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# PFP Issues/Assumptions Development and Management Planning Guide

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

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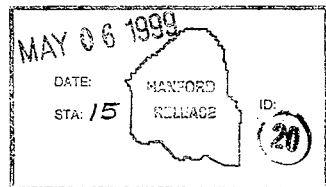
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**Abstract:** This document includes the planning guide used for the development of the PFP issues and assumptions management list. The PFP life-cycle project was re-baselined in FY99. The PFP life-cycle baseline is documented in the Integrated Project Management Plan for the Plutonium Finishing Plant Stabilization and Deactivation Project, HNF-3617.

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# PFP Issues/Assumptions Development and Management Planning Guide

HNF-3725, Rev. 0

Prepared by

B&W Hanford Company and  
Fluor Daniel Hanford, Inc.

Prepared for

U.S. Department of Energy,  
Richland Operations Office

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## **1.0 Introduction**

The PFP Issues/Assumptions Development and Management Planning Guide presents the strategy and process used for the identification, allocation, and maintenance of an Issues/Assumptions Management List for the Plutonium Finishing Plant (PFP) integrated project baseline. Revisions to this document will include, as attachments, the most recent version of the Issues/Assumptions Management List, both open and current issues/assumptions (Appendix A), and closed or historical issues/assumptions (Appendix B).

This document is intended be a Project-owned management tool. As such, this document will periodically require revisions resulting from improvements of the information, processes, and techniques as now described. Revisions that suggest improved processes will only require PFP management approval.

## **2.0 Statement of Need**

To complete the implementation of the overall Systems Engineering/Project Management Modified Approach to the development of the upgraded and accelerated PFP project baseline, a thorough analysis of project-related issues and assumptions is required. A complete and working Issues and Assumptions Management List will ensure that the PFP baseline maintains a high confidence level and that the uncertainty associated with a system function or work breakdown structure activity is actively being managed to reduce the overall potential impact on the project schedule. This planning guide has been developed to be consistent with the requirements of the site procedure, HNF-PRO-419, *Technical Issues Management List Procedure*.

## **3.0 Background**

The PFP Stabilization and Deactivation Project's (hereafter referred to as the Project) schedule has many areas of uncertainty due to changing requirements, first-of-a-kind processing, packaging long-lead procurements currently in the conceptual or specification stage, and years of operations which have on occasion included upsets and contained spills and leaks. Implementation of an issues management program, which addresses project and subproject issues, is a key element in managing risks to the Project's integrated baseline. Disciplined risk management is required to ensure that the accelerated PFP schedule does not result in undue safety, environmental, technical, schedule, nor financial risks. As such, an issue and assumptions identification, development, and management tool is required to effectively manage the project risk and uncertainty associated with the baseline. Issues and/or assumptions originate from a variety of sources and require different actions for resolution.

## 4.0 Definitions

The following provides the reader and the reviewer of the planning guides used in the development of the PFP Integrated Project Management Plan with common terms and their definitions:

**Activity-Based Cost Estimate** – An activity-based cost (ABC) estimate is prepared at the lowest practical level in the work breakdown structure (functional breakdown) where labor, equipment, and material costs can be defined for the activity.

**Integrated Baseline** – The interrelated aspects of the technical scope, project schedule, and activity-based cost estimate make up the Integrated Baseline. Key elements of the Project's Integrated Baseline will be documented electronically in the Technical Baseline Management System. Key baseline elements, which will be maintained electronically, include work breakdown structure and dictionary (e.g., functions and functional analysis), requirements, issues/assumptions, interfaces, location descriptions, basis of estimate, schedule information, milestones, and requirements closure criteria.

**Functional Analysis** – The Functional Analysis defines what the system must do (i.e., the activities or "functions") to achieve the overall objectives (mission) and defines the internal and external interactions among the activities. The Functional Analysis is the basis for the Project's technical logic, work breakdown structure, definition of subprojects, the organization structure, the Project's files, process flow diagrams, and definition of the Project's Technical Baseline.

**Requirements Analysis** – The Requirements Analysis consists of the identification of the applicable requirements. This analysis results in the Project's requirements baseline, which is the foundation for identifying the activities, which will satisfy these requirements (the functional analysis). All requirements must be allocated to the individual functions or elements of the system. Requirements will be maintained in the Technical Baseline Management System, as an integral part of the Project's Technical Baseline.

**Systems Engineering/Project Management Modified Approach** – The Systems Engineering/Project Management Modified Approach is a focused accelerated effort undertaken to develop the upgraded PFP project baseline. The approach uses the fundamental concepts of systems engineering, combined with the rigor of sound project management principles, to establish a defensible and traceable requirements-based Technical Baseline.

**Technical Baseline** – The Technical Baseline is the body of technical information associated with the personnel, the processes, and the products required to accomplish the Project's mission. The initial Technical Baseline is a formal description of functions (activities), their sequence and interactions, and the requirements and constraints needed to define the system. The Technical Baseline also provides the basis to develop cost estimates and schedules used for management of work. A Technical Baseline may evolve over the Project's life cycle from a Requirements Baseline, through a Design Baseline, an As-built Baseline, an Operational Baseline, and a Deactivation Baseline.

**Issue** – An issue is an area of uncertainty. The level of uncertainty tracked and described as an issue should be at the project managers discretion based on the relative level of risk to the project and authority the project manager has to manage the uncertainty. Each issue is assigned to a specific organization (manager) for resolution.

**Assumption** – An assumption is a supposition that should be used in the case where a rule or a fact has changed in the past or can potentially change in the future. An assumption should only be documented and tracked if a change in the rule or fact would change the baseline.

**Enabling Assumption** – An issue that results in an assumption that allows (enables) the planning to continue until the issue is resolved is an enabling assumption. This enabling assumption is a statement of the most reasonable or likely path forward on an issue and/or area of project uncertainty.

**Issue/Assumptions Resolution Action Type** – An Issue/Assumptions Resolution Action Type is a tool to be used for the resolution of the area of uncertainty. Standard tools to be used in the development of the PFP baseline will include (but not be limited to): workshops, trade/engineering studies, memorandum of agreement, acquisitions, and technical work plans. Documentation of closure of each issue is an important final step in the process.

## **5.0 Issues/Assumptions Development and Maintenance Approach**

The process described below will be used to develop and maintain the Issues/Assumption Management List during the development of the PFP project baseline.

### **5.1 Issues/Assumptions Development Documentation**

The approach for assembly of project issues, assumptions, at all levels of the functional history includes the collection and review of existing PFP and Hanford Site documentation. As documents are reviewed, assessments are made to determine if they are valid sources of project issues, assumptions, and/or enabling assumptions. If issues and assumptions are extracted from these documents, the Issues/Assumptions Management List is to contain the source document as a reference. In addition, notes from workshops and other project related meetings conducted during the development of the PFP baseline are to be evaluated as sources of issues and assumptions.

As the Functional and Requirements Analyses are being developed, special templates are used that include cells for listing issues and assumptions based on a given function or requirement. These issues/assumptions are mapped to the given function (work breakdown structure element). Issues/Assumptions gathered from source documents are to be mapped to the appropriate function upon completion of the Functional Analysis. Finally, issues and assumptions are to be documented through reviews and by interviews with project representatives and management.

## **5.2 Issues/Assumptions List Maintenance Approach**

During the development of the PFP baseline, the Issues and Assumptions Management List was maintained and revised as an appendix to this document. Items were added to the list by the baseline development team (PFP Tiger Team A) from the baseline development effort or through direction from the PFP. This Issues and Assumptions Management List was provided to the issues management team (PFP Tiger Team B) on a weekly basis for action and interface with PFP. Items will not be deleted from the list but will be statused as open or closed. Open issues at the time the baseline is submitted will be accompanied by an enabling assumption within the baseline.

An electronic database with issues and assumptions mapped to the functions is to be provided to PFP at the conclusion of the baseline development process for maintenance and resolution.

## **5.3 Issue Identification, Assignment, Categorization and Closure**

### **5.3.1 Issue Identification**

An issue results from missing data required for planning or execution of an activity. This may be a requirement or function that has not been defined, an architecture that has not been identified, or the inability of a project to meet previously defined requirements for any of a number of reasons. Each issue results in a planning assumption that is used until the issue is resolved. Issues can be identified by any member of the Project management or staff.

### **5.3.2 Responsibility Assignment**

Once identified, an issue is reviewed for inclusion in the Technical Issues Management List by Project management. Management assigns a champion to manage resolution of the issue. The duties of the champion are described in Section 5.5.

### **5.3.3 Categorization**

An issue is placed in one of three categories:

Category 1 Issues: Technical issues that lie within the scope and responsibility of the PFP Project to resolve. The deliverable from the resolution of these issues will be a decision and resultant baseline change, if required.

Category 2 Issues: Technical issues that are beyond the scope and responsibility of the PFP Project to resolve, but within the scope and responsibility of Hanford to resolve. These issues will be carried as planning assumptions in the Project baseline until the resolved within Hanford.

Category 3 Issues: Technical issues beyond the scope and responsibility of Hanford to resolve. These issues will be carried as planning assumptions in the Project baseline until the off-site decision authority resolves the issue.



### 5.3.4 Issue Closure

An issue will be considered closed when the proper approved authorities have formally documented a decision, and activities necessary to implement the decision are scheduled and funded in the baseline. The Technical Issues Management List will be modified to status the issue as closed, and to reflect the closure documentation.

## 5.4 Data Elements Associated with Technical Issues

Specific data is to be developed for each technical issue. Supporting data and documentation relating to resolution of an issue shall be maintained in a file unique to that issue.

### 5.4.1 Required Data:

The required data is entered into the Technical Baseline Management System database (TBMS). Appendix A is a query from that database. The identifiers for the required data are based on the *Technical Issues Management List*, HNF-PRO-419, Rev 0. Some of the following identifiers were modified for inclusion in the TBMS, and these modifications are indicated in parenthesis ( ):

- a. **Issue Number (Assumption/Issues Management ID):** A unique number will be assigned to each issue. The number will never be reused.
- b. **Issue Type (Assumption/Issue Type):** Planning or Issue.
- c. **Issue (Title):** A descriptive title followed by a concise description of the substance of the issue.
- d. **Affected Elements (WBS Number and WBS Title):** Any internal or external functional or organization interfaces affected by the issue and its resolution.
- e. **Required Decision (Description):** A concise description of the action required from the decision-maker to resolve the issue
- f. **Planning Assumption (Source):** A concise summary of the planning assumption to be used until the issue is resolved.
- g. **Impact (General Description):** A brief description of the consequences of the decision being different from the planning assumption, or of the decision not being made in the required time frame.
- h. **Action Type:** Describes the action required to resolve the issue, such as generation of a Memorandum of Understanding, completion of a trade study, acquiring a new system, etc.
- i. **Source (Document Title):** The documented source of the issue.
- j. **Category:** See Section 5.3.3 for a description of categories.
- k. **Recommendation Date (Start):** The date that the recommended resolution to the issue must be delivered to the Project decision-makers.
- l. **Decision Date (Finish):** The date that the decision must be made for Category 1 issues, or the planning assumption must be approved for Category 2 and 3 issues in order to maintain the approved baseline.
- m. **Status:** Open or closed. If open, provide a brief summary of progress.

- n. **Champions:** The names and titles of those individuals at all levels who are responsible for resolution of the issue. Must include issue resolution lead.
- o. **Decision Maker:** The individual within the Project, at Hanford, or external to Hanford who must make the decisions which will resolve the issue.

## **5.5 Duties and Expectations of Personnel Identified with Issues**

### **5.5.1 Issue Resolution**

The primary responsibility of the leader is to deliver the recommended resolution of the issue to the decision-maker on schedule. Other duties may include:

- a. Identify and coordinate with organizations affected by the issue.
- b. Clearly define the issue and ensure it is correctly described in the Technical Issues Management List.
- c. Develop the required information for the Technical Issues Management List data elements described above.
- d. Maintain the schedule for issue resolution, and keep the decision-maker and champions informed.
- e. Request needed resources and funding to resolve the issue.
- f. Support preparation and staffing of any baseline change requests.
- g. Make periodic status reports to the champions and decision-maker as required.

### **5.5.2 Champions**

Duties may include:

- a. Obtain resources as necessary including approval of change requests.
- b. Coordinate personnel support as necessary.
- c. Sponsor the appropriate priority for the issue resolution activity.
- d. Sponsor briefings to the Site Management Board and/or company senior management as necessary.
- e. Take necessary follow-through action following decision-maker's action.

### **5.5.3 Decision-Maker**

Duties may include:

- a. Approve/disapprove the recommended issue resolution in a timely manner.
- b. Provide direction for further action.
- c. Disseminate decision information to actionees and interested parties.
- d. Ensure actions are clearly assigned to responsible parties.
- e. For Category 3 issues, ensure that the offsite decision-maker is informed of the Hanford planning assumption.

## **5.6 Technical Issues Management List Maintenance**

### **5.6.1 Closed Issues**

Closed issues will be maintained on the Technical Issues Management List for six months.

### **5.6.2 Technical Issues Management List Publication**

The Technical Issues Management List is to be published monthly when changes have been made. If there are no changes, a letter is to be distributed stating the previous month's Technical Issues Management List is still current.

## **5.7 Issue Analysis**

While the depth and level of technical analysis required for resolution of an issue will vary, several key features are required to maintain defensibility and consistency of the issue resolution process. Minimum requirements for an analysis are:

- a. A clear and comprehensive statement of the problem. This will define the problem boundaries and ensure that what is included in the problem, as well as what is not included in the problem, is defined.
- b. A clear and comprehensive statement of the required decision which resolves the issue.
- c. A set of alternative solutions, approaches or architectures which would resolve the issue.

NOTE: Where these alternatives have been identified and analyzed in the past, this step can be replaced with appropriate references to previous work.

- d. A set of evaluation criteria which are used to analyze and compare the performance of the alternatives.
- e. Identification of the selected alternative and a defense of the selection.
- f. Concurrence of the affected organizations.

## **5.8 Issue Prioritization**

Issue prioritization is a subjective categorization based on considerations of the Environmental, Safety and Health (ES&H) impact, financial impact, and timing of the need for resolution of the issue.

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## **Appendix A**

### **Open Issues and Assumptions Management List**

## Issues - Assumptions - PFP

Assumption/Issues Management ID		2	Action Type	Other	Assumption/Issue Type		Issue
Decision_Maker		Heizenga/P.	Knollmeyer		Start	8/30/99	Closure Date:
Champions		J. Sinclair/ R.	Redekopp		Finish	9/30/99	
Priority							

### Description

Final disposition of stabilized materials. Uncertainty in MD criteria increases project risk.

### Required Decision

Confirm compatibility of materials and process operations with MD criteria. Monitor the MD criteria for changes which will impact the materials stabilization effort.

### Planning Assumption

The draft criteria defined in "Acceptance Criteria for Plutonium Bearing Materials to be Dispositioned by Immobilization," Rev. 0, dated 8/19/98

### Impacts

Increased cost and schedule delays while alternatives are developed.

### Source

Project Management Plan/Materials Stabilization(> or equal to 50 wt% Pu) DRAFT October 22, 1998

### Status

Open

### WBS Number

1.04.05.01.13.03.04.02      Transfer and Process Caustic Solutions  
1.04.05.01.13.01.01.02      Transfer & Process Pu Metal

Tuesday, April 27, 1999

## Issues - Assumptions - PFP

1.04.05.01.13.03.07.02	Transfer and Process Solutions
1.04.05.01.13.03.03.02	Transfer and Process Chloride Solutions
1.04.05.01.13.03.02.02	Transfer and Process Impure Nitrate Solutions
1.04.05.01.13.03.01.02	Transfer and Process Pure Nitrate Solutions
1.04.05.01.13.01.04.02	Transfer & Process Pu Oxides/MOX
1.04.05.01.13.01.03.02	Transfer & Process Pu Oxides/MOX
1.04.05.01.13.01.02.02	Transfer & Process Pu Alloys
1.04.05.01.13.04.01.02	Transfer and Process Polycubes

## Issues - Assumptions - PFP

Assumption/Issues Management ID	3	Action Type	MOU	Assumption/Issue Type	Issue
Decision Maker	Heizenga/P. Knollmeyer			Start	8/30/99
Champions	J. Sinclair/ R. Redekopp			Finish	9/30/99
Priority					

### Description

Final disposition of stabilized materials.

### Required Decision

Establish packaging agreement with MD program for FFTF fuel.

### Planning Assumption

The selected packaging configuration for FFTF fuel will be acceptable to the MD program

### Impacts

Increased cost and schedule delays while alternatives are developed.

### Source

Informal note, Rick Martinez to PFP quartet, dated 10/14/98, "Updated Issues Matrix with Issues Dictionary and Crosswalk".

### Status

Open

WBS Number WBS Title

1.04.05.01.14.02.02.03 Disposition Non-Irradiated FFTF Fuel



## Issues - Assumptions - PFP

<i>Assumption/Issues Management ID</i>	<i>6</i>	<i>Action Type</i>	<i>Letter</i>	<i>Assumption/Issue Type</i>	<i>Issue</i>
<i>Decision Maker</i>	F. Crawford/L. Olguin/L. Romine/Heizenga			<i>Start</i>	4/30/99 <i>Closure Date:</i>
<i>Champions</i>	P. Roeger/R. Redekopp			<i>Finish</i>	5/30/99
<i>Priority</i>					

### Description

An agreed upon set of safety basis requirements for completion of the project.

### Required Decision

Determine safety basis management strategy and obtain RL approval. Prepare revised FSAR as necessary.

### Planning Assumption

Facility safety requirements will be derived from documents listed in FSP-PFP-5-8, procedure 2.23 (Identification and Resolution of Unreviewed Safety Questions), Appendix A.

### Impacts

Activities cannot be performed without DOE authorization and the development of the safety basis strategy and requirements. Therefore activities could be delayed while the documentation for DOE authorization is completed and approved.

### Source

PFP Tiger Team A Requirements Analysis.

### Status

Open

### WBS Number WBS Title

1.04.05.01.13.01.01.02	Transfer & Process Pu Metal
1.04.05.01.13.03.03.02	Transfer and Process Chloride Solutions

Tuesday, April 27, 1999

## Issues - Assumptions - PFP

1.04.05.01.13.04.01.02	Transfer and Process Polycubes
1.04.05.01.13.03.07.02	Transfer and Process Solutions
1.04.05.01.13.03.04.02	Transfer and Process Caustic Solutions
1.04.05.01.13.03.02.02	Transfer and Process Impure Nitrate Solutions
1.04.05.01.13.03.01.02	Transfer and Process Pure Nitrate Solutions
1.04.05.01.13.01.04.02	Transfer & Process Pu Oxides/MOX
1.04.05.01.13.01.02.02	Transfer & Process Pu Alloys
1.04.05.01.15.15.01.09	Maintain Safety Basis Documentation
1.04.05.01.13.01.03.02	Transfer & Process Pu Oxides/MOX

## Issues - Assumptions - PFP

Assumption/Issues Management ID	7	Action Type	MOU	Assumption/Issue Type	Issue
Decision_Maker	F. Crawford/ L. Olguin/ L. Romine/Heizenga	Start	8/30/99	Closure Date:	
Champions	D. Bartlett/ R. Redekopp	Finish	9/30/99		
Priority					

### Description

At what level the safeguard requirements will be terminated.

### Required Decision

Confirm appropriate safeguard termination limit requirements.

### Planning Assumption

The safeguard termination limits specified in the PFP specific letter of 4/1/96 (Ref.??) will be applied.

### Impacts

Resource requirements could be impacted if the safeguards requirements were extended beyond those specified in the referenced letter.

### Source

PFP Tiger Team A Requirements Analysis.

### Status

Open

WBS Number	WBS Title
1.04.05.01.13.02.05.02	Transfer and Process Residues
1.04.05.01.13.03.05.02	Transfer and Process Organic Solutions
1.04.05.01.13.02.06.02	Transfer and Process

## Issues - Assumptions - PFP

1.04.05.01.13.02.03.02	Transfer and Process Oxides/MOX
1.04.05.01.13.02.01.02	Transfer and Process SS&C
1.04.05.01.13.02.02.02	Transfer and Process Ash
1.04.05.01.13.02.04.02	Transfer and Process Compound

## Issues - Assumptions - PFP

<i>Assumption/Issues Management ID</i>	<i>8</i>	<i>Action Type</i>	<i>Trade Study</i>	<i>Assumption/Issue Type</i>	<i>Issue</i>
<i>Decision_Maker</i>	F. Crawford/ L. Olguin/ L. Romine/Heizenga			<i>Start</i>	8/30/99 <i>Closure Date:</i>
<i>Champions</i>	J. Sinclair			<i>Finish</i>	9/30/99
<i>Priority</i>					

### Description

Interim storage, in convenience canisters, of the material while awaiting final 3013 disposition.

### Required Decision

Verify acceptability of Hanford Convenience Container to maintain stability of packaged materials

### Planning Assumption

The Hanford Convenience Container is an acceptable packaging arrangement for interim storage of stabilized materials prior to final 3013 packaging

### Impacts

Schedule impacts would be likely while either an alternate interim canister was identified or to allow for direct disposition per 3013 criteria. Additionally the material would be more hazardous in the current configuration than in the interim storage condition.

### Source

Materials Stabilization Workshops (Nov. 1998)

### Status

Open

<i>WBS Number</i>	<i>WBS Title</i>
1.04.05.01.13.03.01.02	Transfer and Process Pure Nitrate Solutions
1.04.05.01.13.04.01.02	Transfer and Process Polycubes

Tuesday, April 27, 1999

## Issues - Assumptions - PFP

1.04.05.01.13.03.07.02	Transfer and Process Solutions
1.04.05.01.13.03.04.02	Transfer and Process Caustic Solutions
1.04.05.01.13.03.02.02	Transfer and Process Impure Nitrate Solutions
1.04.05.01.13.01.04.02	Transfer & Process Pu Oxides/MOX
1.04.05.01.13.01.03.02	Transfer & Process Pu Oxides/MOX
1.04.05.01.13.01.02.02	Transfer & Process Pu Alloys
1.04.05.01.13.01.01.02	Transfer & Process Pu Metal
1.04.05.01.13.03.03.02	Transfer and Process Chloride Solutions

## Issues - Assumptions - PFP

Assumption/Issues Management ID	11	Action Type	Other	Assumption/Issue Type	Issue
Decision_Maker	F. Crawford/ L. Olguin/ L. Romine/Heizenga			Start	4/30/99
Champions	J. Sinclair			Finish	5/30/99
Priority					

### Description

An improved BTS schedule is needed.

### Required Decision

Complete design and procurement documents.

### Planning Assumption

The Bagless Transfer System (BTS) unit will be designed, fabricated, installed and tested in a 24 month period (the stabilization furnaces 18 months, the packaging unit 12 months)

### Impacts

Schedule delay while the BTS unit is completed and made operational.

### Source

Materials Stabilization Workshops (Nov. 1998)

### Status

Open

### WBS Number

### WBS Title

1.04.05.01.13.01.02.02

Transfer & Process Pu Alloys

1.04.05.01.14.01.01.02

Repurchase Stabilized Materials

1.04.05.01.14.01.02.07

Provide Packaging System

Tuesday, April 27, 1999

## Issues - Assumptions - PFP

Assumption/Issues Management ID	12	Action Type	Acquisition	Assumption/Issue Type	Issue
Decision Maker	F. Crawford/ L. Olguin/ L. Romine/Heizenga			Start	8/30/99
Champions	J. Sinclair			Finish	9/30/99
Priority					

### Description

BTS capable of meeting 3013 packaging requirements is needed.

### Required Decision

Finalize procurement specification.

### Planning Assumption

Hanford will procure stabilization and packaging capabilities as part of the BTS

### Impacts

### Source

Materials Stabilization Workshops (Nov. 1998)

### Status

Open

WBS Number	WBS Title
1.04.05.01.14.01.02.07	Provide Packaging System
1.04.05.01.13.01.01.02	Transfer & Process Pu Metal
1.04.05.01.13.01.02.02	Transfer & Process Pu Alloys



## Issues - Assumptions - PFP

1.04.05.01.14.01.01.02 Repackage Stabilized Materials

<i>Assumption/Issues Management ID</i>	<i>13</i>	<i>Action Type</i>	Trade Study	<i>Assumption/Issue Type</i>	Issue
<i>Decision_Maker</i>	F. Crawford/ L. Olguin/ L. Romine/Heizenga			<i>Start</i>	8/30/99
<i>Champions</i>	R. Redekopp			<i>Finish</i>	9/30/99
<i>Priority</i>					

### Description

Availability of the necessary analysis capabilities for RCRA and/or WIPP.

### Required Decision

Investigate, select and implement laboratory strategy

### Planning Assumption

Laboratory capability to perform certified RCRA and/or WIPP analysis of plutonium bearing materials has not been confirmed.

### Impacts

Increased costs for analysis activities.

### Source

Materials Stabilization Workshops (Nov. 1998)

### Status

Open

### WBS Number

### WBS Title

1.04.05.01.13.02.06.02

Transfer and Process

1.04.05.01.13.03.05.02

Transfer and Process Organic Solutions

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## Issues - Assumptions - PFP

1.04.05.01.13.02.05.02	Transfer and Process Residues
1.04.05.01.13.02.04.02	Transfer and Process Compound
1.04.05.01.13.02.03.02	Transfer and Process Oxides/MOX
1.04.05.01.13.02.02.02	Transfer and Process Ash
1.04.05.01.13.02.01.02	Transfer and Process SS&C
1.04.05.01.15	Transition the Plutonium Finishing Plant

## Issues - Assumptions - PFP

<i>Assumption/Issues Management ID</i>	<i>14</i>	<i>Action Type</i>	<i>Trade Study</i>	<i>Assumption/Issue Type</i>	<i>Issue</i>
<i>Decision Maker</i>	F. Crawford/ L. Olguin/ L. Romine/Heizenga			<i>Start</i>	8/30/99 <i>Closure Date:</i>
<i>Champions</i>	J. Sinclair/ D. Speer			<i>Finish</i>	9/30/99
<i>Priority</i>					

### Description

Sampling requirements based on Standard 3013.

### Required Decision

Provide technical evaluation demonstrating statistical sampling is technically justified and pursue appropriate variance to 3013 as necessary.

### Planning Assumption

Hanford Convenience Container innermost material can will not need to be opened prior to packaging to meet the 3013 standard.

### Impacts

Increased time and costs associated with opening and sampling of all convenience containers.

### Source

Materials Stabilization Workshops (Nov. 1998)

### Status

Open

**WBS Number** **WBS Title**

1.04.05.01.14.01.01.02 Repackage Stabilized Materials

## Issues - Assumptions - PFP

<i>Assumption/Issues Management ID</i>	16	<i>Action Type</i>	Trade Study	<i>Assumption/Issue Type</i>	Issue
<i>Decision Maker</i>	F. Crawford/ L. Olguin/ L. Romine/Heizenga	<i>Start</i>	8/30/99	<i>Closure Date:</i>	
<i>Champions</i>	J. Sinclair	<i>Finish</i>	9/30/99		

### Priority

### Description

Acceptance criteria for material disposition.

### Required Decision

Identify candidate items and determine appropriate disposition path.

### Planning Assumption

No unique items will be identified that require processing beyond currently planned PFP capabilities.

### Impacts

Inability to dispose of materials and delays resulting from this inability.

### Source

Materials Stabilization Workshops (Nov. 1998)

### Status

Open

<i>WBS Number</i>	<i>WBS Title</i>
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1.04.05.01.14.01.01.02	Repurpose Stabilized Materials
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1.04.05.01.14.02.02.05	Disposition Fluoride Compounds
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1.04.05.01.14.02.02.08	Provide Project Support (Management, Safety, Engineering, Regulatory,
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## Issues - Assumptions - PFP

1.04.05.01.14.02.02.07	Disposition Special Isotope Sources -NMMS
1.04.05.01.14.02.02.06	Disposition Aluminum Alloys
1.04.05.01.14.02.02.04	Disposition Non-Contaminated HEU
1.04.05.01.14.02.02.03	Disposition Non-Irradiated FFTF Fuel
1.04.05.01.14.02.02.01	Disposition Stabilized Product
1.04.05.01.14.02.02.09	Disposition SS&C to SRS
1.04.05.01.14.02.02.02	Disposition Irradiated Fuel

## Issues - Assumptions - PFP

<i>Assumption/Issues Management ID</i>	<i>21</i>	<i>Action Type</i>	<i>MOU</i>	<i>Assumption/Issue Type</i>	<i>Issue</i>
<i>Decision Maker</i>	F. Crawford/ L. Olguin/ L. Romine/Heizenga			<i>Start</i>	8/30/99 <i>Closure Date:</i>
<i>Champions</i>	A. Hopkins/ R. Redekopp			<i>Finish</i>	9/30/99
<i>Priority</i>					

### Description

Final disposition of stabilized materials.

### Required Decision

Formalize and finalize agreement and conditions for WIPP and Hanford's CWC to accept cement waste form.

### Planning Assumption

Planned cement waste form can meet WIPP disposal requirements and CWC acceptance criteria.

### Impacts

Increased disposition costs and possible delays (and associated costs) to determine alternatives.

### Source

Materials Stabilization Workshops (Nov. 1998)

### Status

Open

<i>WBS Number</i>	<i>WBS Title</i>
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1.04.05.01.13.02.06.02	Transfer and Process
1.04.05.01.13.03.05.02	Transfer and Process Organic Solutions
1.04.05.01.13.02.07.02	Transfer and Process Misc. Combustibles

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## Issues - Assumptions - PFP

1.04.05.01.13.02.04.02	Transfer and Process Compound
1.04.05.01.13.02.01.02	Transfer and Process SS&C
1.04.05.01.13.02.05.02	Transfer and Process Residues
1.04.05.01.13.02.03.02	Transfer and Process Oxides/MOX

## Issues - Assumptions - PFP

Assumption/Issues Management ID	24	Action Type	Trade Study	Assumption/Issue Type	Issue
Decision Maker	Crawford (WMMH)			Start	8/30/99
Champions	J. Bramson/J. Hilliard			Finish	9/30/99
Priority					

### Required Decision

### Description

Waste Handling/Shipping resource availability/adequacy.

### Required Decision

Determine CWC capabilities and identify viable alternatives if capabilities are insufficient.

### Planning Assumption

Hanford Central Waste Complex has sufficient capability to support waste handling/shipping activities in accordance with schedule

### Impacts

Schedule delays and potential increased costs.

### Source

Materials Stabilization Workshops (Nov. 1998)

### Status

Open

WBS Number WBS Title

1.04.05.01.14.02.01.02 Manage and Disposition Solid Waste

1.04.05.01.14.02.01.03 Provide Project Support (Management, Safety, Engineering, Regulatory,



## Issues - Assumptions - PFP

Assumption/Issues Management ID	26	Action Type	MOU	Assumption/Issue Type	Issue
Decision Maker	F. Crawford/ L. Olguin/ L. Romine/Heizenga	Start	8/30/99	Closure Date:	
Champions	L. L. Reed	Finish	9/30/99		
Priority					

### Description

Stabilization and disposition of materials.

### Required Decision

Begin TPA negotiations to make material classification final determination.

### Planning Assumption

TPA negotiations are necessary regarding material classification (waste vs. product). The classification can impact disposition options.

### Impacts

Increased disposition costs and possible delays (and associated costs).

### Source

Materials Stabilization Workshops (Nov. 1998)

### Status

Open

WBS Number WBS Title

1.04.05.01.13.02.03.02 Transfer and Process Oxides/MOX

1.04.05.01.13.03.05.02 Transfer and Process Organic Solutions

1.04.05.01.13.02.07.02 Transfer and Process Misc. Combustibles

## Issues - Assumptions - PFP

1.04.05.01.13.02.06.02	Transfer and Process
1.04.05.01.13.02.04.02	Transfer and Process Compound
1.04.05.01.13.02.02.02	Transfer and Process Ash
1.04.05.01.13.02.01.02	Transfer and Process SS&C
1.04.05.01.13.02.05.02	Transfer and Process Residues

## Issues - Assumptions - PFP

<i>Assumption/Issues Management ID</i>	<i>27</i>	<i>Action Type</i>	<i>MOU</i>	<i>Assumption/Issue Type</i>	<i>Issue</i>
<i>Decision Maker</i>	F. Crawford/ L. Olguin/ L. Romme/Heizenga			<i>Start</i>	8/30/99 <i>Closure Date:</i>
<i>Champions</i>	D. Bartlett/ R. Redekopp			<i>Finish</i>	9/30/99
<i>Priority</i>					

### Description

Safeguard Termination Limit(s) impacts on planned disposition activities.

### Required Disposition

Assess impact of STLs on current disposition plans and pursue variance as appropriate

### Planning Assumption

Safeguard Termination Limits may impact ability to implement viable disposition alternatives (e.g. Pipe and Go) and range of materials suitable for disposal.

### Impacts

Increased disposition costs and possible delays (and associated costs).

### Source

Materials Stabilization Workshops (Nov. 1998)

### Status

Open

### WBS Number

<i>WBS Title</i>
1.04.05.01.13.02.04.02 Transfer and Process Compound
1.04.05.01.13.02.01.02 Transfer and Process SS&C
1.04.05.01.13.02.02.02 Transfer and Process Ash

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## Issues - Assumptions - PFP

1.04.05.01.13.02.05.02	Transfer and Process Residues
1.04.05.01.13.02.06.02	Transfer and Process
1.04.05.01.13.02.07.02	Transfer and Process Misc. Combustibles
1.04.05.01.13.02.03.02	Transfer and Process Oxides/MOX

## Issues - Assumptions - PFP

<i>Assumption/Issues Management ID</i>	<i>31</i>	<i>Action Type</i>	<i>Trade Study</i>	<i>Assumption/Issue Type</i>	<i>Issue</i>
<i>Decision_Maker</i>	F. Crawford/ L. Olguin/ L. Romine/Heizenga			<i>Start</i>	8/30/99 <i>Closure Date:</i>
<i>Champions</i>	J. Sinclair/ M. Hahn/ R. Martinez			<i>Finish</i>	9/30/99

### Priority

### Description

Interim storage (packaging) requirements.

### Required Decision

Determine appropriate packaging for interim storage (prior to implementation of BTS) of stabilized materials. Establish acceptability of the HCC or alternate for interim storage and schedule for implementation.

### Planning Assumption

Canning for interim storage will be done in either food pack cans or Hanford convenience cans. Canning will start in food pack cans and move to convenience cans as the equipment and procedures to support that packaging are developed

### Impacts

Schedule delays would result if food pack cans cannot be used while developing documentation/equipment for use of HCCs.

### Source

Project Management Plan Materials Stabilization(> or equal to 50 wt% Pu)DRAFT October 22, 1998

### Status

Open

### WBS Number WBS Title

1.04.05.01.13.03.01.02 Transfer and Process Pure Nitrate Solutions

1.04.05.01.13.04.01.02 Transfer and Process Polycubes

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## Issues - Assumptions - PFP

1.04.05.01.13.03.04.02	Transfer and Process Caustic Solutions
1.04.05.01.13.03.02.02	Transfer and Process Impure Nitrate Solutions
1.04.05.01.13.02.07.02	Transfer and Process Misc. Combustibles
1.04.05.01.13.01.04.02	Transfer & Process Pu Oxides/MOX
1.04.05.01.13.01.03.02	Transfer & Process Pu Oxides/MOX
1.04.05.01.13.01.02.02	Transfer & Process Pu Alloys
1.04.05.01.13.03.03.02	Transfer and Process Chloride Solutions

## Issues - Assumptions - PFP

<i>Assumption/Issues Management ID</i>	33	<i>Action Type</i>	Trade Study	<i>Assumption/Issue Type</i>	Issue
<i>Decision Maker</i>	F. Crawford/ L. Olguin/ L. Romme/Heizenga	<i>Start</i>	4/30/99	<i>Closure Date:</i>	
<i>Champions</i>	P. Roeger/ J. Sinclair	<i>Finish</i>	5/30/99		
<i>Priority</i>					

### Description

The extent of characterization activities to support stabilization and disposition.

### Required Decision

Evaluate characterization needs and alternatives.

### Planning Assumption

The methods for initial characterization aren't established. A potential exists for the characterization to require significant effort including methods development.

### Impacts

Increased costs and schedule slippage while characterization activities are completed.

### Source

Project Management Plan Materials Stabilization(> or equal to 50 wt% Pu) DRAFT October 22, 1998

### Status

Open

### WBS Number WBS Title

1.04.05.01.13.03.04.02	Transfer and Process Caustic Solutions
1.04.05.01.13.02.06.02	Transfer and Process
1.04.05.01.13.04.01.02	Transfer and Process Polycubes

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## ***Issues - Assumptions - PFP***

1.04.05.01.13.03.05.02	Transfer and Process Organic Solutions
1.04.05.01.13.02.07.02	Transfer and Process Misc. Combustibles
1.04.05.01.13.02.04.02	Transfer and Process Compound
1.04.05.01.13.02.03.02	Transfer and Process Oxides/MOX
1.04.05.01.13.01.02.02	Transfer & Process Pu Alloys
1.04.05.01.13.02.02.02	Transfer and Process Ash
1.04.05.01.13.02.01.02	Transfer and Process SS&C
1.04.05.01.13.02.05.02	Transfer and Process Residues
1.04.05.01.13.03.07.02	Transfer and Process Solutions



## Issues - Assumptions - PFP

<i>Assumption/Issues Management ID</i>	34	<i>Action Type</i>	Trade Study	<i>Assumption/Issue Type</i>	Issue
<i>Decision Maker</i>	F. Crawford/ L. Olguin/ L. Romine/Heizenga	<i>Start</i>	4/30/99	<i>Closure Date:</i>	
<i>Champions</i>	P. Roeger	<i>Finish</i>	5/30/99		
<i>Priority</i>					

### Description

Final disposition of Pu metals.

### Required Decision

Determine technical basis for metal stabilization and disposition

### Planning Assumption

Pu Metal will be brushed and repackaged to 3013 -99 criteria without oxidation in furnaces.

### Impacts

Increased costs and schedule delays while the Pu metal is processes in the oxidation furnaces.

### Source

PFP Materials Disposition Planning Guide (HNF-3704) Review Meeting 12/15/98.

### Status

Open

<i>WBS Number</i>	<i>WBS Title</i>
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1.04.05.01.13.01.01.02	Transfer & Process Pu Metal
1.04.05.01.13.01.02.02	Transfer & Process Pu Alloys

## Issues - Assumptions - PFP

Assumption/Issues Management ID	35	Action Type	Letter	Assumption/Issue Type	Issue
Decision Maker	F. Crawford/ L. Olguin/ L. Romme/Heizenga			Start	Closure Date:
Champions	M. Hahn/ J. Sinclair			Finish	12/18/99
Priority					

### Description

Successful partnering with DOE for the polycube disposition effort.

### Required Decision

Formally request the DOE to identify appropriate RL program lead.

### Planning Assumption

No DOE-RL program lead/owner identified for polycube disposition effort. This inhibits ability to resolve issues and make timely decisions.

### Impacts

Increased time and costs required for this effort without DOE support to ensure success.

### Source

Materials Stabilization Workshops (Nov. 1998)

### Status

Open

WBS Number WBS Title

## Issues - Assumptions - PFP

<i>Assumption/Issues Management ID</i>	41	<i>Action Type</i>	Trade Study	<i>Assumption/Issue Type</i>	Issue
<i>Decision Maker</i>	F. Crawford/ L. Olguin/ L. Romine/Heizenga			<i>Start</i>	4/30/99
<i>Champions</i>	R. Bond/ J. Sinclair			<i>Finish</i>	5/30/99
<i>Priority</i>					

### Description

Interim storage/batching of pyrolysis material for muffle furnace input.

### Required Decision

Verify staging/storage and batching capabilities via flowsheet analysis, process modeling and logistics analysis (time/motion) as necessary.

### Planning Assumption

In-process material from the pyrolysis furnace can be stored and batched for input to the muffle furnaces.

### Impacts

Delays and increased costs on the polycube stabilization could result if staging/storage capabilities are not adequate.

### Source

Project Plan Polycube Stabilization Project Plutonium Finishing Plant November 05, 1998

### Status

Open

<i>WBS Number</i>	<i>WBS Title</i>
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1.04.05.01.13.04.01.02	Transfer and Process Polycubes
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## Issues - Assumptions - PFP

<i>Assumption/Issues Management ID</i>	<i>42</i>	<i>Action Type</i>	<i>MOU</i>	<i>Assumption/Issue Type</i>	<i>Issue</i>
<i>Decision_Maker</i>	F. Crawford/ L. Olguin/ L. Romine/Heizenga			<i>Start</i>	4/30/99 <i>Closure Date:</i>
<i>Champions</i>	R. Bond/ J. Sinclair			<i>Finish</i>	5/30/99
<i>Priority</i>					

### Description

LANL input(s) to the C-227 project in a timely manner to support the schedule.

### Required Decision

Finalize Los Alamos support commitments

### Planning Assumption

The necessary Project C-227 developmental design, operating and maintenance information, safety analysis input and equipment from the DOE site at Los Alamos can be transmitted to this subproject in a timely and cost effective manner.

### Impacts

Delays and increased costs could result if LANL inputs are not received to support the schedule.

### Source

Project Plan Polycube stabilization Project Plutonium Finishing Plant November 05, 1998

### Status

Open

### WBS Number

1.04.05.01.13.04.01.02

### WBS Title

Transfer and Process Polycubes

## Issues - Assumptions - PFP

Assumption/Issues Management ID			44	Action Type	Assumption/Issue Type Issue	
Decision_Maker		D. Van Leuven/ F. Crawford/ F. Delozier			Start	4/30/99 Closure Date:
Champions		J. Sinclair/ R. Redekopp			Finish	5/30/99
Priority						

### Description

Disposal of liquid wastes from the stabilization processes.

### Required Decision

Confirm TWRS capability to support liquid waste disposal.

### Planning Assumption

All liquid waste generated from the stabilization process will be routed through existing systems and disposed to the Hanford 200 Area waste tanks in accordance with current site waste tank acceptance criteria

### Impacts

Increased costs and schedule delays could result if TWRS is not able to accept the liquid wastes.

### Source

Project Plan polycube stabilization Project Plutonium Finishing Plant November 05, 1998

### Status

Open

WBS Number	WBS Title
1.04.05.01.13.03.01.02	Transfer and Process Pure Nitrate Solutions
1.04.05.01.14.02.01.01	Manage and Disposition Liquid Waste
1.04.05.01.13.03.04.02	Transfer and Process Caustic Solutions

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## Issues - Assumptions - PFP

1.04.05.01.13.03.02.02 Transfer and Process Impure Nitrate Solutions  
 1.04.05.01.13.03.03.02 Transfer and Process Chloride Solutions

<i>Assumption/Issues Management ID</i>	<i>45 Action Type</i>	<i>Trade Study</i>	<i>Assumption/Issue Type</i>	<i>Issue</i>
<i>Decision_Maker</i>	<i>F. Crawford/ L. Olguin/ L. Romine/Heizenga</i>		<i>Start</i>	<i>8/30/99 Closure Date:</i>
<i>Champions</i>	<i>D. Bartlett/ J. Sinclair</i>		<i>Finish</i>	<i>9/30/99</i>
<i>Priority</i>				

### Description

Disposition baseline for fuels (irradiated and non-irradiated) needs to be defined.

### Required Decision

Determine baseline for fuels disposition.

### Planning Assumption

Current (FY-99) MYWP placeholder used.

### Impacts

Potential schedule delays associated with facility transition.

### Source

Tiger Team Baseline Planning Workshops

### Status

Open

*WBS Number* *WBS Title*

1.04.05.01.14.02.02.02 Disposition Irradiated Fuel

## Issues - Assumptions - PFP

1.04.05.01.14.02.02.03 Disposition Non-Irradiated FFTF Fuel

<i>Assumption/Issues Management ID</i>	49	<i>Action Type</i>	Trade Study	<i>Assumption/Issue Type</i>	Issue
<i>Decision Maker</i>	F. Crawford/ L. Olguin/ L. Romine/Heizenga			<i>Start</i>	4/30/99
<i>Champions</i>	J. Sinclair			<i>Finish</i>	5/30/99
<i>Priority</i>					

### Description

Impacts of dispersibility limits on throughput

### Required Decision

Evaluate throughput and schedule impacts and investigate alternatives and contingencies (i.e. logistics studies, additional safety analysis, etc.)

### Planning Assumption

Operations will be performed in accordance with the limits identified in the FSAR and criticality specifications.

### Impacts

Increased project completion time if more than two systems cannot be operated concurrently.

### Source

Materials Stabilization Workshops (Nov. 1998)

### Status

Open

<i>WBS Number</i>	<i>WBS Title</i>
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1.04.05.01.13.02.04.02	Transfer and Process Compound
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1.04.05.01.13.04.01.02	Transfer and Process Polycubes
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**Issues - Assumptions - PFP**

1.04.05.01.13.03.07.02	Transfer and Process Solutions
1.04.05.01.13.03.04.02	Transfer and Process Caustic Solutions
1.04.05.01.13.03.03.02	Transfer and Process Chloride Solutions
1.04.05.01.13.03.02.02	Transfer and Process Impure Nitrate Solutions
1.04.05.01.13.02.03.02	Transfer and Process Oxides/MOX
1.04.05.01.13.02.02.02	Transfer and Process Ash
1.04.05.01.13.02.01.02	Transfer and Process SS&C
1.04.05.01.13.01.04.02	Transfer & Process Pu Oxides/MOX
1.04.05.01.13.01.03.02	Transfer & Process Pu Oxides/MOX
1.04.05.01.13.01.02.02	Transfer & Process Pu Alloys
1.04.05.01.13.01.01.02	Transfer & Process Pu Metal
1.04.05.01.13.03.01.02	Transfer and Process Pure Nitrate Solutions



## Issues - Assumptions - PFP

<i>Assumption/Issues Management ID</i>	<i>56</i>	<i>Action Type</i>	<i>Other</i>	<i>Assumption/Issue Type</i>	<i>Issue</i>
<i>Decision Maker</i>	F. Crawford/ L. Olguin/ L. Romine/Heizenga			<i>Start</i>	<i>4/30/99</i>
<i>Champions</i>	J. Sinclair/ R. Redekopp			<i>Finish</i>	<i>5/30/99</i>
<i>Priority</i>					

### Description

Verification of operational readiness for each stabilization process.

### Required Decision

Confirm readiness review requirements and ensure schedule accommodates needs.

### Planning Assumption

Reviews will be performed consistent with draft white paper "Start-Up Reviews for 94-1 Activities"

### Impacts

Should some activities not require a full ORR cost and schedule savings may result.

### Source

E-mail communication, Jim Carrey to RM Millikin, dated 2/1/99, white paper titled "Start-Up Reviews for 94-1 Activities"

### Status

Open

<i>WBS Number</i>	<i>WBS Title</i>
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1.04.05.01.14.02.02.02	Disposition Irradiated Fuel
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1.04.05.01.13.03.01.02	Transfer and Process Pure Nitrate Solutions
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1.04.05.01.13.03.02.02	Transfer and Process Impure Nitrate Solutions
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## Issues - Assumptions - PFP

1.04.05.01.13.03.04.02	Transfer and Process Caustic Solutions
1.04.05.01.13.03.07.02	Transfer and Process Solutions
1.04.05.01.13.02.07.02	Transfer and Process Misc. Combustibles
1.04.05.01.14.01.01.02	Repackage Stabilized Materials
1.04.05.01.13.03.03.02	Transfer and Process Chloride Solutions
1.04.05.01.13.04.01.02	Transfer and Process Polycubes
1.04.05.01.13.02.05.02	Transfer and Process Residues
1.04.05.01.13.02.04.02	Transfer and Process Compound
1.04.05.01.13.02.03.02	Transfer and Process Oxides/MOX
1.04.05.01.13.03.05.02	Transfer and Process Organic Solutions
1.04.05.01.13.02.02.02	Transfer and Process Ash
1.04.05.01.13.02.01.02	Transfer and Process SS&C
1.04.05.01.13.01.04.02	Transfer & Process Pu Oxides/MOX
1.04.05.01.13.01.03.02	Transfer & Process Pu Oxides/MOX
1.04.05.01.13.01.02.02	Transfer & Process Pu Alloys
1.04.05.01.13.01.01.02	Transfer & Process Pu Metal
1.04.05.01.13.02.06.02	Transfer and Process

## Issues - Assumptions - PFP

*Assumption/Issues Management ID* 59 *Action Type*

*Decision\_Maker* F. Crawford/ L. Olguin/ L. Romine/Heizenga

*Champions* J. Sinclair

*Priority*

*Assumption/Issue Type* Issue

*Start* 8/30/99 *Closure Date:*

*Finish* 9/30/99

### Description

SRS storage restrictions and capabilities.

### Required Decision

Determine conservative package projections based on process options and requirements. Confirm SRS capabilities to receive stabilized materials in 3013 packages.

### Planning Assumption

PFP will not exceed the allotted 3000 containers for storage at the Savannah River Site. SRS will be capable of receiving stabilized material shipments on or before 7/05.

### Impacts

If PFP cannot stay within the identified limit or if SRS is unable to receive materials as planned, delays and increased costs for alternatives would result.

### Source

Materials Stabilization Workshops (Nov. 1998)

### Status

Open

*WBS Number*

*WBS Title*

1.04.05.01.14.02.02.01

Disposition Stabilized Product

Tuesday, April 27, 1999

## Issues - Assumptions - PFP

1.04.05.01.14.01.01.02 Repackage Stabilized Materials

*Assumption/Issues Management ID* 71 *Action Type* Trade Study

*Decision Maker* F. Crawford/ L. Olguin/ L. Romine/Heizenga

*Champions* J. Sinclair

*Priority*

*Assumption/Issue Type* Issue

*Start* *Closure Date:*

*Finish* 2/28/99

### Description

Engineering evaluations for ion exchange stabilization for nitrate solutions.

### Required Decision

Complete engineering evaluations to confirm capability of IX to support solution stabilization. Identify and evaluate viable alternatives and contingencies.

### Planning Assumption

The ion exchange is currently shown as the pretreatment process for the nitrate solutions (see figure 2). This method will require additional engineering evaluation prior to finalizing the pretreatment design.

### Impacts

### Source

Project Plan Solution Stabilization Plutonium Finishing Plant November 5, 1998

### Status

Open

*WBS Number*

*WBS Title*

## Issues - Assumptions - PFP

<i>Assumption/Issues Management ID</i>	<i>74</i>	<i>Action Type</i>	<i>Other/ALARA Do</i>	<i>Assumption/Issue Type</i>	<i>Issue</i>
<i>Decision Maker</i>	F. Crawford			<i>Start</i>	<i>Closure Date:</i>
<i>Champions</i>	J. Sinclair/ L. L. Reed			<i>Finish</i>	2/28/99
<i>Priority</i>					

### Description

Dose impacts of the magnesium hydroxide precipitation process.

### Required Decision

Perform ALARA and associated dose/shielding analysis and modify design as necessary.

### Planning Assumption

The magnesium oxide precipitation process can be operated within dose management constraints.

### Impacts

If the dose limits cannot be met with this process increased costs and schedule delays could result.

### Source

PFP Materials Disposition Planning Guide (HNF-3704) Review Meeting 12/15/98.

### Status

Open

<i>WBS Number</i>	<i>WBS Title</i>
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1.04.05.01.13.03.02.02	Transfer and Process Impure Nitrate Solutions
1.04.05.01.13.03.03.02	Transfer and Process Chloride Solutions
1.04.05.01.13.03.04.02	Transfer and Process Caustic Solutions

Tuesday, April 27, 1999

## Issues - Assumptions - PFP

1.04.05.01.13.03.01.02 Transfer and Process Pure Nitrate Solutions

<i>Assumption/Issues Management ID</i>	75	<i>Action Type</i>	Trade Study	<i>Assumption/Issue Type</i>	Issue
<i>Decision Maker</i>	F. Crawford/ L. Olguin/ L. Romine/Heizenga			<i>Start</i>	<i>Closure Date:</i>
<i>Champions</i>	J. Sinclair			<i>Finish</i>	2/28/99
<i>Priority</i>					

### Description

Ion exchange process capabilities to support the schedule.

### Required Decision

Complete engineering evaluations to confirm capability of IX to support solution stabilization. Identify and evaluate viable alternatives and contingencies.

### Planning Assumption

The ion exchange system will be capable of supporting the solutions stabilization project.

### Impacts

If the ion exchange process cannot support the stabilization schedule increased costs and delays for alternative development could result.

### Source

Materials Stabilization Workshops (Nov. 1998)

### Status

Open

*WBS Number* *WBS Title*

## Issues - Assumptions - PFP

Assumption/Issues Management ID		76	Action Type	Other	Assumption/Issue Type	Issue
Decision Maker		F. Crawford			Start	Closure Date:
Champions		J. Sinclair/ P. Roegel/ R. Redekopp			Finish	2/28/99

### Priority

### Description

Safety analysis to support the ion exchange stabilization process.

### Required Decision

Complete safety analysis regarding the calciner and IX processes. Use results to determine if design or process changes are necessary.

### Planning Assumption

Based on a previous Unresolved Safety Question Evaluation (USQ) (PFP-96-14), postulated accidents for the calciner process are no different than those described in the FSAR. A resin bed exothermic reaction event for the ion exchange process (pretreatment process) does not exist in the PFP FSAR. This type of accident will require an approved PSAR before installation of the ion exchange column.

### Impacts

Delays in or unanticipated results from the safety analysis could result in schedule delays and increased costs.

### Source

Project Plan Solution Stabilization Plutonium Finishing Plant November 5, 1998

### Status

Open

### WBS Number

### WBS Title

## Issues - Assumptions - PFP

Assumption/Issues Management ID	78	Action Type	Assumption/Issue Type	Issue
Decision Maker	F. Crawford		Start	8/30/99
Champions	J. Sinclair		Finish	9/30/99
Priority				

### Description

Oxide product from the VDC will require refring in the muffle furnace.

### Required Decision

Perform analysis/tests to determine rework requirements.

### Planning Assumption

The oxide product from the VDC will require refring in the muffle furnaces.

### Impacts

If refring is not required schedule and costs could be reduced.

### Source

Materials Stabilization Workshops (Nov. 1998)

### Status

Open

WBS Number WBS Title

1.04.05.01.13.03.01.02 Transfer and Process Pure Nitrate Solutions



## Issues - Assumptions - PFP

Assumption/Issues Management ID	90	Action Type	Assumption/Issue Type	Issue
Decision_Maker	P. Knollmeyer/ Heizenga		Start	8/30/99
Champions	R. Redekopp		Finish	9/30/99
Priority				

### Description

Vehicle availability to support material shipment.

### Required Decision

Confirm availability and funding for transportation vehicles.

### Planning Assumption

The vehicles necessary for shipment of materials offsite for stabilization or final packaging/storage will be available to support the schedule needs. In addition, funding for these vehicles will be provided by the appropriate DOE program office and additional funds will not be required from PFP funds.

### Impacts

If the vehicles are not available schedule delays and increased costs could result.

### Source

PFP Externally Controlled or Influenced Issues/Uncertainties (Draft 12/4/98)

### Status

Open

### WBS Number WBS Title

1.04.05.01.14.02.02.09 Disposition SS&C to SRS

1.04.05.01.14.02.01.02 Manage and Disposition Solid Waste

Tuesday, April 27, 1999

## Issues - Assumptions - PFP

1.04.05.01.14.02.02.04	Disposition Non-Contaminated HEU
1.04.05.01.14.02.02.05	Disposition Fluoride Compounds
1.04.05.01.14.02.02.06	Disposition Aluminum Alloys
1.04.05.01.14.02.02.07	Disposition Special Isotope Sources -NMMS

## **Appendix B**

### **Closed Issues and Assumptions Management List**

## Issues - Assumptions - PFP

Assumption/Issues Management ID	19	Action Type	Other	Assumption/Issue Type	Issue
Decision_Maker				Start	Closure Date:
Champions				Finish	1/4/99
Priority					

### Description

Fissile Material Movement Restriction impedance to stabilization activities.

### Required Decision

Monitor progress of Fissile Movement Restriction. Adjust schedule to include impacts of delays.

### Planning Assumption

Fissile Material Movement Restriction lifted by 12-23-98 and materials stabilization resumes by 1-4-99.

### Impacts

Schedule slippage based on limitations from Fissile Material Movement Restriction.

### Source

FY-1999 Accelerated Stabilization Scenario Planning Basis, Draft 11-4-98

### Status

Complete

### WBS Number

WBS Title