNCTIONS

B.12.1.3.16.3.2 Maintain Safe & Compliant 331 Complex

Maintain the 331 Complex in a safe and compliant condition in support of the ongoing environmental management mission.

B.12.1.3.16.3.3 Transition 331 Complex

Initiate the transition phase of decontamination and decommissioning for the 331A Building.

B.12.1.3.16.4 331 Complex Boundary Diagram

Table B.12-24 331 Complex Boundary Diagram

External Interfaces Hanford Legacy Hanford Site Environmental System Interfaces -None-		External Interfaces -None- Hanford Site Environmental System Interfaces -None-

B.12.1.3.16.5 331 Complex Interface Description and Forecast

EXTERNAL INPUTS

Table B.12-25 External Inputs for 331 Complex

Stream	Category	Period	Baseline	Units
X.0 Hanford Legacy Legacy/SS 331 *Legacy material contained in South 600 area 331 Complex*	(none forecasted)			

INTERNAL INPUTS

-None-

EXTERNAL OUTPUTS

-None-

INTERNAL OUTPUTS

-None-

B.12.1.4 Drivers for Hanford Surplus Facility Program 300 Area Revitalization Project

Table B.12-26 Source Documents for Hanford Surplus Facility Program 300 Area Revitalization Project

Name	Title
DOE/EIS-0222D	Draft Hanford Remedial Action Environmental Impact Statement and Comprehensive Land Use Plan
DOE/RL-96-14	Updated Draft Mission Direction Document, June 1996
DOE/RL-96-92	Hanford Strategic Plan

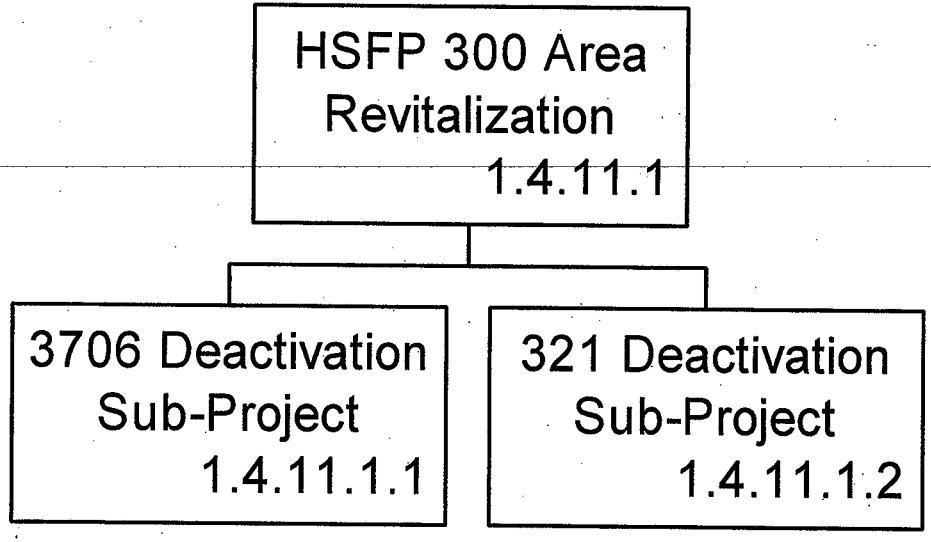
B.12.1.5 Hanford Surplus Facility Program 300 Area Revitalization Project Risk Management

As a result of Hanford site mission change from defense production to cleanup and downsizing, the 300 area has a number of excess facilities requiring disposition beyond simple removal. These facilities include a reactor building, accelerator building, and numerous buildings used for reactor fuel production and processing activities. Most of the facilities contain significant radiological and chemical contamination, with 8 facilities currently managed under RCRA. The 300 area contains multiple burial grounds and liquid disposal / spill sites, which are managed under CERCLA as 3 separate operable units. There are 156 non-mobile buildings listed in the 300 Area. Of these, 57 buildings are known to contain radioactive and/or hazardous contamination. The remaining 99 buildings are not listed as contaminated but further verification of that condition is warranted on some of them because known historical uses and contamination of nearby grounds make them suspect. Eighteen contaminated buildings are being deactivated (300 Fuel Supply [16], 308 Building, 309 Building) and four contaminated facilities are scheduled to begin deactivation in 1997 (324,327, 324A, 324D buildings) and are not included in the scope of this PBS.

These facilities constitute a risk to the public, environment and on-site workers due to contaminination with a variety of materials including cesium, strontium, uranium, throium, mixed fission products, various acids and bases, and a wide variety of cleaning agents and solvents. The facilities covered in this project are in close proximity to the Columbia River and the city of Richland. A fire, containment system failure or structural collapse due to natural causes or facility deterioration could result in a release of contaminants to the environment via air, ground and water pathways. Many of these facilities have exceeded their design life, and will pose an increasing hazard to site workers as the facilities continue to deteriorate. Most areas outside these facilities already contain radiological and hazardous contaminants in the soil and an additional release of contaminants would further complicate and increase the scope of D&D and future operable unit remediation activities as well as the risk associated with performance of these actions.

Work activities likely to place the workers at risk include: removing inventory materials [Special Nuclear Materials, Nuclear Materials, Nuclear Fuel (SNM/NM/NF)]; flushing, isolating and blanking of process or subprocess systems; removing radioactive and hazardous materials and mixed wastes; deactivating non-essential systems and utilities; reconfiguring systems to facilitate long-term surveillance and maintenance (LTS&M) and eventual decontamination and decommissioning (D&D); "mothballing" of systems necessary for LTS&M and D&D; closing facility penetrations to prevent bird, animal and weather intrusion; conversion activities; performing LTS&M and environmental monitoring; performing remedial investigation and characterization activities; performing radioactive and hazardous waste treatment and disposition activities; performing decontamination of equipment, surfaces and structures; assessing and expediting alternate use; and performing dismantling, segmenting and demolition of facilities and structures.

Hanford Surplus Facility Program 300 Area Revitalization Work Breakdown Structure



HANFORD SITE WORK BREAKDOWN STRUCTURE DICTIONARY
FACILITY STABILIZATION
WBS: 1.4

9/08/1997

1. Activity Title: 3706 DEACTIVATION SUBPROJECT	2. Date 7/31/1997	3. PBS Number RL-TP14	4. Dict Rev 0
5. Contract WBS No. 1.4.11.1.1	6. Corresponding FDS No. KHA	7. Baseline CR No.	
8. Organization Name 19000			9. B & R No.

10. Scope of Work

Minimum safe activities protect the public, workers and environment from exposure posed by loss of containment and control over nuclear material and industrial hazards associated with these facilities. Minimum safe activities will be conducted over the life of the facility, decreasing in scope as risks are removed/reduced within the facilities. This is comprised of the facility surveillance and maintenance required to maintain facility systems and structures. This activity includes required preventative maintenance and calibrations; repair of failed and malfunctioning equipment; walkdown of safety systems, equipment, and facility grounds (operational surveillances); routine radiological surveys, source checks, and dosimetry; facility utilities and assessments; and waste management assessments. This also includes Management and Assessment activities including the project direction, management and controls, and environmental, quality and safety oversight for the minimum safe condition.

HANFORD SITE WORK BREAKDOWN STRUCTURE DICTIONARY
FACILITY STABILIZATION
WBS: 1.4

9/08/1997

1. Activity Title: 321 ACTIVITIES	2. Date 7/31/1997	3. PBS Number RL-TP14	4. Dict Rev 0
5. Contract WBS No. 1.4.11.1.2	6. Corresponding FDS No. KHB	7. Baseline CR No.	
8. Organization Name 19000			9. B & R No.

10. Scope of Work

Minimum safe activities protect the public, workers and environment from exposure posed by loss of containment and control over nuclear material and industrial hazards associated with these facilities. Minimum safe activities will be conducted over the life of the facility, decreasing in scope as risks are removed/reduced within the facilities. This is comprised of the facility surveillance and maintenance required to maintain facility systems and structures. This activity includes required preventative maintenance and calibrations; repair of failed and malfunctioning equipment; walkdown of safety systems, equipment, and facility grounds (operational surveillances); routine radiological surveys, source checks, and dosimetry; facility utilities and assessments; and waste management assessments. This also includes Management and Assessment activities including the project direction, management and controls, and environmental, quality and safety oversight for the minimum safe condition. The scope of work also includes stabilization of the exterior of the 321 Facility, currently a radiological zone. Paint, primarily applied for contamination fixation, is peeling and requires removal and replacement in order to minimize potential spread of contamination.

9/08/1997

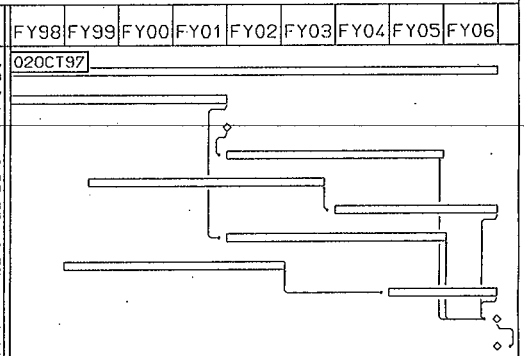
Mission Area Responsibility Assignment Matrix

Proj Lvl (PBS #)	FDS Act Number	Activity Title	Activity Manager	Responsible Organization	Cost Account
RL-TP14		HANFORD SURPLUS FACILITY PROG 300 AREA REVITALIZA			
	KHA	3706 DEACTIVATION SUBPROJECT	E. J. Bitten	19000	1KHA01 1KHA03 1KHA05
	KHB	321 ACTIVITIES	E. J. Bitten	19000	1KHB01 1KHB03 1KHB05

FACILITY STABILIZATION PROJECT
RL-TP14 300 Area Revitalization Project
Project Master Baseline Schedule

Time-Phased Logic Diagram
FY 98 MYWP September 1997

Activity	Description	Start / Finish
RV	300 AREA REVITALIZATION PROJECT	10/02/97 09/29/06
RV851	Surveillance & Maintenance Contamin. Facilities	10/02/97 09/30/01
~~RV854~~	~~SSS-W10, Recieve 340 Facility from Waste Mgmt~~	~~10/01/01~~ ~~10/01/01~~
RV857	340 Facility Stabilization and Deactivation	10/01/01 09/30/05
RV880	Conversion/Marketing Effort 300 Area Facilities	03/15/99 07/23/03
RV883	Commercial Conversion 300 Area Facilities	10/01/03 09/29/06
RV886	Deactivation Cont. Facilities,300 Area (26 Bldg)	10/01/01 10/20/05
RV889	D & D Clean Facilities,300 Area (73 Bldg)	10/01/98 10/28/02
RV892	D & D Contaminated Facilities,300 Area (26 Bldg)	10/01/04 09/29/06
RV895	Compl Hanford Excess Fac Program 300 Area Rev.	09/30/06 09/30/06
RV896	Compl of Requested Analytical Support from WMH	09/30/06 09/30/06



FACILITY STABILIZATION PROJECT
RL-TP14 300 Area Revitalization Project
Project Master Baseline Schedule

Time-Phased Logic Diagram
FY 98 MYWP September 1997

Activity	Description	Start
RV	300 AREA REVITALIZATION PROJECT	10/02/97 09/29/06
RV851	Surveillance & Maintenance Contamin. Facilities	10/02/97 09/30/01
RV854	SSS-W10, Recieve 340 Facility from Waste Mgmt	10/01/01 10/01/01
RV857	340 Facility Stabilization and Deactivation	10/01/01 09/30/05
RV880	Conversion/Marketing Effort 300 Area Facilities	03/16/99 07/23/03
RV883	Commercial Conversion 300 Area Facilities	10/01/03 09/29/06
RV886	Deactivation Cont. Facilities,300 Area (26 Bldg)	10/01/01 10/20/05
RV889	D & D Clean Facilities,300 Area (73 Bldg)	10/01/98 10/20/02
RV892	D & D Contaminated Facilities,300 Area (26 Bldg)	10/01/04 09/29/06
RV895	Compl Hanford Excess Fac Program 300 Area Rev.	09/30/06 09/30/06
RV896	Compl of Requested Analytical Support from WMHH	09/30/06 09/30/06

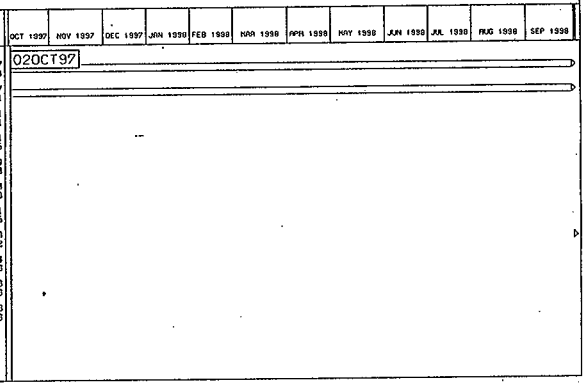


EXHIBIT 1

FACILITY STABILIZATION
LIFE CYCLE COST BASELINE (BCWS) BY YEAR BY FUND TYPE
BY PROJECT BASELINE SUMMARY (PBS)
FY 1998

($000s)

PROJECT WBS:	1.4.11.1
PBS NO:	RL-TP14
PBS TITLE:	HSFP 300 Area Revitalization

FUND TYPE	FY1997	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	SUBTOT FY1997-FY2006
OPERATING EXPENSE		872	759	5,472	14,187	10,635	9,251	34,274	27,686	35,816	138,952
CENRTC											-
GENERAL PLANT PROJECT											-
LINE ITEM *(List Each One)*											
											-
											-
											-
											-
											-
Subtotal Line Items	-		-	-	-	-	-	-	-	-	-
TOTAL BCWS/PMB[1]		872	759	5,472	14,187	10,635	9,251	34,274	27,686	35,816	138,952
MGMT RESERVE[2]											-
LINE ITEM CONTINGENCY[2]											-
OFFSITE TRANSFERS[3]											-
Subtotal	-	-	-	-	-	-	-	-	-	-	-
TOTAL		872	759	5,472	14,187	10,635	9,251	34,274	27,686	35,816	138,952

[1]Budgeted Cost of Work Scheduled (BCWS) Equals Performance Measurement Baseline (PMB); Expense Carryover NOT Included.

[2]Management Reserve and Line Item Contingency Held by RL.

[3]Work Performed at Sites Other Than Hanford.

FACILITY STABILIZATION
LIFE CYCLE COST BASELINE (BCWS) BY YEAR BY FUND TYPE
BY PROJECT BASELINE SUMMARY (PBS)
FY 1998

($000s)

PROJECT WBS:	1.4.11.1									
PBS NO:	RL-TP14									
PBS TITLE:	HSFP 300 Area Revitalization									TOTAL
FUND TYPE	FY2007-FY2010	FY2011-FY2015	FY2016-FY2020	FY2021-FY2025	FY2026-FY2030	FY2031-FY2035	FY2036 FY2040	FY2041-FY2045	FY2046 FY2050	FY1997-FY2050
OPERATING EXPENSE	31,200									170,152
										-
CENRTC										
										-
GENERAL PLANT PROJECT										
										-
LINE ITEM *(List Each One)*										
										-
										-
										-
										-
										-
Subtotal Line Items	-	-	-	-	-	-	-	-	-	-
TOTAL BCWS/PMB[1]	31,200									170,152
										-
MGMT RESERVE[2]										
										-
LINE ITEM CONTINGENCY[2]										
										-
OFFSITE TRANSFERS[3]										
										-
Subtotal	-	-	-	-	-	-	-	-	-	-
TOTAL	31,200									170,152

[1]Budgeted Cost of Work Scheduled (BCWS) Equals Performance Measurement Baseline (PMB); Expense Carryover **NOT** Included.
[2]Management Reserve and Line Item Contingency Held by RL.
[3]Work Performed at Sites Other Than Hanford.

EXHIBIT 4

FACILITY STABILIZATION
LIFE CYCLE BUDGET AUTHORITY (B/A) BY YEAR BY FUND TYPE
BY PROJECT BASELINE SUMMARY (PBS)
FY 1998

($000s)

PROJECT WBS:	1.4.11.1
PBS NO:	RL-TP14
PBS TITLE:	HSFP 300 Area Revitalization

FUND TYPE	FY1997	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	SUBTOT FY1997-FY2006
OPERATING EXPENSE		872	759	5,472	14,187	10,635	9,251	34,274	27,686	35,816	138,952
CENRTC											-
GENERAL PLANT PROJECT											-
LINE ITEM *(List Each One)*											
03-Dxxx Other Spent Fuel											-
											-
											-
											-
											-
Subtotal Line Items	-		-	-	-	-	-	-	-	-	-
TOTAL REVISED											

EXHIBIT 4

FACILITY STABILIZATION
LIFE CYCLE BUDGET AUTHORITY (B/A) BY YEAR BY FUND TYPE
BY PROJECT BASELINE SUMMARY (PBS)
FY 1998

($000s)

PROJECT WBS:	1.4.11.1
PBS NO:	RL-TP14
PBS TITLE:	HSFP 300 Area Revitalization

FUND TYPE	FY2007-FY2010	FY2011-FY2015	FY2016-FY2020	FY2021-FY2025	FY2026-FY2030	FY2031-FY2035	FY2036 FY2040	FY2041-FY2045	FY2046 FY2050	TOTAL FY1997-FY2050
OPERATING EXPENSE	31,200									170,152
CENRTC										-
GENERAL PLANT PROJECT										-
LINE ITEM *(List Each One)*										
03-Dxxx Other Spent Fuel										-
										-
										-
										-
										-
Subtotal Line Items	-	-	-	-	-	-	-	-	-	-
TOTAL NEW B/A	31,200									170,152

EXHIBIT 2a

FACILITY STABILIZATION
FY 1998 COST BASELINE (BCWS) BY MONTH
BY PROJECT BASELINE SUMMARY (PBS)
BY ACTIVITY DATA SHEET (ADS)
EXECUTION YEAR

($000s)

PROJECT WBS: 1.4.11.1
PBS NO: RL-TP14
PBS TITLE: HSFP 300 Area Revitalization

ADS TITLE	ADS NO	FUND TYPE	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
HSFP 300 Area Revitalizatio	6619-0	OP EXP	66	82	66	69	69	90	69	80	68	61	83	69	872
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	66	82	66	69	69	90	69	80	68	61	83	69	872
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-

[1]Budgeted Cost of Work Scheduled (BCWS) Equals Performance Measurement Baseline (PMB); Expense Carryover Is NOT Included.

EXHIBIT 2a

FACILITY STABILIZATION
FY 1998 COST BASELINE (BCWS) BY MONTH
BY PROJECT BASELINE SUMMARY (PBS)
BY ACTIVITY DATA SHEET (ADS)
EXECUTION YEAR

($000s)

PROJECT WBS:	1.4.11.1
PBS NO:	RL-TP14
PBS TITLE:	HSFP 300 Area Revitalization

ADS TITLE	ADS NO	FUND TYPE	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-
		OP EXP													-
		CENRTC													-
		GPP													-
		LI													-
		SUBTOT	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL BCWS/PMB[1]			66	82	66	69	69	90	69	80	68	61	83	69	872

[1]Budgeted Cost of Work Scheduled (BCWS) Equals Performance Measurement Baseline (PMB); Expense Carryover Is **NOT** Included.

HANFORD SURPLUS FACILITIES PROGRAM 300 AREA REVITALIZATION

AVERAGE ANNUAL FULL TIME EQUIVALENTS
(includes Major Subcontractors but not Enterprise Companies)

PHBS 1.4.11.1 **Submittal Date: 9/10/97**

PBS Number	PBS Title	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007
RL-TP14	HSFP 300 Area R	2	3	3	1						
Total PBS FTEs		2	3	3	1	0	0	0	0	0	0

Appendix A

Comparison of FY 1998 Multi-Year Work Plan vs. April Project Baseline Summary Submittal

Appendix A
Comparison of FY 1998 Multi-Year Work Plan vs. April Project Baseline Summary Submittal

B Plant Sub Project (TP-01)	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006
FY 1998 Multi-Year Work Plan	22,381	4,909	0	0	0	0	0	0	0
PBS Submittal	19,719	4,824	236	657	0	0	0	0	0
Delta	(2,662)	(85)	236	657	0	0	0	0	0

Explanation of Changes: The FY98 increase is a result of work scope required that was not recognized when the PBS was prepared. This includes procurement and use of a Gamma camera to aid in the characterization of the canyon cells, other sampling and analysis needed for facility characterization, and dispositioning five contaminated railroad cars. The FY99 increase is minor and is related to work scope not completed in FY97 and rate changes.

The funding requested in the PBS for FY2000 and 2001 is for work scope planed to follow transfer of the facility to the environmental restoration contractor including demolition of the 291-B stack. This work scope was requested in the budget submittal but is not part of the B Plant deactivation. Funding would be transferred to the ERC.

WESF Sub Project (TP-02)	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006
FY 1998 Multi-Year Work Plan	13,113	10,747	16,157	12,597	12,479	12,467	12,247	13,034	13,254
PBS Submittal	12,879	12,962	11,857	11,643	11,543	11,534	11,713	11,870	11,808
Delta	(234)	2,215	(4,300)	(954)	(936)	(933)	(534)	(1,164)	(1,446)

Explanation of Changes: For FY98, multiple changes took place from the submittal of the PBS to the preparation and submittal of the MYWP for WESF. Completion of clean out of the WESF hot cells was delayed due to the WESF closed loop cooling piping replacement and K-3 flooding work that was not in the FY97 baseline. Several upgrades, implementation of the WESF BIO, and phase 2 of the design reconstitution were postponed. For FY99, all work scope beyond minimum safe conditions were postponed until FY2000. FY2000 reflects the FY98 and FY99 work scope that was moved to FY2000. FY2001 and beyond are escalation increases from the prior years.

Appendix A
Comparison of FY 1998 Multi-Year Work Plan vs. April Project Baseline Summary Submittal

300 Area/SNM Sub Project (TP-04)	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006
FY 1998 Multi-Year Work Plan	4,688	4,894	8,935	0	0	0	0	0	0
PBS Submittal	4,341	6,491	6,314	2,261	2,295	2,326	2,362	2,393	2,463
Delta	(347)	1,597	(2,621)	2,261	2,295	2,326	2,362	2,393	2,463
Explanation of Changes: Roof repairs added to FY 1998 and 1999. Phase II Shutdown and 313 Bldg. Isolation deferred from FY 1999 to FY 2000. WATS Phase III accelerated from FY 2000 to FY 1999. In FY 2001 and out, SNM responsibility transferred to RL-TP12 (Transition Project Management).									

PFP Deactivation (TP-05)	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006
FY 1998 Multi-Year Work Plan	0	0	5,494	16,344	21,778	28,258	27,279	15,950	3,320
PBS Submittal	0	4,035	5,494	16,344	21,778	28,258	27,279	15,950	3,320
Delta	0	4,035	0	0	0	0	0	0	0
Explanation of Changes: Lower than expected funding levels have resulted in a reprioritization and deferral of PFP work scope. A new baseline will be developed later this year after a thorough analysis of reengineering and funding impacts.									

Appendix A
Comparison of FY 1998 Multi-Year Work Plan vs. April Project Baseline Summary Submittal

PFP Stabilization (TP-06)	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006
FY 1998 Multi-Year Work Plan	11,886	30,060	18,889	13,324	8,081	0	0	0	0
PBS Submittal	26,453	35,610	18,889	13,324	8,081	0	0	0	0
Delta	14,567	5,550	0	0	0	0	0	0	0

Explanation of Changes: Lower than expected funding levels have resulted in a reprioritization and deferral of PFP work scope. A new baseline will be developed later this year after a thorough analysis of reengineering and funding impacts.

PFP Vault Management (TP-07)	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006
FY 1998 Multi-Year Work Plan	60,975	62,687	75,140	70,120	67,068	61,532	62,406	63,535	27,329
PBS Submittal	63,275	74,292	75,140	70,120	67,068	61,532	62,406	63,535	27,329
Delta	2,300	11,605	0	0	0	0	0	0	0

Explanation of Changes: Lower than expected funding levels have resulted in a reprioritization and deferral of PFP work scope. A new baseline will be developed later this year after a thorough analysis of reengineering and funding impacts.

Appendix A
Comparison of FY 1998 Multi-Year Work Plan vs. April Project Baseline Summary Submittal

324/327 Facility Transition (TP-08)	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006
FY 1998 Multi-Year Work Plan	33,481	31,042	38,661	30,329	23,021	14,132	10,188	752	0
PBS Submittal	29,627	31,651	31,588	20,224	11,890	370	368	364	354
Delta	(3,854)	609	(7,073)	(10,105)	(11,131)	(13,762)	(9,820)	(388)	354
Explanation of Changes: The PBS submittal was a rough order of magnitude estimate based on facility size, relative contamination, and other similar deactivation projects at Hanford. The MYWP was a more detailed analysis which will be refined further. The final estimate will be submitted in March, 1998.									

K Basin Deactivation (TP-09)	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006
FY 1998 Multi-Year Work Plan	0	0	1,196	3,284	25,189	35,341	32,895	24,589	1,158
PBS Submittal	0	487	709	3,284	25,189	35,341	32,895	24,589	1,158
Delta	0	487	(487)	0	0	0	0	0	0
Explanation of Changes: The difference is based on a projected delay in a turnover of the facility from the Spent Nuclear Fuel Project.									

Appendix A
Comparison of FY 1998 Multi-Year Work Plan vs. April Project Baseline Summary Submittal

Accelerated Deactivation (TP-10)	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006
FY 1998 Multi-Year Work Plan	2,716	1,445	3,583	2,666	2,503	3,345	3,164	2,971	2,778
PBS Submittal	0	3,736	3,388	2,502	2,335	3,095	2,907	2,706	2,475
Delta	(2,716)	2,291	(195)	(164)	(168)	(250)	(257)	(265)	(303)
Explanation of Changes: The project was re-evaluated based on the actual facilities that were transferred into this project in FY 1997.									

Transition Project Management (TP-10)	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006
FY 1998 Multi-Year Work Plan	11,596	12,026	11,415	13,564	13,900	14,248	15,108	15,478	13,229
PBS Submittal	9,905	10,854	10,894	11,016	11,085	11,436	11,649	11,844	11,831
Delta	(1,691)	(1,172)	(521)	(2,548)	(2,815)	(2,812)	(3,459)	(3,634)	(1,398)
Explanation of Changes: The FY 1998 MYWP included new requirements (beginning in FY 98) for FDH project Direction, Rad Con/QA site manuals, Site Systems Engineering, Site Packaging and Shipping, and project procedure updates. In addition, beginning in FY 2001, SNM management work scope will be transferred from the 300 Area/SMN Sub-Project (TP04).									

Appendix A
Comparison of FY 1998 Multi-Year Work Plan vs. April Project Baseline Summary Submittal

Hanford Surplus Facility Program (TP-14)	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006
FY 1998 Multi-Year Work Plan	872	759	5,472	14,187	10,635	9,251	34,274	27,686	35,816
PBS Submittal	0	4,381	3,877	14,076	10,635	9,251	34,274	27,686	35,816
Delta	(872)	3,622	(1,595)	(111)	0	0	0	0	0
Explanation of Changes: The project was re-evaluated based on the actual facilities that were transferred into this project in FY 1997.									

DISTRIBUTION

Number of Copies

OFFSITE

1 U.S. Department of Energy
Cloverleaf Bldg.
19901 Germantown Rd.
Germantown, MD 20874

1 Washington State Department of Ecology
P.O. Box 47600
Olympia, WA 98504-7600

1 U.S. Environmental Protection Agency
712 Suite 5, Swift Blvd.
Richland, WA 99352

1 Hanford Advisory Board
Ms. Merilyn Reeves
723 The Parkway, Suite 200
Richland, WA 99352

1 Oregon Department of Energy
625 Marion Street N.E.
Salem, OR 97310

1 Yakima Indian Nation
P.O. Box 151
Toppinish, WA 98948

1 Wanapum Tribe
P.O. Box 878
Ephrata, WA 98823

1 Nez Perce Tribe
P.O. 365
Lapwai, ID 83540

1 Confederated Tribes of the Umatilla Indian Reservation
P.O. Box 638
Pendleton, OR 97801

Number of Copies

ONSITE

13 U.S. Department of Energy - Richland Operations Office

Reading Room	H2-53
Hanford Technical Library	P8-55
N.D. Moorer, Business Management Team (11)	A5-11

10 Fluor Daniel Hanford Company

Central Files	B1-03
Document Processing Center	A3-94
E.A. Schultz (3)	B3-53
L.J. Olguin	N1-26
E.L. Reynolds (4)	N1-26

30 B&W Hanford Company

Stabilization Program Management (10)	R3-6
E. J. Bitten	L5-65
P. M. Bodmer	T5-45
D. P. Brockman	L6-26
D. B. Cartmell	R3-50
F. R. Crawford	T5-50
J. P. Hayfield	S6-15
G. O. Hayner	L5-65
W. F. Heer	H5-31
P. D. Jensen	T5-51
L. M. Kinsey	R3-61
G. E. Kulynych	H5-31
R. Lehman	L5-65
D. P. Lund	R3-56
J. O. Lundeen	R3-61
G. L. McCormick	R3-56
R. M. Millikin	L5-65
J. R. Montano	N2-51
A. E. Schilling	T5-51
D. R. Speer	S4-49
D. E. Wertz	R3-61

THIS PAGE INTENTIONALLY
LEFT BLANK