

Sta 5

12

ENGINEERING DATA TRANSMITTAL

Page 1 of 1
1. EDT No. 612495

FEB 09 1999

| | | |
|--|--|---|
| 2. To: (Receiving Organization) See distribution list | 3. From: (Originating Organization) PFP Program Management | 4. Related EDT No.: N/A |
| 5. Proj/Prog/Dept/Div.: Remove SNM from PFP | 6. Design Authority/ Design Agent/Cog Engr.: W. D. Bartlett | 7. Purchase Order No.: N/A |
| 8. Originator Remarks: This is the initial release of this project plan. | | 9. Equip./Component No.: N/A |
| | | 10. System/Bldg/Facility: N/A |
| 11. Receiver Remarks: 11A. Design Baseline Document? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | 12. Major Assm. Dwg. No.: N/A |
| | | 13. Permit/Permit Application No.: N/A |
| | | 14. Required Response Date: N/A |

| | | | | | | | | |
|----------------------|--|---------------|--------------|--|----------------------------|-----------------------------|-----------------------------|---------------------------|
| 15. DATA TRANSMITTED | | | | | (F) | (G) | (H) | (I) |
| (A) Item No. | (B) Document/Drawing No. HNF 1 HPN- 3752 dp for wdcb 2/9/99 | (C) Sheet No. | (D) Rev. No. | (E) Title or Description of Data Transmitted Remove SNM from PFP Project Plan | Approval Designator N/A | Reason for Transmittal 1 | Originator Disposition 1 | Receiver Disposition 1 |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

16.

KEY

| | | | | | | |
|--|----------------------------|-------------------------------------|--------------------------|-------------------------|--|--|
| Approval Designator (F) | Reason for Transmittal (G) | | | Disposition (H) & (I) | | |
| E, S, Q, D or N/A (see WHC-CM-3-5, Sec.12.7) | 1. Approval | 4. Review | 1. Approved | 4. Reviewed no comment | | |
| | 2. Release | 5. Post-Review | 2. Approved w/comment | 5. Reviewed w/comment | | |
| | 3. Information | 6. Dist. (Receipt Acknow. Required) | 3. Disapproved w/comment | 6. Receipt acknowledged | | |

| | | | | | | | | | | | |
|---|-----------|--------------------------|-------------------|----------|----------|------------|-----------|-------------------|----------------------|----------|----------|
| 17. SIGNATURE/DISTRIBUTION (See Approval Designator for required signatures) | | | | | | | | | | | |
| (G) Reason | (H) Disp. | (J) Name | (K) Signature | (L) Date | (M) MSIN | (G) Reason | (H) Disp. | (J) Name | (K) Signature | (L) Date | (M) MSIN |
| | | Design Authority | | | T5-50 | 1 | 1 | J.C. Sinclair III | <i>J.C. Sinclair</i> | 2/9/98 | 13-50 |
| | | Design Agent | | | | 1 | 1 | F. R. Crawford | <i>F.R. Crawford</i> | 2/9/98 | 13-50 |
| | | Cog. Eng. | <i>WDBartlett</i> | 12/28/98 | T5-50 | | | | | | |
| 1 | 1 | Cog. Mgr. W. D. Bartlett | <i>WDBartlett</i> | 12/28/98 | T5-50 | | | | | | |
| | | QA | | | | | | | | | |
| | | Safety | | | | | | | | | |
| | | Env. | | | | | | | | | |

| | | | |
|---|---|---|--|
| 18. | 19. | 20. | 21. DOE APPROVAL (if required) Ctrl. No. |
| <i>WDBartlett</i> Signature of EDT Date Originator | <i>WDBartlett</i> 12-31-98 Authorized Representative Date for Receiving Organization | <i>WDBartlett</i> 12-31-98 Design Authority/ Cognizant Manager | <input type="checkbox"/> Approved <input type="checkbox"/> Approved w/ comments <input type="checkbox"/> Disapproved w/ comments |

5

Project Plan

Remove Special Nuclear Material from PFP Project

Plutonium Finishing Plant

W. D. (Dean) Bartlett

B&W Hanford Company, Richland, WA 99352

U.S. Department of Energy Contract DE-AC06-96RL13200

EDT/ECN: 612495

UC: 2050

Org Code: 15000

Charge Code: 100749/AA30

B&R Code: EW7040000

Total Pages: 14

Key Words: Project Management Plan, Remove Special Nuclear Material from PFP

Abstract: Project Management Plan for the transfer of Special Nuclear Material located at PFP to their final storage destination.

TRADEMARK DISCLAIMER. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof or its contractors or subcontractors.

Printed in the United States of America. To obtain copies of this document, contact: Document Control Services, P.O. Box 950, Mailstop H6-08, Richland WA 99352, Phone (509) 372-2420; Fax (509) 376-4989.

DOES NOT CONTAIN CLASSIFIED OR
UNCLASSIFIED CONTROLLED
NUCLEAR INFORMATION

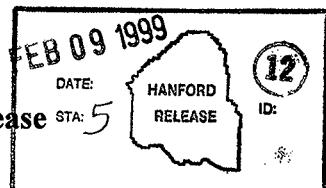
Reviewing
Official / ADC:

Date: 2/9/99

Q. Rinkal
Release Approval

2/9/99
Date

Release Stamp



Approved for Public Release

TABLE OF CONTENTS

| | |
|-------------------------------------|----|
| 1. Introduction | 2 |
| 2. Work Scope..... | 3 |
| 3. Work Breakdown Structure..... | 6 |
| 4. Project Strategy..... | 7 |
| 5. Management | 7 |
| 8. Quality Assurance..... | 11 |
| 9. Systems Engineering Plan..... | 11 |
| 10. Security | 12 |
| 11. Other Supporting Documents..... | 12 |

LIST OF FIGURES

| | |
|---------------|----|
| Figure 1..... | 5 |
| Figure 2..... | 10 |
| Figure 3..... | 13 |

Project Plan
Remove Special Nuclear Material from PFP Project
Plutonium Finishing Plant
November 16, 1998

1. Introduction

1.1 Project Plan Purpose

This plan presents the overall objectives, description, justification and planning for the Plutonium Finishing Plant (PFP) Remove Special Nuclear Material (SNM) Materials. The intent of this plan is to describe how this project will be managed and integrated with other facility stabilization and deactivation activities. This plan supplements the overall integrated plan presented in the *Plutonium Finishing Plant Integrated Project Management Plan* (IPMP), HNF-3617, Rev. 0.

This project plan is the top-level definitive project management document for PFP Remove SNM Materials project. It specifies the technical, schedule, requirements and the cost baselines to manage the execution of the Remove SNM Materials project. Any deviations to the document must be authorized through the appropriate change control process.

1.2 Project Description

The Remove SNM Materials project provides the necessary support and controls required for U.S. Department of Energy (DOE)-Headquarters (HQ), DOE, Richland Operations Office (RL), B&W Hanford Company (BWHC), and other DOE Complex Contractors the path forward to negotiate shipper/receiver agreements, schedule shipments, and transfer material out of PFP to enable final deactivation.

1.3 Project Mission

This project is part of the PFP Stabilization and Deactivation Project. The Stabilization and Deactivation Project is discussed in the *Hanford Site Integrated Stabilization Management Plan* (SISMP) and the PFP IPMP. The overall project mission is provided in the IPMP.

The mission of the Remove SNM Material project from the PFP is to stabilize, provide interim storage, package and ship plutonium (Pu)-bearing material to the designated receiver sites for long term storage or final disposition.

1.4. Project Background

The driving force behind this project is the Record of Decision that calls for all material to be stabilized to the DOE-STD-3013 standard and shipped to the Savannah River Site (SRS) for long term storage until the Material Disposition facility is completed. (In a 3013 bagless or like container.)

1.5. Project Relationship to the Total Stabilization Program

This project is one of several identified to complete stabilization of plutonium at PFP, safely store it onsite, ship it offsite for storage or disposal, and transition the facility to a condition suitable for long term, minimum cost surveillance and maintenance. The overall hierarchy of planning documents is as follows:

- IPMP, presents the overall planning strategies and scope for the above.
 - Project planning at the functional level
 - Facility Surveillance and Maintenance
 - Material Storage (vaults)
 - International Atomic Energy Agency (IAEA) support activities
 - Material Stabilization
 - Project Planning to support Material Stabilization activities
 - Metals and Oxides Stabilization
 - Solutions Stabilization
 - Polycubes Stabilization
 - Residues Disposition
 - Project W-460, Plutonium Stabilization and Packaging (PuSAP) construction
 - Plutonium Stabilization and Handling (PuSH) Operations
 - Fuels Management
 - SNM
 - Special Isotopes
 - Facility Transition
 - Material Shipments (this plan)
 - Post Deactivation Surveillance and Maintenance

2. Work Scope

2.1 Work Scope

Process Flow Description

Figure 1 provides (1) the major process steps associated with the Removal of SNM Material project and (2) the overall relationships to the Defense Nuclear Facilities Safety Board (DNFSB) Recommendation 94-1 activities. Material stored in room 3 of the 2736-Z Building will be

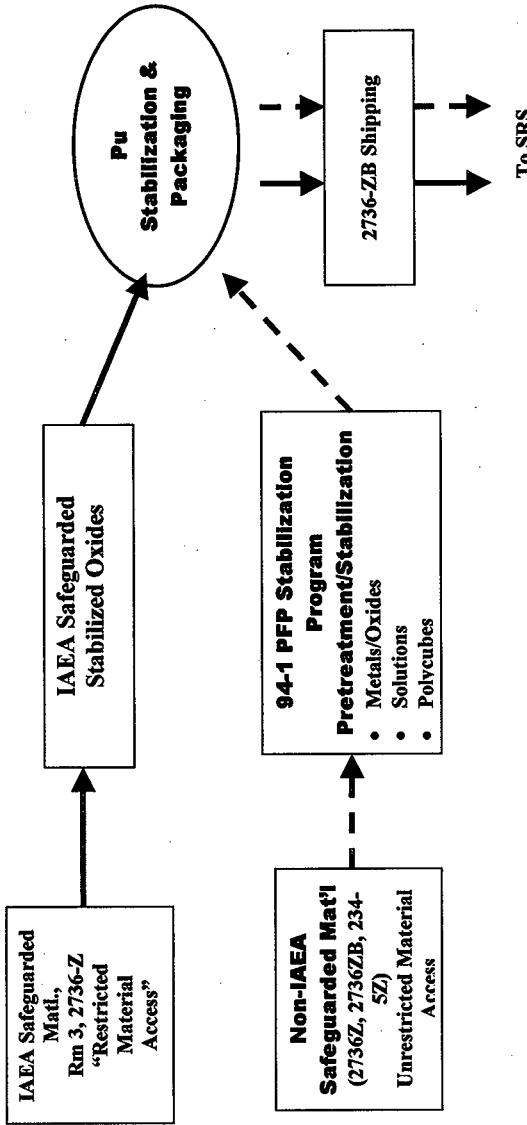
stabilized and packaged to 3013 criteria. Interim storage will be provided if the Plutonium Stabilization and Packaging (PuSAP) facilities are not available. Final packaging to DOE-STD-3013 criteria for long term storage and shipment to the SRS will be provided following PuSH processing activities.

Facility Modifications/Equipment Installation

No additional facility modifications or equipment installation will be required.

REMOVE SNM MATERIAL PROGRAM RELATIONSHIP TO 94-1 ACTIVITIES

Figure 1



Operations

This work scope includes support to DOE-HQ and RL in negotiating shipper/receiver plans with other DOE Contractors.

2.2 Requirements Baseline

2.2.1 Driving Requirements

Driving requirements are those requirements that define the project mission. The DNFSB Recommendation 94-1 Hanford Site Integrated Stabilization Management Plan (SISMP), revision 5, dated May 1997 has been the source of driving requirements for the PFP projects.

2.2.2 Derived Requirements

Derived requirements are those requirements that flow down from higher level requirements or assumptions. No derived requirements have been identified at this time.

2.2.3 Key Interfaces

Each of the tasks included in this project have a shipping and packaging interface which includes the PuSAP Stabilization and Packaging to DOE-STD-3013 and SRS or Los Alamos National Laboratory (LANL) packaging and shipping standards. It is assumed that it will be possible to establish each of these interfaces as currently planned.

Due to the possibility of several related processes going on at the same time, this project will have interfaces with the other subprojects. These interfaces include items such as material flow, feed and stabilized material transfers, staging, radiation effects, and airborne radiation area status. Evaluations of the material flow to the different DNFSB Recommendation 94-1 operations and the interactions between them will need to be conducted as required to ensure a smooth flow of material.

2.2.4 Key Milestones

Complete removal of SNM by fiscal year 2007.

3. Work Breakdown Structure

The Remove SNM Material Project Work Breakdown Structure (WBS) is shown in Section 5.3. The WBS is a product-oriented hierarchy of the work and products for the subproject and will be used to define and inter-relate the subproject work.

4. Project Strategy

The Remove SNM Material Project will complete packaging and shipment of the material to its final storage location. The strategy for this project is to complete the work within the current project management structure, minimize impacts to the other projects' tasks and complete the shipments as efficiently as possible.

5. Management

The Remove SNM Material project is under the direction of PFP Senior Director. Support for the subproject activities is provided by various support groups within the PFP organization.

5.1 Project Management Roles and Responsibilities

The individual cost account packages for this subproject are identified in Section 5.3.

5.1.1 Project Manager

The project manager is responsible for the following activities within this subproject:

- Planning, managing and maintaining the technical, schedule, and cost baselines for the project.
- Selecting and directing cost account managers responsible for delivering discrete products and services defined by assigned WBS elements.
- Maintaining a trained and qualified work force to complete the cost account products.
- Effectively resolving issues impacting project completion.
- Providing monthly project status of performance to the PBS manager.
- Acting as primary point of contact for all issues pertaining to the project
- Obtaining and directing other support functions necessary to ensure project completion.
- Providing effective personnel resources utilization.

5.1.2 Cost Account Managers

The individual cost account managers are responsible for the following:

- Planning and completing the applicable cost account work scope in accordance with the technical, schedule and cost baselines established in this plan.
- Identifying work package managers as needed and ensuring that their work is properly managed to achieve control account objectives.
- Performing work in a manner that meets the subproject's quality objectives.
- Ensuring resource requirements are identified to matrix organizations.

- Maintaining a trained and qualified work force to complete the cost account products.
- Achieving operational safety and compliance with permit requirements.
- Evaluating and reporting monthly cost account status to the project manager.
- Maintaining required operational efficiencies to achieve project objectives.
- Developing and implementing corrective action plans as needed.
- Directing and working with work package managers to complete the work packages as planned.

5.2 Primary Project Interfaces

Primary project interfaces are shown in Figure 2.

5.3 Responsibility Assignment Matrix

| WBS | TITLE | RESPONSIBLE MANAGER |
|--------|---------------------------------|-----------------------|
| 1K6BL1 | Project Management Min Safe | W. D. (Dean) Bartlett |
| 1K6BA1 | Shipments of SNM | W. D. (Dean) Bartlett |
| 1K6EA1 | Offsite SNM Shipment & Receipt | W. D. (Dean) Bartlett |
| 1K6EA2 | Onsite SNM Shipment & Receipt | W. D. (Dean) Bartlett |
| 1K6EA3 | Vault Miscellaneous Maintenance | W. D. (Dean) Bartlett |
| 1K6EA4 | Vault #3 Security Maintenance | W. D. (Dean) Bartlett |
| 1K6BL1 | Vault Project Management | W. D. (Dean) Bartlett |

5.4 Authority/Responsibility Matrix

Authority and responsibilities for this project are summarized in Figure 2 and Section 5.3 of this project plan.

6. Schedules (Baseline)

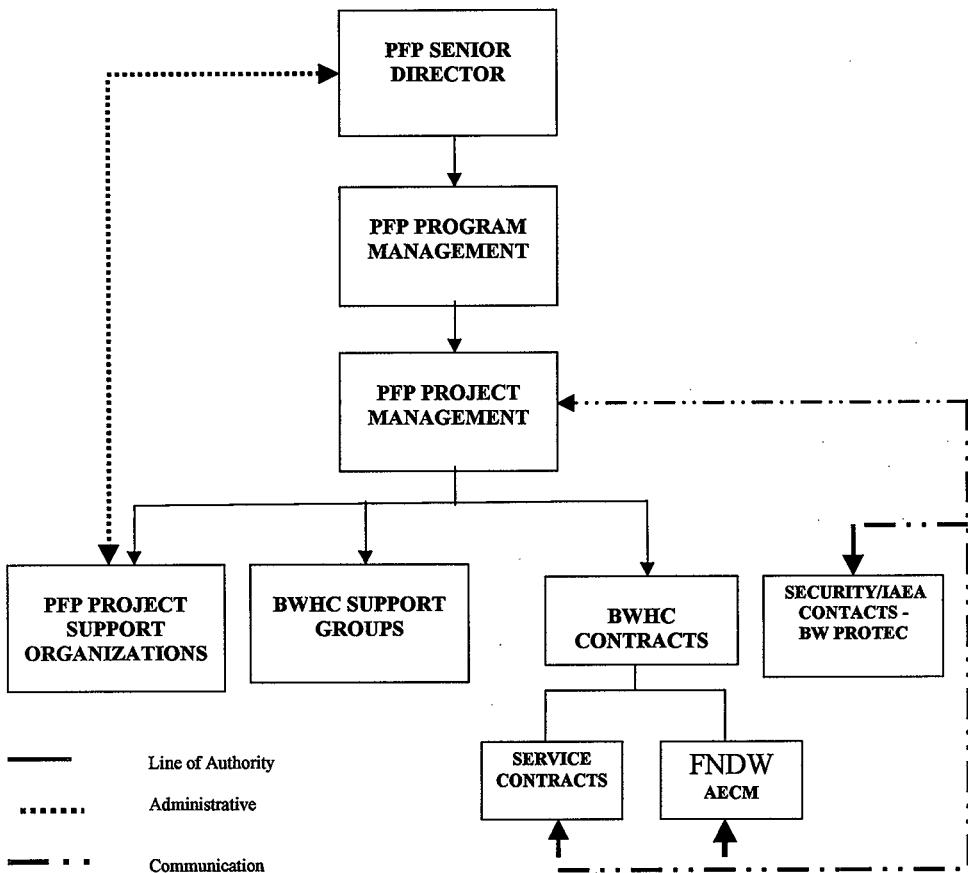
The Remove SNM Material project schedule is provided in Figure 3. Detailed schedules will be developed and/or updated and will be maintained in Primavera Project Planner (P3).

7. Cost Estimate

The funding requirements for this project are listed in the following table.

| FISCAL YEAR | FUNDING REQUIREMENT (\$K) |
|--------------|---------------------------|
| 1999 | 1,815 |
| 2000 | 1,815 |
| 2001 | 1,815 |
| 2002 | TBD |
| 2003 | TBD |
| 2004 | TBD |
| 2005 | TBD |
| 2006 | TBD |
| 2007 | TBD |
| 2008 | TBD |
| 2009 | TBD |
| 2010 | TBD |
| 2011 | TBD |
| 2012 | TBD |
| 2013 | TBD |
| 2014 | TBD |
| TOTAL | TBD |

Figure 2
Primary Project Interfaces



8. Quality Assurance

A. Quality Assurance Document Hierarchy

The BWHC Facility Stabilization Project *Quality Assurance Program Plan* (QAPP) (Reference FSP-MP-004) documents the BWHC organization, and functional responsibilities and interfaces for quality assurance (QA) and identifies procedures, instructions, and management systems to implement requirements appropriate to the BWHC work scope.

BWHC is currently responsible for the Facility Stabilization Projects and Advanced Reactor Transition. Due to the varied nature of BWHC Projects, the BWHC QAPP is a combination of an umbrella BWHC QAPP, which covers company activities and a set of Facility/Project specific QAPPs tailored to specific project tasks.

The PFP QAPP, FSP-PFP-5-8, Volume 2, Section 15.1, of the *PFP Administration Manual* implements the QA requirements of Title 10, Code of Federal Regulations (CFR), Part 830.120, "Quality Assurance Requirements," and the Project Hanford *Quality Assurance Program Description* (QAPD), HNF-MP-599 and constitutes the specific PFP QAPP.

B. Quality Assurance Organization and Interface

The PFP structure, interfaces and levels of authority of the PFP organization are defined in the *PFP Administration Manual*, FSP-PFP-5-8, Section A, "Organizational Charts," and general responsibilities are described in Section B, "PFP Management Positions/Team leaders – Key Functions."

C. Quality Assurance Requirements

PFP is subject to the requirements of Title 10, CFR, Part 830.120, "Quality Assurance Requirements," and shall comply with the applicable requirements described in the Project Hanford QAPD, HNF-MP-559. Appendix A, "QAPD Requirements Applicability Matrix," of the PFP QAPP identifies QAPD requirements that apply to each PFP organization.

9. Systems Engineering Plan

Due to the nature of the Remove SNM Material tasks and the level of negotiations required for the work, evaluations of options and work tasks are coordinated between RL, EM-64, BWHC and the Receiver Sites. Systems engineering support will be provided at PFP as it pertains to operations in the PFP.

10. Security

The PFP security program addresses the following security aspects: Physical protection of SNM, nuclear material accountability & control, access control requirements, human reliability program protection, shipments and movement of SNM and storage of SNM.

A. Personnel Security (clearances)

Authorized access to the process area will be controlled by positive identification that will require a "two-person rule." The two-person rule requires that at least two knowledgeable people in the Personnel Security Assurance Program be in the area when work is in progress.

Positive identification is performed at the Protected Area as well as at the Material Access Area.

B. Nuclear Material Accountability and Control

Domestic Safeguards Material Accountability and Control is applied to all SNM under Safeguards utilizing tamper indicating seals. Material surveillance procedures (two-person rule) are implemented utilizing personnel qualified under the Personnel Security Assurance Program in Category 1 SNM locations.

C. Physical Security

All material under safeguards will be protected under domestic security at all times. This will include utilization of locking devices for cubical storage and the use of transport wagons at all times. Material will be stored under vault protection when not attended.

11. Other Supporting Documentation

Other supporting documentation and plans will be prepared to support this subproject.

- A. Regulatory Compliance plan
- B. ALARA Plan
- C. Characterization Plan
- D. Readiness Assessment Plan
- E. Shipper/Receiver Plans
- F. Memorandum of Agreement

HNF-3752, Rev. 0

Figure 3

REMOVE SNM MATERIAL SHIPPING PROJECT SCHEDULE
TO BE DEVELOPED AT A LATER DATE

DISTRIBUTION SHEET