# *Project Baseline Summary Report*

Data Source: **EM CDB**
Report Number: **GEN-01b**
Operations/Field Office: **Richland**
Print Date: **3/9/2000**
Site Summary Level: **Hanford Site**
HQ ID: **0405**
Project **RL-TP05 / PFP Deactivation**

## General Project Information

### Project Description Narratives

**Purpose, Scope, and Technical Approach:**

Purpose: The mission of the PFP Sub-project is to develop, implement, and manage the operations and transition of the PFP that will stabilize its present condition and transition the facility from a mission of stabilization to that of minimal surveillance awaiting eventual decontamination and decommissioning and environmental restoration. The PFP Sub-Project now consists of a single PBS, PFP Project 1.4.5.

Project End State: The PFP Facility, excluding the PFP vaults, is transitioned using terminal cleanout technologies, to a deactivated state by 2014. The PFP vaults, upon removal of the SNM during the period of 2025 through 2027 and completion of Terminal Cleanout and Deactivation activities, will be transitioned to the Environmental Restoration Program by 2029.

Project Safety Authorization Basis: The authorization basis for PFP is contained in WHC-SD-CP-SAR-021 (Shapley 1995) and WHC-SD-CP-OSR-010 (Szempruch 1994). The PFP shall be operated in accordance with FSP-PFP-5-8, "Plutonium Finishing Plant Administration" (FDH 1997c). Environmental, safety, and health requirements for PFP are contained in WHC-SD-MP-SRID-003, "Plutonium Finishing Plant (PFP) Standards/Requirements Identification Document (S/RID) (Maddox 1996).

¸ Planning Assumptions:

The following planning assumptions are common to all PFP subprojects.

¸ ¸ The updated FY1997 Activity Based Cost Estimate for the PFP Project, revised by an FY1999 Basis of Estimate (yet to be validated), is the basis for the FY1999 budget, and all outyear workscope and schedule through FY2014. The Basis of Estimate incorporates all safety compliance issues into an engineered management approach. However, a new Integrated Project Management Plan (IPMP), including resource loaded schedules and a new Basis of Estimate, is being developed. This new IPMP, to be available by 4/30/99, will form the new Project Baseline once validated. Hence, this project description will require revision to include this new baseline and Basis of Estimate in late FY99.

¸ ¸ No major changes in programmatic direction or regulatory status (e.g., permitting) are assumed as a result of ongoing Tri-Party Agreement negotiations.

¸ ¸ Facility modifications for minimum S&M will continue.

¸ ¸ The facility will be maintained in a safe and compliant configuration.

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

¸ ¸ Fissile Material movement restriction was lifted on January 14,1999.

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Project **RL-TP05 / PFP Deactivation**

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¸ ¸ The stabilization of Pu-bearing materials is completed by July 30, 2005, consistent with the following:

¸ ¸ a. Operate and maintain PFP stabilization, packaging and/or other disposition activities in a formal, safe and secure manner in compliance with applicable regulations.

¸ ¸ b. Storage activities will include container handling required for stabilization of materials to the specifications in DOE-STD-3013-96 "Criteria for Safe Storage of Plutonium Metals and Oxides" (DOE 1996j).

¸ ¸ c. Implement and complete stabilization, packaging, immobilization and/or other Pu disposition activities consistent with HNF-EP-0853, "DNFSB Recommendation 94-1 Hanford Site Integrated Stabilization Management Plan" (McCormack 1997). This document, HNF-EP-0853, is being revised to reflect the scope and schedule identified in the John Wagoner letter TPD: LDR/98-TPD-093, dated June 12, 1998.

¸ ¸ * For stabilization considerations, Pu-bearing material has been grouped into three categories: (1) solutions, (2) residues and mixed oxides (<30 wt% Pu+U), and (3) metals and oxides (>30 wt% Pu+U).

¸ ¸ * Three main process paths are planned for these materials:

¸ ¸ ¸ - Solutions will undergo stabilization using direct denitration calcination (i.e., vertical calciner) with ion exchange pretreatment required for two thirds of the solutions.

¸ ¸ ¸ - Most residues and oxides <30 wt% Pu and U will be pretreated as necessary, cemented, and sent to WIPP for disposal. Polycubes will undergo stabilization using the pyrolysis method.

¸ ¸ ¸ - For metals and oxides >30 wt% Pu and U, materials will be stabilized and repackaged in accordance with DOE-STD-3013 criteria. The Hanford Site will receive an operational Stabilization and Packaging system from BNFL. The Stabilization and Packaging System will complete the stabilization and repackaging in accordance with the PFP baseline schedule. For metals and oxides containing impurities which render them incompatible with the Stabilization and Packaging System, stabilization will occur in the muffle furnaces followed by repackaging in the Stabilization and Packaging System. All metals and some alloys will be oxidized before packaging in accordance with DOE-STD-3013 criteria.

¸ ¸ d. The following Pu material types remaining at the PFP to be stabilized and/or otherwise dispositioned after FY1998 are liquids (4300 liters); residues, (3546 kg bulk); oxides (5843 items); and HEU (18 kg U). This starting inventory is based on prior years (as of March 1996, 26 kg Pu total had been stabilized and/or cemented). As of February 1997, items of unirradiated fuel pins and assemblies are at the PFP in disposition-ready storage. This quantity of pins and assembled fuel will remain constant at PFP until a decision is reached on the final disposition path for this material (i.e., shipment to the Savannah River, or other DOE, site).

¸ ¸ e. Facility modifications needed to package and store Pu containers in accordance with DOE-STD-3013-96 will be operational by October 2000. Stabilized high-assay material (>30 wt% Pu and U) will be retrieved from storage and restabilized and packaged consistent with DOE-STD-3013-96

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criteria and returned to vault storage. Major vault modifications, necessary to handle the new standardized Pu storage container, will be required.

¸ ¸ f. Vault 3 will remain under the safeguards of the IAEA during DNFSB Recommendation 94-1 activities at the 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 2005. Funds for converting additional vaults to IAEA safeguards are not included.

¸ ¸ g. The PFP-stored Spent Nuclear Fuels will not require reprocessing or repackaging at PFP.

¸ ¸ h. Unirradiated fuel pins and assemblies will be downloaded to DOE STD-3013-96 containers and will not require stabilization. This activity is not a part of DNFSB Recommendation 94-1 and is being pursued as best management practice.

Scope: Specific project scope from the Hanford Site technical baseline is provided below in terms of the systems that the project has responsibility for.

PFP

· Maintain Safe and Secure SNM in PFP Facility: The purpose and objective of this Function is two fold; 1) maintain the PFP Vaults in a safe, secure and compliant condition throughout the Complex until final disposition of the SNM from the PFP complex is completed, and 2) provide the Safeguards & Security operations necessary to protect, account for and maintain surveillance of all SNM material in inventory at the PFP Complex. To accomplish this function two Units of Analysis (UOA) have been created. These units of analysis projects are, PFP Min Safe-Vaults, Safeguards & Security, and Local Area Network Material Accounting System at Hanford, which completes in FY1999.

Project # 1, "PFP Min Safe-Vaults, Safeguards and Security"; consist of approximately eleven major activities. This unit of analysis has no DOE-HQ, or DOE-RL milestones associated with it. Workscope contained within these subprojects provides for documentation and technical verification (Nondestructive Analysis and/or other confirmatory measurement activities as required) of onsite, offsite shipments of Special Nuclear Material (SNM). In addition, Safeguards and Security (SAS) operations provide physical security to maintain accountability, surveillance and maintain all Special Nuclear Materials (SNM) in inventory at the PFP Complex. This includes the basic physical security envelope around the PFP complex necessary to meet the security requirements for the protection of SNM/NM/NF and physical property. In addition, this unit of analysis provides for vault operations of the 2736-Z/2736-ZB facilities, all ZB/Z-vault support facilities and all 234-5Z vaults and/or vault-type rooms. Included is the support necessary to enforce county, state, and federal laws and statues.

This project provides for studies to determine and evaluate alternatives for vault modifications and acts on these evaluations. This includes vault, and vault-type rooms, conditions and viability to meet the plant mission, comply with regulations/requirements and to minimize costs. Provides Operational Safety Requirement (OSR) and non-OSR corrective and preventative maintenance for the 2736-Z/2736-ZB facilities, all ZB/Z vault support facilities and all 234-5Z vaults and/or vault type rooms.

Also included are nuclear process, radiation control, ventilation and power-related surveillance's of vault operations and vault operating systems in 2736-Z/2736-ZB facilities, all ZB/Z-vault support facilities and all 234-5Z vaults and/or vault-type rooms. Develops acutely unsafe condition action

## Project Description Narratives

plans for vault-related nuclear processes, radiation, ventilation and power-related activities. Includes the implementation of OSR surveillance procedures for vault nuclear processes, radiation, ventilation and power-related activities and the performance of surveillance's for safety analysis compliance for vault nuclear processes and radiation activities.

This project also provides all necessary and required SNM custodial services for the same facilities identified in the above paragraphs. This includes training specific to custodial responsibilities, oversight, internal audits, and maintains the Tamper Indicating Device (TID) program.

All support necessary to perform and continue Life Extension Upgrades, EXCLUDING the LANMAS upgrade, to assure the security systems conditions and viability to meet plant mission and regulations/requirements are met are included in this project.

Finally, this project includes the project management, administrative support, and training specific to the success of the workscope contained in this function.

"Local Area Network Material Accounting System (LANMAS) at Hanford"; consist of two (2) activities. These activities provide for the development and implementation of the Westinghouse Savannah River Site Local Area Network Material Accounting System at Hanford. This includes completion of development, system testing, and user training by March 1999 followed by full implementation by January 2000. This project also provides for the upgrade of the VSIS system for year 2000 compliance. This project has one DOE-RL milestone, "Provide Beneficial Use of the New LANMAS System at PFP", scheduled to be completed on September 30, 1999.

This function covers work necessary to satisfy technical baseline requirements for the Hanford cleanup mission:
· Store SNM consistent with DOE Orders on Safeguards and Security, such as: DOE Orders 5630.13A, 5631.2C, 5631.6A, 5632.1C, 5633.3B, 5634.1B, 5639.1, 5650.2B, 5632.1C-1, 5630.3A and 5632, 1B.
· Spent nuclear fuel requiring added safeguards protection shall be consolidated in the PFP for interim storage.
· Special Nuclear Materials shall be safely stored in the PFP pending national policy on final disposition.
· 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.
· The Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) provides EPA with enforcement authority for remedial and corrective actions activities at contaminated waste sites. PFP support is provided sufficient to meet reporting requirements and complete corrective actions under CERCLA

· Maintain Safe & Compliant Plutonium Finishing Plant Facility with SNM: The purpose and objective of this function is to maintain the PFP Complex in a safe and compliant condition WHILE Category I SNM materials are PRESENT throughout the Complex. To accomplish this objective this Function is divided into two components, also referred to as Units of Analysis (UOA). These Units of Analysis are; 1) PFP Min Safe-Surveillance & Maintenance, and 2) PFP Min Safe-Essential Modifications & Assessments.

"PFP Min Safe-Surveillance & Maintenance"; provides PFP minimum safe operations for surveillance & maintenance. Activities included are safety boundary maintenance; reoccurring surveillance's of all facilities within the PFP Complex, laundry, plastic shop, corrective and preventative

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maintenance and environmental surveillances. Other activities, also included through specific subprojects, are the PFP emergency preparedness drill program, Tank 241-Z-361 characterization (to be completed in the 1st quarter of FY2000), PFP safety authorized basis [Facility Safety Analysis Report (FSAR)] update, Criticality Safety Evaluation Reports (CSER), Chemical Management System Compliance, Unreviewed Safety Questions (USQ) analysis, Environmental Compliance, Waste Handling, etc. This unit of analysis has DOE-RL milestones associated with the FSAR Annual Update milestones due each year. There are also two DOE-RL milestones pertaining to remediation of Tank 241-Z-361 due in FY1999.

"PFP Min Safe-Essential Modifications & Assessments"; provides PFP minimum safe operations for essential modifications & assessments. Activities included are mandatory facility modifications, such as roof repairs, stairwell repairs, backflow preventer upgrades, 291-Z sump refurbishment, expense support to approved General Plant Project (GPP) capital projects and all such facility modifications required for facility occupancy. Also included are facility assessments, such as S/RIDs assessments, corrective action management, Price Anderson Act compliance activities, external assessments, and general Hanford Site assessments for water, electricity, waste burials and et cetera. This unit of analysis also includes Min Safe essential management and administration necessary to maintain facility occupancy sufficient to maintain all PFP safety boundary systems.

In general, this Function covers work necessary to satisfy the following technical baseline requirements for the Hanford cleanup mission:
· The Clean Water Act establishes water quality standards for surface water and pretreatment standards for waste waters released to public-owned treatments works. All PFP support necessary to cease all discharges to the 216-Z-21 crib were completed prior to June 30, 1995.
· Various DOE Orders provide and/or implement best management practices for policy and guidance to the PFP Project. The work scope, cost and schedule are direct result of conforming to these various Orders. Applicable DOE Orders are 5400.5 (DOE 1990a), 5480.3 (DOE 1985), 5480.7A (DOE 1993), 5480.19 (DOE 1990b), 5480.22 (DOE 1992a), 5480.23 (DOE 1992b), 5483.1A, (DOE 1983), 5632.1C (DOE 1994a), 5633.3B (DOE 1994c), 5480.2A (DOE 1988c), P 450.1 (DOE 1995f), 10 CFR 830.120 and 10 CFR 835.
· Central Plateau shall be used for the collection and management of nuclear materials that remain onsite.
· 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.
· RCRA-All hazardous waste is collected, counted and identified for shipments 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 actions activities at contaminated waste sites. PFP support is provided sufficient to meet reporting requirements and complete corrective actions under CERCLA.
· The Occupational Safety and Health Act applies to any action involving the health and safety of employees in the work place. Periodic inspections are done at the PFP facilities to verify compliance with the OSHA. PFP activities must comply with the OSHA Act and assess any new project starts/restarts to the Act. Continuous walk downs are done by the Safety Organization and Plant management to ensure compliance with OSHA and 29 CFR 1910 guidelines.
· The Clean Air Act provides policy and guidance related to the release of air emissions that may be present during shutdown and cleanup activities. Prepare and submit the appropriate operating permits for the PFP Project to ensure compliance with the NESHAPS section of 40 CFR 61.

· Remove SNM from PFP: The purpose and objective of this Function is to provide all necessary support and direction to ship all SNM material stabilized and packaged consistent with DOE Standard DOE-STD-3013 criteria to other DOE sites for final disposition. However, no funding has been included at this time for this activity but will be provided in the new IPMP baseline.

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Project **RL-TP05 / PFP Deactivation**

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Briefly, this Function will provide for the offsite shipment planning and engineering studies, the environmental path forward for shipment, operations (staging drums, packaging drums, etc.) and the actual loading of the appropriate transport vehicles. Procurement of drums necessary for the shipment would also be included. It is estimated that between 300-500 drums will be required and that between 3,000 - 4,000 items will be shipped (non FFTF items). The number and type of containers for DNFSB 94-1 materials is estimated at 144 9975s and 216 Safkegs. Currently, shipments are proposed to the Savannah River Site but no formal agreement has been developed or approved. For this reason, no funding or resources have been applied to this activity in the current baseline.

· Transition Plutonium Finishing Plant Facility: The purpose and objective of this function is two fold; 1) cleanup, transition, and turnover of the 234-5Z facility in accordance with EM-60 guidelines, and 2) Dismantlement of the 234-5Z Facility. For accomplishment of this purpose and objective this function consist of two Projects, also referred to as Units of Analysis (UOA). These projects are Facility Deactivation, and Facility Dismantlement.

Project # 1, Facility Deactivation includes;

- Facility transition planning,
- Glove box cleanup & deactivation,
- Duct remediation,
- Tank cleanup & deactivation, drain line & sumps cleanup & deactivation,
- Electrical systems modifications & deactivation,
- HVAC systems modification & deactivation,
- Fire systems deactivation,
- Facility support services cleanup & deactivation, facility turnover documentation,
- Criticality alarm system deactivation,
- SAS modifications & deactivation,
- Roof assessment & repairs,
- Facility remote monitoring installation,
- Facility acceptance inspection, facility turnover, & facility surveillance lighting installation,
- Radiation control contamination & dose rate mapping,
- FFTF fuel relocation and,
- Laboratory transition to deactivation.

Project # 2, Facility Dismantlement includes;

- Facility Dismantlement Planning
- Glovebox Removal and Volume Reduction
- Duct, Piping and Support Equipment Removal and Volume Reduction
- Interior non-load bearing walls removal

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Project **RL-TP05 / PFP Deactivation**

**Project Description Narratives**

- Utilities isolated for the facility
- Facility structure dismantled and disposed
- Concrete cap installed.
- Turnover to ERC

· Maintain PFP Complex without SNM: Surveillance and Maintenance of the PFP Complex without SNM is performed in conjunction with the D&D function.

The purpose and objective of this function is to maintain the PFP Complex in a safe, secure and compliant condition WITHOUT Category I SNM materials PRESENT throughout the Complex except in the PFP vaults. All SNM material has been removed from the PFP Complex and been placed in the PFP vaults for storage; the only security function remaining is industrial security. This Function is active in FY 2008 following the transfer of all SNM from PFP facilities to the PFP vaults by FY 2007. To accomplish this objective two projects, also referred to as Units of Analysis (UOA) make up this function. These two projects are:

PFP Min-Safe Surveillance & Maintenance included are safety boundary maintenance, reoccurring surveillance's of all facilities within the PFP Complex, laundry, plastic shop, corrective and preventative maintenance and environmental surveillances. Also included are nuclear process, radiation control, ventilation and power-related surveillance's of all facilities in the PFP Complex, including the 2736-Z/2736-ZB facilities, all ZB/Z-vault support facilities. Develops acutely unsafe condition action plans for vault-related nuclear processes, radiation, ventilation and power-related activities. Includes the implementation of OSR surveillance procedures for vault nuclear processes, radiation, ventilation and power-related activities and the performance of surveillance's for safety analysis compliance for vault nuclear processes and radiation activities. Finally, this project includes the project management, administrative support, and training specific to the success of the work scope contained in this function.

PFP Min-Safe Essential Modifications & Assessments provides all facility modifications necessary to stabilize and reconfigure the facility for minimum surveillance while continuing with the safe deactivation of nonessential systems, components and physical structures. Briefly, this unit of analysis provides PFP minimum safe operations for essential modifications & assessments. Activities included are mandatory facility modifications, such as roof repairs, stairwell repairs, backflow preventer upgrades, 291-Z sump refurbishment, expense support to approved General Plant Project (GPP) capital projects and all such facility modifications required for facility occupancy. Also included are facility assessments, such as S/RIDs assessments, corrective action management, Price Anderson Act compliance activities, external assessments, and general Hanford Site assessments for water, electricity, waste burials and et cetera. This unit of analysis also includes Min Safe essential management and administration necessary to maintain facility occupancy sufficient to maintain all PFP safety boundary systems.

In general, this Function covers work necessary to satisfy the following technical baseline requirements for the Hanford cleanup mission:
· The Clean Water Act establishes water quality standards for surface water and pretreatment standards for waste waters released to public-owned treatments works. All PFP support necessary to cease all discharges to the 216-Z-21 crib were completed prior to June 30, 1995.
· Various DOE Orders provide and/or implement best management practices for policy and guidance to the PFP Project. The work scope, cost and

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schedule are direct result of conforming to these various Orders. Applicable DOE Orders are 5400.5 (DOE 1990a), 5480.3 (DOE 1985), 5480.7A (DOE 1993), 5480.19 (DOE 1990b), 5480.22 (DOE 1992a), 5480.23 (DOE 1992b), 5483.1A, (DOE 1983), 5632.1C (DOE 1994a), 5633.3B (DOE 1994c), 5480.2A (DOE 1988c), P 450.1 (DOE 1995f), 10 CFR 830.120 and 10 CFR 835.
· Central Plateau shall be used for the collection and management of nuclear materials that remain onsite.
· 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.
· RCRA-All hazardous waste is collected, counted and identified for shipments to Hanford's Central Waste Storage Complex.
· The Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) provides EPA with enforcement authority forremedial and corrective actions activities at contaminated waste sites. PFP support is provided sufficient to meet reporting requirements and complete corrective actions under CERCLA.
· 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. PFP activities must comply with the OSHA Act and assess any new project starts/restarts to the Act. Continuous walk downs are done by the Safety Organization and Plant management to ensure compliance with OSHA and 29 CFR 1910 guidelines.
· The Clean Air Act provides policy and guidance related to the release of air emissions that may be present during shutdown and cleanup activities. Prepare and submit the appropriate operating permits for the PFP Project to ensure compliance with the NESHAPS section of 40 CFR 61.

· Stabilize Plutonium-bearing Materials at PFP: The purpose and objective of this Function provides support necessary to complete the scope and intent of Defense Nuclear Facilities Safety Board (DNFSB) Recommendation 94-01 at PFP. The primary objective is to complete this work scope on or before July 30, 2005. The specific work scope for this Function is defined in the "Hanford Site Integrated Stabilization Management Plan", HNF-EP-0853, dated May 1998. To accomplish these objective eight activities, also referred to as Units of Analysis (UOA),make up this function. These eight units of analysis are:

Material Stabilization (> or = 30wt% Pu+U) which provides for the material stabilization, such as thermal stabilization using muffle furnaces, of Pu-bearing materials >30 wt% Pu+U in order to transform them into a stable oxide form suitable for interim vault storage and/or shipment as necessary to support final disposition consistent with the Materials Disposition Program.

Solution Stabilization provides for the stabilization of the current inventory of Pu-bearing solutions at the PFP, comprised of approximately 4,300 liters of plutonium nitrate solutions, to a stable plutonium dioxide form suitable for interim vault storage and/or shipment as necessary to support final disposition consistent with the Materials Disposition Program.

Polycube Stabilization provides for the stabilization of the current inventory of Pu-bearing polycubes and miscellaneous combustible materials to a stable plutonium dioxide form suitable for interim vault storage and/or shipment as necessary to support final disposition consistent with the Materials Disposition Program.

Materials Disposition (< or = 30wt% Pu+U) provides for the disposition of Pu-bearing materials <30 wt% Pu in order to transform them into a stable plutonium form suitable for disposal to the Waste Isolation Pilot Plant (WIPP) via Hanford's Central Waste Complex.

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Project **RL-TP05 / PFP Deactivation**

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## Project Description Narratives

Project W-460, Plutonium Stabilization & Handling System (PuSH) includes all expense-funded activities associated with the PuSH, Project W-460, and all capital-funded activities associated with PuSH Project W460, which are funded by capital Line Item 98-D-453 (ADS RL-6630-0). Including overall project integration, support to design and construction, procurement of packaging components and support to capital equipment procurements of NDA laboratory equipment and the Hanford PuSAP unit. There are two DOE-HQ milestones associated with this workscope and one DOE-RL milestone.

Fuel Pins Disposition provides all necessary support for the disposition of Fuel Pins in storage at the PFP. This work scope covers FFTF and non-FFTF fuel pins, downloading of fuel pins, packaging of fuel pins and spent fuel disposition. Certain programmatic decisions, such as whether or not the FFTF fuel pins must be restabilized consistent with DOE-STD-3013, only repackaged into 3013 containers or only repackaged into food pack cans, still remain to be resolved. This WBS does assume the fuel pins are repackaged into 3013 containers but re-stabilization is NOT required.

Pu Stabilization and Packaging System Operations provides for the operation of the plutonium stabilization and packaging system at PFP. Operation is based on an XYZ shift schedule, starting October 2000.

Accelerated/Alternate Stabilization provides support to accelerate stabilization activities at PFP. This support can be through the addition of supplemental crews (i.e., increase crew size from XYZ to ABCD) and/or provide innovative methodologies or alternate paths for stabilization. Alternate paths might include transfer of flush and filtrate plutonium nitrate solutions to 200 West Area Tanks Farms rather than processing through new pretreatment systems and the vertical calciner. Also, shipment of current resident inventories of SNM, such as alloys or polycubes, to other sites for stabilization thereby accelerating PFP's role in stabilization of that material category.

· IAEA Safeguards at PFP: The purpose and objective of this Function is to provide support necessary to meet the intent ofImplementation of International Safeguards at PFP and to submit fissile materials no longer needed for deterrent under the U.S.-International Atomic Energy Agency (IAEA) Voluntary Safeguards Agreement. The primary driver is an International Agreement between the United States and the IAEA, which is now Federal Law. This activity is also required for compliance to DOE Order 1270.2B, "Safeguards Agreement with the International Atomic Energy Agency", dated 6/23/92.

Specifically within this function are all the resources required and necessary for SNM storage and operation of Vault #3 consistent with IAEA Safeguards requirements. These resources in addition to standard types of preventative and corrective maintenance also provide security maintenance to applicable security surveillance cameras, BMSs, and related security required systems supporting Vault #3.

This IAEA function has no DOE-HQ or DOE-RL Milestones associated with this workscope.

Technical Approach: The end point targets in the Hanford Strategic Plan addressed by this project include:

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

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

· Transition production areas of PFP to a low cost, stable, deactivated condition; upon completion of stabilization (DNFSB 94-1) activities.

· Remove Central Plateau (200 Area) non-essential, surplus buildings and facilities that don't have identified post-cleanup uses.

The technical approach and technology initiatives for the Project to accomplish the Hanford Strategic Plan end point targets are identified below.

**Project Status in FY 2006:**

PFP

· PFP will have completed stabilization and packaging all plutonium bearing materials to DOE-STD-3013.

· PFP will be working on deactivation and terminal cleanout.

· The fuel pins and assemblies will be in the process of being downloaded to DOE-STD-3013 containers.

**Post-2006 Project Scope:**

PFP

· PFP will continue to maintain safe and secure storage of SNM until all shipments are complete.

· PFP will complete the deactivation and terminal cleanout of the PFP facilities, including the vaults, followed by turnover to ER.

· PFP will continue to provide "Min Safe" services to PFP until deactivation and turnover are complete.

· PFP will complete download of fuel pins and assemblies to DOE-STD-3013 containers.
PFP will ship all plutonium bearing materials and other special nuclear materials to SRS or other designated site for disposition in the Materials Disposition Program.

**Project End State**

The Hanford Strategic Plan end point targets achieved at completion of the project include:

Hanford Mission End Point Targets Achieved

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

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· Transition production areas of PFP to a low cost, stable, deactivated condition; upon completion of stabilization (DNFSB 94-1) activities.

Specific work activities to close the facilities under this Project to be performed by others at the end of this Project's mission are identified below.

**Cost Baseline Comments:**

An activity based cost (ABC) estimate is the basis for the detailed fiscal year 1997 budget, and for all outyear work scope, budget, and schedule requests through fiscal year 2002. The estimates for deactivation were deemed Rough-Order-of-Magnitude (ROM) because the detailed planning had not been completed. The ABC estimate was updated via Baseline Change Control for FY 1998. This estimate incorporates all safe compliance issues into a systems engineering/ projectized management approach.

The detailed planning for deactivation has still NOT been performed. With the current funding scenario, detailed planning to will not be done until FY 2000. The estimates from FY 2000 through FY 2014 are still ROM.

**Safety & Health Hazards:**

There is no formal, all-inclusive Hazards Analysis for the PFP Project. However, the Plutonium Finishing Plant Final Safety Analysis Report, WHC-SD-CP-SAR-021, Rev. 0-J, dated 9/29/95, has been peer reviewed, reviewed in detail by Pacific Northwest National Laboratory (PNNL), as documented in the PNNL Safety Evaluation Report and finally approved by DOE-HQ. It is this safety analysis Report which defines the hazards at PFP.

In addition to the PFP FSAR, several focused Hazard Assessments/Analyses have been performed. These include, but are not limited to, the Plutonium Working Group Report on Environmental, Safety, and Health Vulnerabilities Associated with the Department's Plutonium Storage DOE/EH-0415, Nov 1994; Plutonium Vulnerability Management Plan DOE/EM-0119 dated March 1995; Fire Hazard Analysis WHC-CP-FHA-004 dated June 1996; Plutonium Finishing Plant Chemical Hazard assessment HNF-SD-CP-HA-001 dated Sept 1997.

Additional hazard assessments and environmental impact data is available in the PFP Stabilization Final EIS Dated May 1996 (ROD issued June 1996).

PFP also performs security vulnerability assessments as required by DOE Orders.

**Safety & Health Work Performance:**

Work is performed at PFP consistent with the controls outlined in the above section D.1.3 and the approximate 400+ approved operating procedures for the Plant. In addition, maintenance activities are performed consistent with approved Job System Control work packages and procedures, which require job hazards analyses, RWPs and any permits (confined space, excavation, etc.) required to perform the work.

Of course, all applicable quality assurance procedures and safety procedures as documented in Hanford`s Project Hanford Management Contract

## Project Description Narratives

(PHMC) Policy and Procedures manuals are followed.

The Project Hanford Management Contract "Integrated Environment, Safety and Health Management System (ISMS) Plan" (HNF-MP-003, dated Sept. 5 ,1997) establishes a single, defined safety and environmental management system that integrates environment, safety and health (ES&H) requirements into the work planning and execution processes to effectively protect the workers, public, and the environment. The ISMS supports U.S. Department of Energy's (DOE) Hanford Strategic Plan (DOE/RL-96-92) to safely clean up and manage the site's legacy waste and deploy science and technology while incorporating the ISMS fundamental goal to "Do work safely and protect human health and the environment."

Performing work includes 1) preparing for the work, 2) confirming readiness to perform the work at both the Facility and Activity Levels, and 3) performing the work in a safe environmentally protective, and efficient manner.

An essential aspect of preparing for work is ensuring that the workers, support staff, supervisors, and managers possess the appropriate level of experience, knowledge, skills, and abilities (both mental and physical) to safely and effectively discharge their responsibilities. The FDH Qualification and Training Plan (HNF-MP-011) provides specifics regarding employee training and qualification; the Hanford Occupational Health Process (HOHP) ensures that Hanford Site workers receive the appropriate medical qualification, monitoring, and related occupational medical services.

Worker training is provided by a variety of PHMC Team training organizations, subject matter experts, outside vendors, and educational institutions. The FDH Qualification and Training Plan (HNF-MP-011) establishes the framework and standards to ensure that all training provided to PHMC Team employees meets the applicable contractual and regulatory requirements (e.g., DOE Order 5480.20A, 29 Code of Federal Regulation CFR 1910/1926, 10 CFR 835, 10 CFR 830) and prepares the work force to effectively perform their activities in a safe and environmentally protective manner. These standards, in conjunction with implementing procedures and supporting documents that govern training under the PHMC, establish a graded, systematic approach to training that is designed to ensure an effective qualification and training program. Training, qualification, and certification requirements for personnel are established by individual managers in the training implementation matrices and/or the training matrix based on the applicable regulatory requirements and company and facility specific requirements. Primary responsibility for skill mix within the PHMC Team, as it pertains to ES&H, rests with the line management (M&I Plan, HNF-MP-001).

As part of the ISMS, the Employee Job Task Analysis (EJTA) provides the primary mechanism to ensure that personnel have the appropriate medical qualification, training, and exposure monitoring based on their assigned job functions and the hazards to which they may be exposed. The EJTA, in conjunction with the AJHA and exposure monitoring and reporting, provide the primary data input components to the Hanford Occupational Health Process (HOHP). In addition to providing essential data for medical qualification and monitoring, the HOHP effectively supports other occupational medical evaluations and examinations such as pre-placement, voluntary periodic, return to work, and termination health examinations, which are specified by DOE Order 5480.8A.

To perform work safely and in an environmentally protective manner, a process of confirming readiness and authorizing work at the facility and activity level is established to ensure that hazards and environmental impacts have been identified and controlled, requirements are met, compliance is ensured, workers understand and are ready to perform the assigned scope of work, and work can be done in accordance with the Authorization Envelope.

# *Project Baseline Summary Report*

Data Source: **EM CDB** Report Number: **GEN-01b**

Operations/Field Office: **Richland** Print Date: **3/9/2000**

Site Summary Level: **Hanford Site** HQ ID: **0405**

Project **RL-TP05 / PFP Deactivation**

## Project Description Narratives

The pre-job briefing is the last confirmation of readiness before performing individual work activities and provides the work team with a collective understanding of the task to be completed, requirements for performing the task, identified hazards and environmental impacts, and necessary controls. Pre-job briefings are to be face-to-face communications with sufficient technical expertise present to answer questions concerning the work tasks or identified controls. The ISMS Core Functions listed below serve as the outline for pre-job briefings as follows: 1) Define the Scope of Work - Describe the scope of work to be performed and the associated work instructions, procedures, etc; 2) Identified Hazards and Environmental Impacts and Requirements - Describe the hazards and environmental impacts and requirements associated with the work scope as identified in the JHA. Consider current site conditions and other activities in the area; 3) Analyze Hazards and Environmental Impacts, and Implement Controls - Describe any personal or area monitoring that will be necessary to quantify chemical, physical (including ionizing radiation) or biological hazards, and the controls (engineering, administrative, or personal protective equipment) necessary to mitigate the identified hazards and environmental impacts described in the JHA. Describe any emergency response contingencies applicable to the work; 4) Perform the Work - Confirm each worker's readiness to perform the work relative to training, qualification, medical, and understanding of work and associated work instructions and procedures. Reinforce to all workers the STAR concept to Stop, Think, Act, and Review.; and 5) Feedback & Improvement - Request comments or clarification regarding the scope of work to be performed and the associated hazards and environmental impacts identification, evaluation and control; reinforce that a post-job briefing will be conducted to support continuous feedback and improvement.

The process for conducting Unreviewed Safety Questions has been developed to ensure that the authorization basis for nuclear facilities can be maintained while allowing for "operational" flexibility. The Unreviewed Safety Question (USQ) allows the Major Subcontractors to make physical and/or procedural changes and to conduct tests and experiments without prior DOE-RL approval, as long as these changes do not explicitly or implicitly affect the Authorization Basis of the facility or result in a TSR change.

Safe and environmentally protective work is conducted in accordance with the requirements, controls, and procedures developed from and contained in the Authorization Envelope. FDH and the Major Subcontractors are committed to ensuring that all work is performed in a safe and environmentally protective manner, and within the Authorization Envelope. Working within the Authorization Envelope includes adhering to controls specified in the approved safety basis, complying with the approved Requirements Basis, and complying with the requirements in applicable environmental permits, consent orders and agreements, and other documentation.

In addition to USQ reviews, all work at PFP is reviewed to ensure compliance with the existing PFP NEPA documentation. If required, supplemental analyses are performed to determine the impact a proposed change to PFP may have on the environment, public and facility workers. If the impact is significant, the work is modified (additional barriers or controls added) to minimize the impacts, the work is cancelled, or performed in a different, less impacting way.

**PBS Comments:**

The deactivation of the PFP process areas and the 2736Z/ZB vaults will be a momentous event. Great interest has been generated by the states of Oregon and Washington and various "stakeholder" organizations, e.g., Heart of America Northwest, Hanford Education Action League (HEAL), the Federated Indian Tribes, etc., to cease and desist operations at PFP and to accelerate cleanup as quickly as is safe. It will be the last of the World War II and Cold War legacy processing facilities at Hanford to be deactivated. It will signal the end of an era in our National Defense programs and an outstanding example for the National efforts to provide a cleaner environment.

# *Project Baseline Summary Report*

Data Source: **EM CDB** | Report Number: **GEN-01b**

Operations/Field Office: **Richland** | Print Date: **3/9/2000**

Site Summary Level: **Hanford Site** | HQ ID: **0405**

Project **RL-TP05 / PFP Deactivation**

## Project Description Narratives

**Baseline Validation Narrative:**

An Activity Based Cost (ABC) estimate was prepared in FY 1996 and maintained through the baseline change process as well as annual updates for FY 1997 and FY 1998. This current estimate incorporates all stabilization objectives and safe compliance issues into a systems engineering/projectization management approach. Audits by DOE an the Army Corp of Engineers were performed in Fy 1997 to ensure that the Baseline Change Control process was adequately followed; there were no Findings.

An Integrated Project Management Plan including an updated ABC estimate and resource-loaded schedules is currently under development. An Independent Validation is planned for completion in the last quarter of FY 1999.

## General PBS Information

**Project Validated?** Yes **Date Validated:** 9/29/1995

**Has Headquarters reviewed and approved project?** Yes

**Date Project was Added:** 12/1/1997

**Baseline Submission Date:**

**FEDPLAN Project?** Yes

**Drivers:**

| CERCLA | RCRA | DNFSB | AEA | UMTRCA | State | DOE Orders | Other |
|---|---|---|---|---|---|---|---|
| Y | Y | Y | Y | | | Y | Y |

## Project Identification Information

**DOE Project Manager:** Larry D. Romine

**DOE Project Manager Phone Number:** 509-376-4747

**DOE Project Manager Fax Number:** 509-376-0695

**DOE Project Manager e-mail address:** larry_d_romine@rl.gov

**Is this a High Visibility Project (Y/N):** Y

## Planning Section

**Baseline Costs (in thousands of dollars)**

# *Project Baseline Summary Report*

Data Source: **EM CDB**

Report Number: **GEN-01b**

Operations/Field Office: **Richland**

Print Date: **3/9/2000**

Site Summary Level: **Hanford Site**

HQ ID: **0405**

Project **RL-TP05 / PFP Deactivation**

| | 1997-2006 Total | 2007-2070 Total | 1997-2070 Total | 1997 | Actual 1997 | 1998 | Actual 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PBS Baseline (current year dollars) | 1,192,839 | 1,777,384 | 2,970,223 | 85,201 | 1,033 | 88,090 | 79,700 | 105,421 | 143,347 | 126,570 | 116,333 | 129,581 | 133,228 | 148,752 | 116,316 |
| PBS Baseline (constant 1999 dollars) | 1,118,653 | 1,218,184 | 2,336,837 | 85,201 | 1,033 | 88,090 | 79,700 | 105,421 | 140,399 | 121,298 | 109,088 | 118,895 | 119,610 | 130,672 | 99,979 |
| PBS EM Baseline (current year dollars) | 1,192,839 | 1,777,384 | 2,970,223 | 85,201 | 1,033 | 88,090 | 79,700 | 105,421 | 143,347 | 126,570 | 116,333 | 129,581 | 133,228 | 148,752 | 116,316 |
| PBS EM Baseline (constant 1999 dollars) | 1,118,653 | 1,218,184 | 2,336,837 | 85,201 | 1,033 | 88,090 | 79,700 | 105,421 | 140,399 | 121,298 | 109,088 | 118,895 | 119,610 | 130,672 | 99,979 |

| | 2007 | 2008 | 2009 | 2010 | 2011-2015 | 2016-2020 | 2021-2025 | 2026-2030 | 2031-2035 | 2036-2040 | 2041-2045 | 2046-2050 | 2051-2055 | 2056-2060 | 2061-2065 | 2066-2070 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PBS Baseline (current year dollars) | 119,639 | 102,639 | 103,205 | 100,700 | 436,484 | 266,962 | 431,167 | 216,588 | 0 | 0 | 0 | 0 | | | | |
| PBS Baseline (constant 1999 dollars) | 100,621 | 84,466 | 83,103 | 79,340 | 322,319 | 176,812 | 256,127 | 115,396 | 0 | 0 | 0 | 0 | | | | |
| PBS EM Baseline (current year dollars) | 119,639 | 102,639 | 103,205 | 100,700 | 436,484 | 266,962 | 431,167 | 216,588 | 0 | 0 | 0 | 0 | | | | |
| PBS EM Baseline (constant 1999 dollars) | 100,621 | 84,466 | 83,103 | 79,340 | 322,319 | 176,812 | 256,127 | 115,396 | 0 | 0 | 0 | 0 | | | | |

**Baseline Escalation Rates**

| 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.00% | 0.00% | 0.00% | 2.10% | 2.20% | 2.20% | 2.20% | 2.20% | 2.20% | 2.20% | 2.20% | 2.20% | 2.20% |

| 2010 | 2011-2015 | 2016-2020 | 2021-2025 | 2026-2030 | 2031-2035 | 2036-2040 | 2041-2045 | 2046-2050 | 2051-2055 | 2056-2060 | 2061-2065 | 2066-2070 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

# *Project Baseline Summary Report*

Data Source: **EM CDB** Report Number: **GEN-01b**

Operations/Field Office: **Richland** Print Date: **3/9/2000**

Site Summary Level: **Hanford Site** HQ ID: **0405**

Project **RL-TP05 / PFP Deactivation**

| 2010 | 2011-2015 | 2016-2020 | 2021-2025 | 2026-2030 | 2031-2035 | 2036-2040 | 2041-2045 | 2046-2050 | 2051-2055 | 2056-2060 | 2061-2065 | 2066-2070 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.20% | 2.20% | 2.20% | 2.20% | 2.20% | 2.20% | 2.20% | 2.20% | 2.20% | | | | |

## Project Reconciliation

### Project Completion Date Changes:

**Previously Projected End Date of Project:** 5/6/2014

**Current Projected End Date of Project:** 9/30/2028

**Explanation of Project Completion Date Difference (if applicable):**

### Project Cost Estimates (in thousands of dollars)

| | | | | | |
|---|---|---|---|---|---|
| **Previously Estimated Lifecycle Cost (1997 - 2070, 1998 Dollars):** | 151,861 | **Actual 1997 Cost:** | 1,033 | **Actual 1998 Cost:** | 79,700 |
| **Previously Estimated Lifecycle Cost of Project (1999 - 2070, 1998 Dollars):** | 71,128 | **Inflation Adjustment (2.7% to convert 1998 to 1999 dollars):** | | | 1,920 |
| **Previously Estimated Lifecycle Cost (1999 - 2070, 1999 Dollars):** | 73,048 | | | | |

### Project Cost Changes

| | Cost Adjustments | Reconciliation Narratives |
|---|---|---|
| **Cost Change Due to Scope Deletions (-):** | | |
| **Cost Reductions Due to Efficiencies (-):** | | |
| **Cost Associated with New Scope (+):** | | |
| **Cost Growth Associated with Scope Previously Reported (+):** | | |
| **Cost Reductions Due to Science & Technology Efficiencies (-):** | | |
| **Subtotal:** | 73,048 | |
| **Additional Amount to Reconcile (+):** | 2,090,498 | |
| **Current Estimated Lifecycle Cost (1999 - 2070, 1999 Dollars):** | **2,163,546** | |

### Milestones

# *Project Baseline Summary Report*

Data Source: **EM CDB**

Report Number: **GEN-01b**

Operations/Field Office: **Richland**

Print Date: **3/9/2000**

Site Summary Level: **Hanford Site**

HQ ID: **0405**

Project **RL-TP05 / PFP Deactivation**

| Milestone/Activity | Field Milestone Code | Original Date | Baseline Date | Legal Date | Forecast Date | Actual Date | EA | DNFSB | Mgmt. Commit. | Key Decision | Intersite |
|---|---|---|---|---|---|---|---|---|---|---|---|
| COMPLETE STABILIZATION OF PROCESS AREAS & OTHER CLEANOUT ACTIONS | M-83-00 | 12/31/2049 | 12/31/2049 | 12/31/2049 | | | Y | | | | |
| BEGIN PROCESSING SOLUTIONS AT PFP | TRP-97-403 | 6/30/1997 | 6/30/1997 | | 11/4/2000 | | | Y | | | |
| COMPLETE STABILIZATION OF PU-BEARING SOLUTIONS AT PFP | TRP-99-401 | 1/31/1999 | 1/31/1999 | | 4/30/2003 | | | Y | | | |
| START RESTABILIZING HIGH-ASSAY OXIDES AT PFP | TRP-99-402 | 7/31/1999 | 7/31/1999 | | 2/26/1999 | 2/10/1999 | | Y | | | |
| START STABILIZATION OF POLYCUBES | TRP-99-403 | 7/31/1999 | 7/31/1999 | | 5/1/2002 | | | Y | | | |
| COMPLETE STABILIZATION OF REACTIVE SOLID RESIDUES AT PFP | TRP-00-401 | 1/31/2000 | 1/31/2000 | | 3/9/2005 | | | Y | | | |
| COMPLETE METAL REPACKAGING AT PFP | TRP-00-402 | 9/30/2000 | 9/30/2000 | | 5/31/2002 | | | Y | | | |
| COMMENCE REPACKAGING OPERATIONS AT PFP | TRP-00-404 | 10/31/1999 | 10/31/1999 | | 5/1/2001 | | | Y | | | |
| COMPLETE STABILIZATION OF POLYCUBES | TRP-01-401 | 1/31/2001 | 1/31/2001 | | 3/31/2004 | | | Y | | | |
| COMPLETE STAB. AND REPACKAGING OF ALL REMAINING RESIDUES AT PFP | TRP-02-401 | 5/31/2002 | 5/31/2002 | | 7/30/2005 | | | Y | | | |
| COMPLETE THERMAL STAB/REPKG OF ALL PUO2 TO MEET STORAGE STANDARDS | TRP-02-402 | 5/31/2002 | 5/31/2002 | | 12/31/2004 | | | Y | | | |
| COMPLETE STAB. AND REPKG. OF INTERIM-STABILIZED MATERIAL | TRP-02-404 | 1/31/2002 | 1/31/2002 | | 3/9/2005 | | | Y | | | |
| REPACKAGE 1.2 KG PU METALS & OXIDES FROM MOUND TO MEET STANDARDS | TRP-02-405 | 5/31/2002 | 5/31/2002 | | | | | Y | | | |
| COMPLETE DESIGN, PROCUREMENT & INSTALLATION OF NEW REPACKAGING | TRP-99-410 | 12/31/1998 | 12/31/1998 | | 3/12/2001 | | | Y | | | |
| PERFORM OPERATIONAL READINESS TESTING OF NEW REPACKAGING SYSTEM | TRP-99-411 | 9/30/1999 | 9/30/1999 | | 7/16/2001 | | | Y | | | |
| COMPLETE PFP DEACTIVATION | TRP-14-401 | 9/30/2014 | 9/30/2014 | | | | | | | | |
| COMPLETE DISPOSITION OF PFP SOURCES | TRP-05-403 | 5/25/2005 | 5/25/2005 | | | | | | | | |

# *Project Baseline Summary Report*

Data Source: **EM CDB**

Operations/Field Office: **Richland**

Site Summary Level: **Hanford Site**

Project **RL-TP05 / PFP Deactivation**

Report Number: **GEN-01b**

Print Date: **3/9/2000**

HQ ID: **0405**

## Milestones

| Milestone/Activity | Field Milestone Code | Original Date | Baseline Date | Legal Date | Forecast Date | Actual Date | EA | DNFSB | Mgmt. Commit. | Key Decision | Intersite |
|---|---|---|---|---|---|---|---|---|---|---|---|
| COMPLETE DISPOSITION OF PFP SPECIAL ISOTOPES | TRP-05-402 | 5/25/2005 | 5/25/2005 | | | | | | | | |
| ISSUE NOTICE TO PROCEED FOR HANFORD PUSAP UNIT | TRP-99-414 | 1/1/1999 | 1/1/1999 | | 3/30/1999 | | | | | | |
| Obtain PFP Tank 241-Z-361 Core Samples (FS1.2.1) | TRP-99-421 | 9/30/1999 | 9/30/1999 | | | | | | Y | | |
| Restart Prototype Calciner (FS1.1.2) | TRP-99-418 | 5/10/1999 | 5/10/1999 | | | | | | Y | | |
| Declare Readiness for ISMS Phase II Verification at PFP | TRP-99-420 | 9/30/1999 | 9/30/1999 | | | | | | Y | | |
| Restart Thermal Stabilization (FS1.1.1) | TRP-99-417 | 9/30/1999 | 9/30/1999 | | | | | | Y | | |
| Comp Installation of Prod Scale Vertical Calciner (FS 1.1.2) | TRP-99-419 | 9/30/1999 | 9/30/1999 | | | | | | Y | | |
| Begin PFP Project | PBS-97-020 | | 2/28/1997 | | | | | | | | |
| PBS Mission Completion | PBS-MC-020 | | 9/30/2028 | | | | | | | | |
| PBS Project End | PBS-PE-020 | | 9/30/2028 | | | | | | | | |

## Milestones - Part II

| Milestone/Activity | Field Milestone Code | Critical Decision | Critial Closure Path | Project Start | Project End | Mission Complete | Tech Risk | Work Scope Risk | Intersite Risk | Cancelled | Milestone Description |
|---|---|---|---|---|---|---|---|---|---|---|---|
| COMPLETE STABILIZATION OF PROCESS AREAS & OTHER CLEANOUT ACTIONS | M-83-00 | | | | | | | | | | |
| BEGIN PROCESSING SOLUTIONS AT PFP | TRP-97-403 | | | | | | | | | | This milestone reflects the DOE-HQ commitment date of 6/30/97 per DNFSB Recommendation 94-1 commitment IP-3.1-022 (also see DOE-RL milestone TRP- 97-413). Se Contractor milestone PFP-97-413 for the anticipated completion date |

# *Project Baseline Summary Report*

Data Source: **EM CDB**

Operations/Field Office: **Richland**

Site Summary Level: **Hanford Site**

Project **RL-TP05 / PFP Deactivation**

Report Number: **GEN-01b**

Print Date: **3/9/2000**

HQ ID: **0405**

**Milestones - Part II**

| Milestone/Activity | Field Milestone Code | Critical Decision | Critial Closure Path | Project Start | Project End | Mission Complete | Tech Risk | Work Scope Risk | Intersite Risk | Cancelled | Milestone Description |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | of this task. |
| COMPLETE STABILIZATION OF PU-BEARING SOLUTIONS AT PFP | TRP-99-401 | | Y | | | | | | | | This reflects the DOE-HQ commitment date of 1/31/99 per DNFSB Recommendation 94-1 for DOE-HQ milestone IP-3.1-017 (see also DOE-RL milestone TRP-98-404). See Contractor milestone PFP-98-404 for the anticipated completion date of this task. |
| START RESTABILIZING HIGH-ASSAY OXIDES AT PFP | TRP-99-402 | | | | | | | | | | This reflects the DOE-HQ commitment date of 7/31/99 per DNFSB recommendton 94-1 commitment for milestone IP-3.2-033. |
| START STABILIZATION OF POLYCUBES | TRP-99-403 | | | | | | | | | | This milestone reflects the DOE-HQ commitment date of 7/31/99 to commence polycube stabilization per DNFSB Recommendation 94-1 milestone IP-3.3-028. |
| COMPLETE STABILIZATION OF REACTIVE SOLID RESIDUES AT PFP | TRP-00-401 | | Y | | | | | | | | This milestone completes the stabilization of all remaining reactive solid residues at PFP in inventory as of 9/30/96. This milestone reflects the DOE-HQ commitment for DNFSB Recommendaton 94-1 milestone IP-3.3-026 (see also DOE-RL milestone TRP-99-407). |
| COMPLETE METAL REPACKAGING AT PFP | TRP-00-402 | | | | | | | | | | This milestone reflects the DOE-HQ commitment date of 9/30/2000 per DNFSB Recommendation 94-1 commitment for milestone IP-3.2-032. For the anticipated completion date of this task see Contractor |

# *Project Baseline Summary Report*

Data Source: **EM CDB**

Operations/Field Office: **Richland**

Site Summary Level: **Hanford Site**

Project **RL-TP05 / PFP Deactivation**

Report Number: **GEN-01b**

Print Date: **3/9/2000**

HQ ID: **0405**

**Milestones - Part II**

| Milestone/Activity | Field Milestone Code | Critical Decision | Critial Closure Path | Project Start | Project End | Mission Complete | Tech Risk | Work Scope Risk | Intersite Risk | Cancelled | Milestone Description |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | milestone PFP-00- 402. |
| COMMENCE REPACKAGING OPERATIONS AT PFP | TRP-00-404 | | | | | | | | | | Commence repackaging opertions at the PFP utilizing the new PuSH system (Project W-460) consistent with DOE-STD-3013 for >50 wt.% material. This milestone reflects the DOE-HQ commitment date of 10/31/99 per DNFSB Recommendation 94-1 commitment for milest |
| COMPLETE STABILIZATION OF POLYCUBES | TRP-01-401 | | | | | | | | | | Complete the stabilization of all 1,600 polycubes in inventory at the PFP facility by January 31, 2001. This milestone also reflects the DOE-HQ commitment date of 1/31/2001 for DNFSB Recommendation 94-1 milestone IP- 3.3-029. See Contractor milestone PFP- |
| COMPLETE STAB. AND REPACKAGING OF ALL REMAINING RESIDUES AT PFP | TRP-02-401 | | | | | | | | | | This milestone reflects the DOE-HQ commitment date of 1/31/2001 per DNFSB Recommendation 94-1 milestone IP-3.3-033. See Contractor milestone PFP-02- 401 for anticipated completion date of this task. |
| COMPLETE THERMAL STAB/REPKG OF ALL PUO2 TO MEET STORAGE STANDARDS | TRP-02-402 | | | | | | | | | | This milestone reflects the DOE-HQ commitment date of 1/31/2001 per DNFSB Recommendation 94-1 milestone IP-3.2-018. See also DOE-RL milestones TRP- 01-403 and TRP-01-404. See Contractor milestone PFP-02-402 for the anticipated completion date for this |

# *Project Baseline Summary Report*

Data Source: **EM CDB**

Operations/Field Office: **Richland**

Site Summary Level: **Hanford Site**

Project **RL-TP05 / PFP Deactivation**

Report Number: **GEN-01b**

Print Date: **3/9/2000**

HQ ID: **0405**

**Milestones - Part II**

| Milestone/Activity | Field Milestone Code | Critical Decision | Critial Closure Path | Project Start | Project End | Mission Complete | Tech Risk | Work Scope Risk | Intersite Risk | Cancelled | Milestone Description |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | tas |
| COMPLETE STAB. AND REPKG. OF INTERIM-STABILIZED MATERIAL | TRP-02-404 | | | | | | | | | | Complete stabilization and repackaging of Interim-stabilized residue material at PFP. This milestone applies only to the residue materials in inventory at PFP as of May 1996. Any residues received at PFP AFTER MAY 1996 are NOT covered by this milestone. T |
| REPACKAGE 1.2 KG PU METALS & OXIDES FROM MOUND TO MEET STANDARDS | TRP-02-405 | | | | | | | | | | Repackage the 1.2 Kg plutonium item received from Mound to meet DOE-STD- 3013-96 criteria. |
| COMPLETE DESIGN, PROCUREMENT & INSTALLATION OF NEW REPACKAGING | TRP-99-410 | | | | | | | | | | Complete design, fabrication and installation of repackaging system at PFP via PuSH Project W-460. |
| PERFORM OPERATIONAL READINESS TESTING OF NEW REPACKAGING SYSTEM | TRP-99-411 | | | | | | | | | | Complete operational testing, staff training and contractor readiness review of the repackaging system to be installed at PFP by Project W-460. This milestone reflects the DOE-HQ commitment date of 9/30/99 per DNFSB Recommendation 94-1 milestone IP-3.2-03 |
| COMPLETE PFP DEACTIVATION | TRP-14-401 | | | | | | | | | | |
| COMPLETE DISPOSITION OF PFP SOURCES | TRP-05-403 | | | | Y | | | | | | |
| COMPLETE DISPOSITION OF PFP SPECIAL ISOTOPES | TRP-05-402 | | | | Y | | | | | | |
| ISSUE NOTICE TO PROCEED | TRP-99-414 | Y | | | | | | | | | Issue the Notice to Proceed for the |

# *Project Baseline Summary Report*

Data Source: **EM CDB**

Operations/Field Office: **Richland**

Site Summary Level: **Hanford Site**

Project **RL-TP05 / PFP Deactivation**

Report Number: **GEN-01b**

Print Date: **3/9/2000**

HQ ID: **0405**

**Milestones - Part II**

| Milestone/Activity | Field Milestone Code | Critical Decision | Critial Closure Path | Project Start | Project End | Mission Complete | Tech Risk | Work Scope Risk | Intersite Risk | Cancelled | Milestone Description |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FOR HANFORD PUSAP UNIT | | | | | | | | | | | Hanford PuSAP Unit, within national DOE contract DE-AC03-96SF20948. |
| Obtain PFP Tank 241-Z-361 Core Samples (FS1.2.1) | TRP-99-421 | | | | | | | | | | Obtain two (2) PFP Tank 241-Z-361 core samples by September 30, 1999. |
| Restart Prototype Calciner (FS1.1.2) | TRP-99-418 | | | | | | | | | | Restart of the prototype vertical calciner, located in the Plutonium Process Support Laboratories in the 234-5Z building, with plutonium solution feed on or before 510/99. |
| Declare Readiness for ISMS Phase II Verification at PFP | TRP-99-420 | | | | | | | | | | Declare readiness for Integrated Safety Management system Phase II verification at PFP. |
| Restart Thermal Stabilization (FS1.1.1) | TRP-99-417 | | | | | | | | | | Restart thermal stabilization operations and complete stabilization, by 9/30/99, of higher risk plutonium-bearing materials in quantities equal to or greater than those established for one fo the following feed priorities: Case 1 - Stabilization of pluto |
| Comp Installation of Prod Scale Vertical Calciner (FS 1.1.2) | TRP-99-419 | | | | | | | | | | Complete installation of the production model Vertical Denitration Calciner, as referenced in Section 5 of Performance Agreement FS 1.1.2, by 9/30/99. |
| Begin PFP Project | PBS-97-020 | | | Y | | | | | | | Administrative input to document the start of this PBS. |
| PBS Mission Completion | PBS-MC-020 | | | | | Y | | | | | Administrative input to document the mission completion of this PBS. |
| PBS Project End | PBS-PE-020 | | | | Y | | | | | | Administrative input to document |

# *Project Baseline Summary Report*

Data Source: **EM CDB**

Report Number: **GEN-01b**

Operations/Field Office: **Richland**

Print Date: **3/9/2000**

Site Summary Level: **Hanford Site**

HQ ID: **0405**

Project **RL-TP05 / PFP Deactivation**

## Milestones - Part II

| Milestone/Activity | Field Milestone Code | Critical Decision | Critial Closure Path | Project Start | Project End | Mission Complete | Tech Risk | Work Scope Risk | Intersite Risk | Cancelled | Milestone Description |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | the project end of this PBS. |

## Performance Measure Metrics

| Category/Subcategory | Units | 1997-2006 Total | 2007-2070 Total | 1997-2070 Total | Actual Pre-1997 | Planned 1997 | Actual 1997 | Planned 1998 | Planned 1999 | Planned 2000 | Planned 2001 | Planned 2002 | Planned 2003 | Planne 200 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Fac.** | | | | | | | | | | | | | | |
| **Decom.- Assess.** | NF | 0.00 | 0.00 | 0.00 | | | | | | | | | | |
| **Fac.** | | | | | | | | | | | | | | |
| **Decom- Cleanup** | NF | 0.00 | 58.00 | 58.00 | 1.00 | | | | | | | | | |
| **Fac.** | | | | | | | | | | | | | | |
| **Deact. During Per.** | NF | 0.00 | 58.00 | 58.00 | | | | | | | | | | |
| **NM** | | | | | | | | | | | | | | |
| **Stabilized - Pu Sol.** | L | 4,300.00 | 0.00 | 4,300.00 | | | | | 40.00 | 160.00 | 1,380.00 | 2,100.00 | 620.00 | |
| **NM** | | | | | | | | | | | | | | |
| **Stabilized - Pu Res.** | Kg/B | 3,765.00 | 0.00 | 3,765.00 | | 219.00 | | | | 600.00 | 1,600.00 | 3.00 | | 800.( |
| **NM** | | | | | | | | | | | | | | |
| **Stablilized - Pu Metal/Oxides** | Ncont | 5,845.00 | 0.00 | 5,845.00 | 0.00 | 2.00 | 0.00 | | 110.00 | 366.00 | | 1,200.00 | 1,745.00 | 1,560.( |
| **NM** | | | | | | | | | | | | | | |
| **Stablilized - Other NM** | HU | 32.00 | 0.00 | 32.00 | | | | | | | | | | |
| **NM** | | | | | | | | | | | | | | |
| **MDR - Pu** | Ncont | 3,138.00 | 0.00 | 3,138.00 | | | | | | | 30.00 | 300.00 | 800.00 | 1,400.( |

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Print Date: **3/9/2000**

Site Summary Level: **Hanford Site**

HQ ID: **0405**

Project **RL-TP05 / PFP Deactivation**

## Performance Measure Metrics

| Category/Subcategory | Units | 1997-2006 Total | 2007-2070 Total | 1997-2070 Total | Actual Pre-1997 | Planned 1997 | Actual 1997 | Planned 1998 | Planned 1999 | Planned 2000 | Planned 2001 | Planned 2002 | Planned 2003 | Planne 20( |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **NM** | | | | | | | | | | | | | | |
| **MDR - Other NM** | Ncont | 32.00 | 0.00 | 32.00 | | | | | | | | | | |
| **Tech.** | | | | | | | | | | | | | | |
| **Deployed** | Ntd | 1.00 | 0.00 | 1.00 | | | | | | 1.00 | | | | |

| Category/Subcategory | Units | Planned 2004 | Planned 2005 | Planned 2006 | Planned 2007 | Planned 2008 | Planned 2009 | Planned 2010 | Planned 2011 - 2015 | Planned 2016 - 2020 | Planned 2021 - 2025 | Planned 2026 - 2030 | Planned 2031 - 2035 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Fac.** | | | | | | | | | | | | | |
| **Decom.- Assess.** | NF | | | | | | | | | | | | |
| **Fac.** | | | | | | | | | | | | | |
| **Decom- Cleanup** | NF | | | | | | 7.00 | 12.00 | 25.00 | 4.00 | 1.00 | | 2.00 |
| **Fac.** | | | | | | | | | | | | | |
| **Deact. During Per.** | NF | | | | | | 7.00 | 14.00 | 31.00 | 6.00 | | | |
| **NM** | | | | | | | | | | | | | |
| **Stabilized - Pu Sol.** | L | | | | | | | | | | | | |
| **NM** | | | | | | | | | | | | | |
| **Stabilized - Pu Res.** | Kg/B | 800.00 | 543.00 | | | | | | | | | | |
| **NM** | | | | | | | | | | | | | |
| **Stablilized - Pu Metal/Oxides** | Ncont | 1,560.00 | 862.00 | | | | | | | | | | |
| **NM** | | | | | | | | | | | | | |
| **Stablilized - Other NM** | HU | | 32.00 | | | | | | | | | | |
| **NM** | | | | | | | | | | | | | |
| **MDR - Pu** | Ncont | 1,400.00 | 470.00 | 138.00 | | | | | | | | | |

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Operations/Field Office: **Richland**

Print Date: **3/9/2000**

Site Summary Level: **Hanford Site**

HQ ID: **0405**

Project **RL-TP05 / PFP Deactivation**

| Category/Subcategory | Units | Planned 2004 | Planned 2005 | Planned 2006 | Planned 2007 | Planned 2008 | Planned 2009 | Planned 2010 | Planned 2011 - 2015 | Planned 2016 - 2020 | Planned 2021 - 2025 | Planned 2026 - 2030 | Planned 2031 - 2035 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **NM** | | | | | | | | | | | | | |
| **MDR - Other NM** | Ncont | | 32.00 | | | | | | | | | | |
| **Tech.** | | | | | | | | | | | | | |
| **Deployed** | Ntd | | | | | | | | | | | | |

| Category/Subcategory | Units | Planned 2036 - 2040 | Planned 2041 - 2045 | Planned 2046 - 2050 | Planned 2051 - 2055 | Planned 2056 - 2060 | Planned 2061 - 2035 | Planned 2066 - 2070 | Exceptions | Lifecycle Total |
|---|---|---|---|---|---|---|---|---|---|---|
| **Fac.** | | | | | | | | | | |
| **Decom.- Assess.** | NF | | | | | | | | 59.00 | 59.00 |
| **Fac.** | | | | | | | | | | |
| **Decom- Cleanup** | NF | 7.00 | | | | | | | | 59.00 |
| **Fac.** | | | | | | | | | | |
| **Deact. During Per.** | NF | | | | | | | | 1.00 | 59.00 |
| **NM** | | | | | | | | | | |
| **Stabilized - Pu Sol.** | L | | | | | | | | | 4,260.00 |
| **NM** | | | | | | | | | | |
| **Stabilized - Pu Res.** | Kg/B | | | | | | | | | 3,546.00 |
| **NM** | | | | | | | | | | |
| **Stablilized - Pu Metal/Oxides** | Ncont | | | | | | | | | 5,754.00 |
| **NM** | | | | | | | | | | |
| **Stablilized - Other NM** | HU | | | | | | | | | 32.00 |
| **NM** | | | | | | | | | | |
| **MDR - Pu** | Ncont | | | | | | | | | 3,138.00 |

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Operations/Field Office: **Richland**

Print Date: **3/9/2000**

Site Summary Level: **Hanford Site**

HQ ID: **0405**

Project **RL-TP05 / PFP Deactivation**

| Category/Subcategory | Units | Planned 2036 - 2040 | Planned 2041 - 2045 | Planned 2046 - 2050 | Planned 2051 - 2055 | Planned 2056 - 2060 | Planned 2061 - 2035 | Planned 2066 - 2070 | Exceptions | Lifecycle Total |
|---|---|---|---|---|---|---|---|---|---|---|
| **NM** | | | | | | | | | | |
| **MDR - Other NM Tech.** | Ncont | | | | | | | | | 32.00 |
| **Deployed** | Ntd | | | | | | | | 1.00 | 2.00 |

## Release Sites

| Site Code | RSF ID | Change Flag | Description | Class/Subclass Name | Planned Assess. Year | Forecast Assess. Year | Actual Assess. Date | Planned Comp. Year | Forecast Comp. Year | Actual Comp. Date | Acc. Year | No Action | Comp. Status | RAD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HASI | 7473 | R | 241-Z, 241-Z Treatment and Storage Tanks, 241-Z Tank Farm, 241-Z Treatment and Storage System, 241-Z-D-4, 241-Z-D-5, 241-Z-D-7, 241-Z-D-8, 241-Z Sump, 241-Z Tank Pit | / | | | | | | | | | | |
| HASI | 7474 | R | UPR-200-W-103, 216-Z-18 Line Break, UN-216-W-13, UN-200-W-103 | / | | | | | | | | | | |
| HASI | 7475 | R | UPR-200-W-23, Waste Box Fire at 234-5Z, UN-200-W-23 | / | | | | | | | | | | |
| HASI | 7476 | R | UPR-200-W-74, Overground Line Leak at 241-Z, UN-200-W-74 | / | | | | | | | | | | |
| HASI | 7477 | R | UPR-200-W-75, Contamination Spread at 241-Z, UN-200-W-75 | / | | | | | | | | | | |
| HASI | 7478 | R | UPR-200-W-79, Contamination Spread at 241-Z, UN-200-W-79 | / | | | | | | | | | | |
| HASI | 7479 | R | 2607-WB, 2607-WB Septic System | / | | | | | | | | | | |
| HASI | 7480 | R | 200-W-58, Z-Plant Diversion Box #1 | / | | | | | | | | | | |
| HASI | 7481 | R | 200-W-59, Z-Plant Diversion Box #2 | / | | | | | | | | | | |
| HASI | 7482 | R | 2607-Z1, Septic Tank and Drainfield | / | | | | | | | | | | |
| HASI | 7483 | R | 207-Z, 207-Z Retention Basin, 241-Z | / | | | | | | | | | | |

# *Project Baseline Summary Report*

Data Source: **EM CDB** Report Number: **GEN-01b**

Operations/Field Office: **Richland** Print Date: **3/9/2000**

Site Summary Level: **Hanford Site** HQ ID: **0405**

Project **RL-TP05 / PFP Deactivation**

### Release Sites

| Site Code | RSF ID | Change Flag | Description | Class/Subclass Name | Planned Assess. Year | Forecast Assess. Year | Actual Assess. Date | Planned Comp. Year | Forecast Comp. Year | Actual Comp. Date | Acc. Year | No Action | Comp. Status | RAD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Retention Basin, 241-Z-RB | | | | | | | | | | | |

### Facility Decommissioning

| Site Code | RSF ID | Change Flag | Description | Class/Subclass | Hazard | Plan. Assess. Year | Fore. Assess. Year | Actual Assess. Date | Plan. Deac. Year | Fore. Deac. Year | Actual Deac. Date | Plan. Comp. Year | Fore. Comp. Year | Actual Comp. Date | Acc. Year | No Action | Comp. Status | RAD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HASI | 3279 | | 291Z1 | \ | | | | | 2016 | | | 2034 | | | | | | |
| HASI | 3280 | | 291Z | \ | | | | | 2016 | | | 2034 | | | | | | |
| HASI | 3330 | | 2904ZB | \ | | | | | 2015 | | | 2015 | | | | | | |
| HASI | 3331 | | 2904ZA | \ | | | | | 2015 | | | 2015 | | | | | | |
| HASI | 3392 | | 2736ZC | \ | | | | | 2015 | | | 2015 | | | | | | |
| HASI | 3393 | | 2736ZB | \ | | | | | 2015 | | | 2015 | | | | | | |
| HASI | 3394 | | 2736ZA | \ | | | | | 2015 | | | 2015 | | | | | | |
| HASI | 3395 | | 2736Z | \ | | | | | 2015 | | | 2015 | | | | | | |
| HASI | 3399 | | 2735Z | \ | | | | | 2010 | | | 2010 | | | | | | |
| HASI | 3401 | | 2734ZL | \ | | | | | 2010 | | | 2010 | | | | | | |
| HASI | 3402 | | 2734ZK | \ | | | | | 2010 | | | 2010 | | | | | | |
| HASI | 3403 | | 2734ZJ | \ | | | | | 2010 | | | 2010 | | | | | | |
| HASI | 3404 | | 2734ZH | \ | | | | | 2010 | | | 2010 | | | | | | |
| HASI | 3405 | | 2734ZG | \ | | | | | 2010 | | | 2010 | | | | | | |
| HASI | 3406 | | 2734ZF | \ | | | | | 2010 | | | 2010 | | | | | | |
| HASI | 3407 | | 2734ZD | \ | | | | | 2010 | | | 2010 | | | | | | |
| HASI | 3408 | | 2734ZC | \ | | | | | 2010 | | | 2010 | | | | | | |
| HASI | 3409 | | 2734ZB | \ | | | | | 2010 | | | 2010 | | | | | | |

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Data Source: **EM CDB**
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Operations/Field Office: **Richland**
Print Date: **3/9/2000**
Site Summary Level: **Hanford Site**
HQ ID: **0405**
Project **RL-TP05 / PFP Deactivation**

**Facility Decommissioning**

| Site Code | RSF ID | Change Flag | Description | Class/Subclass | Hazard | Plan. Assess. Year | Fore. Assess. Year | Actual Assess. Date | Plan. Deac. Year | Fore. Deac. Year | Actual Deac. Date | Plan. Comp. Year | Fore. Comp. Year | Actual Comp. Date | Acc. Year | No Action | Comp. Status | RAD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HASI | 3410 | | 2734ZA | \ | | | | | 2010 | | | 2010 | | | | | | |
| HASI | 3411 | | 2734Z | \ | | | | | 2009 | | | 2009 | | | | | | |
| HASI | 3415 | | 2731ZA | \ | | | | | 2014 | | | 2014 | | | | | | |
| HASI | 3416 | | 2731Z | \ | | | | | 2014 | | | 2014 | | | | | | |
| HASI | 3429 | | 2729Z | \ | | | | | 2014 | | | 2014 | | | | | | |
| HASI | 3430 | | 2727Z | \ | | | | | 2014 | | | 2014 | | | | | | |
| HASI | 3436 | | 2725Z | \ | | | | | 2010 | | | 2010 | | | | | | |
| HASI | 3468 | | 2721Z | \ | | | | | 2014 | | | 2014 | | | | | | |
| HASI | 3492 | | 2715ZL | \ | | | | | 2009 | | | 2009 | | | | | | |
| HASI | 3493 | | 2715Z | \ | | | | | 2009 | | | 2009 | | | | | | |
| HASI | 3521 | | 2712Z | \ | | | | | 2016 | | | 2016 | | | | | | |
| HASI | 3544 | | 270Z | \ | | | | | 2014 | | | 2014 | | | | | | |
| HASI | 3554 | | 2705Z | \ | | | | | 2016 | | | 2016 | | | | | | |
| HASI | 3555 | | 2704Z | \ | | | | | 2011 | | | 2011 | | | | | | |
| HASI | 3561 | | 2702Z | \ | | | | | 2011 | | | 2011 | | | | | | |
| HASI | 3562 | | 2701ZD | \ | | | | | 2011 | | | 2011 | | | | | | |
| HASI | 3563 | | 2701ZB | \ | | | | | | | | | | 9/30/1996 | | | | |
| HASI | 3564 | | 2701ZA | \ | | | | | 2011 | | | 2011 | | | | | | |
| HASI | 3571 | | 267Z | \ | | | | | 2015 | | | 2015 | | | | | | |
| HASI | 3618 | | 243ZB | \ | | | | | 2013 | | | 2013 | | | | | | |
| HASI | 3619 | | 243ZA | \ | | | | | 2013 | | | 2013 | | | | | | |
| HASI | 3620 | | 243Z | \ | | | | | 2013 | | | 2013 | | | | | | |

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Operations/Field Office: **Richland**

Print Date: **3/9/2000**

Site Summary Level: **Hanford Site**

HQ ID: **0405**

Project **RL-TP05 / PFP Deactivation**

**Facility Decommissioning**

| Site Code | RSF ID | Change Flag | Description | Class/Subclass | Hazard | Plan. Assess. Year | Fore. Assess. Year | Actual Assess. Date | Plan. Deac. Year | Fore. Deac. Year | Actual Deac. Date | Plan. Comp. Year | Fore. Comp. Year | Actual Comp. Date | Acc. Year | No Action | Comp. Status | RAD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HASI | 3643 | | 242Z | \ | | | | | 2015 | | | 2038 | | | | | | |
| HASI | 3672 | | 241ZG | \ | | | | | 2014 | | | 2014 | | | | | | |
| HASI | 3673 | | 241ZB | \ | | | | | 2009 | | | 2009 | | | | | | |
| HASI | 3674 | | 241ZA | \ | | | | | 2014 | | | 2014 | | | | | | |
| HASI | 3675 | | 241Z | \ | | | | | 2016 | | | 2038 | | | | | | |
| HASI | 3829 | | 236Z | \ | | | | | 2015 | | | 2038 | | | | | | |
| HASI | 3831 | | 234ZC | \ | | | | | 2009 | | | 2009 | | | | | | |
| HASI | 3832 | | 234ZB | \ | | | | | 2009 | | | 2009 | | | | | | |
| HASI | 3836 | | 234-5ZA | \ | | | | | 2015 | | | 2016 | | | | | | |
| HASI | 3838 | | 234-5Z | \ | | | | | 2015 | | | 2038 | | | | | | |
| HASI | 3842 | | 232Z | \ | | | | | 2013 | | | 2038 | | | | | | |
| HASI | 3854 | | 225WC | \ | | | | | 2016 | | | 2016 | | | | | | |
| HASI | 3935 | | 216Z9B | \ | | | | | 2014 | | | 2023 | | | | | | |
| HASI | 3936 | | 216Z9A | \ | | | | | 2014 | | | 2014 | | | | | | |
| HASI | 8506 | | 216Z9C | \ | | | | | 2014 | | | 2014 | | | | | | |
| HASI | 8507 | | 241ZRB | \ | | | | | 2010 | | | 2038 | | | | | | |
| HASI | 8508 | | 2722Z | \ | | | | | 2010 | | | 2038 | | | | | | |
| HASI | 8509 | | 2736ZD | \ | | | | | 2012 | | | 2012 | | | | | | |
| HASI | 8510 | | 2902Z | \ | | | | | 2009 | | | 2009 | | | | | | |

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Operations/Field Office: **Richland**
Print Date: **3/9/2000**
Site Summary Level: **Hanford Site**
HQ ID: **0405**
Project **RL-TP05 / PFP Deactivation**

**Facility Deactivation**

| Site Code | RSF ID | Change Flag | Description | Class/Subclass | Hazard | Plan. Assess. Year | Fore. Assess. Year | Actual Assess. Date | Plan. Deac. Year | Fore. Deac. Year | Actual Deac. Date | Plan. Comp. Year | Fore. Comp. Year | Actual Comp. Date | Acc. Year | No Action | Comp. Status | RAD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HASI | 3279 | | 291Z1 | \ | | | | | 2016 | | | 2034 | | | | | | |
| HASI | 3280 | | 291Z | \ | | | | | 2016 | | | 2034 | | | | | | |
| HASI | 3330 | | 2904ZB | \ | | | | | 2015 | | | 2015 | | | | | | |
| HASI | 3331 | | 2904ZA | \ | | | | | 2015 | | | 2015 | | | | | | |
| HASI | 3392 | | 2736ZC | \ | | | | | 2015 | | | 2015 | | | | | | |
| HASI | 3393 | | 2736ZB | \ | | | | | 2015 | | | 2015 | | | | | | |
| HASI | 3394 | | 2736ZA | \ | | | | | 2015 | | | 2015 | | | | | | |
| HASI | 3395 | | 2736Z | \ | | | | | 2015 | | | 2015 | | | | | | |
| HASI | 3399 | | 2735Z | \ | | | | | 2010 | | | 2010 | | | | | | |
| HASI | 3401 | | 2734ZL | \ | | | | | 2010 | | | 2010 | | | | | | |
| HASI | 3402 | | 2734ZK | \ | | | | | 2010 | | | 2010 | | | | | | |
| HASI | 3403 | | 2734ZJ | \ | | | | | 2010 | | | 2010 | | | | | | |
| HASI | 3404 | | 2734ZH | \ | | | | | 2010 | | | 2010 | | | | | | |
| HASI | 3405 | | 2734ZG | \ | | | | | 2010 | | | 2010 | | | | | | |
| HASI | 3406 | | 2734ZF | \ | | | | | 2010 | | | 2010 | | | | | | |
| HASI | 3407 | | 2734ZD | \ | | | | | 2010 | | | 2010 | | | | | | |
| HASI | 3408 | | 2734ZC | \ | | | | | 2010 | | | 2010 | | | | | | |
| HASI | 3409 | | 2734ZB | \ | | | | | 2010 | | | 2010 | | | | | | |
| HASI | 3410 | | 2734ZA | \ | | | | | 2010 | | | 2010 | | | | | | |
| HASI | 3411 | | 2734Z | \ | | | | | 2009 | | | 2009 | | | | | | |
| HASI | 3415 | | 2731ZA | \ | | | | | 2014 | | | 2014 | | | | | | |
| HASI | 3416 | | 2731Z | \ | | | | | 2014 | | | 2014 | | | | | | |

# *Project Baseline Summary Report*

Data Source: **EM CDB**

Operations/Field Office: **Richland**

Site Summary Level: **Hanford Site**

Project **RL-TP05 / PFP Deactivation**

Report Number: **GEN-01b**

Print Date: **3/9/2000**

HQ ID: **0405**

**Facility Deactivation**

| Site Code | RSF ID | Change Flag | Description | Class/Subclass | Hazard | Plan. Assess. Year | Fore. Assess. Year | Actual Assess. Date | Plan. Deac. Year | Fore. Deac. Year | Actual Deac. Date | Plan. Comp. Year | Fore. Comp. Year | Actual Comp. Date | Acc. Year | No Action | Comp. Status | RAD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HASI | 3429 | | 2729Z | \ | | | | | 2014 | | | 2014 | | | | | | |
| HASI | 3430 | | 2727Z | \ | | | | | 2014 | | | 2014 | | | | | | |
| HASI | 3436 | | 2725Z | \ | | | | | 2010 | | | 2010 | | | | | | |
| HASI | 3468 | | 2721Z | \ | | | | | 2014 | | | 2014 | | | | | | |
| HASI | 3492 | | 2715ZL | \ | | | | | 2009 | | | 2009 | | | | | | |
| HASI | 3493 | | 2715Z | \ | | | | | 2009 | | | 2009 | | | | | | |
| HASI | 3521 | | 2712Z | \ | | | | | 2016 | | | 2016 | | | | | | |
| HASI | 3544 | | 270Z | \ | | | | | 2014 | | | 2014 | | | | | | |
| HASI | 3554 | | 2705Z | \ | | | | | 2016 | | | 2016 | | | | | | |
| HASI | 3555 | | 2704Z | \ | | | | | 2011 | | | 2011 | | | | | | |
| HASI | 3561 | | 2702Z | \ | | | | | 2011 | | | 2011 | | | | | | |
| HASI | 3562 | | 2701ZD | \ | | | | | 2011 | | | 2011 | | | | | | |
| HASI | 3563 | | 2701ZB | \ | | | | | | | | | | 9/30/1996 | | | | |
| HASI | 3564 | | 2701ZA | \ | | | | | 2011 | | | 2011 | | | | | | |
| HASI | 3571 | | 267Z | \ | | | | | 2015 | | | 2015 | | | | | | |
| HASI | 3618 | | 243ZB | \ | | | | | 2013 | | | 2013 | | | | | | |
| HASI | 3619 | | 243ZA | \ | | | | | 2013 | | | 2013 | | | | | | |
| HASI | 3620 | | 243Z | \ | | | | | 2013 | | | 2013 | | | | | | |
| HASI | 3643 | | 242Z | \ | | | | | 2015 | | | 2038 | | | | | | |
| HASI | 3672 | | 241ZG | \ | | | | | 2014 | | | 2014 | | | | | | |
| HASI | 3673 | | 241ZB | \ | | | | | 2009 | | | 2009 | | | | | | |
| HASI | 3674 | | 241ZA | \ | | | | | 2014 | | | 2014 | | | | | | |

# *Project Baseline Summary Report*

Data Source: **EM CDB**

Operations/Field Office: **Richland**

Site Summary Level: **Hanford Site**

Project **RL-TP05 / PFP Deactivation**

Report Number: **GEN-01b**

Print Date: **3/9/2000**

HQ ID: **0405**

## Facility Deactivation

| Site Code | RSF ID | Change Flag | Description | Class/Subclass | Hazard | Plan. Assess. Year | Fore. Assess. Year | Actual Assess. Date | Plan. Deac. Year | Fore. Deac. Year | Actual Deac. Date | Plan. Comp. Year | Fore. Comp. Year | Actual Comp. Date | Acc. Year | No Action | Comp. Status | RAD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HASI | 3675 | | 241Z | \ | | | | | 2016 | | | 2038 | | | | | | |
| HASI | 3829 | | 236Z | \ | | | | | 2015 | | | 2038 | | | | | | |
| HASI | 3831 | | 234ZC | \ | | | | | 2009 | | | 2009 | | | | | | |
| HASI | 3832 | | 234ZB | \ | | | | | 2009 | | | 2009 | | | | | | |
| HASI | 3836 | | 234-5ZA | \ | | | | | 2015 | | | 2016 | | | | | | |
| HASI | 3838 | | 234-5Z | \ | | | | | 2015 | | | 2038 | | | | | | |
| HASI | 3842 | | 232Z | \ | | | | | 2013 | | | 2038 | | | | | | |
| HASI | 3854 | | 225WC | \ | | | | | 2016 | | | 2016 | | | | | | |
| HASI | 3935 | | 216Z9B | \ | | | | | 2014 | | | 2023 | | | | | | |
| HASI | 3936 | | 216Z9A | \ | | | | | 2014 | | | 2014 | | | | | | |
| HASI | 8506 | | 216Z9C | \ | | | | | 2014 | | | 2014 | | | | | | |
| HASI | 8507 | | 241ZRB | \ | | | | | 2010 | | | 2038 | | | | | | |
| HASI | 8508 | | 2722Z | \ | | | | | 2010 | | | 2038 | | | | | | |
| HASI | 8509 | | 2736ZD | \ | | | | | 2012 | | | 2012 | | | | | | |
| HASI | 8510 | | 2902Z | \ | | | | | 2009 | | | 2009 | | | | | | |

## Technology Needs

# *Project Baseline Summary Report*

Data Source: **EM CDB** Report Number: **GEN-01b**

Operations/Field Office: **Richland** Print Date: **3/9/2000**

Site Summary Level: **Hanford Site** HQ ID: **0405**

Project **RL-TP05 / PFP Deactivation**

## Technology Needs

**Site Need Code:** RL-DD02

**Site Need Name:** Glove Box Volume Size Reduction System for PFP

**Focus Area Work Package ID:** DD-13 **Focus Area Work Package:** Oversized Metallic TRU Waste Disposition

**Focus Area:** DDFA **Agree with Technology Link:** Y

**Benefits (Cost, Risk Reduction, Both):**

| Technologies | Cost Savings (in thousands of dollars) | Range of Estimate |
|---|---|---|
| Portable Concentrator for Processing Plutonium Contaminated Solutions | | |
| Portable Concentrator for Processing Plutonium Contaminated Solutions | | |
| Laser Cutting and Size Reduction | | |
| Laser Cutting and Size Reduction | | |
| High Speed Clamshell Pipe Cutter | | |
| High Speed Clamshell Pipe Cutter | | |
| Oxy-Gasoline Torch | | |
| Oxy-Gasoline Torch | | |
| Self Contained Pipe Cutting Shear | | |
| Self Contained Pipe Cutting Shear | | |
| Decommissioning In-Situ Plutonium Inventory Monitor (DISPIM) | | |
| Decommissioning In-Situ Plutonium Inventory Monitor (DISPIM) | | |
| Decontamination and Volume Reduction System (DVRS) | | |
| Decontamination and Volume Reduction System (DVRS) | | |
| Hand Held Shear | | |
| Hand Held Shear | | |
| WIPP Certifiable TRU Standard Waste Box Counter | | |

## Technology Needs

WIPP Certifiable TRU Standard Waste Box Counter

**Site Need Code:** RL-DD03

**Site Need Name:** Terminal Clean-out and TRU Waste Decontamination of PFP

**Focus Area Work Package ID:** DD-08 **Focus Area Work Package:** Separation Process Facilities D&D

**Focus Area:** DDFA **Agree with Technology Link:** Y

**Benefits (Cost, Risk Reduction, Both):**

| Technologies | Cost Savings (in thousands of dollars) | Range of Estimate |
|---|---|---|
| Liquid Membrane System for Removal and Concentration of Transuranic Elements | | |
| Liquid Membrane System for Removal and Concentration of Transuranic Elements | | |
| TRUEX/SREX | | |
| TRUEX/SREX | | |
| Portable Concentrator for Processing Plutonium Contaminated Solutions | | |
| Portable Concentrator for Processing Plutonium Contaminated Solutions | | |
| Decontamination and Volume Reduction System (DVRS) | | |
| Decontamination and Volume Reduction System (DVRS) | | |

**Site Need Code:** RL-DD04

**Site Need Name:** TRU Waste Fixatives for PFP

**Focus Area Work Package ID:** DD-13 **Focus Area Work Package:** Oversized Metallic TRU Waste Disposition

**Focus Area:** DDFA **Agree with Technology Link:** Y

**Benefits (Cost, Risk Reduction, Both):**

| Technologies | Cost Savings (in thousands of dollars) | Range of Estimate |
|---|---|---|

## Technology Needs

Reactor Surface Contamination Stabilization

Reactor Surface Contamination Stabilization

Strippable Coatings and Fixatives

Strippable Coatings and Fixatives

**Site Need Code:** RL-99-001-NM

**Site Need Name:** Supplemental Equipment for Pyrolysis Technology Deployment at Plutonium Finishing Plant (PFP)

**Focus Area Work Package ID:** **Focus Area Work Package:**

**Focus Area:** **Agree with Technology Link:** Y

**Benefits (Cost, Risk Reduction, Both):** Both

| Technologies | Cost Savings (in thousands of dollars) | Range of Estimate |
|---|---|---|

**Site Need Code:** RL-99-002-NM

**Site Need Name:** Plutonium Finishing Plant (PFP) Polycube Analysis

**Focus Area Work Package ID:** **Focus Area Work Package:**

**Focus Area:** **Agree with Technology Link:** Y

**Benefits (Cost, Risk Reduction, Both):** Both

| Technologies | Cost Savings (in thousands of dollars) | Range of Estimate |
|---|---|---|

## Technology Needs

**Site Need Code:** RL-99-003-NM

**Site Need Name:** Off-Gas Measurement Systems for Polycubes at Hanford's Plutonium Finishing Plant (PFP)

**Focus Area Work Package ID:** **Focus Area Work Package:**

**Focus Area:** **Agree with Technology Link:** Y

**Benefits (Cost, Risk Reduction, Both):** Both

| Technologies | Cost Savings (in thousands of dollars) | Range of Estimate |
|---|---|---|

**Site Need Code:** RL-99-004-NM

**Site Need Name:** Process Optimization - - Extension of Pu Precipitation Process for Hanford's Plutonium Finishing Plant (PFP)

**Focus Area Work Package ID:** **Focus Area Work Package:**

**Focus Area:** **Agree with Technology Link:** Y

**Benefits (Cost, Risk Reduction, Both):** Both

| Technologies | Cost Savings (in thousands of dollars) | Range of Estimate |
|---|---|---|

## Technology Deployments

| | Deployment Year | | |
|---|---|---|---|
| **Deployment Status** | **Planned** | **Forecast** | **Actual Date** |

**Technology Name:** Personal Ice Cooling System (PICS)

Potential Deployment

# *Project Baseline Summary Report*

Data Source: **EM CDB**
Report Number: **GEN-01b**
Operations/Field Office: **Richland**
Print Date: **3/9/2000**
Site Summary Level: **Hanford Site**
HQ ID: **0405**
Project **RL-TP05 / PFP Deactivation**

**Technology Deployments**

| | Deployment Year | | |
|---|---|---|---|
| **Deployment Status** | **Planned** | **Forecast** | **Actual Date** |
| **Technology Name:** Radiological Characterization of Ducts (Flute Caterpillar) | | | |
| Potential Deployment | 2000 | | |