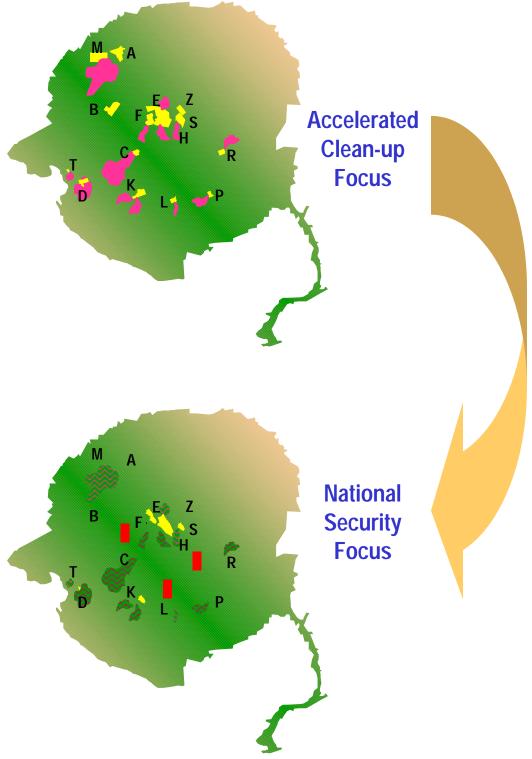
Environmental Management Program Performance Management Plan





This proposed Savannah River Site Environmental Management Program (EM) Performance Management Plan has been submitted to the U.S. Department of Energy-Headquarters (DOE-HQ) and approved by Jessie Roberson, the U.S. Department of Energy Assistant Secretary for EM for discussion with the Office of Management and Budget in August 2002.

Table of Contents

Acro	nyms	ii
Exec	Executive Summary	
1.0	Purpose	1-1
2.0	Background and Project Description 2.1 Scope Statement 2.2 Planned vs. Accelerated Scope 2.3 EM Completion Strategy 2.4 Risk Reduction and Cleanup Strategy	2-1 2-2 2-4 2-6 2-7
3.0	Environmental Management End States 3.1 SRS End State Vision 3.2 SRS EM End State Plan 3.3 Post-Closure Monitoring and Maintenance (PCM&M) Approach 3.4 Actions Required for Implementation	3-1 3-1 3-3 3-3 3-4
4.0	 EM Program and Strategic Initiatives Discussion 4.1 Strategic Initiatives Summary and Schedule 4.2 Program Descriptions with Strategic Initiative Details 4.3 Other EM Program Descriptions 	4-1 4-1 4-5 4-58
5.0	Project Funding Requirements 5.1 Funding Requirements 5.2 Cost Savings Commitment 5.3 Funding Structure	5-1 5-1 5-1 5-2
6.0	Project Management Approach 6.1 Performance Monitoring Process 6.1.1 Reporting and Evaluation Activities 6.1.2 Roles and Responsibilities 6.2 Configuration Control 6.2.1 Baseline Management 6.2.2 Change Control 6.2.3 Roles and Responsibilities 6.3 Risk Management Process	6-1 6-2 6-2 6-3 6-3 6-4 6-4 6-5 6-6
7.0	Key Agreements 7.1 Regulatory Agencies 7.2 DNFSB	7-1 7-1 7-2
8.0	Integrated Project Schedule	8-1
9.0	Key Decisions, Deliverables and Enabling Milestones Responsibility Matrix	9-1

This proposed Savannah River Site Environmental Management Program (EM) Performance Management Plan has been submitted to the U.S. Department of Energy-Headquarters (DOE-HQ) and approved by Jessie Roberson, the U.S. Department of Energy Assistant Secretary for EM for discussion with the Office of Management and Budget in August 2002.

Acronyms

AAM Assistant Manager
Am/Cm americium/curium
ARU acid recovery unit
B&Rs budget and reporting
BCP baseline change proposal
CCTV closed circuit television

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act

CIF Consolidated Incineration Facility

CLAB Central Laboratory Facility

CMP chemicals, metals, and pesticides

CMPC classified matter protection and control
D&D deactivation and decommissioning
DNAPL dense non-aqueous phase liquids
DNFSB Defense Nuclear Facilities Safety Board

DOE Department of Energy

DOE-HQ Department of Energy-Headquarters
DOE-SR Department of Energy-Savannah River

DRR Domestic Research Reactor

DU depleted uranium

DUS dynamic underground stripping
DWPF Defense Waste Processing Facility

ECF Entry Control Facility

EIS Environmental Impact Statement
EM Environmental Management
EPA Environmental Protection Agency

ER Environmental Restoration

ES&H Environmental, Safety and Health

ESS Essential Site Services
ETF Effluent Treatment Facility
FFA Federal Facility Agreement
FFTF Fast Flux Test Facility
FRR Foreign Research Reactor

FRR/DRR Foreign Research Reactor/Domestic Research Reactor

FY Fiscal Year

G&A General and Administrative

GP general purpose

GPRA Government Performance Results Act

GPS Global Positioning System

HCA Head of the Contracting Authority

HEU highly-enriched uranium

HLW high-level waste HP-52 HP-52 Pond

HRB H-Area Retention Basin

HVAC heating, ventilation and air condition

INEEL Idaho National Engineering and Environmental Laboratory

IPABS Integrated Planning and Budget System

KAMS K-Area Materials Storage

LAN local area network LAW low-activity waste

LCAM Life Cycle Asset Management
LLNL Lawrence Livermore National Lab

MARSSIM Multi Agency Radiation Survey and Site Investigation Manual

MCLs maximum contaminant limits
MCS Management Control System

Mk mark

MT metric tons

MTRE Material Test Reactor Equivalent

Na sodium

Nci/g Nanocuries/gram

NEPA National Environmental Policy Act

NESHAPs National Emission Standards for Hazardous Air Pollutants

NNSA National Nuclear Security Administration

OPEX operating expense

ORWBG Old Radioactive Waste Burial Ground

OSTs old solvent tanks

PBIs Performance-Based Incentives
PBS Project Baseline Summary

PCM&M Post Closure Monitoring and Maintenance
PDCF Pit Disassembly and Conversion Facility

PIP Plutonium Immobilization Project
PMP Performance Management Plan
PTSM Principle Threat Source Material

Pu plutonium

PUREX Plutonium Recovery and Extraction
RBOF Receiving Basin for Offsite Fuel

RCRA Resource Conservation and Recovery Act
RFETS Rocky Flats Environmental Technology Site

RODs Records of Decision

ROSRS Remotely Operated Size Reduction System

RW Office of Civilian Radioactive Waste Management (DOE)

S&M Surveillance and Maintenance

S/RID Standards/Requirements Identification Document

SCDHEC South Carolina Department of Health and Environmental Control

SFAS Security and Fire Alarm System

SNF spent nuclear fuel

SNM special nuclear material

SR Savannah River Operations Office

SRS Savannah River Site

SRTC Savannah River Technology Center

SST safe secure transport
STP Site Treatment Plan

SW solid waste

TEC total estimated cost
TPC total project cost
TRU transuranic

TSF Treatment and Storage Facility
TVA Tennessee Valley Authority

UCNI Unclassified Controlled Nuclear Material

UL Underwriters Laboratory
VOC volatile organic compound
VPP Voluntary Protection Program

WAN wide area network

WIPP Waste Isolation Pilot Plant

WP Warner's Pond

WSRC Westinghouse Savannah River Company

Executive Summary

The Savannah River Site (SRS) Cleanup Reform Vision is to accelerate completion of the Site's Environmental Management (EM) missions and transform SRS fully to a site focused on National Security. The SRS EM Program Performance Management Plan (PMP) outlines specific actions that the Department of Energy (DOE) is taking to accelerate the SRS cleanup program to 2030, while targeting an even more aggressive objective of achieving cleanup by 2025. The SRS Vision applies innovative cleanup reform approaches to accelerate both cleanup and risk reduction, reduce the life cycle costs of the EM program and enhance Homeland Security.

Accelerating cleanup at SRS will be achieved through implementation of the following three strategies:

- Accelerating the mitigation and elimination of risks through treatment and disposition of nuclear materials and waste and addressing hazards of contaminated sites and excess facilities
- Reducing the high carrying costs associated with maintaining large, complex nuclear facilities in a safe condition through accelerated deactivation and, where warranted, complete decommissioning
- Driving down the cost of doing business through a comprehensive review of
 activities, requirements and procedures for value added against a safe mission
 essential standard and adopting a closure mentality for facilities and operations
 with near-term completions

This plan outlines the approach that will be taken to achieve accelerated cleanup, specific roles and responsibilities for all parties involved, and establishes discrete project plans with clear milestones and deliverables to enable success, recognizing that future policy decisions, such as those made under the National Environmental Policy Act (NEPA), will be incorporated into the execution of the SRS accelerated cleanup program. This document establishes lines of accountability and will serve as the basis for monitoring progress and measuring success of the accelerated cleanup program at SRS.

The benefits of this accelerated cleanup initiative include:

- Reducing the cost of SRS cleanup by \$8 to \$12 billion;
- Shortening the cleanup schedule by 15 years or more; and
- Eliminating essentially all EM Program health, safety, environmental and security risks in half the time.

Further, the SRS Vision supports DOE Complex goals by providing a means for secure and cost effective consolidation of nuclear materials from other sites, providing a credible disposition path for plutonium and spent nuclear fuel, and supporting the early closure of other sites in the Complex. As noted in the table below, the benefits of the SRS Cleanup Reform Vision are significant, and include a dramatic reduction in the cost of the EM program (represented below in current year dollars with Long-Term Stewardship costs included through 2050 for both cases). The benefits are:

SRS Today	SRS Cleanup Reform Vision	
Complete High Level Waste (HLW) Project	➤ Complete HLW Project by 2020	
by 2039	➤ Produce 5000 HLW Canisters	
➤ Produce 6000 HLW Canisters		
> 2 Canyons are Operating	➤ 1 Canyon Operating after 2006-2007	
> 3 Spent Nuclear Fuel (SNF) Storage Basins	➤ 1 SNF Storage Basin Operating after 2004	
Operating	Complex-wide Consolidation and Post-	
No Disposition Path for Complex Nuclear	Canyon Materials Management Capability	
Materials Exists	Exists (Storage, Stabilization, Surveillance,	
	Disposition)	
Complete Shipments of Legacy Transuranic	Complete Shipments of Legacy TRU Waste	
(TRU) Waste by 2034	by 2013	
> Incineration of Legacy Plutonium Recovery &	Alternate Treatment Technology for Legacy	
Extraction (PUREX) Waste Planned	and F Canyon PUREX Waste Available	
Final Environmental Restoration (ER)	Last Groundwater Record of Decision by	
Remedy Construction in 2037	2023 with Project Construction by 2026	
➤ Broad Footprint/Containment to Protect with	Upgraded, Robust, Consolidated, Security	
In-Depth Defense	Posture	
Minimal Cash Flow to Maintain Safe Facility	Business-Based Deactivation and	
Conditions	Decommissioning (D&D) Implemented	
➤ EM Program Costs through 2050 ~ \$40-45	➤ EM Program Costs through 2050 Reduced by	
	\$8-\$12billion	

To implement the SRS Vision, an incremental investment from Fiscal Year 2003 (FY03) to FY08 is required, which will yield significant returns:

- Completing the high level waste processing up to 8 years sooner and completing all HLW project activities 20 years sooner while producing 1,000 fewer canisters (15% reduction).
- Accelerated completion of nuclear materials stabilization, including deactivation by 2006-2007 of F Canyon and FB-Line while enabling continued longer-term nuclear materials management at SRS. Along with the acceleration of high level waste

- disposal, this Plan provides an accelerated closure-project approach to the F-Area separations and F-Area high level waste tank operations.
- Consolidation of the Site's three spent fuel storage basins into one by 2004.
- Accelerated reduction of environmental risk in the Site's groundwater cleanup and solid waste programs. This includes expedited shipment of legacy transuranic waste to the Waste Isolation Pilot Plant (WIPP) with program completion nearly 21 years earlier than the current plan.
- Enhanced and forward-looking safeguards and security capability. This responds to current and evolving security threat guidance. The safeguards and security capabilities will support the accelerated cleanup and security initiatives at SRS and across the Complex, as well as ongoing and future national security missions.
- An integrated facility deactivation and decommissioning program that will assure cost-effective and environmentally responsible reduction in the Site's industrial and nuclear facility footprint by over 567,000 square feet.

Accelerated cleanup at SRS clearly requires DOE-wide integration and cooperation to consolidate and disposition nuclear materials and to expeditiously transport transuranic waste to the WIPP.

Success also depends in part on key stakeholders. Our plan to achieve the above results will be pursued with deliberate engagement of local communities and stakeholders, including the appropriate regulatory authorities for SRS. The Environmental Protection Agency (EPA) Region IV and the South Carolina Department of Health and Environmental Control (SCDHEC) support accelerating cleanup and risk reduction, as demonstrated by a signed letter of intent.

Throughout the development of this PMP, stakeholders have been very involved. Several meetings were held with the full SRS Citizens Advisory Board (CAB), as well as meetings with the subcommittees. Both EPA and state regulators attend these meetings. SRS held three public meetings in local communities. All comments were reviewed, and changes to the PMP were made based on comments from members of the public, regulators, League of Women Voters, and other stakeholders. Citizens have been supportive of SRS proposals to further reduce risk and achieve results sooner.

SRS is already making significant progress on a number of initiatives that support DOE's accelerated cleanup objectives, most notably supporting the closure of the Rocky Flats and Mound sites. SRS is working collaboratively with regulators to find innovative, flexible ways to meet commitments. SRS is also implementing program strategies that represent breakthroughs from previous processes. These "breakthrough" strategies are being applied to such things as americium/curium (Am/Cm) disposition, the low curie salt program, natural environmental remediation, and other programs.

Fundamentally, the SRS Vision represents a shift from risk management to risk reduction/risk elimination. This shift will require major program reconfigurations and substantial changes in how the site does work—within both the DOE and contractor organizations— with special emphasis on identifying closure projects with risk-appropriate requirements.

FY03 represents a transition year as new modes of doing business and contract changes supporting this new approach are put in place and implemented.

This Plan identifies opportunities to reduce lifecycle costs significantly, freeing up resources to be reinvested to accelerate cleanup and reduce risks faster. This Plan also provides a basis for predictable, stable funding as progress is made to reduce risks and accelerate cleanup.

As the project plan for accelerated cleanup, this Plan will be maintained as a living document to drive accelerated cleanup and achieve our Cleanup Reform vision by 2025.

1.0 Purpose

This Performance Management Plan (PMP) describes the approach that will be taken to achieve accelerated cleanup of the Savannah River Site (SRS). The existing cleanup plan is not appropriately focused on risk reduction, which results in a cleanup program that costs too much and takes too long. SRS is resolute that changing the current approach to one which is focused on reducing risk and accelerating cleanup will enable the Site to complete its Environmental Management (EM) mission by as early as 2025. This will be accomplished by investing in and aligning resources to complete projects that pose the greatest risk and adopting new methods and ways of doing business to advance the cleanup program.

Investing in programs that hold the greatest opportunity for accelerating the cleanup schedule and the risk reduction profile will reduce the life-cycle cost of the EM program and enhance our national Homeland Security posture. SRS has identified unique strategies, described within this PMP, that not only establish a new closure approach for EM work at SRS, but also enable accelerated closure and risk reduction progress at other Department of Energy (DOE) sites. This PMP exhibits a strong emphasis on facility closure and project completion, which will be achieved by:

- Adopting a risk-based approach to defining work requirements;
- Applying a closure-oriented approach to requirements and activities, as appropriate;
- Applying commercial standards to projects wherever possible, and tailoring standards and requirements to the job;
- · Maximizing the use of existing facilities and capabilities beyond their current use;
- Minimizing construction of new EM facilities;
- Subcontracting work when it can be done more cost-effectively;
- Removing requirements that actually inhibit cleanup progress or increase risk aversion;
- Integrating project activities across programs and sites to find the best approach; and,
- Measuring cleanup progress against results rather than processes.

With this focus, SRS can reduce the cost of SRS cleanup by \$8 to \$12 billion, reduce the cleanup schedule by 15 years or more, and eliminate essentially all of the EM Program health, safety, environmental and security risks in half the time originally planned. SRS is working closely with its regulators to develop implementation plans that result in dramatic and significant cleanup acceleration.

Recognizing the importance of accelerating risk reduction and project completion, SRS has already begun the process of implementing some of the strategic initiatives discussed in this PMP. Others will be implemented as soon as discussion with regulators are complete, National Environmental Policy Act (NEPA) and other documented decisions are updated, or as consolidation opportunities are accepted and authorized to proceed. While cleanup progress is already underway, SRS is committed to continuing to identify additional risk reduction and cleanup acceleration opportunities. SRS will work closely with its regulators, DOE Headquarters, other DOE sites, and other stakeholders to implement its accelerated cleanup plan and seek additional program improvements. This PMP will be updated as new opportunities to further accelerate the EM cleanup program arise. SRS will work aggressively to complete cleanup by 2025.

2.0 Background and Project Description

The Savannah River Site (SRS) is a key Department of Energy (DOE) industrial complex dedicated to the stewardship of the environment, the enduring nuclear weapons stockpile and nuclear materials. More specifically, the SRS processes and stores nuclear materials in support of the national defense and U.S. nuclear non-proliferation efforts. The Site also develops and deploys technologies to improve the environment and treat and dispose of nuclear and hazardous materials left from the Cold War. While the changing world has caused a downsizing of the Site's original defense mission, SRS's national commitment continues in several areas: reducing the nuclear danger, transferring applied environmental technology to government and nongovernment entities, cleaning up the site, and managing the waste produced.

This SRS Environmental Management (EM) Program Performance Management Plan (PMP) discusses the approach SRS will implement to accelerate the SRS EM Program to as early as 2025. The overall benefits of the SRS Cleanup Reform Proposal directly support the Calls to Action discussed in the EM Top-to-Bottom Review and provide for expedited cleanup, resulting in significant and early risk reduction, reduced costs, accelerated schedules and enhanced Homeland Security.

The groundwork for implementing Top-to-Bottom approaches has already been laid at SRS. Integrated Safety Management has been fully implemented. SRS is already supporting closure of other EM sites. SRS has established cooperative relationships with the regulators and has been recognized for the streamlining and accomplishments realized in the remediation program. SRS initially developed and offered this "Vision" concept early in Fiscal Year 2002 (FY02) and has continued to develop the details of our approach. Finally, the SRS emphasis on cost reduction is clear in the Contractor's commitment to achieve additional scope for hundreds of millions dollars less than the planned contract funding (FY01-FY06), along with the establishment and implementation of an active program to achieve even greater savings.

Over the last few years, SRS has made real progress in cleanup. More than 75% of the scheduled nuclear materials have been stabilized (109,042 of 143,315 items) and 42 of the 60 Defense Nuclear Facility Safety Board (DNFSB) commitments have been met. Additionally, SRS has received and stored the contents of 260 Spent Nuclear Fuel (SNF) casks from around the world, while at the same time continuing to deinventory the Receiving Basin for Offsite Fuel (RBOF) (currently 46% complete).

More than 1,300 high level waste (HLW) canisters have been produced, representing 21% of the total canisters expected to be produced to complete removal of the HLW from the storage tanks. SRS is the first site to successfully close HLW tanks. Forty-nine storage tanks containing 37 million gallons of high level waste remain for disposition. Volumetrically this quantity represents 40% of the DOE inventory while, radiologically, at 420 million curies, it represents 60% of the DOE inventory. Notable improvements have also been realized in the HLW system performance over the last year.

Shipments of transuranic (TRU) waste to the Waste Isolation Pilot Plant (WIPP) began last year and low-level waste is being sent to the Nevada Test Site, while other wastes are being sent off-site to Tennessee and Utah.

In the Environmental Restoration (ER) program, 306 of the 515 waste sites have been closed or have Records of Decision (RODs) in place. The established, productive relationship between SRS and its regulators sets the stage for additional enhancements to the ER project through the deployment of new technologies and streamlining the regulatory documentation process.

SRS was the first large site to receive the Voluntary Protection Program (VPP) Star Status, evidence of SRS's responsibility to operate safely in order to protect its workers and the public. SRS has consistently received satisfactory ratings on security reviews conducted by Department of Energy-Headquarters (DOE-HQ), an accomplishment that underscores the SRS commitment to secure operations.

2.1 Scope Statement

Building on the cleanup progress to date, SRS will implement additional reforms in order to achieve accelerated cleanup for remaining activities in accordance with its Cleanup Reform Vision. SRS Cleanup Reform will eliminate or defer work on low-risk activities and divert resources to complete cleanup work that reduces higher risk faster. Strong emphasis is placed on facility closure and project completion. SRS Cleanup Reform not only establishes a new closure approach for EM work at SRS, but also enables aggressive progress at other DOE sites, supporting their faster closure and risk reduction at lower costs.

In essence, the scope of this accelerated cleanup program involves completing the removal of waste from all SRS high level waste tanks and closing all the tanks; completing nuclear materials stabilization and processing in the SRS canyons and separations facilities; consolidating and dispositioning SNF; safely treating and disposing of solid wastes; remediating groundwater plumes and soil contamination; and deactivating and/or decommissioning inactive SRS facilities.

SRS will complete cleanup, virtually eliminating the risk and deactivating the majority of facilities at SRS, by 2025. The Site will:

- Process nearly 37 million gallons of high level waste into 5,000 canisters
- Close 51 high level waste tanks (two tanks closed to date)
- Disposition 12 tons of plutonium-bearing materials
- Receive up to 25,000 Material Test Reactor Equivalent (MTRE) elements
- Process Foreign Research Reactor/Domestic Research Reactor fuel in H Canyon on a not-to-interfere basis
- Ship 10,400 cubic meters of TRU to the WIPP
- Treat 97,000 gallons of Plutonium Recovery and Extraction (PUREX) waste

- · Remediate 515 ER waste sites
- Deactivate 5 reactors, 2 canyon facilities, and 2 fuel fabrication facilities
- Deactivate and/or decommission facilities where no future facility use or mission is planned

This PMP provides summary-level, as well as detailed information for the fourteen unique strategic initiatives that make up the SRS Cleanup Reform Proposal and discusses the results that will be realized. They will be accomplished through the implementation of EM's Top-to-Bottom philosophies, which will help to eliminate barriers and inefficiencies that impede cleanup progress. The fourteen initiatives are as follows:

- WM-1, Expedited HLW Processing
- WM-2, Expedited Risk-Based Tank and Facility Closure
- MM-1, Accelerated Nuclear Material Facilities Consolidation and Deactivation
- MM-2, Enhanced SNF Disposition
- MM-3(C), Optimize Disposition of Complex-Wide Plutonium Bearing Materials
- WM-3, Expedite TRU Waste Shipments to the WIPP
- WM-4, Accelerate Risk Reduction through Expedited Management of High Activity TRU Waste
- WM-5, Cost Effective/Risk-Reducing Alternative to Incineration for PUREX Waste
- REM-1, Accelerate Closure of the Old Radioactive Waste Burial Ground
- REM-2, Accelerate Contaminant Reduction in Fourmile Branch Stream
- REM-3, Accelerate Risk Reduction Through Innovative Technologies and Improved Regulatory Processes
- DD-1, Accelerate Facilities Disposition
- SS-1, Accelerate Required Improvements to General Site Security Infrastructure
- SS-2(C), Centralize Alarm Services at SRS

SRS is positioned to satisfy EM priorities to accelerate cleanup not only at the SRS, but also throughout the DOE Complex. Implementing the facility disposition approach described in Section 3 and the strategic initiatives discussed in Section 4 will result in significant risk reduction, lifecycle cost savings and schedule acceleration for DOE. SRS is aggressively moving forward to accelerate the SRS cleanup program. Many of the activities associated with the strategic initiatives in this PMP are already underway; others will be implemented with concurrence and Cleanup Reform funding support from DOE-HQ.

This SRS EM Program PMP describes the framework to achieve accelerated cleanup and risk reduction more cost-effectively. The PMP includes the objectives of SRS Cleanup Reform, as well as the scope, schedule, roles and responsibilities, milestones, end state descriptions, long-term stewardship assumptions, success metrics, and actions required to achieve cleanup by as early as 2025. The vision for interim and final end states and the approach to achieve these end states are discussed in Section 3. An integrated project schedule and a responsibility assignment matrix are contained in Section 8 and 9, respectively. This schedule and responsibility assignment matrix include technical and implementation details. Details of funding requirements and assumptions are discussed in Section 5. The SRS Baseline Management approach, including roles and responsibilities; baseline definition and description; performance-based incentives; change control and performance monitoring; evaluation and reporting; and the risk management process is contained in Section 6.

As progress is realized and additional cost and schedule improvements are achieved, the PMP will be adjusted through formal change control, as appropriate. Implementing breakthrough approaches to site operations and business activities will result in additional streamlining and acceleration. Continuous improvement will continue to be emphasized at SRS as implementing new processes and improvements will be a critical effort to further accelerate risk reduction.

2.2 Planned vs. Accelerated Scope

Accelerating risk reduction, with a continued strong emphasis on protecting the environment and the health and safety of the workers and the public, is a primary objective of the SRS Cleanup Reform Proposal. With this aggressive focus on reducing risk as quickly as possible, SRS will complete cleanup work nearly two decades earlier than originally planned and at lifecycle savings of \$8-12 billion.

Figure 2.1 below clearly depicts the advantages of aggressively pursuing SRS Cleanup Reform.

Figure 2.1 SRS Today vs. SRS Cleanup Reform Vision

SRS Today	SRS Cleanup Reform Vision	
Complete HLW Project by 2039	➤ Complete HLW Project by 2020	
➤ Produce 6000 HLW Canisters	➤ Produce 5000 HLW Canisters	
> 2 Canyons are Operating	> 1 Canyon Operating after 2006-2007	
➤ 3 SNF Storage Basins Operating	> 1 SNF Storage Basin Operating after 2004	
 No Disposition Path for Complex Nuclear 	Complex-wide Consolidation and Post-	
Materials Exists	Canyon Materials Management Capability	
	Exists (Storage, Stabilization, Surveillance,	
	Disposition)	
➤ Complete Shipments of Legacy TRU Waste	Complete Shipments of Legacy TRU Waste	
by 2034	by 2013	
➤ Incineration of Legacy PUREX Waste Planned	➤ Alternate Treatment Technology for Legacy	
	and F Canyon PUREX Waste Available	
➤ Final ER Remedy Construction in 2037	Last Groundwater Record of Decision by	
	2023 with Project Construction by 2026	
Broad Footprint/Containment to Protect with	Upgraded, Robust, Consolidated, Security	
In-Depth Defense	Posture	
Minimal Cash Flow to Maintain Safe Facility	Business-Based Deactivation and	
Conditions	Decommissioning (D&D) Implemented	

Reaching these EM end state results by 2025 will require the implementation of the SRS Cleanup Reform in the very near term. Through near-term implementation, SRS cleanup and risk reduction progress will begin to be realized almost immediately.

For instance, by the end of Fiscal Year 2003 (FY03), SRS will:

- Deactivate TNX and D Areas
- Implement the use of new frit at the Defense Waste Processing Facility which will allow increased waste loading in each HLW canister and support increased canister production rates
- Initiate Low Curie Salt Disposition
- Receive for storage all designated Rocky Flats materials (approximately 2,000 items)
- Complete repackaging of Rocky Flats classified metal
- Disposition Depleted Uranium (Du) Oxide in 728-F and 730-F
- Transfer Americium/Curium (Am/Cm) to HLW
- Initiate F Canyon Deactivation and reduction of surveillance and maintenance (S&M)
- De-inventory approximately one metric ton of SNF and deactivate K-Basin
- Achieve the ROD to close the Old Radioactive Waste Burial Ground (ORWBG), resulting in a safe and cost-effective remedy that reduces total risk to the environment, public and workers, while leaving 600,000 curies of waste (similar to Idaho National Engineering and Environmental Laboratory's Pit 9 waste) in place
- Obtain National Environmental Protection Act (NEPA) decision to begin disposition
 of foreign research reactor/domestic research reactor (FRR/DRR) in H Canyon as
 early as FY03
- Complete NEPA process to select an alternative Pu disposition option

By the end of FY06, SRS will:

- Disposition 2,300 canisters of HLW glass (46%) and 17 million gallons of salt solution (20%)
- · Close two additional HLW tanks
- Complete de-inventory of approximately 20 metric tons of SNF and deactivate the RBOF
- Complete Plutonium packaging of approximately 1,000 3013 containers
- Complete shipment of 16,000 drums (60% of total inventory) of low-activity TRU waste to WIPP
- Issue Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) ROD and complete definitive design for four high-risk ER waste sites
- Complete Dynamic Underground Streaming at M Basin, removing over one million pounds of solvents from groundwater
- · Decommission T, D, and M Areas
- Reduce the EM Facility Footprint by more than 567,000 square feet
- Complete receipts of all additional Complex-wide nuclear materials for consolidated storage (up to 6,900 shipping containers)
- Obtain NEPA decision identifying long-term disposition option for SNF

By the end of FY08, SRS will:

- Disposition 2,700 canisters of HLW glass (54%) and 28 million gallons of salt solution (33%)
- Complete installation of long-term 3013 container packaging/surveillance capability in an existing facility
- Deactivate F Canyon/FB-Line including de-inventory of FB-Line vaults
- Maintain integrated nuclear materials management programs by completing current milestones in addition to the new initiatives (e.g., complete processing of unirradiated Mark [Mk]-22 fuel assemblies)
- Complete shipment of 24,000 drums (\sim 90% of total inventory) of low-activity TRU waste to WIPP
- Achieve closure of the Old Radioactive Waste Burial Ground (ORWBG)
- Reduce tritium flux to Fourmile Branch Stream by 70%

SRS performance toward meeting these objectives will be tracked and documented using the Performance Expectations/Metrics that are listed in the Strategic Initiatives in Section 4.2. Through active performance evaluation and measurement, SRS will stay on track to achieve EM Cleanup by 2025.

2.3 EM Completion Strategy

A focus on completing the SRS EM Program and reducing the lifecycle costs of operations will require changes not only in how projects are currently sequenced and scheduled, but also in currently planned approaches to cleanup. For example, in the High Level Waste Project, using a new frit in glass production and filling the canisters in a higher level will allow $\sim\!\!25\%$ more glass to be placed in each canister, reducing the total number of canisters produced from 6,000 to 5,000.

The SRS Cleanup Reform Proposal also promotes the consolidation of DOE nuclear materials, enabling the Department to accelerate the closure of other sites within the Complex, as well as providing for enhanced Homeland Security. With the cancellation of the Plutonium Immobilization Project (PIP), plutonium-bearing materials across the DOE Complex no longer have an assumed disposition path. However, consolidating and dispositioning these materials at SRS is expected to save on the order of \$2 billion at other locations where these materials are now "stranded" and provide DOE with a coordinated plan for managing these materials with improved national security.

Adopting a Closure Facility Approach is fundamental to achieving accelerated cleanup and risk reduction. SRS is in the process of applying a Safe Mission Essential concept to its programs and activities to appropriately align requirements with work to be accomplished. Aligning risk-based requirements to closure activities will ensure that facilities undergoing closure within the next decade will be closed both safely and cost-effectively on an expedited basis. For instance, tailoring Standards Requirements Identification Document (S/RID) requirements in the SRS ER program has significantly streamlined the ER operations and organization. Expanding this approach to other cleanup activities at SRS will result in further savings and schedule acceleration.

Designating SRS as a Long-Term National Security Site will provide a clear commitment that SRS will be maintained under institutional control for an extended period of time. With such a designation from Congress and/or treatment by DOE, the regulatory agencies and oversight groups, the State of South Carolina and the taxpayers will be assured that ownership and long-term stewardship of the SRS will be in the hands of

the federal government for the foreseeable future. This "guarantee" will aid SRS in its determination of appropriate end states for the EM facilities and projects. This will allow SRS to close facilities without returning these areas to "greenfield" conditions, which is expected to significantly reduce SRS closure costs. In addition, this approach would provide continued assurance that the public health and safety would be fully protected.

Specific program benefits realized from completing the SRS EM Program are significant. The HLW Project is completed about twenty years early and produces 17% fewer HLW canisters. The deactivation of the F Canyon and FB-Line chemical processing facilities is accelerated so that only H Canyon and HB-Line remain operational after 2006-2007. SRS will consolidate SNF from 3 storage basins to a single storage basin after 2004. SRS Cleanup Reform provides for Complex-wide consolidation and management of nuclear materials, including storage, stabilization, surveillance and disposition. The legacy TRU waste will be shipped to the WIPP nearly two decades ahead of schedule. Not only is the costly incineration of legacy PUREX wastes avoided, but the alternative treatment selected for this waste will also treat the PUREX waste from F Canyon by 2009. The ER project is accelerated from 2037 to 2026 for completion of the last scheduled remedial system. Safeguards and Security improvements provide DOE and the nation with an upgraded, robust, and consolidated Homeland Security posture. Inactive facilities are responsibly and effectively deactivated to eliminate on-going costs associated with surveillance and maintenance. Finally, SRS Cleanup Reform implements a business-based approach for deactivation and decommissioning of facilities.

Several of these SRS accelerated cleanup initiatives are already underway, such as expediting HLW sludge processing, low curie salt disposal and the F-Canyon Suspension Project. Additional initiatives are ready to be implemented but require some action, such as a regulatory approval or a DOE-HQ decision, prior to implementation. Finally, several of the initiatives require additional evaluation prior to a decision to implement.

2.4 Risk Reduction and Cleanup Strategy

SRS's strategic approach to cleanup reform is based on three primary thrusts:

- to accelerate mitigation/elimination of risks through treatment and disposition of nuclear materials and waste and addressing hazards of contaminated sites and excess facilities,
- to reduce the high carrying costs required to maintain large, complex nuclear facilities in a safe condition through accelerated deactivation and, where warranted, complete decommissioning, and
- to drive down the cost of doing business through a comprehensive review of activities, requirements and procedures for value added against a standard of "safe mission essential" and adopting a closure mentality for facilities that are approaching the end of their mission.

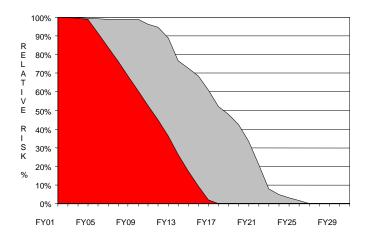
All EM programs at SRS were challenged to re-define the fundamental problems to enable new solution sets, considering the conclusions of the Top-to-Bottom review, Cleanup Reform, EM principles and the key thrusts described above. Program specific proposals were evaluated based on how effectively they met these objectives.

The magnitude of the cleanup challenge at SRS results in the need for a sustained, high-energy program lasting several decades. Significant near-term investment is needed to realize the substantial risk and cost reduction objectives of the cleanup reform initiative. Through the three-pronged strategic approach, SRS believes it has achieved an appropriate balance between reducing lifecycle risk and cost, reduction in nearer term carrying costs, and near-term investment. For example, acceleration of the HLW program will result in substantial lifecycle risk and cost reduction by adopting a fundamentally different approach to salt disposition and tank closure. Accelerated deactivation of F-Area operational facilities and spent fuel storage facilities will result in significant near term reduction in carrying costs for these high cost facilities. For example, deactivating F Area by FY07 instead of the currently scheduled FY12 will realize a net savings of approximately \$475 million during this time frame, while accelerating the deactivation of the RBOF will save \$35 million in lifecycle costs.

Ultimately, the pace of cleanup execution will be dependent on both SRS's ability to drive performance improvement and the resources invested in cleanup acceleration. SRS will continue to explore innovative opportunities to accelerate cleanup as well as integrated program planning to optimize utilization of resources invested by Congress to support the cleanup reform initiative.

Consistent with the intent of the Cleanup Reform Appropriation, this Plan describes an approach that will significantly reduce risk at SRS as the EM Program is completed. In fact, the substantial risk reduction achieved by implementing the SRS Cleanup Reform Proposal is the greatest advantage of this proposal. As depicted in Figure 2.2, SRS's risk is virtually eliminated eight years ahead of schedule. This reduction was determined through a study that analyzed the amount of materials stored or scheduled for processing in individual facilities across the site and comparing that risk to those of the program described in this Plan.

Figure 2.2 SRS Cleanup Reform Vision Expedites Risk Reduction and Improves Homeland Security



In order to complete the cleanup by 2025, SRS has assumed the following:

- Use of performance and risk-based definitions for high level wastes in DOE Order 435 1
- Designation/treatment of SRS as a National Security Site to drive cleanup end state expectations
- Re-issuance of National Environmental Policy Act (NEPA) RODs that support SRS approaches for Spent Fuel Management, Waste Management, Plutonium Disposition, etc.
- Capability to ship to federal repositories on accelerated schedules defined in this Plan
- Effective integration across various DOE programs, such as EM, National Nuclear Security Administration (NNSA), Office of Civilian Radioactive Waste Management (RW), etc.
- Implementation of risk-based closure strategy for designated facilities and operations
- Implementation of tailored requirements, appropriate to facility status and risks
- Funding to support accelerated cleanup objectives
- Consolidation of EM Cleanup funding into a reduced number of appropriation accounts (preferably one) and relief under the line item construction projects that would increase SRS's flexibility to move funds into and out of such projects
- Workforce restructuring flexibility to enable cost-effective execution of this PMP
- Regular communication and collaboration between SRS and DOE-HQ and among SRS and other DOE sites to define and resolve issues and facilitate cleanup progress, benchmarking and lessons-learned

Additional discussion pertaining to these and other assumptions are contained in the descriptions of the strategic initiatives in Section 4 of this PMP. In addition, general and programmatic assumptions and the risk management approach is discussed in Section 6.3.

3.0 Environmental Management End States

The Savannah River Site (SRS) Cleanup Reform Vision completes the Site's Environmental Management (EM) mission as early as 2025 and transitions SRS to a site focused on national security. This section:

- presents the end state vision of watersheds and inactive facilities at the time of turnover to a new landlord with continuing national security missions;
- describes SRS's efforts to develop an EM End State Plan to refine this vision and to
 obtain buy-in from the Department of Energy-Headquarters (DOE-HQ), as well as
 regulators, the community and other stakeholders;
- · discusses the requirements for Post Closure Monitoring and Maintenance, and
- outlines the actions required to reach the EM End State.

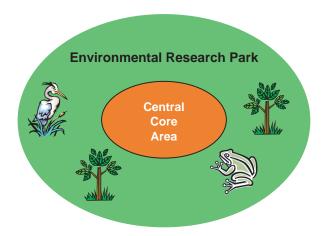
3.1 SRS EM End State Vision

The SRS End State Vision concentrates operations toward the center of the site to form a central core area with continuing national security missions. This central core area will be surrounded by an environmental research park, which will provide a buffer zone between the central core area and the public. Most facilities in the buffer zone will be decommissioned with minimal requirements for Post Closure Monitoring and Maintenance. The entire site will continue to be completely under federal control with no recreational or residential use.

As the EM program missions are completed and the SRS Cleanup Reform Vision is attained, SRS will have undergone substantive changes from the multiple-area operating site of today. All the inactive SRS reactor facilities will be deactivated, with some of the ancillary reactor area facilities removed and others such as the disassembly basins grouted in place and covered with a low permeability soil cap. The EM nuclear materials will be stabilized, processed and turned over to a non-EM mission for future commercial use or shipped to a Federal repository for disposal. The inactive separations facilities will be deactivated or decommissioned. Any reactor and separations facilities with other mission use will be transitioned from the EM program to the new mission owner or Site landlord. All high level waste (HLW) will be removed from the HLW tanks and vitrified, and the 51 waste tanks will be filled with grout. All the HLW canisters will be shipped to the Federal repository. HLW processing facilities will be deactivated and their canyon cells filled with grout. All legacy transuranic (TRU)

waste will be removed from SRS and shipped to the Waste Isolation Pilot Plant (WIPP) and all legacy Plutonium Recovery and Extraction (PUREX) waste will be treated. All 515 SRS waste site and contaminated groundwater remediation projects will be completed with remedial action decisions implemented.

At the time of turnover to long-term stewardship, operations will be concentrated toward the center of the site to form a central core area with continuing national security missions. This industrialized core area will be surrounded by an environmental research park, which will provide a buffer zone between the central core area and the public. The entire site will be completely under federal control with no recreational or residential use.



SRS EM End State Vision

The SRS EM End State Vision is:

- Facilities outside the central core area will be either deactivated to an appropriate condition for long-term (decades) storage, or decommissioned. For example,
 - T, D and M Area Facilities will be decommissioned.
 - A-Area Administrative Facilities will be decommissioned and the Savannah River Technology Center (SRTC) mission will continue to support the enduring SRS missions in a significantly reduced footprint or in a new research and development facility located in the industrialized core area of the Site.
- Facilities within the central core area will be turned over for National Security mission related operations, deactivated to an appropriate condition for long-term (decades) storage, or decommissioned.
 - K-, P- and R-Reactor Buildings will be deactivated and the disassembly basins will be stabilized (grouted). Ancillary buildings will be decommissioned.
 - C-Reactor Building will continue to provide decontamination and waste management services for the Site's continuing missions. The C-Reactor disassembly basin will be stabilized (grouted), and ancillary buildings will be decommissioned.
 - L-Reactor Building will provide storage and receive spent nuclear fuel (SNF) from non-EM government entities; some L Area ancillary facilities will continue to support the fuel operations, however these facilities will be owned and operated by non-EM entities.
 - In the Separations Areas, the nuclear materials processing facilities (Canyons and B-Lines) and HLW tanks will be deactivated; Tritium operations and some

- administrative facilities will continue to support national security missions; and, the remaining administrative facilities will be decommissioned.
- During deactivation planning, all hardened facilities will be considered for alternative waste disposition facilities.
- Environmental Remediation Program end states for the Site's soil, surface water, and groundwater cleanup projects will be developed on a watershed-by-watershed basis and will be consistent with the SRS Strategic Plan, the Federal Facilities Agreement (FFA), the SRS Land Use Control Assurance Plan, and the SRS Long Range Comprehensive Plan. By 2026, waste sites with a risk to surface water or groundwater will be remediated and controlled, and impacted groundwater will be in final remediation or in monitoring. Sites with no risk to groundwater will be under institutional control, using surveillance, maintenance, and monitoring.

3.2 SRS EM End State Plan

SRS has initiated development of an EM End State Plan to establish a process and criteria to determine the end states appropriate for long-term (decades) lay-up with minimal risk and minimal cost for Post Closure Monitoring and Maintenance (PCM&M). SRS intends to obtain buy-in among DOE-HQ and Department of Energy-Savannah River (DOE-SR), appropriate regulatory bodies and other stakeholders will be obtained in Fiscal Year 2003 (FY03). The plan will define the EM end state for facilities, the environment and waste sites. It will take into consideration existing documents such as the SRS Strategic Plan, SRS Land Use Control Assurance Plan and the SRS Long Range Comprehensive Plan. This End State Plan will form the basis for establishing the technical and financial baseline for establishing the EM end state conditions for turnover.

Even though SRS is predominantly an EM site, it has historically been recognized as a site with continuing and new missions. Accordingly, the facilities disposition program has focused on managing risk in inactive facilities with minimal expenditures as opposed to eliminating risk with consideration for minimizing life cycle cost. It is obvious that this approach requires re-evaluation in accordance with the objectives of the SRS Cleanup Reform Vision. The SRS EM End State Plan will define minimum Deactivation and Decommissioning (D&D) requirements and activities necessary to establish acceptable end state conditions for all inactive areas and facilities. It will also establish a model and a process to define additional D&D requirements for specific facilities based on defined economic, risk and programmatic considerations.

3.3 PCM&M Approach

PCM&M activities will be developed to provide cost effective protection of the public and the environment. The planning will consider the advanced technologies being developed by the Long-Term Stewardship Program in the areas of: Contamination Containment and Control; Monitoring and Sensors; Decision Making and Institutional Performance, and Safety Systems and Institutional Controls.

PCM&M activities will be performed on all deactivated facilities until they are decommissioned. In order to minimize the cost of PCM&M, surveillances will be minimized and a Team Based approach will be utilized.

A Surveillance and Maintenance (S&M) Plan will be prepared in accordance with the SRS 1C Facilities Disposition Manual, which provides an implementing procedure for DOE's Implementation Guide for S&M during Facility Transition and Disposition. The S&M Plan will implement the minimum surveillances necessary to satisfy safety basis documentation requirements and prudent engineering judgement based on the condition of each individual facility and its associated risk.

Surveillances identified in the S&M Plan will be performed via a multidisciplinary subject matter expert team. The team approach will minimize the cost of surveillances while increasing their effectiveness. The reduced frequency of inspections will greatly decrease the number, and therefore the cost of entries. The use of a multi-disciplined team to conduct the inspections will improve the quality of the review process and provide a much better overview of the changing conditions within deactivated facilities. The team surveillances will yield valuable information to better perform out-year budget planning by prioritizing corrective maintenance activities based on facility degradation benchmarking.

Using surveillance, maintenance and monitoring techniques, SRS will determine with the regulators, the negotiated points of compliance and the watershed risk criteria that will further ensure end state performance expectations contained in respective Records of Decision (RODs) for soil and groundwater.

3.4 Actions Required for Implementation

SRS is developing the EM End State Plan and will begin the process of obtaining buyin from stakeholders in FY03. The SRS Facilities Disposition procedure manual is also being revised to include decommissioning procedures into the Facilities D&D Program.

The Facilities D&D Program will work with operating facility personnel within the central core area of the site to develop D&D plans for candidate facilities identified in the model. The revised requirements for early integration of the facilities disposition program and operating programs will be implemented to integrate facilities disposition and Environmental Restoration (ER) Program requirements into shutdown planning of operating facilities. Similarly, the ER Program will coordinate and integrate characterization and planning efforts with the Facilities D&D Program's Plans.

To implement the EM End State Plan, incremental funding, as yet to be determined, will be required beyond what is identified from FY04 through FY08 in Strategic Initiative DD-1, "Accelerate Facilities Disposition". As additional incremental funding is made available, the Site will implement its SRS EM End State Plan to achieve the agreed-to end state appropriate for long-term stewardship.

4.0 Strategic Initiatives Discussion

Acceleration of the Savannah River Site (SRS) Environmental Management (EM) Cleanup Program will be achieved through the implementation of the fourteen strategic initiatives described in this section. These descriptions include a discussion of scope, cost, schedule, facility end state at completion (if appropriate), assumptions to achieve success, and success measures for each initiative. Additional information including specific actions, milestones, and detailed descriptions that support each of the strategic initiatives are included in Sections 8 and 9.

4.1 Strategic Initiatives Summary and Schedule

The 14 initiatives include:

High Level Waste (HLW) Initiatives

WM-1, Expedited HLW Processing completes HLW processing eight years earlier than scheduled and saves \$5.4 billion for SRS and an additional \$1 billion for the Department of Energy (DOE) by segregating HLW into four components and tailoring the treatment to each of those components. In addition, this initiative classifies the HLW tanks as closure facilities to appropriately define the requirements to manage these tanks consistent with their use (waste storage) and endstate.

<u>WM-2</u>, <u>Expedited Risk-Based Tank and Facility Closure</u> transitions HLW tank closures and other HLW facilities slated for closure to a risk-based approach that reduces the cost of the HLW program by \$0.7 billion.

Nuclear Materials Initiatives

MM-1, Accelerated Nuclear Material Facilities Consolidation and Deactivation accelerates the consolidation and deactivation of the four current Plutonium (Pu) processing facilities and three spent nuclear fuel (SNF) storage basins into two Pu processing facilities and one SNF storage basin, resulting in significant risk reduction and about \$485 million near-term savings.

MM-2, Enhanced SNF Disposition accelerates the start of SNF disposition by six years, continues the safe receipt and storage of SNF, and enables an integrated disposition strategy and the deferral of \$1 billion in current baseline costs for SNF disposition.

MM-3(C), Optimize Disposition of Complex-Wide Plutonium Bearing Materials accelerates the movement of plutonium bearing materials from across the DOE Complex to SRS, providing a disposition alternative for those materials that were "stranded" by the cancellation of the Plutonium Immobilization Project (PIP).

Solid Waste (SW) Initiatives

WM-3, Expedite Transuranic (TRU) Waste Shipments to the Waste Isolation Pilot Plant (WIPP) accelerates the shipment of low-activity TRU waste to WIPP by 19 years, which reduces the risk of storing that material at SRS and saves approximately \$800 million.

WM-4, Accelerate Risk Reduction through Expedited Management of High-Activity TRU Waste accelerates the risk reduction associated with the high-activity TRU waste stored at SRS, as well as expedites the schedule for shipping this waste to WIPP by eight years, resulting in life-cycle savings of \$890 million.

WM-5, Cost Effective/Risk-Reducing Alternative to Incineration for Plutonium Recovery and Extraction (PUREX) Waste implements a new stabilization technology for PUREX waste treatment that reduces the risk posed by this waste by completing its treatment ten years earlier than the current commitment, resulting in life-cycle cost savings of \$85 million. This approach also enables early closure of the Consolidated Incineration Facility (CIF) and provides a possible treatment for PUREX waste contained in F Canyon.

Environmental Restoration (ER) Initiatives

REM-1, Accelerate Closure of the Old Radioactive Waste Burial Ground (ORWBG) consolidates, integrates and accelerates the remediation of five high risk waste sites by bringing radiologically contaminated soils from four waste units into the ORWBG. This area will then be covered with a low permeability cap, eliminating the need for five separate remedial actions.

REM-2, Accelerate Contaminant Reduction in Fourmile Branch Stream substantially reduces the risk of contamination in the Stream by implementing new remediation technologies that will result in a reduction and possible elimination of the current pump, treat, and re-inject remediation systems.

REM-3, Accelerate Risk Reduction Through Innovative Technologies and Improved Regulatory Processes focuses on aggressive and efficient source cleanup which achieves low-cost monitoring end states or full closures decades earlier than would be achieved through the use of traditional remediation technologies.

Facilities Deactivation and Decommissioning (FDD) Initiative

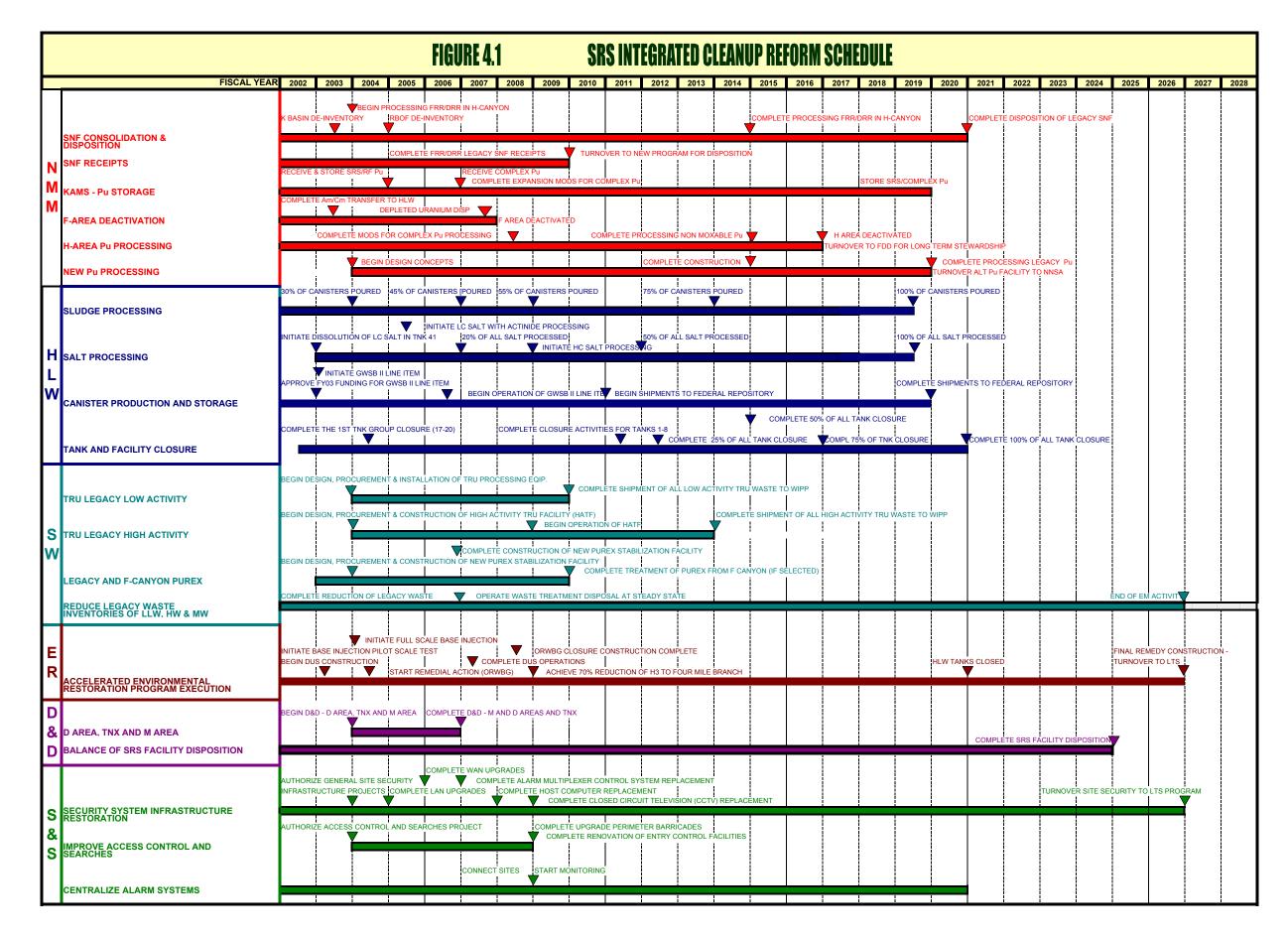
DD-1, Accelerate Facilities Disposition accelerates the decommissioning of currently inactive SRS facilities that are outside the Site's central core and eliminates the risk these facilities pose to the environment, the public and the workers. This involves the removal of up to 72 facilities that are inactive and have no defined or anticipated future mission and that are in close proximity to the Site's boundary and the public domain. In addition, deactivation activities are incorporated as described in other strategic initiatives above, such as MM-1, which includes the deactivation of the Receiving Basin for Offsite Fuel (RBOF) and F Canyon, and WM-5, which includes the deactivation of the CIF. Also, in WM-2, accelerated closure of the high level waste tanks will close EM facilities faster and support reduction of the EM operational footprint at SRS.

Security Initiatives

SS-1, Accelerate Required Improvements to General Site Security Infrastructure improves physical security systems and access control to ensure protection of the SRS, its workers and the Special Nuclear Materials stored at SRS, as well as consolidated nuclear materials from across the DOE Complex.

<u>SS-2(C)</u>, <u>Centralize Alarm Services at SRS</u> provides remote monitoring of fire, commercial security and process alarms from across the DOE Complex through the use of SRS's Central Alarm System, the only Underwriters Laboratory lists alarm station in the federal government.

Each of these strategic initiatives is discussed in greater detail in Section 4.2. A summary schedule of these initiatives built to achieve cleanup by 2025, is shown in Figure 4.1, "SRS Integrated Cleanup Reform Schedule" below. Detailed schedules are included in Section 8.



Program Descriptions with Strategic Initiative Details 4.2

The following provides the program descriptions and the details of each of the programmatic strategic initiatives to accelerate cleanup and risk reduction. The strategic initiative descriptions include details on each of the 14 components of the SRS Cleanup Reform Vision including scope, cost, schedule, facility end state completion (if appropriate), assumptions to achieve success, and success measures. Additional information including specific actions, milestones, and detail descriptions are included in Sections 8 and 9.

Revision 6

High Level Waste

Program Description

The mission of the HLW program is to:

- Safely and efficiently disposition approximately 37 million gallons of legacy highly radioactive waste material currently stored in 49 underground storage tanks
- Support nuclear materials stabilization and other site missions by ensuring that tank space is available to receive newly generated HLW
- · Volume reduce HLW by evaporation
- Pretreat HLW for subsequent treatment and disposal
- Vitrify HLW, and then store and ship the canisters to the federal repository for final disposal
- Treat and dispose of the low-level waste fraction resulting from HLW pretreatment as Saltstone grout
- Empty and close HLW tanks and support systems per regulatory-approved approach
- Ensure that risks to the environment and human health and safety from HLW operations are eliminated or reduced to acceptable levels

Completion of this mission will result in the permanent disposal of 37 million gallons of liquid HLW currently stored in 49 underground storage tanks, as well as all future waste from planned nuclear materials stabilization activities. A significant savings will be realized from the current approximately \$19 billion HLW baseline life-cycle cost. The high level fraction of the removed waste will be processed into borosilicate glass canisters at the Defense Waste Processing Facility (DWPF) and temporarily stored on site until the federal repository is available. The low-level fraction will go to either the Effluent Treatment Facility (ETF), which treats low-level radioactive wastewater or to the Saltstone Facility, which treats and permanently disposes of low-level filtrate by stabilizing it in a solid, cement-based waste form. The program is also responsible for closing high level waste tanks; to date, two high level waste tanks have been emptied and closed.

Closure of the HLW tanks is governed by the Federal Facility Agreement, a binding agreement between DOE, the Environmental Protection Agency (EPA) and the South Carolina Department of Health and Environmental Control (SCDHEC). Similarly, treatment of the liquid HLW is governed by the SRS Site Treatment Plan, an annual plan required and approved by SCDHEC. The Site Treatment Plan establishes a schedule for treating and disposing of mixed waste and identifies the DWPF as the treatment technology for liquid HLW.

High Level Waste Program

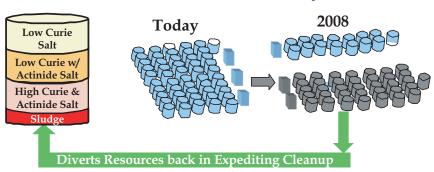
Initiative Title: WM-1, Expedited HLW Processing

Initiative Description: This initiative will expedite the processing of the 37 million gallons of HLW currently stored at SRS so that processing will be completed by 2019, eight years earlier than scheduled. (The program including Tank and Facility Closure will be completed in 2020 – Initiative WM-2.) The initiative will implement two major concepts: Tailored Treatment and Closure Facility.

a. Tailored Treatment

b. Closure Facility

Waste segration allows less expensive tailored treatment based on performance requirements



The Tailored Treatment concept segregates the HLW into four major components. These components are:

- Sludge (which contains the majority of the long lived radionuclides)
- Low Curie Salt
- Low Curie Salt with higher actinide content
- High Curie Salt with higher actinide content

The segregation of these streams allows less costly treatment methods to be used on the waste that contains lower levels of radioactivity and shorter lived radionuclides. This initiative focuses on implementing expedited treatment methods, which ensures the fastest risk reduction, while meeting the performance requirements, which protect human health and the environment.

The first portion of the Tailored Treatment concept expedites sludge processing which is the highest risk component of the HLW. The proposal is based on the culmination of several years of research that supports the breakthrough development of specific frit (glass forming materials) for each batch of sludge feed at the DWPF. The change to a specialized frit for each sludge batch allows the glass to melt at a lower temperature, which allows DWPF to increase its annual canister production rate up to 230 canisters per year. The change to the newly developed frit will also make it possible to place approximately 25% more waste in each canister. These changes will still produce a glass that meets all repository requirements. So, for example, if DWPF produces 230 canisters, these canisters will dispose of the same amount of waste that would have required the production of 280 canisters in the past. The yearly production of an equivalent 280 canisters is an increase from the average of 230 canisters per year produced during FY98-FY01. The new frit will produce a glass that still meets all repository requirements.

The proposal has also accelerated the preparation of future sludge materials to meet the increased production levels by incorporating streamlined waste removal methods for Sludge Removal. This proposal utilizes the maximum volume reduction for vitrification by determining if materials that are currently slated for vitrification can meet performance requirements for alternate disposal paths using simplified treatment techniques.

The second portion of the Tailored Treatment concept expedites salt processing. The proposal segregates the salt waste into three components so tailored treatment programs can be implemented for each major component. The low curie salt waste will be segregated from the other salt waste by removing the interstitial salt solution from selected tanks. The remaining salt cake in those tanks will be dissolved. If it meets performance requirements, it will be stabilized and disposed of in Saltstone Vaults under a landfill disposal permit.

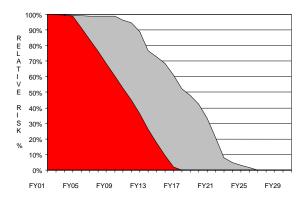
The low curie with high actinide salt waste will be segregated from the other salt waste by removing the interstitial salt solution from other tanks. The remaining salt cake in those tanks will be dissolved and then processed through an actinide removal step. (The actinide removal process will be provided by modifying two existing facilities at the site.) The actinides will be sent to vitrification, but the bulk of the volume will be stabilized and disposed of in Saltstone.

The high curie and high actinide salt waste is the remaining material not segregated into the two streams above. This material will be evaluated to determine what level of cesium and actinide removal will be required to meet the performance requirements so it can be stabilized and disposed of in Saltstone. If some of the salt materials only require low decontamination factor techniques, then these streams will be treated using simplified techniques such as the use of inorganic ion exchange resins. For materials unsuitable for disposal using simplified methods, then a small scale Caustic Side Solvent Extraction or other backup technology facility will be deployed. A total of 34 million gallons of salt waste is currently stored (hard salt and concentrated salt solution). To support processing, the salt must be dissolved and diluted to 6.0 molar sodium (Na) salt solution which will result in 83 million gallons of salt solution being disposed of using the three processing methods. It is expected that approximately 33% of the salt waste will be treated by each processing method.

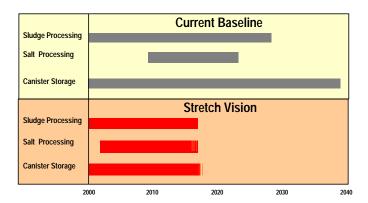
The second concept included in this initiative seeks to rapidly transition a large portion of the tank farms into a Closure Facility. The tank farms can be broken into two functional types of tanks, those that actively prepare waste for disposition and those that store the HLW until it can be moved into the disposition process. This initiative will continue to manage the active processing tanks with the highest level of tank monitoring and equipment maintenance requirements consistent with the level of activity in these tanks. However, the tanks that store waste will be reclassified as a Closure Facility. In the Closure Facility concept, an evaluation will be made to determine the level of tank monitoring and equipment maintenance requirements that are appropriate for this type of dormant storage facility. A set of tailored Standards/Requirements Identification Documents (S/RIDs) and other requirements will be developed and approved that ensure a cost effective management program based on appropriate risk management is implemented. Initially the 24 old style tanks will be

placed into the Closure Facility – with additional tanks added to the closure facility as they transition from active processing roles. The savings obtained by implementing the closure facility concept will be diverted to further expedite the high-risk reduction components of this initiative — the Expediting of Sludge and Salt Processing activities.

Initiative Benefits: The initiative substantially expedites the Site's overall risk reduction profile as shown in the graphic. All risk associated with the storage of HLW is eliminated by 2019, eight years earlier than currently scheduled and provides substantial Homeland Security improvements for the Site.



This initiative also expedites all of the HLW schedules. These improvements range from a seven-year improvement in the start of Salt Processing to a 20-year improvement in all HLW leaving the Site.



Not only does this initiative provide a substantially improved program; it provides that program in a manner that reduces over \$5.4 billion of SRS lifecycle costs to the tax-payer, which represents an approximate 30% reduction in the costs.

This proposal also provides an additional benefit of producing approximately 1,000 fewer canisters of glass due to the higher waste loading. This results in an additional complex saving of up to \$1 billion from lower repository costs.

Prerequisites to Success: There are a number of prerequisites to the full success of this initiative. The first prerequisite will require Department of Energy-Headquarters (DOE-HQ), the Defense Nuclear Facilities Safety Board (DNFSB) and the Site to work cooperatively to define appropriate modified requirements to implement the Closure Facility approach. This will then allow these resources to be diverted to higher risk reduction priorities while still ensuring the safe storage of HLW.

The second item will require approval of a Waste Incidental to Reprocessing (WIR) determination for low curie and low curie with actinide salt. It will also require the Site to work cooperatively with the regulators to ensure their concurrence with the amount of salt waste that can be directly disposed of in grout.

The implementation guidance to DOE Order 435.1 needs to be revised.

- Change to existing guidance for implementing WIR requirements to allow sites to screen for radionuclides that are "key" at their site.
- More realistic Intruder Analysis guidelines to be used for sites where long-term institutional control will exist.
- Additional guidance for the WIR requirements that take advantage of the flexibility in these requirements to support a risk-based process.

If these changes are successful, it may also be appropriate to consider whether more appropriate points of compliance should be defined. This will further improve the closure process while maintaining acceptable levels of health and environmental protection.

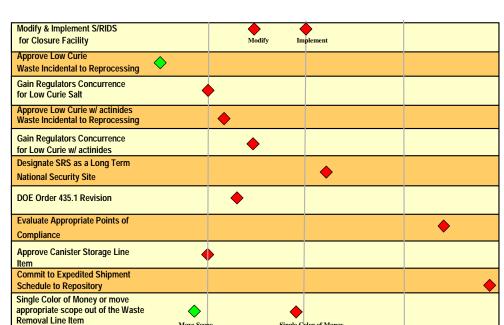
In Fiscal Year 2003 (FY03), a new Line Item for a second Glass Waste Storage Building will need to be authorized and funded to allow the timely construction of this facility to support the expedited processing of canisters.

To support the completion of the HLW Program by 2020, it will also be necessary to expedite the shipment of canisters to the Federal Repository, that is 500 canisters will need to be shipped each year from 2010 through 2019.

With a designation as a Long-Term National Security Site by Congress or DOE, it will be clear that SRS will be maintained as an enduring site with a commitment to maintain the Site under institutional control for an extended period of time. This designation will allow closure costs to be substantially reduced.

The final prerequisite will be making changes that will allow the HLW Program to be executed using one "color of money". This will allow the most flexibility within execution years to move resources to the most important activities. If this is not possible, then as a minimum, many of the activities that are now contained in the Waste Removal Line Item should be moved to operating expense (OPEX) funding. These activities do not create an asset – but instead provide the needed equipment so an asset can be removed from service.

These types of changes are needed to allow this initiative to be fully successful.



Schedule: For full success, the above prerequisites must be addressed in a timely manner as shown below:

Funding Requirements (\$ million): The table below shows the near-term funding requirement for FY03. Funding for FY04 to FY08 remains to be determined.

2003

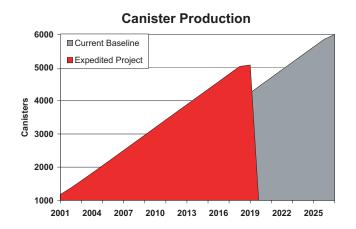
2004

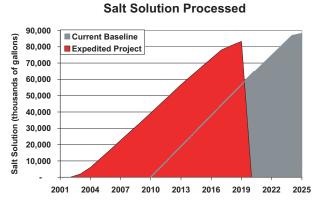
2005

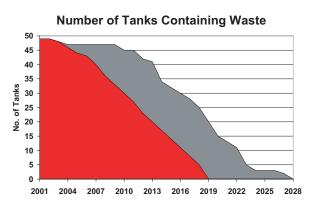
2002

	FY03
Initiative Cost Estimate	122
Cost Reduction Challenge	(19)
Net Funding Request	103

Performance Metrics: The next three graphs show how this initiative will document the improved performance of the HLW Program. The first graph shows the improvement in the production of HLW canisters at DWPF. This proposal not only completes the production of these canisters by 2019, eight years ahead of schedule; it has the added benefit of producing 17% fewer total canisters. That means that approximately 1,000 fewer canisters must be shipped to the Federal Repository. The second graph shows the improvement in the processing of salt waste into the stabilized grout waste form. This proposal starts and completes the processing of this material seven years ahead of schedule. The last graph focuses on the overall goal of the program to remove waste from the storage tanks. This graph shows the substantial acceleration that will be possible in removing the waste from these tanks.







High Level Waste Program

Initiative Title: WM-2, Expedited Risk-Based Tank and Facility Closure

Initiative Description: This initiative implements expedited risk-based HLW tank and facility closure for the remaining HLW facilities, including the tanks, that contain 37 million gallons of HLW. The result is that tank closures will be complete by 2020, eight years earlier than scheduled. This initiative is broken into two components: 1) Tank Closures and 2) Facility Closures. The Tank Closure improvements will be discussed first. The precepts of the previous tank closure program were to remove as much material from the tank as technically possible and then close the tank with grout as soon as it was empty.

Some improvements that transition tank closures to a risk-based approach can be accomplished without DOE Order implementation guideline modifications. However, modifications to DOE Order 435.1 implementation guidelines will allow a more appropriate risk reduction approach to be taken.

With these DOE Order modifications in place, new performance assessment requirements will be used to determine the appropriate heel removal end point for each tank. It will also support a broader range of materials that could be used to close tanks such as grout containing depleted uranium or grout that contains some of the processed salt materials.

Even without successful modifications to the DOE Order, the Tank Closure program can be modified to schedule the closure to more appropriately focus the Site's efforts on risk reduction. This approach allows for large groups of tanks to be emptied, and once a large grouping of tanks is emptied, the tanks will be closed in a "batched" fashion, after the highest risk reduction activities have been completed at SRS. Grouping tanks for closure will significantly reduce the cost of completing the tank closures. This concept of Risk-based Tank Closures will ensure the protection of human health and the environment.

The second portion of this initiative is Risk-based Facility Closures. The precepts of the previous facility closure program were to remove as much material from the facility as technically possible and then close the facility by filling it with grout or removing the structure as soon as processing was completed.

Some improvements that transition facility closures to a risk-based approach can be accomplished by designating SRS as a Long-Term National Security Site. This will allow the facilities at the center of the Site to be closed without returning this area to greenfield conditions. This risk-based approach is not only appropriate, but it will also reduce the overall risk to workers. This will allow these facilities to be placed into a safe/de-inventoried/locked away condition. This concept for closure will be defined based on meeting performance assessment requirements rather than being based on attempts to return the area to as close to greenfield conditions as possible.

Initiative Benefits: This initiative will reduce the costs of the HLW Program by an additional \$0.7 billion over its lifecycle. This is a 4% reduction in the costs. Therefore, if both HLW Initiatives are implemented the total lifecycle savings will be \$6 billion, a 35% reduction in costs. This initiative requires the Expedited HLW Processing Initia-

tive as a prerequisite to allow the projected savings. While some savings can be accomplished with this initiative as a standalone proposal, the savings will be substantially reduced.

Prerequisites to Success: There are a number of prerequisites to the full success of this initiative.

The first prerequisite requires DOE or Congress to designate SRS as a Long-Term National Security Site. This type of designation will clearly state that SRS will be maintained as an enduring site with a commitment to maintain the site under institutional control for an extended period of time. This designation will open up many benefits and allow closure costs to be substantially reduced.

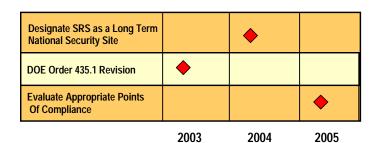
The second prerequisite will require that DOE Order 435.1 implementation guidelines be revised. These revisions include:

- Change to existing guidance for implementing WIR requirements to allow sites to screen for radionuclides that are "key" at their site.
- More realistic Intruder Analysis guidelines to be used for sites where long term institutional control will exist.
- Additional guidance for the WIR requirements that take advantage of the flexibility in these requirements to support a risk-based process.

It may also be appropriate if these changes are successful to consider whether more appropriate points of compliance should be defined. This will further improve the closure process while maintaining acceptable levels of health and environmental protection.

These types of changes are needed to allow this initiative to be fully successful.

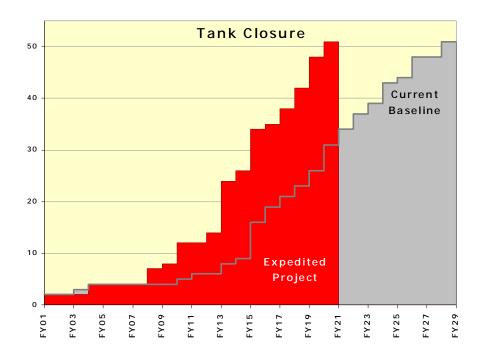
Schedule: For full success the above prerequisites must be addressed in a timely manner. The schedule for addressing these items is shown below:



Funding Requirements (\$ million): The table below shows the near-term funding requirement for FY03. Funding for FY04 to FY08 remains to be determined.

	FY03
Initiative Cost Estimate	0
Cost Reduction Challenge	0
Net Funding Request	-

Performance Metrics: This initiative in conjunction with Initiative WM-1 will allow completion of tank closures much earlier than the previous baseline.



Nuclear Materials Management

Program Description

The Nuclear Materials Management Program is responsible for the management of excess nuclear materials, including transportation, stabilization, storage and disposition of these materials. The primary nuclear materials in this program include components from dismantled weapons, residues from weapons processing activities and other legacy materials, such as irradiated SNF, unirradiated fuel materials, and legacy residues. These materials include the aluminum-clad SNF from previous SRS reactor operations, plutonium at SRS and from other DOE sites, and SNF received from domestic and foreign research reactors. The stabilization activities occur in the chemical separations facilities in the center of the Site. The program mission includes:

- Safe management of SRS and certain Rocky Flats nuclear materials and conversion of "at-risk" nuclear materials into stable forms suitable for interim to long-term storage
- Processing nuclear materials for the DOE/Tennessee Valley Authority (TVA) interagency agreement for transfer of uranium to TVA for use in its power reactors
- Establishment of plutonium stabilization and packaging capability to meet the DOE Standard for Stabilization, Packaging, and Storage of Plutonium-Bearing Materials
- Safe interim storage of special nuclear materials from other DOE sites and storage of SRS SNF, heavy water, and other nuclear materials awaiting disposition
- Receipt, storage and consolidation of spent nuclear fuel, along with spent fuel management and disposition, including processing, as required.

FY03 Highlights

- Foreign Research Reactor/Domestic Research Reactor (FRR/DRR) Receipts
- · Accelerated Receiving Basin for Offsite Fuel (RBOF) De-inventory
- Consolidate Rocky Flats Plutonium (Pu) material at SRS
- Complete Repackaging Rocky Flats classified Pu Metal
- Complete K-Basin Deactivation
- Disposition 728-F and 730-F depleted uranium (Du) Oxide
- Transfer Americium/Curium (Am/Cm) to HLW
- Initiate F Canyon deactivation and reduction of surveillance and maintenance (S&M)
- Continue dissolving Mark (Mk)-22 SNF in H Canyon
- Complete National Environmental Protection Act (NEPA) decision to begin processing FRR/DRR in H Canyon as early as 2003 on a not to interfere basis
- · Complete Sterling Forest Oxide Material Campaign
- Begin blending of 94-1 highly-enriched uranium (HEU) solutions and transfer to TVA
- Begin packaging Pu metal into 3013's
- Complete development of non-MOXable Pu disposition path
- Continue dissolution of Pu Residues and converting appropriate material to oxide

Nuclear Materials Program

Initiative Title: MM-1, Accelerated Nuclear Material Facilities Consolidation and Deactivation

Initiative Description: This initiative accelerates the consolidation and deactivation of the current four Pu processing facilities and three SNF storage basins into two Pu processing facilities and one SNF storage basin. This will result in about a \$485 million near-term Nuclear Materials Program net savings.



Current Baseline: F Canyon completed the plutonium stabilization program in mid FY02 and will transfer all Am/Cm solutions to the HLW System by mid FY03. The current end states for F Canyon require on-going support for the following activities:

- Savannah River Technology Center (SRTC) / C-LAB waste,
- · Sump handling,
- Make-up of cold chemicals for other facilities,
- Process solvent disposition, and
- Significant surveillance and maintenance (S&M) of DU solutions.

As currently projected, full F-Canyon deactivation will not be completed until after conversion of 190,000 gallons of DU solutions to oxide in FY12. FB-Line is scheduled to complete the stabilization, packaging, and de-inventory to K-Area Materials Storage (KAMS) and 235-F storage facilities for approximately 1,000 of the 3013 containers of the F-Area legacy plutonium bearing materials by FY07. The 235-F storage facility remains operational through FY20. RBOF de-inventory is scheduled to complete de-inventory of about 20 metric tons (MT) of spent nuclear fuel by the end of FY06 with transition to minimum S&M in FY07. K-Basin is scheduled to complete the de-inventory of approximately one MT of SNF by the end of FY03.

Initiative Benefits: Acceleration of nuclear material facility consolidation and deactivation into two Pu processing facilities and one SNF storage basin will save approximately \$485 million near-term Nuclear Materials Program net savings over the current baseline and will be accomplished concurrently in the following phases:

- Project-based acceleration of F-Canyon shutdown/deactivation. The FY00
 F-Canyon Deactivation Integrated Project Management Plan and Deactivation End
 Point Report will be revised to integrate shutdown activities and deactivation
 activities into a seamless project with known end states. Safety Basis and associated
 S&M activities will be reduced as material changes to the facility are made.
 F-Canyon deactivation will be completed by FY07. It is expected that the minimum
 S&M for F Canyon and FB-Line will involve no more than \$40M in annual cost.
- FB-Line de-inventory will be complete in FY07, positioning FB-Line for deactivation and transition to minimum S&M.

- Accelerated completion of Pu packaging, stabilization, and de-inventory of approximately 1,000 of the 3013 containers from FB-Line (this acceleration is made possible by increasing the production throughput capacity of the Pu Packaging and Stabilization project without increasing baseline costs) and modification to establish long-term 3013 container surveillance capability.
- Accelerated de-inventory and deactivation of the RBOF and K fuel storage facilities (Accelerated deactivation is made possible because SRS has completed nearly 24 months of planned RBOF de-inventory project work in the first 15 months of the project).
- Associated reductions of area security and infrastructure costs (this reduction is made possible by the shrinkage of operational area footprints).

These savings (over and above those forecast in the current outyear budget plan) can be realized by accelerating deactivation of F Canyon, FB-Line, RBOF, and K-Basin. Acceleration provides:

- Transfer of cold chemical makeup responsibilities to H Canyon;
- Shutdown of Low-Activity Waste and General Purpose Evaporators, and the Acid Recovery Unit;
- Elimination of substantial S&M costs by disposition/solidification of the DU solutions and relocation of the PUREX solvent;
- Disposition of DU oxide from Buildings 728-F and 730-F;
- Reduction of the SNF basin footprint by consolidation of all current basin operations in RBOF and K-Basin into the L-Area SNF storage basin;
- Elimination of infrastructure and safeguards and security requirements for significant portions of F Area and all of the RBOF facility; and
- Identification of a basin chemical control resin regeneration alternative.

Cost Savings Breakdown: Realized savings versus the current baseline plan exceed a Nuclear Materials Program/FB-Line net saving of \$485 million.

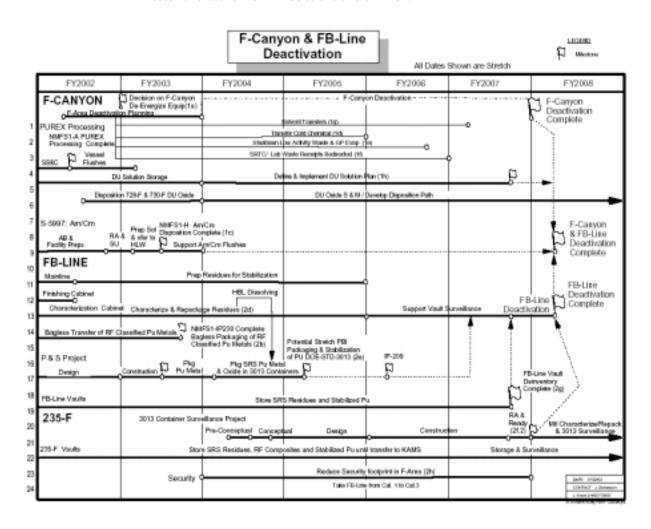
Other Benefits: In addition to the cost savings, accelerated stabilization and packaging of approximately 1,000 items at completion substantially accelerates the reduction of risk associated with these materials. Homeland Security is enhanced by consolidating and reducing the number of nuclear material storage locations from three sites to one (SRS/Rocky Flats/Richland to SRS), enabling security assets to be focused on a more limited number of protected areas. Finally, focusing resources on consolidated Pu processing and SNF storage facilities will enable available resources to more effectively maintain the physical and productivity infrastructure of the remaining facilities.

Prerequisites to Success: To successfully implement these alternate end states and achieve an accelerated deactivation, the following prerequisites are required:

- Obtain DOE approval of final facility end state and of F Canyon/FB-Line formal direction to begin deactivation.
- Identify alternative to F Canyon for laboratory waste handling.
- Develop Alternative Processing of contaminated water to enable shutdown of the general-purpose (GP) evaporator.
- Revise the F-Canyon Authorization Basis to eliminate sump flushing and enable shutdown of the Low-Activity Waste (LAW) Evaporator and Acid Recovery Unit (ARU).

- Obtain approval to move process solvent from F Canyon to Solid Waste Processing while awaiting disposition.
- Identify alternative for DU solution disposition.
- Disposition Du Oxide in Buildings 728-F and 730-F.
- Perform criticality analyses and engineering evaluations for SNF handling, transfer, and storage in L-Basin. Significant quantities of the fuel have been stored under water for more than thirty years, and evaluation is required before movement.
- Accelerate an alternative to RBOF resin regeneration.
- Provide secure transport capability to support FB-Line deinventory to KAMS and other intra-site shipments.
- Conclude National Environmental Policy Act (NEPA) determination for 3013 surveillance capability.
- Provide long-term Pu surveillance capability.

Schedule: Implementation of these initiatives is expected to accelerate the full deactivation of F Canyon from FY12 to FY07. Disposition of approximately 190,000 gallons of DU solutions is critical path and will be completed in FY07. De-inventory of FB-Line will be achieved by FY07. Long-term 3013 container surveillance and repackaging capability will be operational in FY07 (see below schedule). De-inventory of RBOF will be accelerated from FY06 to FY04. Accelerated K-Basin deinventory will pull the milestone forward from FY03 to the end of FY02.



Funding Requirements FY03 – FY08 (\$ million): The table below shows the near-term funding requirement for FY03. Funding for FY04 to FY08 remains to be determined.

	FY03
Initiative Cost Estimate ¹	21
Cost Reduction Challenge	(12)
Net Funding Request	9
Long-Term Stewardship	0

Performance Metrics: The main objective of this initiative is to accelerate deactivation of F Canyon, FB-Line, RBOF and K-Basin Facilities. Progress will be measured by tracking project implementation milestones (see above schedule) for the alternate end states and trending the reduction in F Area, RBOF and K-Basin direct costs. The performance metric for RBOF is the rate of de-inventory versus time.

 $^{^1}$ The budgetary estimates provided herein are planning estimates for the Cleanup Phase as delineated in DOE G 430.1-1. The degree of accuracy for these estimates is defined as minus 50% to plus 100%.

Nuclear Materials Program

Initiative Title: MM-2, Enhanced Spent Nuclear Fuel Disposition

Initiative Description: This initiative accelerates the start of SNF disposition by as much as six years from the current baseline, continues safe receipt and storage of SNF, and enables deferral of \$1 billion in current baseline costs for SNF disposition. It further supports development of a complex-wide integrated disposition



strategy that can be implemented in a streamlined, cost-effective manner with substantially reduced lifecycle expenditures. The actions associated with this initiative provide accelerated SNF disposition, expanded storage capacity, and an integrated disposition strategy.

The \$250 million Treatment and Storage Facility (TSF) that is the current preferred NEPA disposition option for approximately 28 metric tons of heavy metal for aluminum-based SNF has been suspended to evaluate and identify the most cost-effective, integrated approach. Our proposal is to begin using H Canyon to dissolve and process SNF as early as FY03 to disposition current legacy fuel. Issues associated with Homeland Security represent risks not considered under the existing non-proliferation NEPA Record of Decision (ROD). We propose a NEPA action in early FY03 that considers chemical processing of selected SNF inventories as an allowed alternative for disposition while awaiting the integrated disposition strategy. This initiative will capitalize on current H Canyon capabilities to maximize SRS opportunities for commencing disposition of SNF without impact to other missions. H Canyon processing accelerates the start of SNF disposition from FY09 to as early as FY03. Integration with on-going material processing makes this the low-cost approach that commences immediate disposition of SNF and accelerates residual risk reduction associated with the SRS SNF storage inventory. However, negotiations must be initiated with the TVA to include the uranium into the blend down program or develop a similar agreement with another company.

This initiative assumes NEPA actions will be completed to enable processing of SNF through H Canyon on a not-to-interfere basis. If not obtained, projected SNF receipts will exceed the planned capacity of L-Basin around 2012. A just-in-time approach for basin storage capacity will maintain the single basin strategy and provide support of national programs. Increased capacity opportunities include (but are not limited to), installation of additional racks, removal of equipment/scrap to increase storage rack space, and potential dense packing of SNF.

Accelerated H Canyon disposition enables the deferral of approximately \$1 billion in SNF disposition lifecycle costs that can be utilized in higher risk areas while an integrated disposition strategy for SNF is developed. This integrated strategy will identify and validate new disposition technologies (such as co-disposal) and leverage complex wide initiatives for application at SRS, providing a more cost-effective and consistent approach to disposition. SRS proposes to provide technical input and support of the NEPA process for SNF, targeting a Record of Decision (ROD) in early FY03.

The current baseline assumes SRS receives SNF from offsite sources until 2035 as an EM responsibility. However, SNF receipts beyond 2009 are primarily from the ongoing operation of domestic research reactors. If direct shipments to the repository are

approved, SRS recommends that offsite domestic receipts of SNF be stopped as soon as the National Repository opens for SNF (around 2012). Offsite domestic SNF would then be sent directly to the repository by the generator. Furthermore, EM may choose to divest the expense of Non-Legacy SNF (produced/received after 2009). Disposition of non-legacy SNF will be the responsibility of the appropriate DOE office which sponsors the producing program. Efforts at SRS will focus on determining and implementing the most cost-effective disposition of the existing legacy aluminum based SNF.

SNF likely disposition options include one or more of the following:

- Direct Co-Disposal of SNF: This alternative will provide development of new disposition technologies. Significant work has been performed on co-disposal technologies and the costs for implementation are highly dependent on RW acceptance criteria. Direct disposal of bare fuel results in the lowest cost. Direct disposal in a standardized container with a specialized packaging could result in costs similar to those expected for a melt and dilute facility. The advantage of co-disposal will be the integration of SRS efforts with those of other sites within the DOE complex, potentially resulting in lower costs and accelerated schedules through utilization of pre-existing work from other sites. Optimally, the NEPA action will permit chemical processing of SNF through H Canyon on a not-to-interfere basis as long as the H-Area facilities are operating for plutonium disposition.
- Chemical Processing of SNF: This alternative will continue chemical processing in
 H Canyon on a not-to-interfere basis until plutonium processing is complete.
 Ultimately, a "new generation" disposition facility is required to address on-going
 SNF generation. For this alternative, continued chemical processing could be
 provided through a hot cell added to the alternate plutonium disposition facility.
 This option depends on the ability to disposition the bulk of the legacy SNF through
 H Canyon to minimize the required throughput and cost of the hot cell
- **Melt and Dilute of SNF:** This alternative will construct a stand-alone facility that will employ the melt and dilute technology to provide for disposition. This alternative will build on the significant technology validation work that has already been completed, results in a significant volume reduction for SNF waste, and already has a license application.

Current Baseline: The current baseline provides for the on-going operation of L-Basin as the primary SNF receipt facility for off-site SNF returns through 2035. All Foreign Research Reactor (FRR) receipts will be complete by 2009. Domestic Research Reactor (DRR) receipts will continue through 2035. Canada returns are limited by the current baseline to less than 20 total shipments. Before suspension, the melt and dilute technology validation was well underway and scheduled for completion in FY03. This schedule would have supported a FY09 startup of the SNF TSF. Design, construction, and startup of TSF are currently in DOE's Integrated Planning and Budget System (IPABS).

Initiative Benefits: This initiative will utilize current H Canyon capabilities to maximize SRS opportunities for commencing disposition of SNF without impact to other missions. H Canyon processing accelerates the start of SNF disposition from FY09 to as early as FY03. Integration with on-going material processing makes this the low-cost approach that begins immediate disposition of SNF and accelerates residual risk reduction associated with the SRS SNF storage inventory.

The just-in-time approach to basin capacity improvements is based on real time needs and captures changes in actual receipts and optimized H-Canyon operations which may negate the need for all, or part, of the improvements. The just-in-time strategy will ensure costs are minimized, while maintaining the single basin strategy, providing support of national programs, focusing SRS resources on risk reduction, and further enhancing Homeland Security through reduced security perimeters.

Defining the legacy SNF as that received at SRS by 2009 appropriately bounds the EM cleanup initiative and appropriately links the responsibility and cost for disposition of future SNF to the sponsoring DOE offices that produce them.

Accelerated H-Canyon disposition and L-Basin capacity management enable the deferral of approximately \$1 billion in SNF disposition lifecycle costs that can be utilized in higher risk areas until an integrated disposition strategy for SNF is developed. This integrated strategy will identify and validate new disposition technologies (such as co-disposal) and will leverage complex-wide initiatives for application at SRS, providing a more cost- effective and consistent approach to disposition. SRS proposes to provide technical input and support of the NEPA process for SNF.

Prerequisites to Success: Full success of this initiative is dependent on the required NEPA action that supports the use of chemical separation as an authorized disposition path for processing FDD/DRR in H Canyon on a not-to-interfere basis at a sufficient level to maintain the one spent fuel basin strategy. This also assumes there will be no Idaho National Engineering and Environmental Laboratory (INEEL)/SRS fuel swap. It is this accelerated disposition in H Canyon and just-in-time approach to L-Basin storage capacity that enables the deferral of approximately \$1 billion in SNF disposition lifecycle costs that can be utilized in higher risk areas, until an integrated disposition strategy for the remaining SNF is developed. Further success will be gained through coordination of the SNF NEPA actions with those required for plutonium disposition to permit selection of the optimized final SNF disposition path. Extensive chemical processing of research reactor fuels will require either extension of the TVA agreement or development of a similar agreement with another company to continue the final step in SNF disposition.

Schedule: Processing of SNF in H Canyon could begin as early as FY03 and required NEPA actions should be targeted for completion prior to December 31, 2002.

Funding Requirements FY03 – FY08 (\$ million):):): The table below shows the near-term funding requirement for FY03. Funding for FY04 to FY08 remains to be determined.

	FY03
Initiative Cost Estimate ²	21
Cost Reduction Challenge	(6)
Net Funding Request	15

² The budgetary estimates provided herein are planning estimates for the cleanup phase as delineated in DOE G 430.1-1.

Funding requirements to support the selected final disposition of legacy SNF will depend upon the outcome of NEPA actions and the integration of the SNF disposition with disposition of other legacy materials. The following chart shows the lifecycle cost for this initiative.

Performance Metrics: Performance would be tracked against SRS ability to receive and store identified inventory and against identification of available storage capacity to satisfy expected offsite receipt requirements.

Nuclear Materials Program

Initiative Title: MM-3(C), Optimize Disposition of Complex-Wide Plutonium Bearing Materials

Initiative Description: SRS proposes that the EM Program accelerate the movement of plutonium bearing materials from across the Complex to SRS to await disposition. SRS storage facilities (particularly

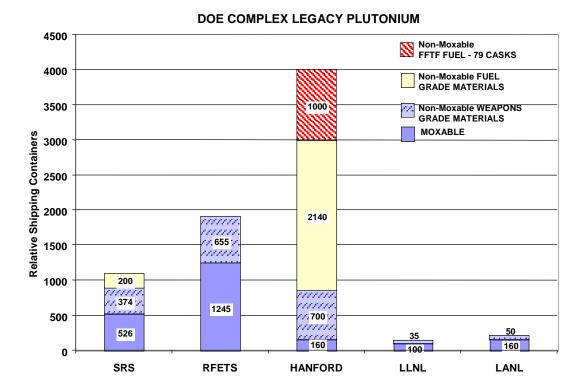
KAMS) will be modified to increase the number of storage positions and provide additional storage flexibility. A capability will be needed for disposition of non-MOXable (MOX - mixed oxide) materials. A supplemental EIS to select the preferred approach needs to be completed in 2003.

Current Baseline: The existing baseline for storage, treatment and disposition of EM's approximately 12 metric tons of legacy plutonium bearing materials was altered by the decision to cancel the Immobilization Facility. The cancellation has left many materials without a clear disposition path and could lead to significant schedule / cost impacts at Rocky Flats and Hanford. Many of the items that need to be shipped from Rocky Flats to support that site's de-inventory were previously scheduled for immobilization. Hanford's de-inventory plan for the plutonium storage vaults was tied to a just-in-time delivery to the Immobilization Facility. SRS H-Area processing facilities are currently scheduled to complete stabilization activities by 2006 and HEU Blend Down activities by 2008.

Initiative Benefits: This initiative provides a 'plutonium path forward' that satisfies the needs for a clear disposition of materials to be sent to SRS. The path forward also supports the Mixed Oxide (MOX) non-proliferation mission without disrupting other critical DOE programs (e.g., Rocky Flats de-inventory and HEU Blend Down). The return on investment from consolidated storage is estimated to be less than two years considering the extensive costs of delaying Rocky Flats de-inventory, the savings from accelerated de-inventory of vaults at Hanford, and the security savings associated with consolidating storage at SRS. The Complex-wide footprint of plutonium storage facilities will be reduced and critical storage challenges at the national labs will be resolved through this initiative. Homeland Defense will be enhanced by reducing the number of target facilities, and increasing the ability to focus security resources on the remaining facilities.

Prerequisites to Success: The Department has completed the revision of the NEPA ROD to address the cancellation of Immobilization. A supplemental EIS to select the preferred approach for disposition of non-MOXable Pu needs to be completed in 2003. Safe Secure Transport (SST) availability needs to be increased to support consolidation. In addition, key decisions are required to support execution of this proposal, which also represents opportunities for improvement. These are described in the last segment of this initiative description.

For non-MOXable materials a specific disposition path (treat to make MOXable, discard to the WIPP, discard to HLW processing at SRS, or disposition via MOX after the current 10 year campaign) needs to be defined. The figure below provides the relative distribution of legacy plutonium bearing materials currently in storage (Pantex is excluded). Decisions related to specific disposition paths need to consider all of these materials.



Modifications to KAMS will be completed in time to allow consolidation of complex-wide material at SRS by the end of FY06. The supplemental Pu Disposition EIS decision to be made in 2003 will establish the schedule for the new capability needed for non-MOXable materials.

Likely candidates for disposition of non-MOXable Pu include:

- Small Aqueous Processing Facility: This alternative will construct a stand-alone aqueous facility capable of dissolving and processing various forms of both weapons-grade and fuel-grade plutonium bearing materials including approximately 1,000 units in 73 casks of unirradiated Fast Flux Test Facility (FFTF) fuel. This facility will include the capability to provide final disposition of the resulting waste stream without relying on the DWPF in the outyears.
- Multi-Purpose Aqueous Processing Facility: This alternative will construct a standalone multi-purpose facility capable of dissolving and processing excess materials from across the complex, including receiving and dismantling weapons pits. This facility will have the capability of producing plutonium in either metal or oxide form and could ultimately replace the plutonium-processing portion of the Pit Disassembly and Conversion Facility (PDCF).
- 3013 in HLW Canisters: This alternative places 3013 containers in a HLW canister while empty. DWPF operations fill the canister with vitrified HLW, effectively entombing the 3013 containers in glass. Execution of the current baseline will stabilize approximately 1,000 items of SRS plutonium into 3013 containers by 2005. By 2006 we will also complete receipt of excess materials from the complex. This alternative requires modification of the DWPF facilities to handle 3013 containers including contamination control in the event of canister failure and security requirements for protection of materials prior to immobilization. Technical issues require

- the resolution of 3013 interaction with molten glass (possible can rupture), determination of the number of cans which can be loaded into each DWPF canister, and qualification of the entombed 3013 containers for storage in the Federal Repository. Some processing of the FFTF material will be required to place this material into 3013 containers.
- Direct Vitrification in HLW Glass: This alternative will install a dissolver colocated with DWPF and provide direct injection of the dissolved material either directly into the DWPF glass stream or through an adjunct melter operation. One advantage to this alternative is that the dissolver could be sized to permit direct processing of plutonium fuel materials. This initiative could begin upon completion of dissolver construction and required support modifications. Support modifications include DWPF upgrades for increased temperatures required for vitrification of plutonium, improvements in the off-gas systems for volatile materials (e.g., cesium), an injection path for the dissolved solutions, and security upgrades for material handling prior to vitrification. Technical issues require resolution of the effects of the injected stream on the DWPF glass, assurance of a critically safe configuration, determination of maximum plutonium loading in the canister, and qualification of the resulting glass log for acceptance to the federal repository.

Funding Requirements FY03 – FY08 (\$ million): The table below shows the near-term funding requirement for FY03. Funding for FY04 to FY08 remains to be determined.

MM-3	FY03
Initiative Cost Estimate ³	43
Cost Reduction Challenge	(9)
Net Funding Request	34

MM-3(C)	FY03
Initiative Cost Estimate	0
Cost Reduction Challenge	0
Net Funding Request	0
Safeguards & Security Costs	0

³ The budgetary estimates provided herein are planning estimates for the cleanup phase as delineated in DOE G 430.1-1.

Performance Metrics: Plutonium shipments, receipts, and processing rates (alternative disposition of non-MOXable items) will be tracked. In addition, project milestones and cost performance will be measured when the scope and baselines are defined.

Solid Waste (SW) Program

Program Description

The mission of the SW program is to provide cost-effective solid waste management services to support DOE missions at SRS and across the DOE-Complex. The program provides treatment, storage and disposal capabilities required for SRS to safely store, treat and ultimately dispose of both legacy wastes and newly-generated wastes which arise from operations at SRS. The program is responsible for reducing the legacy waste inventory of all the waste types to zero and therefore obtaining a steady-state condition with ongoing waste being treated and disposed as it is generated. The five types of waste managed by this program include sanitary waste; low-level radioactive waste; hazardous waste; mixed waste (both hazardous and radioactive); and TRU waste (solid waste contaminated with alpha-emitting TRU radionuclides that result primarily from the Canyon and analytical laboratory facilities at SRS).

Sanitary waste is a solid waste that is neither radioactive nor hazardous. Sanitary waste typically consists of materials that would be received by a municipal sanitary landfill and contains salvageable or recyclable materials such as scrap metal.

Low-level waste is radioactive waste that is not classified as high level waste, TRU waste, spent fuel, or byproduct material and does not contain any hazardous waste. Typically, low-level waste at SRS is radioactively contaminated materials such as job-control waste, small and large equipment, plastic sheeting, gloves, soil and suspect contaminated materials used in a radiological areas.

Hazardous waste is identified by the EPA and requires management in accordance with specific regulatory mandates. The SW program receives, stores and arranges off-site treatment or disposal for SRS-generated hazardous wastes. Examples of hazardous waste include materials such as lead, solvents, paints and pesticides.

Mixed waste is both hazardous and radioactive waste, includes solvent-contaminated wipes, debris from operations, cleanup, construction, etc. from radiological areas. The SW program is responsible for receipt, interim storage, treatment and disposal of mixed waste. Treatment is performed at SRS facilities, at other DOE sites or commercial vendors. Disposal activities include identifying a disposal facility, characterizing for disposal, and preparing waste to transport and shipping.

TRU waste is contaminated with alpha-emitting TRU radionuclides that meet very specific criteria. Some TRU waste at SRS contains hazardous waste and must be managed in accordance with regulatory requirements. These wastes are and have been generated primarily by plutonium separations facilities and analytical laboratories. Additionally, some of the TRU waste at SRS is from offsite generators in the late 1970s. The TRU waste program has historically focused on the acceptance and maintenance of safe storage. However, the program is moving forward with shipping the TRU waste to DOE's WIPP in Carlsbad. NM.

The treatment, storage and disposal of sanitary, hazardous, mixed and mixed-TRU wastes are subject to regulation by EPA and SCDHEC in accordance with the Resource Conservation and Recovery Act (RCRA). The site has regulatory commitments concerning treatment of legacy wastes for these waste streams. These commitments are con-

tained in the Site Treatment Plan, which was developed in response to a consent order. In addition, current RCRA regulations provide specific timescales for treating newlygenerated wastes.

The treatment, storage and disposal of low-level waste is subject to the provisions of DOE Order 435.1, which establishes specific timescales for the disposal of newlygenerated wastes.

Solid Waste Program

Initiative Title: WM-3, Expedite TRU Waste Shipments

to the WIPP

Initiative Description: Accelerate Risk Reduction by expediting TRU Waste shipments to WIPP and eliminating long term SRS storage associated with a significant inventory of radioactive waste. This is to be accomplished



by providing enhanced characterization, re-packaging, certification, and loading capability at SRS. The characterization and certification capability will be deployed at SRS by the National TRU program as part of the Transuranic Waste Performance Management Plan, with the remaining TRU processing capabilities provided by SRS. The two acceleration proposals (WIPP and SRS) are fully integrated. It will also be necessary to enhance the payload capability of the existing TRUPACT-II units to permit the shipment of higher gram quantities of TRU waste to WIPP. This proposal will bring the end state forward to 2009 for low-activity drum waste in contrast to the current 2034 baseline. The life-cycle savings for this initiative is approximately \$800 million.

Current Baseline: The current baseline calls for shipping 4,900 cubic meters of low-activity TRU waste to WIPP by 2034. The baseline shipping schedule for this waste is: 12 TRUPACT-II shipments (504 drums) per year through 2014 and 24 shipments per year (1,008 drums) through 2034. This schedule is based on the unaccelerated National TRU Program Plan with priority on closure sites such as Rocky Flats and Idaho. In addition to the currently planned baseline shipments, approximately 3,000 drums of TRU waste must be moved to WIPP in order to support the shipments of TRU Waste from the Mound Facility to SRS for interim storage and future processing. These 3,000 drums are planned to be shipped by March 2003. It is assumed that sufficient TRUPACT-IIs are available in 2003, after Idaho meets an initial shipment milestone to support the accelerated schedule. This assumption is also consistent with WIPP's Transuranic Waste Performance Management Plan to increase its capacity to receive 34 shipments per week.

Initiative Benefits: By providing enhanced characterization, repackaging, certification and additional TRUPACT-II loading capability, the Site can accelerate the cleanup of low-activity drum waste at SRS by nearly 21 years, thereby accelerating risk reduction and reducing cost for storage and processing by approximately \$800 million. The accelerated program is directed at $\sim 24,000$ drums of Pu-239 waste and low-activity Pu-238 waste and ~ 480 polyethylene (poly) boxes. The accelerated plan will ship this inventory of TRU waste drums to WIPP by the end of FY09. To achieve the acceleration goal, SRS will ship approximately 4,000 drums per year, roughly eight times the current TRU Program baseline shipping schedule.

Prerequisites to Success: The following activities will be required to implement this accelerated program:

- Capital investment in SRS to augment existing TRU processing facilities and provide new drum repackaging and drum sort/segregate capability based on Los Alamos National Laboratory (LANL) glovebox system.
- Additional facility upgrades to SRS facilities to provide aerosol can puncturing, liquid stabilization, handling and transport equipment, and a loading system for transport.
- Deployment of enhanced characterization equipment at SRS by National TRU program, including Pu-238 assay capability.
- Provision of culvert-opening capability.
- Electronic Data Collection, characterization, certification interface for National TRU program characterization program with WIPP.
- Safety basis and regulatory development, procedures, training for new capability.
- Enhanced TRUPACT-II payload capabilities.

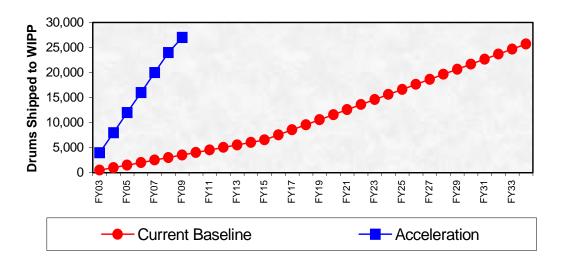
Schedule: Procurement and project activities begin in 2003 in order to sustain 4,000 drums per year in the outyears. The 24,000 drums and 480 poly boxes identified are processed and shipped between 2003 and the end of 2009.

Funding Requirements (\$ million): The table below shows the near-term funding requirement for FY03. Funding for FY04 to FY08 remains to be determined.

	FY03
Initiative Cost Estimate	11
Cost Reduction Challenge	(3)
Net Funding Request	8

Note: The funding values will be fully integrated with the TRU Waste Performance Management Plan, such that there is no scope which is repeated in both proposals.

Performance Metric: The main objective of this initiative is to accelerate the disposition of legacy waste and reduce the risk from long-term storage. The performance metric will be to measure that acceleration in number of shipments against the baseline schedule.



Solid Waste Program

Initiative Title: WM-4, Accelerate

Risk Reduction through Expedited Management of High-Activity TRU Waste



Initiative Description: Accelerate risk reduction by providing early funding and a modular approach for the TRU facilities to process and/or treat the high-activity Pu-238/Pu-239 waste and bulk containers. Capital funding for all activities including design, construction and startup activities is to be provided in the FY04–FY08 time frame. As opposed to the original concept of a large Hazard Category 2 facility, the accelerated approach will include the use of existing facilities at SRS for infrastructure and the major containment structure. The initiative also includes fit-for-purpose modular design concepts for certain activities (storage of containers waiting processing) and the possible use of existing Remotely Operated Size Reduction System (ROSRS) obtained from Rocky Flats for processing large bulk equipment or other new technology for organic destruction, such as the Studsvik steam reforming process. This, combined with the anticipated operation of a rail transport program and new TRUPACT-III transporter, will allow SRS to accelerate the end state date from the proposed 2024 date to 2013, thus realizing a life-cycle savings of approximately \$890 million.

Current Baseline: The current baseline plans call for the design and construction of a Hazard Category 2 facility to process and treat the high-activity portion of the TRU waste legacy containers and large bulk equipment. The project is scheduled for authorization in FY05 with design and construction running through FY15. Operations would commence in 2015 through 2024. This facility would process ~ 5,400 m³ of drums and boxes. It would include facilities for culvert opening and drum removal, sorting and repackaging and possible treatment for shipment to WIPP. It would also have the capability to open black boxes and remove the large equipment; size-reduce, as necessary; and repack in standard waste boxes. Other odd shaped containers such as concrete casks and manipulator tubes would also be handled in this facility. Rail and truck transport loading facilities would also be included. Expected Total Project Cost (TPC) was projected to be \$453 million, with operating costs additional to this.

Initiative Benefits: By abandoning the large capital line item project strategy and accelerating the funding for this modular concept utilizing existing facilities, the higher activity and bulk waste will be shipped to WIPP on an accelerated schedule. This action results in a significant risk reduction of stored material at SRS by addressing the higher activity material at an earlier date. It moves the end state for TRU waste at SRS from the projected 2024 to 2013, an additional 11-year acceleration. This program is directed at $\sim 5,400~\rm m^3$ of high activity Pu-238/Pu-239 waste, including the large bulk equipment stored in black boxes, casks and other containers. This accelerated plan will ship this approximately 80% of this inventory of TRU waste to WIPP in the new TRUPACT-III transporter via either rail or truck, with the remaining 20% undergoing significant repackaging or treatment. The new TRUPACT-III having the capability to transport large boxed waste, could be in operation as early as 2005, which

easily supports an FY08 date needed to support this accelerated schedule and has the potential to significantly reduce the amount of processing necessary to prepare bulk waste for shipment. The lifecycle saving for this initiative is approximately \$890 million.

Prerequisites to Success: The following activities will be required to implement this accelerated program:

- Capital investment at SRS to provide modular high-activity TRU waste processing capability, including expedited line item approval to support initiation in FY04
- Upgrades to existing facilities to provide infrastructure for these processing systems
- Effective utilization of less expensive modular designs for certain activities (e.g., Dufrane modular storage units)
- Assumes that the existing ROSRS can be utilized without major re-engineering (size reduction, repackage modules)
- Availability of TRUPACT-III containers

Schedule: This initiative is based on an assumption that multiple project activities begin in 2003 with the facility operational in 2009. The 5,400 m³ is processed and shipped to WIPP by the end of 2013.

Funding Requirements (\$ million)⁴: The table below shows the near-term funding requirement for FY03. Funding for FY04 to FY08 remains to be determined.

	FY03
Initiative Cost Estimate	0
Cost Reduction Challenge	0
Net Funding Request	0

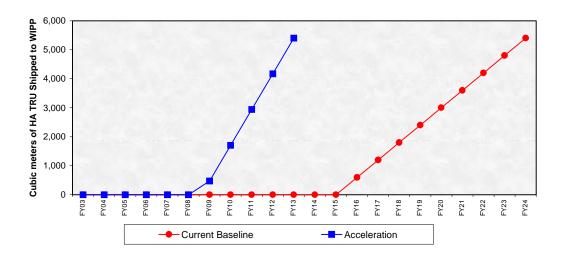
For ease of reference the funding requirements for both WM-3 and WM-4 are presented below as a <u>combined</u> total to achieve the total acceleration of the TRU program at SRS.

	FY03
Initiative Cost Estimate	11
Cost Reduction Challenge	(3)
Net Funding Request	8

Note: The funding values will be fully integrated with the TRU Waste Performance Management Plan, such that there is no scope which is repeated in both proposals.

⁴ The budgetary estimates provided herein are planning estimates for the cleanup phase as delineated in DOE 54301-1.

Performance Metrics: The main objective of this initiative is to accelerate the disposition of legacy waste. The performance metric will be to measure that acceleration against the baseline schedule.

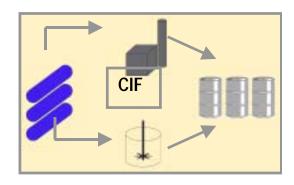


Solid Waste Program

Initiative Title: WM-5, Cost Effective/Risk-Reducing Alternative to

Incineration for PUREX Waste

Initiative Description: Implementation of a new stabilization technology for treatment of PUREX waste will significantly reduce risk by accelerating the treatment of the PUREX waste 10 years sooner than the current



commitment. It will also accelerate the decommissioning of the CIF from FY35 to FY09 and provide a solution for F Canyon PUREX not covered in the baseline. This initiative will produce a lifecycle saving of \$85 million by completing these activities nearly 25 years ahead of the assumed FY35 EM end state in the baseline.

Current Baseline: The current treatment for the PUREX waste is incineration. CIF will be restarted and incinerate the aqueous and organic phases of PUREX waste to meet the current Site Treatment Plan commitment of FY19. Surveillance and maintenance of the CIF facility continue to FY35 and beyond. The lifecycle cost of using the CIF to treat the PUREX waste and for continued surveillance and maintenance of the facility through an FY70 end state is \$450 million.

Initiative Benefits: The early treatment facilitated by this alternative technology reduces the inherent risk from long-term storage of 25,000 gallons of legacy organic PUREX, 12,000 gallons of legacy aqueous PUREX, and approximately 60,000 gallons of F-Canyon PUREX waste in underground tanks. Treatment will be done in three phases. The aqueous portion (12,000 gallons) will be treated at the Saltstone Facility in FY03. The remaining organic legacy PUREX waste (25,000 gallons) will be stabilized using a commercially available product in a new facility. This is a low complexity process with a high probability of success. Following disposition of the legacy organic PUREX, the F-Canyon organic PUREX waste (~60,000 gallons) will also be treated in the new facility. The ease of implementation will allow legacy waste removal from the tanks by FY09, ahead of the original Site Treatment Plan (STP) commitment of FY19.

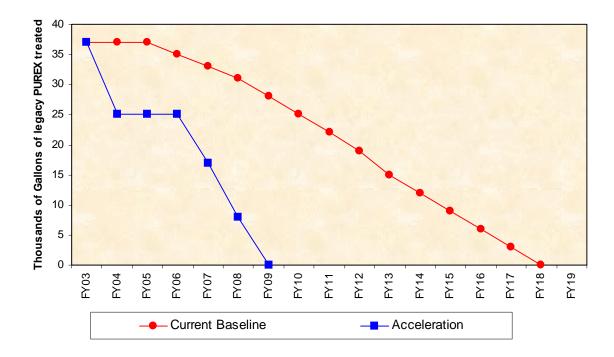
Prerequisites to Success: There is no existing facility at SRS with the capability of stabilizing the organic PUREX waste. A new general plant project is required to provide a stabilization facility for treatment of this waste. Since the organic PUREX waste is a RCRA hazardous waste, this facility will need a treatment permit issued by SCDHEC. The new stabilization technology is a low complexity process with little technical uncertainty. This stabilization process is an alternative technology to incineration, and has a high probability of obtaining all the necessary regulatory permits.

Schedule: This initiative is based on the assumption that project activities begin in 2003. The 12,000 gallons of aqueous PUREX is treated in FY03 at Saltstone facility, the 25,000 gallons of organic legacy PUREX is treated by the end of 2007 in a new stabilization facility, and the F-Canyon waste is treated by end of 2009.

Funding Requirements: (\$ million)⁵: The table below shows the near-term funding requirement for FY03. Funding for FY04 to FY08 remain to be determined.

	FY03
Initiative Cost Estimate	1
Cost Reduction Challenge	0
Net Funding Request	1
Long-Term Stewardship	0

Performance Metrics: The main objective of this initiative is to accelerate the disposition of legacy waste, thereby reducing the inherent risk from long-term storage. The performance metric will be to measure that acceleration against the baseline schedule.



⁵ The budgetary estimates provided herein are planning estimates for the cleanup phase as delineated in DOE 54301-1.

Environmental Restoration (ER) Program

Program Description

The ER program mission is to investigate inactive waste sites and groundwater units and, if needed, remediate releases of hazardous substances to minimize or eliminate potential risks to human health or the environment. Remediation of waste sites is regulated by RCRA and CERCLA. In 1993, SRS entered into the a legally binding cleanup agreement, the Federal Facility Agreement (FFA), with the SCDHEC and the EPA, which lays out the schedule for remediating the inactive waste and groundwater units.

There are currently 515 inactive waste and groundwater units in the SRS ER program. The waste units vary in size from a few square feet to tens of acres and include basins, pits, piles, burial grounds, landfills, and tanks. The contaminated groundwater plumes are substantially larger and range up to as much as 1,600 acres. Although soils, groundwater and surface water have been impacted by radionuclides and hazardous chemicals as a result of over 50 years of operations, mitigating actions have helped to limit the contamination to local areas and to reduce any current, significant offsite risk. An assessment of the human health and environmental risks associated with each waste site is conducted to determine the cleanup priority, where focus is placed on the highest risk first. Additionally, as facility dispositioning is performed, the impact to waste sites and the surrounding environmental medial will be assessed for appropriate actions.

If preliminary evaluations show that a waste unit may be a candidate for cleanup, an investigation and site characterization are conducted. If the investigation determines that there is a risk to human health or the environment, cleanup alternatives are evaluated, selected and implemented. Currently, of the 515 identified SRS units that require evaluation, 306 have been closed or are in remediation, while 340 of the 500 total acres requiring remediation have been or are being remediated. There are 11 groundwater contamination areas with treatment systems actively remediating the groundwater contamination at eight of these site areas.

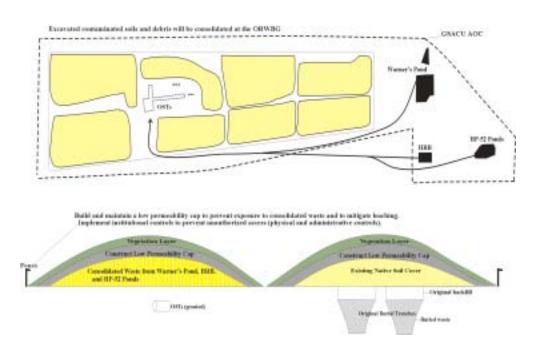
With support from the regulatory agencies, SRS deploys state-of-the-art technology to increase remediation effectiveness and efficiency. By using remediation techniques such as vacuum extraction, a process that removes solvents from the soils above the groundwater, SRS has been able to reduce the potential for more groundwater contamination, as well as reduce cleanup cost and expedite cleanup, while protecting human health and the environment. Another technology SRS has successfully deployed involves using nature in remediation. For instance, phytoremediation, the technique of using natural processes occurring in vegetation, is being used to mitigate contamination in groundwater.

The following strategic initiatives, REM-1, Accelerate Closure of the Old Radioactive Waste Burial Ground; REM-2, Accelerate Contaminant Reduction in Fourmile Branch Stream; and REM-3, Accelerate Risk Reduction Through Innovative Technologies and Improved Regulatory Processes, will enable additional streamlining in this program.

Environmental Restoration Program

Initiative Title: REM-1, Accelerate Closure of the Old Radioactive Waste Burial Ground

Initiative Description: This cleanup reform initiative prioritizes the reduction of risk by consolidating, integrating, and accelerating the remediation of five high risk SRS-ER waste sites. The improved end state is achieved by excavating and consolidating 33,500 cubic meters of higher level radiologically contaminated soils and materials from four nearby waste units onto the ORWBG. The excavated sites will be backfilled with clean soil and protected by a simple soil cover and institutional controls while any residual radioactivity decays. Following in-place closure of the 22 old solvent tanks (OSTs) which are located within the burial ground and the consolidation of the excavated soils, a low permeability cap will be constructed over the ORWBG and protected by institutional controls. This initiative affords significant cost savings and avoidance as well as significant remediation acceleration.



The following primary project elements will be implemented to effect closure of the five waste units:

- Excavate and consolidate the highest level radioactive soils from H-Area Retention Basin (HRB), Warner's Pond (WP) which includes a coincidental portion of the H-Area Inactive Process Sewer Lines, and the HP-52 Pond (HP-52) onto predetermined locations within the ORWBG.
- Close HRB, WP, and HP-52 sites with a simple backfill cover.
- Close the ORWBG, including the OSTs and the materials from the other sites, with a low permeability cap.
- Maintain institutional controls for all units.
- Perform groundwater remediation in the ORWBG region under a RCRA permit.

Activities Planned in FY03 include the following:

- Develop and obtain approval of the final CERCLA ROD for the ORWBG surface unit.
- Develop preliminary and definitive designs.
- Complete field investigation to validate extent of contamination in WP and HP-52.
- Develop and obtain post-ROD document approval for scope of work.
- Complete the in-place closure of the OSTs.

Current Baseline: Each of the waste sites is addressed as a separate remediation project in the SRS-ER program baseline. For HRB, WP, and HP-52, the remediation involves off-SRS disposal and/or in-situ treatment of Principle Threat Source Material (PTSM). For the ORWBG and OSTs, the remediation assumes in-place closure could be agreed to by the two regulatory agencies. Each of the projects will have a separate programmatic scope, cost, and schedule baseline. Each is a separate operable unit in the SRS FFA with separate implementing schedule milestones. The current cost baseline is shown in the table below. The current schedule baseline shows a collective completion date in late 2010.

Current Baseline (\$ million):

SITE	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10
HRB	0.5	3.0	6.0	4.5	1.0	0.0	0.0	3.0
WP	1.0	1.0	0.0	0.5	1.0	3.0	7.0	3.5
HP-52	2.0	0.5	0.0	1.0	3.5	6.0	3.0	0.0
ORWBG	5.0	5.5	0.5	0.0	0.0	0.0	0.0	0.0
TOTAL	8.5	10.0	6.5	6.0	5.5	9.0	10.0	6.5

This baseline includes \$18 million that would be required for off-site and/or in-situ disposal costs that are not currently in IPABS for HRB, WP, and HP-52. This total does not include \$9 million for contingency that is included in IPABS.

Initiative Benefits:

- Closure of the highest risk unit in the ER program, i.e., the ORWBG
- Results in significant worker risk avoidance by leaving the ORWBG buried waste and contaminated soil (approximately 600,000 curies) in place for closure
- Results in an estimated cost avoidance of \$150 million (\$132 million avoided by reaching agreement to dispose of the long-lived burial ground waste and the OSTs in place, and \$18 million for consolidating the other four projects into the ORWBG closure)
- Removes mobile contaminants from HRB, WP, and HP-52, thereby reducing risk to adjacent streams and limiting post closure groundwater monitoring, at a savings of \$1.4 million

- Eliminates multiple sets of regulatory documents for estimated savings of \$3.6 million
- Achieves over 99% risk reduction from the four waste site cleanups for the public and the industrial worker
- Reduces the overall projects' completion schedule by two years
- Beneficially reuses the consolidation soils, in lieu of clean fill material, to achieve the final lines and grade for the construction of the ORWBG closure cap

Prerequisites for Success:

Regulatory agreement for consolidation and reduction of regulatory documents.

This project has strong regulatory support as evidenced by an Agreement in Principle, dated 1/26/2001 and signed by the EPA and SCDHEC to support the project.

Regulatory agreement to leave the burial ground waste in place and proceed with the consolidation project.

The two regulatory agencies have approved the Corrective Measures Study/Feasibility Study and the Statement of Basis/Proposed Plan in FY02.

Schedule:



Schedule acceleration » three years for WP and HP-52.

Funding Requirements (\$ million): The table below shows the near-term funding requirement for FY03. Funding for FY04 to FY08 remain to be determined.

	FY03
Funding Request	3.5

Performance Metrics: The performance on project will be tracked using standard cost and schedule measures in accordance with DOE Order 413.3.

Environmental Restoration Program

Initiative Title: REM-2, Accelerate Contaminant Reduction in Fourmile Branch Stream

Initiative Description: This initiative achieves substantial risk reduction in Fourmile Branch by 2007. There are currently exceedances in the stream for uranium, cobalt, iodine-129, radium-226, strontium-90, vanadium and tritium from groundwater discharges associated with the Mixed Waste Management Facility and the F- and H-Area Hazardous Waste Management Facilities. The proposed technologies for this initiative are base injection and phytoremediation with spray irrigation.

- Base injection consists of pumping alkaline solutions into the subsurface to raise the
 aquifer pH. This action will change the low pH condition in the aquifer that is
 mobilizing contaminants. The result will fix many contaminants in place and
 prevent their migration to the stream.
- Phytoremediation with spray irrigation provides a system to manage the precision extracted groundwater by irrigating two hundred acres of forest. This action significantly reduces aquifer recharge by limiting the volume of re-injected water. The irrigated groundwater will be evapo-transpired at levels below National Emission Standards for Hazardous Air Pollutants (NESHAPs) values.

This initiative will substantially reduce, and possibly lead to the elimination of, the current pump, treat, and re-inject remediation systems, and thereby reduce the cost of this RCRA permitted remediation while accelerating risk reduction to the public.

Current Baseline* (\$ million):

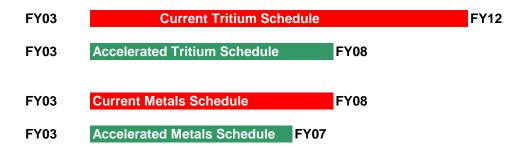
	FY03	FY04	FY05	FY06	FY07	FY08
Funding Request	3.6	5.5	2.2	1.5	2.1	1.5

Initiative Benefits: This initiative will implement two innovative technologies to reduce the overall contaminant concentrations in Fourmile Branch to regulatory standards maximum contaminant limits (MCLs). Accelerated implementation of this project will achieve an 80% reduction in risk to human health and the environment in Fourmile Branch and reduce the contaminant flux to the Savannah River three years ahead of the current schedule.

Prerequisites to Success: The state regulators must approve the SRS RCRA Part B Corrective Action Plans associated with this work. The corrective action plans are currently under review by SCDHEC. Due to previous successes in smaller scale field implementation of these technologies, there is a high probability of receiving regulatory approval.

^{*} Annual operating cost for the pump and treat systems are approximately \$10M/year. This cost is not included as part of the project baseline and is the cost that is targeted for elimination.

Schedule:



Funding Requirements (\$ million): The table below shows the near-term funding requirement for FY03. Funding for FY04 to FY08 remains to be determined.

Future funding requirements will reflect the estimated cost to develop, construct and start-up an alternate remedy to replace the current groundwater treatment units.

	FY03
Funding Request	14.7

Performance Metrics: Performance will be measured against the calendar year 2000 average concentrations for tritium in Fourmile Branch at the mouth of the stream (monitoring station FM-6). Other contaminants will be measured downgradient from the project and compared to the September 2000 baseline concentrations established in the RCRA Permit (monitoring station FM-A7U). The goal is to achieve regulatory standards in the stream by 2007 for metals and by 2008 for tritium.

Environmental Restoration Program

Initiative Title: REM-3, Accelerate Risk Reduction Through Innovative Technologies and Improved Regulatory Processes

Initiative Description: This initiative accelerates risk reduction and reduces lifecycle cost for the ER program's more than 200 remaining cleanup projects by using innovative technologies and streamlined regulatory processes. Aggressive and efficient source cleanup will achieve low-cost monitoring end states or full closures by decades earlier than will traditional technologies. As examples, SRS has recently used two new technologies to accelerate remediation: Dynamic Underground Stripping (DUS) and Microenfractionation. In concert with an improved regulatory process, these and other innovative technologies will reduce the cost for the EM Program at SRS, and will meet regulator and stakeholder requirements. This stems from a key SRS imperative for the use of innovation in the Site's cleanup program.

The two technologies noted above are among many of the recently proven technologies that will be applied at different waste units across SRS. DUS removes and destroys solvent source Dense Non-Aqueous Phase Liquids (DNAPL) contamination in the vadose zone and groundwater. A recent DUS (a steam injection process) deployment at SRS extracted solvents 75 times faster than the pump and treat configuration operating within the remedial zone. The Microenfractionation, an enhanced bioremediation process, remediates surface soils on-unit which are contaminated with polychlorinated biphenyls, herbicides, and pesticides. The Microenfractionation process will eliminate the need to dispose of acutely hazardous waste at an off-site incineration facility. Each of these two technologies has been deployed at SRS, greatly accelerating cleanup schedules and reducing worker and environmental risk by 99%, while substantially cutting lifecycle cost. These aggressive source term cleanup projects also establish the basis for leaving low-risk, low-level residual contamination in place under long-term, inexpensive institutional controls. In other cases, aggressive source term cleanup is coupled with passive technologies to reduce risk and achieve final cleanup goals at the lowest cost possible. Natural remediation, or passive technologies, are low cost options. These include phytoremediation and monitored natural attenuation and are often selected as preferred remedial approaches for dilute fringe areas of contaminant plumes.

An acceleration of project schedules and reduced baseline costs is achieved by an improved regulatory process that employs a Core Team approach to make real-time decisions and streamline the document process. Core teaming with regulators has allowed the SRS environmental program to eliminate, reduce, or combine key regulatory decision documents. These actions result in a decreased cost for the assessment and decision phase of the process, as well as a significant reduction in the time it takes to begin cleanup for the respective projects. Further, the Core Team remedy decision process has resulted in the selection of remedies that are very appropriate for the risk levels, thus assuring favorable cost/benefit results.

Selected key projects that are proposed for acceleration as they yield significant risk reduction, and utilize innovative, cost effective remedies include:

Waste Unit(s)	Technology	Risk Reduction	Benefit
M Basin, A14 Outfall	Dynamic Underground Stripping	>99%	Shutdown existing pump and treat units before FY10, accelerating end states by decades
CMP Pits	Microenfractionation	>99%	In-situ source remedy, accelerates schedule by 5 years at substantial cost avoidance
488-D Basin	Geosynthetic Cover	>95%	Eliminate groundwater contaminant source, significant baseline cost reduction >\$10M, accelerate remediation by 4 years, reduce regulatory decision documents
C Burning Rubble Pits, D-Area Operable Unit, A/M Area	Enhanced Bioremediation for Groundwater Remediation	>90%	Innovative technology to promote Natural Remediation for a cost effective source remediation
P-Area Groundwater	Phytoremediation	>95%	Eliminate high-risk tritium and volatile organic compound (VOC) contaminated groundwater from discharging into Steel Creek
C-Area Groundwater	Soil Vapor Extraction at the source with active to passive systems	>95%	Eliminate VOC source in the vadose zone to facilitate Natural Remediation as a final action for groundwater

Combining the improved regulatory process with the increased deployment of innovative technologies will reduce the ER program's overall execution year and life-cycle cost, shorten schedules for the individual waste site projects, and accelerate completion of the overall environmental remediation program.

Current Baseline (\$ million): Project cost estimates assume current baseline technologies and the normal assessment/remediation schedules consistent with either RCRA or CERCLA projects. Budget as shown is without cost savings that will be derived from efficiencies due to technologies and the Core Team approach.

FY03	FY04	FY05	FY06	FY07	FY08
42.8	54.1	36.0	35.9	50.47	62.3

Initiative Benefits: Earlier risk reduction and lower cleanup costs (targeted at 13% over the average of all projects) will result from the use of innovative technologies and the Core Team decision-making process.

- Aggressive source remediation will allow several of the waste sites to reach a lowcost monitoring end state by decades earlier than planned.
- Aggressive source remediation can be coupled with passive technologies to reduce risk and accelerate final cleanup goals.
- Core Team achieves a streamlining of the decision-making process which shortens the time to begin cleanup work and results in most appropriate remedial solutions.

Prerequisites to Success: The regulators are committed to the Core Team process and support the development and implementation of innovative technologies. SRS has high confidence in executing the project efforts as exhibited from recent decisions supporting the successful DUS and Microenfractionation deployments.

Funding Requirements (\$ million): The table below shows the near-term funding requirement for FY03. Funding for FY04 to FY08 remains to be determined.

	FY03
Funding Request	21.6

Performance Metrics: The performance will be assessed against the currently established and approved cost and schedule baselines for the respective cleanup project following project management principles consistent with DOE Order 413.3.

Facilities Deactivation and Decommissioning (FDD) Program

Program Description

The FDD program goal is to deactivate excess facilities and maintain these deactivated facilities in safe condition to minimize risk to workers, the public and the environment; and to decommission facilities, if justified by risk, economics, or DOE programmatic objectives.

The program is responsible for dispositioning the more than 200 SRS structures that have been identified as excess. These facilities range in size and complexity from small storage buildings to large nuclear reactors. Dispositioning is the process that begins once a decision is made that a facility is no longer needed to support SRS missions and the facility is declared excess.

The facility disposition process is broken down into four activities:

- 1) Shutdown/Transition is the process of terminating operations in a controlled manner, placing the facility in stable and known conditions, identifying hazards, eliminating or mitigating hazards, and transferring programmatic and financial responsibilities to the FDD Program.
- 2) Deactivation places a facility in a stable and known configuration by removing the chemical and radioactive materials, shutting down or mothballing the facility equipment and mitigating the hazards.
- 3) Safe Storage is the dormant period when Post-Closure Care and Maintenance activities occur to ensure the protection of human health and safety and the environment.
- 4) Decommissioning places a facility in its final end state and can include dismantlement, decontamination, or some other activity that makes the land available for either unrestricted use or for limited applications.

In addition to dispositioning those structures which have already been identified as excess, the program will disposition facilities as they are determined to be no longer necessary to support SRS missions. For instance, F Canyon, the RBOF and the CIF will be shutdown/transitioned into the disposition program as described in Strategic Initiatives in this PMP. The EM End State Plan will define the appropriate disposition activities to place these facilities in their appropriate end states. Additional funding to complete these facility disposition activities will be provided from the \$8 to \$12 billion life cycle savings that will result from accelerated cleanup.

Facilities Deactivation and Decommissioning Program

Initiative Title: DD-1, Accelerate Facilities Disposition

Initiative Description: Accelerate the demolition of virtually all currently inactive facilities outside the site's central core area by 2006. This will entail the removal of up to 72 facilities, with a footprint of 567,000 square feet (ft²), located in the T, D and M Areas, which are inactive with no defined or anticipated future mission. T and D Areas are located in a remote area near the Savannah River, and M Area is located in close proximity to the pubic domain. Removal of inactive facilities for which there is no planned reuse reduces the inherent risk to site workers, the public and the environment, as well as reducing the life-cycle cost to maintain them. This initiative is consistent with the SRS EM End State Vision (Section 3.1 of this PMP) to consolidate continuing National Security missions to the center of the site and decommission inactive facilities in the Environmental Research Park surrounding the central core area.

This initiative, along with the broader scope of the facilities disposition vision provided in Section 3 of this PMP, directly addresses recent criticism of the EM facilities disposition program:

The IG Audit Report, <u>Disposition of the Department's Excess Facilities</u>, dated April 2002, stated that DOE's excess facilities "are deteriorating, causing the cost of performing surveillance and maintenance to increase while at the same time providing limited or no value to the mission of the Department's programs. As time passes, the potential for negative impacts to worker safety and the environment will continue to increase." The results of the <u>Top-to-Bottom Review of the EM Program</u>, dated February 4, 2002, identified a "systemic problem with the way EM has conducted its activities: the EM program's major emphasis has been on managing risk, rather than actually reducing risk to workers, the public, and the environment."

Current Baseline: While the SRS Long Range Comprehensive Plan indicates that all but two facilities in the T, D and M Areas will be removed by the year 2020, the current baseline provides no budget or plan for their removal. The baseline for these facilities provides for their deactivation in the 2000 to 2006 time frame followed by long-term surveillance and maintenance until 2070 when eventual demolition will take place. The baseline life cycle cost for the facilities in the T, D and M Areas exceeds § 1 billion.

Initiative Benefits: This initiative, along with the broader scope of the facilities disposition vision provided in Section 3 of this PMP, changes the emphasis from managing risk to elimination of risk; significantly reduces the life cycle cost for these facilities; supports the SRS Comprehensive Plan objective to move all functions toward the center of the site; and supports the EM objectives of accelerated cleanup and footprint reduction. Specifically, this initiative will:

- Reduce life cycle cost by \$ 945 million
- Eliminate up to 72 facilities, with a footprint reduction of over 567,000 ft² through the most cost effective means, including approaches such as assets-for-services
- Eliminate risk associated with these facilities located in close proximity to the site boundary, rather than continuing to manage risk and accept the associated liability

Prerequisites to Success: The following activities will be required to implement this accelerated program:

- A significant planning effort will be required in FY03 to support activities planned for FY04.
- As appropriate, establishment of site specific site release criteria to define allowable residual contamination levels, and Multi Agency Radiation Survey and Site Investigation Manual (MARSSIM) survey methodology for final radiological verification will require DOE-HQ approval.

Schedule:

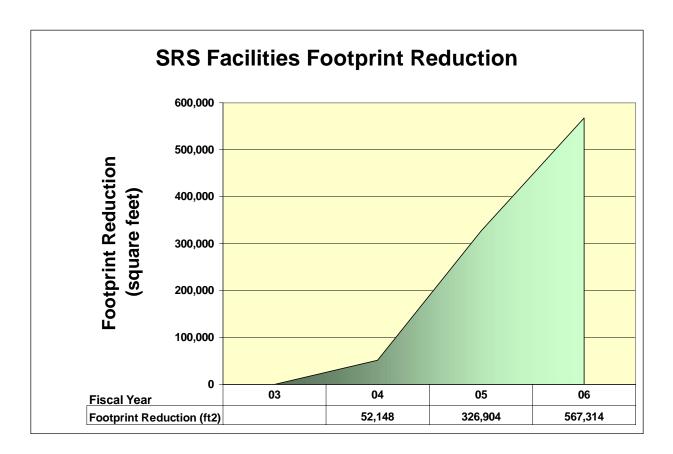
	FY-03	FY-04	FY-05	FY-06
Planning				
D Area				
TNX				
M Area				

Funding Requirements (\$ million): The table below shows the near-term funding requirement for FY03. Funding for FY04 to FY08 remains to be determined.

	FY03
Initiative Cost Estimate ¹	5
Cost Reduction Challenge	0
Net Funding Request	5

Note: 1. Near-term D&D activities outside the scope of this initiative, as discussed in Section 3 of this PMP, will be funded by other initiatives contained herein (MM-1 and WM-2). Longer-term actions will be funded by reallocating funds from the \$8-12 billion savings that will result from accelerated cleanup.

Performance Metrics:



Safeguards and Security (S&S) Program

Program Description

The Savannah River S&S program serves national security interests through the protection of SRS nuclear weapons materials, production facilities, property and classified matter from theft, sabotage, or unauthorized control. The baseline also supports the SRS Strategic Plan elements of national security and nonproliferation as required by the Atomic Energy Act, other federal statues, Executive Orders, and other federal directives.

Physical security components include protective force personnel, equipment and facilities, physical security protection systems, and a comprehensive Personnel Security program. These elements provide for intrusion detection and assessment, entry/access controls, barriers/secure storage, explosive detection and monitoring of tamper-indicating devices and alarms in support of the control and accountability of special nuclear materials (SNM).

Information Security components provide for effective classification, declassification, and unclassified controlled nuclear information (UCNI) programs to ensure information is identified (and protected) at the proper security level. Operations security, classified matter protection and control (CMPC), export control, and security incidents programs ensure consistent guidance and appropriate levels of awareness and controls are established across the Site. Cyber Security programs are directed toward the protection of information systems that process classified or unclassified information or are critical to facility operations to avoid the compromise of national security information.

Safeguards and Security Program

Initiative Title: SS-1, Accelerate Required Improvements to General Site Security Infrastructure

Initiative Description: Site security is effected primarily by vehicular inspection, personnel identification, intrusion detection and access control into and within the SRS; this control and inspection is accomplished at various Site perimeter barricades and Entry Control Facilities (ECF) throughout the Site. However, the formidable appearance and efficiency of the security process



that takes place at these locations also effect Site security. In light of the September 11th terrorist attacks on our country, proposed improvements to security facilities have been identified to improve the appearance and process. Upgrades to the Site's existing physical security system infrastructure are also needed to continue supporting current and proposed Site missions.

The scope of this modification is:

- To replace existing Site perimeter barricades with new facilities that present a secure and formidable appearance to individuals approaching the Site.
- To replace existing Site perimeter barricades that permit vehicle control, inspection and personnel identification in a more efficient manner, complying with current security requirements.



- To upgrade or replace selected entry control facilities at Property Protection Areas, Limited Areas and Protected Areas to allow the necessary control of pedestrians and vehicles, complying with current security requirements.
- Correct existing physical security system shortcomings due to equipment obsolescence, and provide technology improvements that will minimize Protective Force and maintenance staffing.







Current Baseline: The current plan for the perimeter barricades and entry control facilities is to maintain existing facilities and fund Protective Force compensatory measures as required due to equipment failure. The proposed project develops conceptual design packages and schedules during FY02 and FY03. This scope includes:

- Upgrade Perimeter Barricades to accommodate vehicle inspections (similar to a toll plaza)
- Install additional wider lanes and appropriate search equipment
- Procure and install equipment enabling detailed searches of vehicles
- Renovate Limited Area Entry Control Facilities to allow appropriate control of pedestrians and vehicles
- · Create adequate all-weather search areas for vehicle ingress and egress

The proposed Security System Restoration Line Item will avoid shortcomings due to equipment obsolescence. This scope includes:

- Local Area Network (LAN) Upgrades
- Wide Area Network (WAN) Upgrades
- Access Control Device Replacement
- · Alarm Multiplexer Control System Replacement
- Host Computer Replacement
- Argus Migration
- Closed Circuit Television (CCTV) Replacement

Initiative Benefits: This work allows SRS to maintain acceptable levels of security for the stored SNM and positions the Site to continue to support material consolidation. Improved searches will be accomplished by providing adequate facilities and improved technologies to perform the searches. Improved reliability of the physical security system's access control and intrusion detection sub-systems prevent the need for costly deployment of Protective Force labor as compensatory measures.

Prerequisites to Success: Continued support for S&S funding for KAMS will permit the receipt and protection of SNM from across the DOE Complex.

Schedule: The barricades and entry control facilities are currently being addressed by the Corps of Engineers with a goal of producing conceptual designs during FY02/03. The physical security upgrades are staggered over the next five years beginning with requests for funds in FY03 to begin conceptual design. This waterfall scheduling was developed to maximize existing Site resources.

Funding Requirements (\$ million): The table below shows the near-term funding requirement for FY03. Funding for FY04 to FY08 remains to be determined. Future funding requirements will be based on existing threat guidance.

SS-1	FY03
Accelerate Restoration and Post 9/11 Improvements to General Site Security Infrastructure	31.0

Note that MM-1 and MM-3(C) address the Security components associated with Nuclear Materials initiatives.

Performance Metrics: Existing Site Project Management and Project Controls tools will be utilized to track project performance.

Safeguards and Security Program

Initiative Title: SS-2 (C), Centralize Alarm Service at SRS

Initiative Description: The SRS has the only Underwriters Laboratory (UL) listed Central Alarm Station in the Federal Government. The system can provide remote monitoring of fire, commercial security, and process alarms from across the DOE



Complex utilizing commercial technology 24 hours a day, seven days a week (24/7). The system has sufficient capacity to accept complex wide input today provided necessary staffing is made available to monitor these signals. Currently SRS is handling 2 panels from Fernald as well as 300 SRS panels.

The technology in use on the SRS Security and Fire Alarm System (SFAS) is the same as that currently employed by every major central alarm station in operation today. Through the use of standard telephone lines, alarm reporting is almost instantaneous. Major corporations such as Wal-Mart monitor the security and fire alarm systems at all of their business locations nationwide (or worldwide) 24/7 from a single location utilizing the same central alarm station technology.

SRS costs will range from \$1.0 - \$2.0 million to achieve DOE Complex savings of \$25.0 - \$50.0 million. Savings will result from avoiding operating costs and major investments to replace aging alarm infrastructure at other sites.

Current Baseline: The SRS SFAS currently costs approximately \$1.7 million per year to operate and monitors about 300 panels from SRS and 2 panels from Fernald. Collectively, these panels are interfaced to over 10,000 fire alarm points.

Initiative Benefits: In addition to the potential DOE Complex wide savings, utilization of the existing SRS infrastructure will:

- Enhance Homeland Security through standardization of alarm system monitoring and reporting including subcontractor offices/facilities not located at large DOE sites (e.g., design firm offices containing site specific sensitive data)
- Enhance personal safety/security by providing personnel with nationwide mobile communication and Global Positioning System (GPS) tracking
- Avoid duplication of services within the DOE Complex
- Demonstrate cost effective implementation of commercial practices
- Minimize new capital investments to replace aging alarm infrastructures within the DOE Complex

Prerequisites to Success: The success of this initiative is dependent on DOE-HQ and the Complex to:

- Reprogram existing alarm panels to redirect signals to SRS
- Change site specific "concept of operations" to rely upon others for service/support

Schedule: The SRS SFAS is currently handling signals for SRS and 3 panels at Fernald. Once funding is made available to support staffing, the SFAS can provide service immediately to another 300 alarm panels (about 10,000 alarm points). System use and growth will depend upon service transition from other sites. Outyear funding request is based upon expectations of gradual growth in number of customers serviced.

Funding Requirements (\$ million): The table below shows the near-term funding requirement for FY03. Funding for FY04 to FY08 remains to be determined. Increased funding is necessary in order to add the personnel to staff the central alarm stations along with hardware costs associated with installation of redundant telecommunication paths.

SS-2 (C)	FY03
Centralized Alarm Services at SRS	1.088

Performance Metrics: Metrics utilized to judge the performance of this initiative will be the overall costs either saved or avoided by other sites as they eliminate the need for central monitoring infrastructure and operations center staffing.

4.3 Other EM Program Descriptions

The other components of the SRS EM Program are described below. While these components of the EM Program do not have strategic initiatives that will directly accelerate the completion of the EM program associated with their scope, these components are critical to executing the scope of the EM program.

SRS Infrastructure Program

The SRS Infrastructure Program is responsible for planning and managing the capital projects to maintain all general site infrastructure that supports existing EM missions and ensure that adequate margins of safety and supply are maintained for other DOE missions hosted at the Site. General Site infrastructure consists of the support facilities, systems and equipment that provides necessary services to the Site's missions, both inside and outside the limited area fences. It includes intra-area utilities and common appurtenances such as roofs, administrative housing, laboratories, and emergency systems. It does not include operating facilities that unique or directly related to the mission capabilities required to execute EM and other DOE missions at the Site. The systems and facilities that comprise general site infrastructure are:

- Administrative facilities
- Central Laboratory Facility (CLAB)
- Computing/Telecom
- · Site Dams
- Electrical transmission system
- · Heating, ventilation and air-condition (HVAC) systems
- Roofing systems
- · Sanitary sewer system
- SRTC
- SFAS
- Steam system
- Transportation (site roads and railroads)
- Water systems (process and domestic water)

SRS general site infrastructure continues to maintain support to all enduring site missions.

Essential Site Services and General and Administrative Programs

The Essential Site Services (ESS) and General and Administrative (G&A) programs provide operating support that enables the Site to meet its mission requirements. EM and other DOE missions at the Site fund these programs as site overhead expense. Types of work categorized as ESS scope includes:

- Environmental Services, such as environmental monitoring and reporting and regulatory compliance support and oversight.
- Safety and Health Protection Services, including dosimetry, respiratory protection, medical services, and the SRS safety program.
- General Site Services, such as engineering services, maintenance programs, nondestructive testing, geotechnical support, criticality and safety analysis programs, emergency services and fire department, fleet management, etc.

 General Site Infrastructure that operates and maintains shared facilities across the site, such as roads, bridges, parking lots, grounds, dams and other facilities outside the general areas.

The G&A workscope includes functions such as the following:

- · Procurement services and materials management
- Information technology
- Management services including contract administration, document control and records management
- Human resources
- · Internal and contractual audits
- Legal Counsel
- Finance
- · Public affairs

5.0 Project Funding

5.1 Funding

Fiscal Year 2003 through Fiscal Year 2008 funding is to be determined. Fiscal Year 2003 funding required for each of the initiatives can found in Section 4 of this PMP.

5.2 Cost Reduction Objective

Changing traditional methods of operations to focus on streamlining, reducing and tailoring requirements to the work being accomplished will result in significant cost reductions, that will enable SRS to accelerate its cleanup program. For instance, through initiatives such as Requirements Based Surveillance and Maintenance, SRS expects to identify activities that exceed minimum essential surveillance and maintenance requirements, which can then be eliminated. Adopting a Closure Facility approach will support efforts to specifically identify requirements that contribute to safe operations in a facility closure mode and eliminate requirements with little added value. Likewise, applying commercial standards to the ways in which SRS conducts its work will result in cost reductions. Applying these kinds of philosophies to the cleanup program will require cooperation among DOE, the Defense Nuclear Facility Safety Board (DNFSB), and the contractor to maximize the opportunities for cost reductions which can be reinvested in cleanup work.

SRS believes that accelerating completion of the cleanup program to as early as 2025 will require achieving cost savings greater than the current contract savings commitment. Completing additional scope by realizing cost reductions over and above current contract savings commitments represents a significant management challenge to the SRS contractor. We believe that, however challenging, these cost reductions can be achieved by maintaining the synergy and momentum that has been built up over the last several years at SRS through an institutionalized cost reduction program, and by implementing the new cost savings strategies discussed above. Through establishment of super-stretch performance-based incentives, the Department of Energy – Savannah River (DOE-SR) will drive realization of these cost reductions to create funding for the completion of the additional unfunded work scope. This concept is now outlined in the existing contract with the contractor, Westinghouse Savannah River Company (WSRC), and specific implementation of this concept to maximize its effectiveness as related to accelerated cleanup is currently the subject of discussions between WSRC and DOE.

5.3 Funding Structure

Currently, EM funding received at SRS is split between the Budgeting and Reporting (B&R) Codes for the Site/Project Completion account (~35%) and the Post-2006 Completion account (~65%). This funding allocation, while difficult, is not unmanageable in an environment of relative stability in work planning and execution. However, this accelerated cleanup proposal is inherently dynamic. Optimum work scope execution is predicated on flexibility to align funding against initiatives which provide the most lucrative payback in terms of risk reduction and life-cycle cost reduction. As in any major project endeavor, changes will be necessary to maintain and optimize this payback. The consolidation of EM funding at SRS into a single account would provide the necessary flexibility to achieve this optimization. Without this consolidation, maximum work scope execution is potentially jeopardized, since any realignment of funding would require formal reprogramming actions, consuming valuable time which could be better used in actual work execution.

Additionally, a significant element of the SRS cleanup proposal revolves around waste processing. This element includes the Waste Removal Line Item, a formal line item approved by Congress with associated funding. Further flexibility would be provided to facilitate maximum work execution if this line item were shifted from a formal capital line item to a cost project. This shift would provide operating funding for waste removal, allowing realignment of funding between ongoing operations and the project as necessary to achieve maximum performance.

6.0 Project Management Approach

The Department of Energy Headquarters (DOE-HQ) and the Department of Energy-Savannah River (DOE-SR) agree to achieve the safe, accelerated risk reduction and cleanup of the Savannah River Site (SRS) by 2025 through the implementation of the Strategic Cleanup Reform Initiatives. This agreement will necessitate a formal revision to the site baseline and the implementation of management changes to ensure the successful achievement of the baseline goals. These management changes include, but are not limited to:

- Continued re-alignment/restructuring of the DOE-SR Field Office to facilitate contractor interfaces in a manner that supports achievement of the accelerated cleanup plan.
- Assuring Human Resource goals and objectives for the DOE-SR office as specified in the 5-Year Staffing Management Plan are met.
- Assuring prompt resolution of contractor skills mix and related workforce management issues
- Continuing to strengthen Federal and contractor project manager capabilities and related project management systems.
- Development of an aggressive acquisition strategy to assure contractual breakthroughs in performance in ongoing and future contracts inclusive of appropriate contractor incentives and use of competitive contracting techniques.
- Aligning performance monitoring, measuring, and reporting systems to conform with Government Performance Results Act (GPRA) expectations particularly with respect to the accelerated clean-up initiatives described in this plan.
- Assuring management and control systems are in place to effectively maintain minimum essential requirements.
- Reducing the number of budget control points through consolidation/collapsing of Environmental Management's (EM) appropriation structure, preferably to a single appropriation. This would also include re-defining what constitute reportable and controllable line item construction projects within Congressional appropriations.
- Streamlining, tailoring, and/or waiving certain DOE Order requirements that are inapplicable or inappropriate for "closure" activities at the site.
- Maintaining a strong commitment to the re-engineered regulatory Core Team approach for cleaning up legacy waste sites and groundwater units.

6.1 Performance Monitoring Process

DOE-SR will develop and implement a predictable, reliable, and performance-based oversight and assessment process to manage the contract and EM projects. This process will ensure that progress is reported against the target case baseline (technical, scope, cost, schedule, and key performance metrics) and facilitate management of the contract and open communications of progress and issues among DOE-SR, DOE-HQ, and the contractor. The contractor will report status consistent with the requirements of the assessment process on a schedule agreed to with DOE-SR to provide early warning of issues that could threaten the successful completion of the accelerated cleanup goals and provide reliable and timely information to DOE-HQ. While formal reporting schedules will be established, it is critical that issues are openly communicated, as they become known, to allow for early action to mitigate their impact. DOE-HQ will conduct periodic progress and issue reviews to ensure mutual understanding of status and to provide the support required for the successful accomplishment of accelerated cleanup goals. Key measurable elements in the performance monitoring process are scope (as reflected by the Performance-Based Incentives [PBIs]) and Performance Metrics, schedule (as reflected in the EM Integrated Life Cycle Critical Path Schedule), and cost (budget baseline versus actual cost).

Accomplishment of the key elements is directly attributable to the contractor's management ability to successfully achieve the results specified in the contract performance baseline statements of work as defined in the verified Contract Performance Baseline Documents and Work Authorization Documents.

6.1.1 Reporting and Evaluation Activities

PBIs - The annual and multi-year PBIs under the SRS operating contract are an integral part of the contract performance baseline and represent the accomplishment of the primary site work that is most essential to these missions. It is recognized that **all** of the work under this contract, not only that subject to objectives measured under a specific PBI, will be performed to an acceptable standard. Compliance with Environment, Safety and Health (ES&H) requirements is a precondition of operations and of earning all fees under the contract.

PBIs are negotiated to include measures of the accomplishment of performance metrics and scheduled objectives within the contract performance baseline and are approved by the Head of the Contracting Authority (HCA).

Performance Metrics – Key multi-year performance metrics will be negotiated and formally incorporated into the contract performance baseline. These metrics are an integral part of the contract performance baseline, their accomplishment is measurable, and they represent the accomplishment of the work that is most essential to achieving the PBI goals. Negotiation and control of the Performance Metrics will be at the DOE-SR Assistant Manager (AM) level of authority.

EM Life Cycle Integrated Schedule – The contractor will prepare and maintain an EM Integrated Life Cycle Schedule. The schedule will be a logic diagram that depicts key activities, key internal SRS interfaces, key external (DOE Complex, regulators, etc) interfaces, milestones, and the logic necessary for accomplishing the risk reduction goals. The schedule will be prepared with the SRS standard scheduling software and will have the capability for "what if" exercises that are necessary for developing

working options should the baseline logic and assumptions change. All cost estimates, PBIs, and performance metrics will be based on the EM Integrated Life Cycle Schedule. Approval and control of the schedule will be at the AM level of authority.

EM Baseline Cost – The cost estimates reflect the accomplishment of the accelerated risk reduction goals as represented by PBIs, performance metrics, and the EM Integrated Life Cycle Schedule. It is recognized that the estimates for the planned work are greater than the expected funding. Accordingly, it is expected that the contractor will implement cost reductions and operational efficiencies to close this gap. Significant cost reductions have been assumed in the Cleanup Reform account funding request to support the SRS strategic initiatives to accelerate cleanup.

6.1.2 Roles and Responsibilities

Savannah River Operations Office – DOE-SR will implement management systems, processes, and oversight techniques that ensure rapid response to issues. In its site management capacity, DOE-SR will:

- realign, restructure and focus contracts and incentives that drive performance to deliver the accelerated cleanup plan;
- develop and implement a predictable, reliable, and performance based oversight and assessment process to manage the contract;
- enhance contract management (manage the contract, not the contractor);
- ensure that all interactions with the contractor add value in achieving safe, accelerated risk reduction; and
- reform SRS internal business processes to ensure DOE cost-effectively supports and drives accelerated risk reduction and cleanup.

DOE Headquarters – In its capacity as the highest review and approval authority, DOE-HQ will:

- conduct timely progress and issues reviews to ensure mutual understanding and support for the successful accomplishment of the accelerated cleanup goals; and
- facilitate cross-site benchmarking to share best practices.

SRS Contractors – Contractors are responsible for developing the work plans and estimates required to accomplish the Cleanup Reform risk reduction goals and execute the work as planned. In the role of performer, the contractors will:

- maintain schedule status and report progress and issues against the schedule activities:
- report performance against negotiated PBIs and performance metrics;
- report cost against approved budgets and funding levels; and
- · maintain records of all savings and cost reductions.

6.2 Configuration Control

DOE-SR and its contractors have implemented accepted, proven, and cost-effective techniques for baseline management and control. SRS's project management process ensures that appropriate levels of control are applied to operating and traditional capital projects. The Management Control System (MCS) process is driven by the EM

Strategic Plan objectives and constrained by the operating contract. Baselines are developed as an integral part of the EM planning, budgeting, execution, and reporting process. The project management requirements of DOE Order 413.3 are applied to traditional capital projects and Environmental Restoration (ER) projects on a "graded approach" (i.e., Complex Line Items have more restrictive requirements, capital equipment and ER projects are less restrictive). For operating activities and site overhead, the order requirements serve as the basic guidelines for management and control. Accelerated Cleanup Initiatives and associated key performance metrics will be incorporated into the existing baselines by formal change control.

6.2.1 Baseline Management

SRS multi-year technical, scope, schedule, and cost baselines have been established for the contract performance period by Project Baseline Summary (PBS). For management, control, and integration of scope, schedule and cost, the PBS structure is consistent with the Life Cycle Asset Management (LCAM) model for design and construction, operations, deactivation/cleanup (disposition), and post-disposition long-term surveillance and monitoring (Long Term Stewardship). For EM, the Contract Performance Baseline represents the period of FY01 through FY06 of the EM life cycle baseline retained in the Integrated Planning, Accountability, and Budgeting System (IPABS). The contract performance baselines are documented on the Contract Performance Baseline documents and were verified and approved by DOE-SR. The annual execution plan is the execution year slice of the contract performance baseline and is documented in the annual Work Authorizations that are used for technical scope approval.

Operating and traditional capital project baseline quality is characterized by project phases per guidance in DOE Order 430-1. Of particular importance is the recognition of estimate quality. As with any project, the estimate confidence increases as the scope is better defined and implementation proceeds. The Accelerated Cleanup Program Initiatives and the life cycle PBSs contained in the SRS life cycle baseline are in varying project phases, ranging from conceptual to definitive. Therefore, the estimate quality and confidence ranges accordingly. The contract performance baseline was verified and approved by DOE-SR and serves as a sound basis for work authorization and performance measurement. The integrity of the baseline is maintained through formal change control as technical, scope, cost, and schedule baseline changes are identified, cost savings initiatives are implemented, or funding assumptions change. The approved Strategic Initiatives will also be incorporated into the contract performance baseline and the EM life cycle estimate.

6.2.2 Change Control

The change control process is based on a graded approach to implementing project control requirements of DOE Order 413.3 and the IPABS life cycle baseline change control requirements.

Changes to the contract performance baseline and to PBIs are controlled through a formal change control process that ensures that changes are authorized at the same level of authority that initially authorized the baseline or PBI. Baseline cost reductions are also documented through the Baseline Change Control Process to provide an audit trail for cost improvement initiatives as required by the contract. Targeted crosscutting cost reductions are reflected in the contract performance baseline for all programs. As

specific cost reduction initiatives become firm, change control is executed to reduce the estimated cost or to establish a management reserve.

The contractor has established change boards that have been assigned levels of approval authority based on change thresholds and/or contractual authority. This approach ensures that changes can be addressed rapidly without compromising control.

The contract performance baseline is change controlled on an as required basis (i.e., as driven by project scope changes, cost reduction, program realignment, etc.). However, the baseline must also be change controlled on an annual basis to define the annual execution plan for Work Authorization and to expand the performance baseline by an additional year utilizing the "rolling wave" approach for long-term planning. Approval of the annual Work Authorization by DOE-SR provides technical authorization to perform the work.

6.2.3 Roles and Responsibilities

Savannah River Operations Office – DOE-SR will manage the development of an integrated life cycle baseline that completes accelerated risk reduction and cleanup by the Performance Management Plan (PMP) dates and the associated critical path schedule that articulates key decisions, major milestones, significant known barriers, funding requirements, and responsible parties. In its site management capacity, DOE-SR will:

- allow the contractor workforce management flexibility in accordance with reducing costs and meeting the goals outlined in the PMP;
- restructure and realign the Federal workforce, as necessary, to support the PMP;
- support and stay the course on implementing safe mission essential/tailored requirements;
- avoid or prevent any expansion in the scope baseline, mission, or requirements for the SRS EM Program that is inconsistent with achieving safe, accelerated cleanup;
- reform SRS internal business processes to ensure DOE cost-effectively supports accelerated risk reduction and cleanup;
- ensure National Environmental Policy Act (NEPA) reviews and Records of Decision are completed in a cost-effective, technically based manner that supports timely decision-making by DOE senior management and the accelerated cleanup actions at SRS.
- proactively work with regulators, oversight groups, the State of South Carolina, and other stakeholders to resolve issues;
- work with DOE-HQ to assure that all actions requiring to support decisions beyond local control are delivered on a timely basis, so as not to impact the 2025 schedule;
- work with DOE-HQ to obtain the policy changes necessary to support completion of the SRS EM Program by 2025;
- assist with cross-site integration and in obtaining required approvals to meet the objectives of cleanup reform and site integration; and,
- satisfy agreed upon multi-year funding commitments via the DOE-HQ budget allocation process.

DOE Headquarters – In its capacity as the highest review and approval authority, DOE-HQ will support the successful accomplishment of the accelerated cleanup goals through:

- provide active assistance in overcoming barriers and obstacles to expedite accelerated risk reduction and clean up including proactive and prompt closure on issues and proposed work in areas such as safeguards & security, contracts, incentives, oversight, authorization basis, budget issues, policy changes, etc; and
- satisfy agreed upon funding commitments to SRS and establish a flexible appropriation structure.

SRS Contractors – Contractors will support DOE-SR in developing an integrated life cycle baseline that completes accelerated risk reduction and cleanup as early as 2025 and the associated critical path schedule that articulates key decisions, major milestones, significant known barriers, funding requirements, and responsible parties. In performing the scope to achieve accelerated risk reduction, contractors will: actively seek ways to reduce cost and risk to deliver results contained in the performance baseline; bring in best-in-class management practices, lessons learned, and closure project management techniques to SRS; manage the workforce to ensure delivery of the PMP objectives; rapidly notify DOE-SR of work issues that require DOE support or action to resolve; proactively work with regulators, oversight groups, the State of South Carolina, and other stakeholders to resolve issues; and commit to ongoing implementation of Integrated Safety Management and continued excellence in safety performance.

6.3 Risk Management Process

Application of a disciplined risk management process is required for SRS to achieve success in expediting the cleanup program. The SRS risk management approach uses a structured, formal process to define risk and develop specific plans to control and/or mitigate the risk to an acceptable level. In general, risk management is considered from a cross-cutting programmatic perspective and project specific perspective.

In the project management arena, SRS has developed a rigorous risk management process reflected in processes and procedures that make risk management an integral part of SRS's project and task management. Risk and opportunity identification, including technical risk, is done early in the project process and continues throughout all the major phases. The results are documented and the risks are then quantified and included in a Risk and Opportunity Management Plan. This plan enhances the opportunities and reduces the threats on SRS project and task objectives. Risk monitoring and control is an ongoing process continued throughout the life of every project and task. All risk identification, mitigation and management activities and handling strategies are documented and managed in accordance with Westinghouse Savannah River Site (WSRC) Manuals E-7 and E-11. This ongoing process helps to ensure that technical risks are mitigated, minimizing cost and schedule impacts to each project and task.

Key prerequisites and assumptions for each Strategic Initiative have been identified in Section 4. SRS will develop specific risk management plans for each of the initiatives to increase the probability of SRS achieving EM completion by 2025. SRS's implementation of this risk management process increases confidence in each project's success by up-front and proactive consideration of key technical and project execution risks.

Cross-Cutting Programmatic Risks

Accelerating the SRS cleanup to 2025 requires various assumptions, as discussed in Section 2 of the PMP and in each of the strategic initiatives in Section 4. This section contains key cross-cutting programmatic risks, the impacts of these risks and mitigation strategies to address the risks.

Cross-cutting programmatic risks can be generally categorized as 1) risks associated with integrated baseline management (cost, schedule, scope, resources), and 2) risks associated with regulatory and institutional uncertainties. SRS cleanup programmatic risks are managed at the contractor, project, and senior DOE levels. The programmatic risk management approach is focused on identifying, analyzing, prioritizing, and mitigating these overall categories of programmatic risks as discussed below. SRS will use a cross-cutting risk management list to monitor management of selected high-priority baseline activity risks and organizational risks. More specific cross-cutting approaches to the two principal categories of programmatic risk are briefly discussed below.

Integrated Baseline Management Risks

Several parallel efforts are currently underway to reduce baseline management uncertainty and risk. For example, an integrated SRS cleanup schedule has been developed to determine and manage the overall site critical path to closure (Section 8). Included are key decision points that have the potential to interrupt the critical path cleanup activities. Organizational responsibilities for key activities and decisions at the federal and contractor levels have been established (Section 9). Monthly meetings with key federal and contractor personnel will identify and maintain a focus on resolving the high-impact issues. Based on DOE staff and contractor input, SRS will continually identify key issues and assign responsibilities and monitoring points to ensure successful issue resolution. Minimizing our risk posture may require re-sequencing activities, performing work more efficiently, aligning our business practices, improving contracts and incentives, making tough decisions, and in some cases accepting risk to gain the benefit of more advanced cleanup and waste processing approaches and technology than would have otherwise been used.

Stakeholder, Regulatory and Institutional Risk Management

Implementing decisions that stick is dependent on early stakeholder participation in decision-making including reaching agreement with regulatory bodies on cleanup strategies and specific technical solutions. SRS will build on its established processes for stakeholder involvement, including the SRS Citizens Advisory Board, to insure all affected stakeholders have an opportunity for input into the decision making process. DOE and SRS regulators are committed to continuing the current open and collaborative process to implement sound, appropriate and cost-effective cleanup. This process has been instrumental in selection of remedies that meet regulatory requirements at reasonable cost, especially through utilization of innovative technical approaches. SRS will also engage the Defense Nuclear Facilities Safety Board early in the planning and technical decision making cycle to address technical and safety concerns. Through engagement of these stakeholders early in the project cycle, issues can be identified and addressed in a way that minimizes risk to meeting overall project objectives.

Currently Identified Cross-Cutting Programmatic Risks

Specific cross-cutting programmatic risks, which have been identified for formal risk management, are discussed below. Clean-up acceleration impacts and potential mitigation strategies are discussed for each specific risk. These will be further developed as the SRS accelerated clean-up reform project is implemented.

• Funding is not provided in the amounts or on the schedule requested.

Impact: Schedule acceleration and associated EM cost reductions will be jeopardized.

Mitigation Strategy: The project execution strategy would have to be adjusted to accommodate lack of confidence in funding. Three different strategies will be pursued to avoid or reduce the impacts:

1) Obtain at least a 2-year funding commitment

While the stated funding profile is required to optimize schedule acceleration and maximize savings, if DOE-HQ can commit to at least a rolling 2 year funding assurance, work activities could be realigned to reduce the impacts of any single year funding shortfall and provide more efficient project execution. This strategy would require a firm commitment to provide subsequent year funding without reductions for Congressional general reductions, DOE-HQ mandates, or any other "taxes".

2) Establish predetermined priority of Accelerated Cleanup Program initiatives

This strategy would result in an agreed to priority of clean up reform initiatives and clear recognition and understanding that certain work activities would be impacted in the event of funding reductions. This would allow a timely and efficient response to changes in anticipated funding from both a scope and workforce management perspective. For example, the contractor could develop work execution strategies to maximize the use of subcontracted resources on these lower priority activities, providing flexibility in resource management without significant workforce restructuring impacts.

3) Consolidation of Budgeting and Reporting (B&Rs) Codes

Reducing funding sources B&Rs to a single element would provide maximum flexibility in re-aligning funds to the most lucrative work activities in terms of schedule acceleration and life-cycle cost reductions. The Fiscal Year 2004 (FY04) Outyear Budget submittal will include a proposal to revise the current PBS structure and associated B&R alignment to better represent the proposed approach and consolidate these PBSs into a single B&R structure.

Cost Reduction Objectives Will Not be Realized

Impact: Funding request will be inadequate to achieve program objectives, impacting ability to achieve schedule acceleration and EM cost baseline reductions.

Mitigation Strategy: Focus will continue on existing cost effectiveness programs, with additional emphasis on identifying requirements which must change to enable full realization of the Closure Facility approach. Senior management focus will be applied

to monitoring progress on requirements modification, elevating issues to the highest possible levels for resolution if necessary.

Cost Estimate Pricing Assumptions

Impact: Significant changes in baseline pricing assumptions outside of SRS control, such as escalation rate, cost of subcontract services, Westinghouse Savannah River Company (WSRC) pension contributions, etc., would result in project performance baseline funding requirements being inadequate to achieve program objectives, impacting ability to achieve schedule acceleration and EM cost baseline reductions.

Mitigation Strategies: Three mitigation strategies are available that could be taken individually or in combination to address this risk:

- 1) Include project contingency, held by DOE, for pricing changes outside of WSRC control.
- 2) Adjust project performance baseline cost estimates through formal change control and incorporate in annual funding request accordingly.
- 3) Adjust project performance baseline cost estimates through formal change control and adjust activity schedules to stay within established funding request.

Adjustment of Workforce Skill Mix Consistent with Project Resource Requirements

Impact: External constraint on exercising planned, ongoing workforce adjustments for full service employees (consistent with DOE policy), may result in an increase in project execution cost and/or delay in project schedules.

Mitigating Strategies: Three mitigation strategies are available that could be taken individually or in combination to address this risk:

- 1) Maximize cost effective re-assignment, re-training, and use of other workforce management options to minimize skill mix issues.
- 2) Leverage use of subcontract personnel, where cost effective.
- 3) Develop multi-year staffing plans to anticipate workforce transitions and facilitate stakeholder communications.

Stakeholder and Regulator Confidence in Long-Term Federal Ownership of SRS

Impact: Lack of confidence in long-term institutional control of SRS by the Federal Government would limit waste management disposition options and remedy selection for waste site remediation, with potential significant impacts on Clean-up Reform program strategies, schedules and cost.

Mitigating Strategy: Congressional designation and/or treatment by DOE of SRS as a National Security Site.

. Timely Resolution of Plutonium (Pu) Exit Strategy Issue

Impact: Prolonged dispute with the State of South Carolina concerning Pu disposition activities will impact material management baselines and may impact other facets of the Accelerated Cleanup proposal requiring state collaboration.

Mitigating Strategy: Maintain open communications with key participants and develop contingency plans for potential programmatic impacts.

Risk Management plans will be developed and updated in a regular and timely fashion to actively identify, quantify, respond to and control the risks associated with achieving accelerated cleanup. These plans will be fundamental tools for SRS program and project managers to continually evaluate the progress SRS is realizing and define ways to maintain progress toward completing the SRS EM Program by 2025.

7.0 Key Agreements

The Savannah River Site (SRS) works closely with various oversight groups and regulatory agencies in accomplishing its work. The Site is proud of the established relationships with these external parties and credits the cooperative nature of these relationships with many cleanup accomplishments achieved to date. In addition, the local communities and Congressional, state and local officials typically are very supportive of SRS, understanding well the critical role SRS has played in the past and will continue to play in the cleanup of this Site and the security of the nation.

7.1 Regulatory Agencies

There are several key agreements that facilitate the accelerated cleanup of SRS. The Department of Energy (DOE) and its contractors will continue to proactively work with the State of South Carolina, regulators, Defense Nuclear Facility Safety Board (DNFSB), oversight groups, and stakeholders to facilitate the accomplishment of the Cleanup Reform risk reduction objectives and will rapidly address issues or obstacles with the Department of Energy-Headquarters (DOE-HQ) that require DOE support.

The Savannah River Site Federal Facility Agreement (FFA) - The FFA is a tri-party agreement among the DOE, the Environmental Protection Agency (EPA) and the South Carolina Department of Health and Environmental Control (SCDHEC) that governs the environmental remediation and high level waste tank closure program at SRS. The document clearly establishes the roles and responsibilities of the three parties, lays the foundation for timely remediations conducted under the Resource Conservation and Recovery Act (RCRA) and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and describes the remediation process and associated priority of environmental remediation projects.

The SRS Site Treatment Plan (STP) - The STP is a document that requires radioactive mixed waste to be treated to hazardous waste standards within an agreed-upon schedule. High-level waste is an example of a radioactive mixed waste. The STP is enforceable by a Consent Order signed by SCDHEC and Department of Energy-Savannah River (DOE-SR). The STP lays out the approaches and schedule milestones

for treating and managing radioactive mixed wastes that are stored or generated at SRS. These treatment approaches and milestones are determined to ensure SRS compliance with RCRA Land Disposal Restriction requirements. The STP was required by the Federal Facility Compliance Act, and is updated annually to include an inventory of all mixed waste, the status of all treatment residuals, an implementation schedule, and projections of new mixed waste streams at SRS or those to be received from offsite into SRS.

7.2 DNFSB

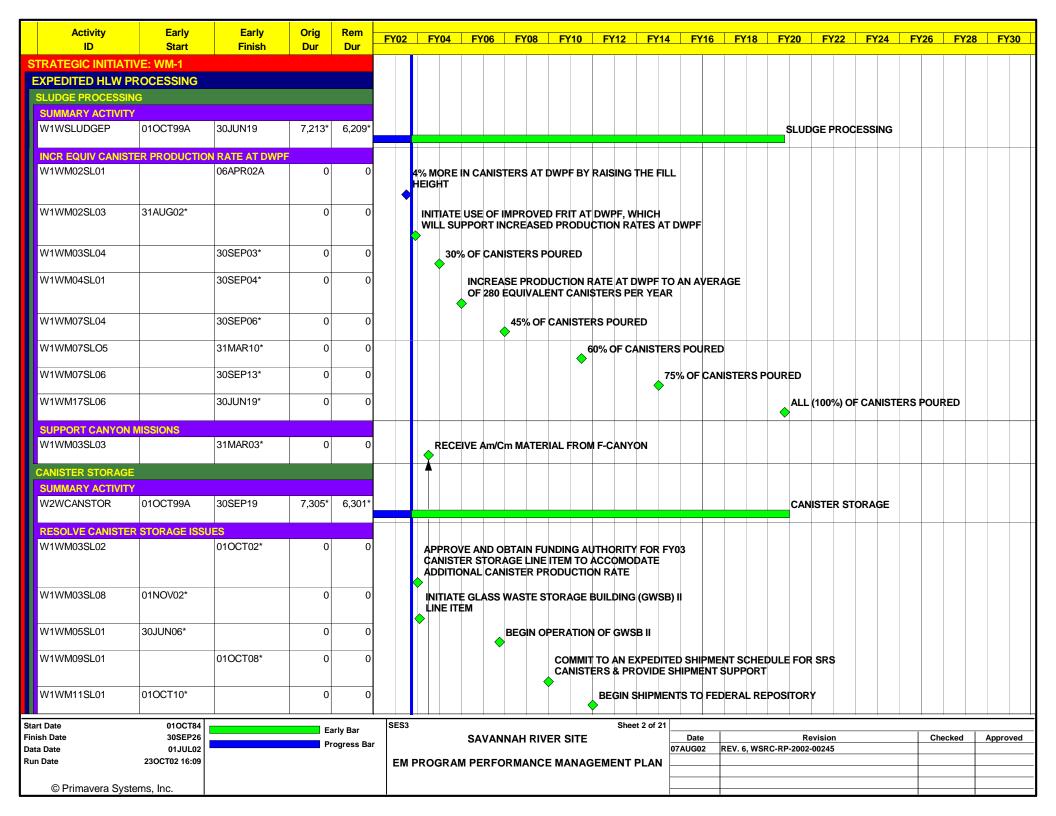
The interface with the DNFSB is managed through implementation plans that can be updated on an as-required basis.

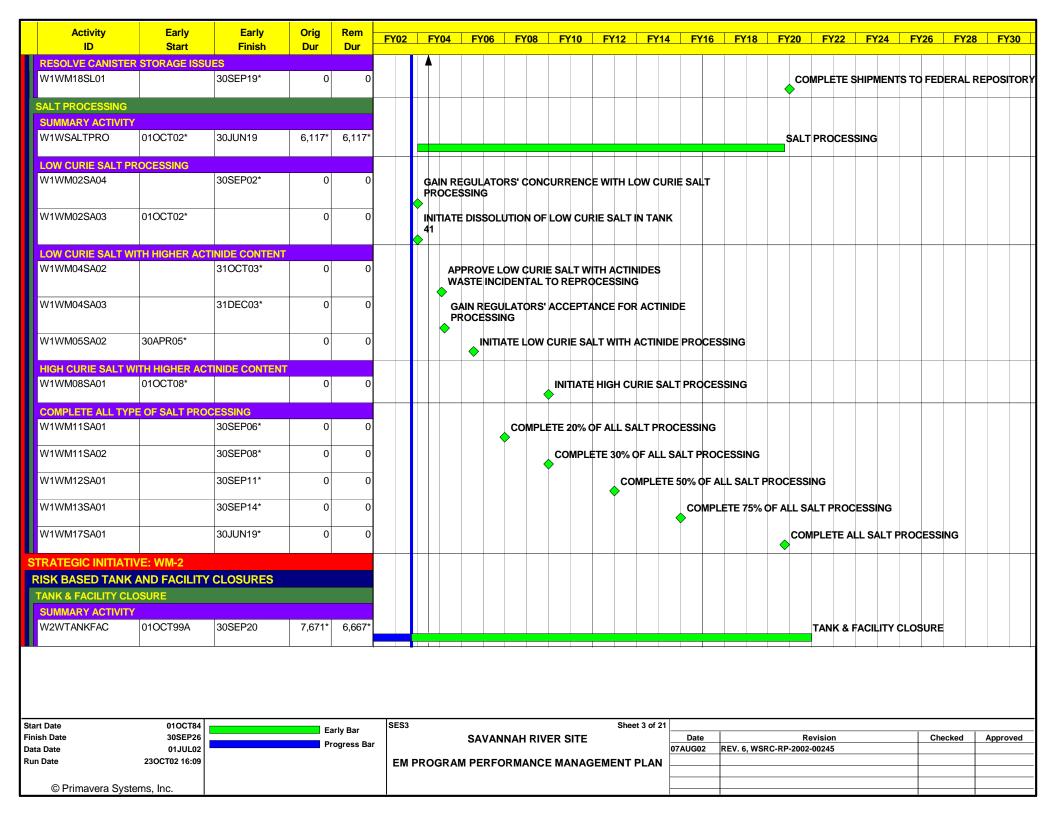
Implementation Plan for DNFSB Recommendations 94-1 and 2000-1 - In response to recommendations made by DNSFB, this plan describes the measures and schedule for stabilization of nuclear materials at SRS and other sites within the DOE Complex. SRS has made much progress against the milestones established in the Implementation Plan and is committed to continue meeting these milestones in a manner that safely manages the nuclear materials to protect the health and safety of our workers and the public. The SRS Accelerated Cleanup initiatives related to nuclear materials management are fully consistent with achieving the Implementation Plan milestones and will enable the Site to continue, and even accelerate, meeting the milestones contained within the Implementation Plan.

8.0 Integrated Project Schedule

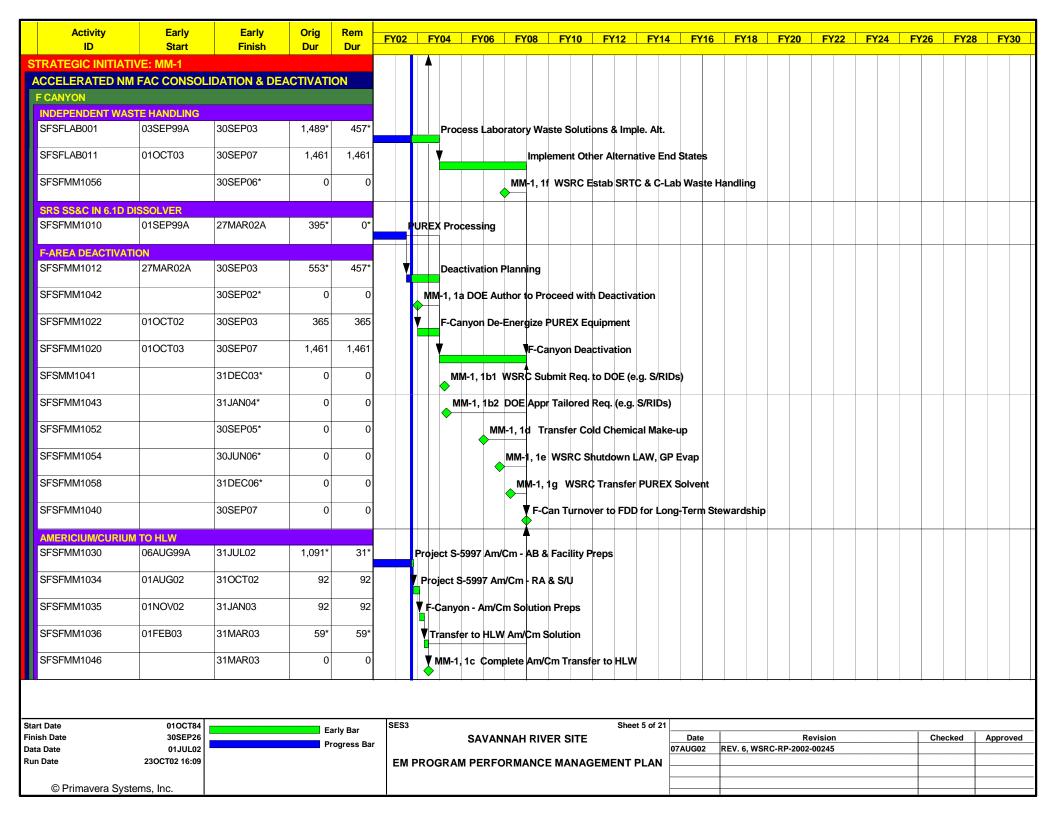
The following detailed Savannah River Site (SRS) Cleanup Reform Vision schedules are organized by each Environmental Management (EM) Program component and depict the milestones critical to completing the SRS EM Program by 2025.

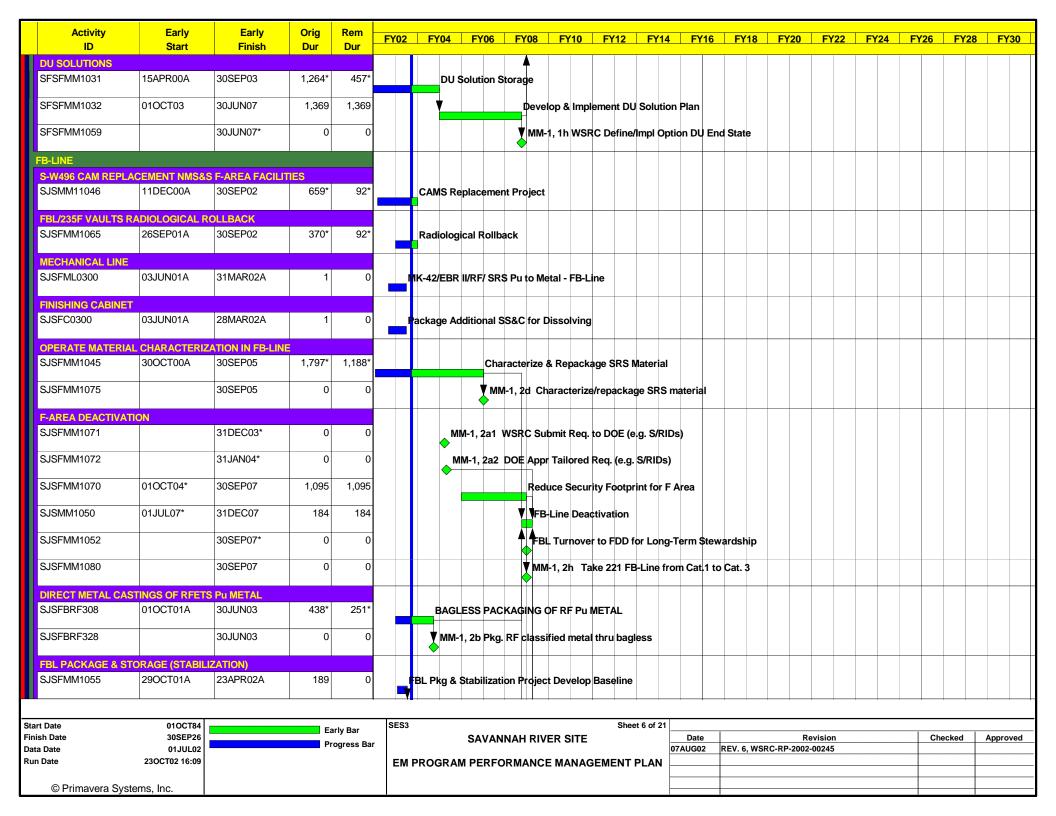
Activity ID	Early Start	Early Finish	Orig Dur	Rem Dur	FY02 FY04 FY06 FY08 FY10 FY12 FY14 FY16 FY18 FY20 FY22 FY24 FY26 FY28 FY
LW - RESOLVE PR	OGRAMMATIC	REQUIREMEN	IT ISSUES		
SUMMARY ACTIVITY	<u>/</u>				
WPWRESPROG	01JUL02*	31MAR04	640*	640*	RESOLVE PROGRAMMATIC REQUIREMENT ISSUES
MODIFY FINANCIAL	SYSTEMS TO SU	UPPORT ACCELE	ERATION		
W1WM02SL02		15JUL02A	0	0	APPROVE MOVEMENT OF MANY ACTIVITIES OUT OF THE WASTE REMOVAL LINE ITEM
W1WM02SL05		31JAN03*	0	0	SUBMIT RECOMMENDED PBS STRUCTURE TO DOE-HQ
W1WM03SL05		30SEP03*	0	0	MODIFY CURRENT PBS STRUCTURE TO ALLOW MORE FLEXIBILITY
W1WM03SL06		30SEP03*	0	0	APPROVE USE OF A SINGLE COLOR OF MONEY
MODIFY DOE 435.1-	KEY RADNUCL,I	NTRUD ANAL. &	WIR		
W1WM02SL04		31JUL02*	0	0	SUBMIT TO DOE-HQ REQUESTED MODIFICATIONS TO DOE ORDER 435.1
W1WM03SL07		31JAN03*	0	0	COMPLETE DOE-HQ APPROVAL OF REVISED DOE ORDER
W2WM04TF02		01DEC03*	0	0	DEVELOP ACCEPTANCE CRITERIA BASED ON THE REVISED DOE ORDER 435.1 FOR DETERMINING WHEN WASTE REMOVAL EFFORTS SHOULD BE COMPLETED ON TANKS
W2WM05TF01		31MAR04*	0	0	OBTAIN REGULATORY CONCURRENCE WITH THE REVISED ACCEPTANCE CRITERIA FOR TANK CLOSURE
MODIFY REQUIREM	ENTS FOR TNK	FRM CLOSURE F	ACILITY		
W1WM03SA01		01DEC02*	0	0	SUBMIT CLOSURE FACILITY PLANS DETAILING MODIFIED REQUIREMENTS
W1WM03SA02		01MAR03*	0	0	APPROVE MODIFIED S/RIDs FOR THE CLOSURE FACILITY
W1WM03SA03		01APR03*	0	0	GAIN DOE-HQ & DNFSB CONCURRENCE
W1WM04SA04	01OCT03*		0	0	IMPLEMENT MODIFIED REQUIREMENTS
rt Date	01OCT84			rly Bar	SES3 Sheet 1 of 21
sh Date	30SEP26			riy Bar ogress Bar	SAVANNAH RIVER SITE Date Revision Checked Appro
a Date ı Date	01JUL02 23OCT02 16:09			ogroco Dai	EM PROGRAM PERFORMANCE MANAGEMENT PLAN

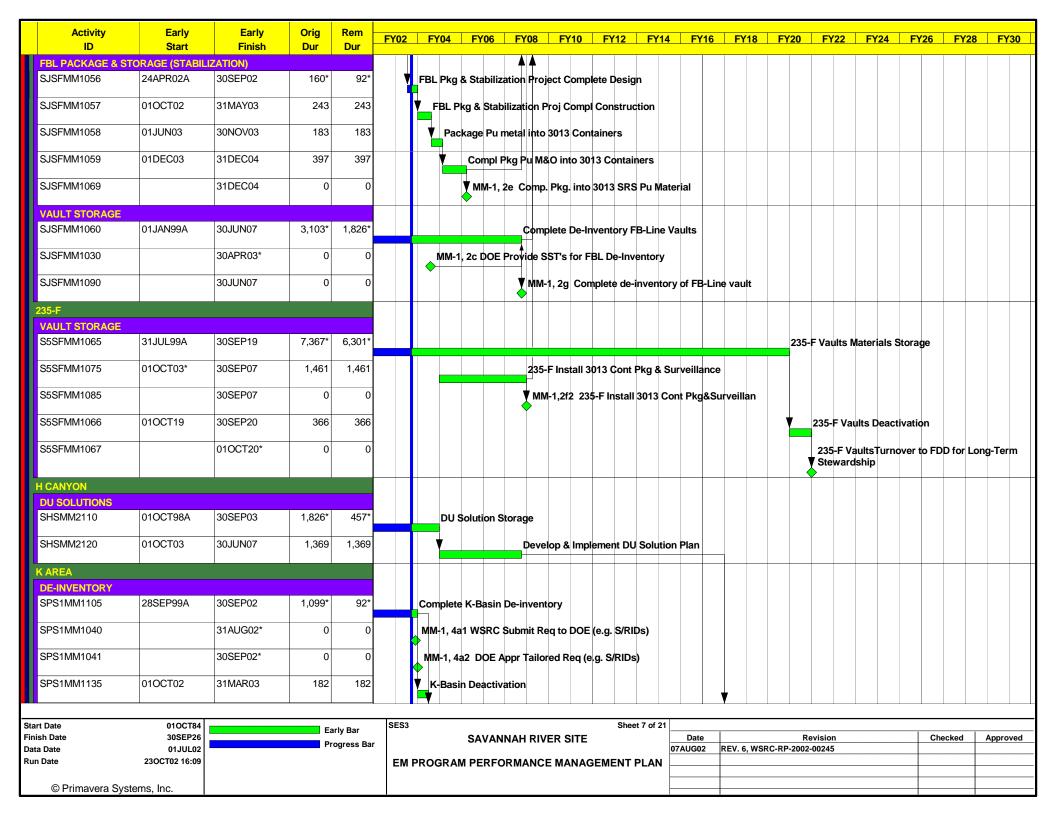


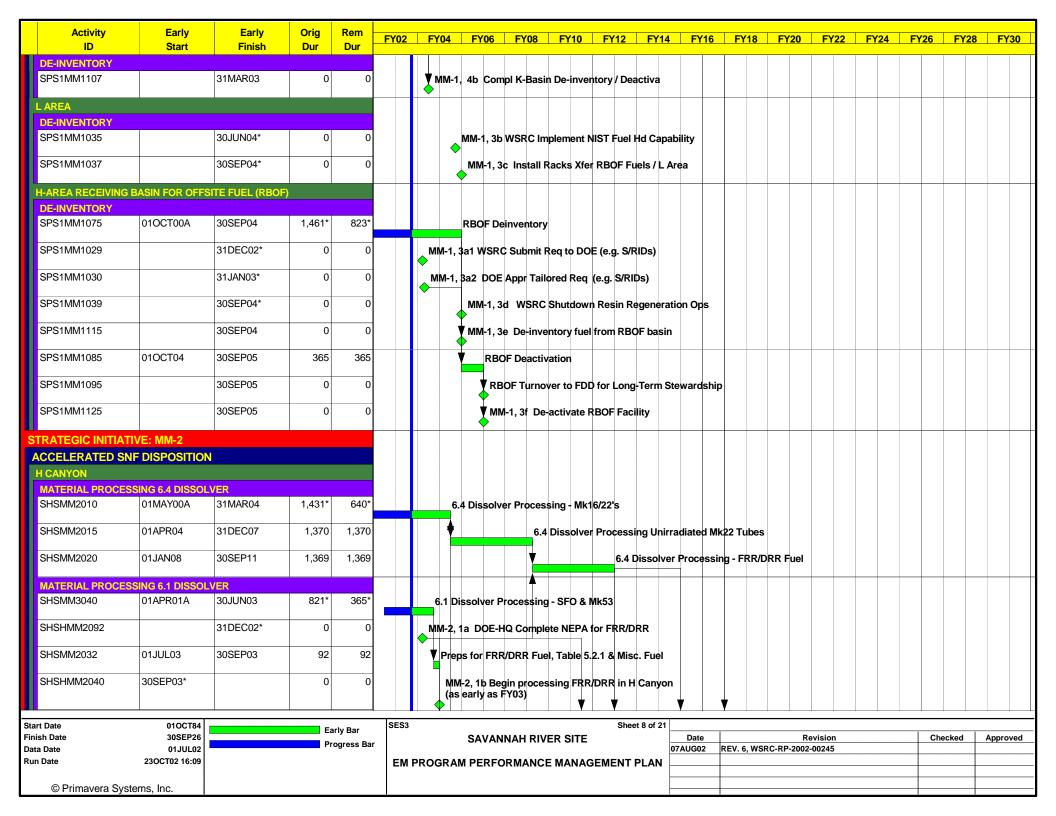


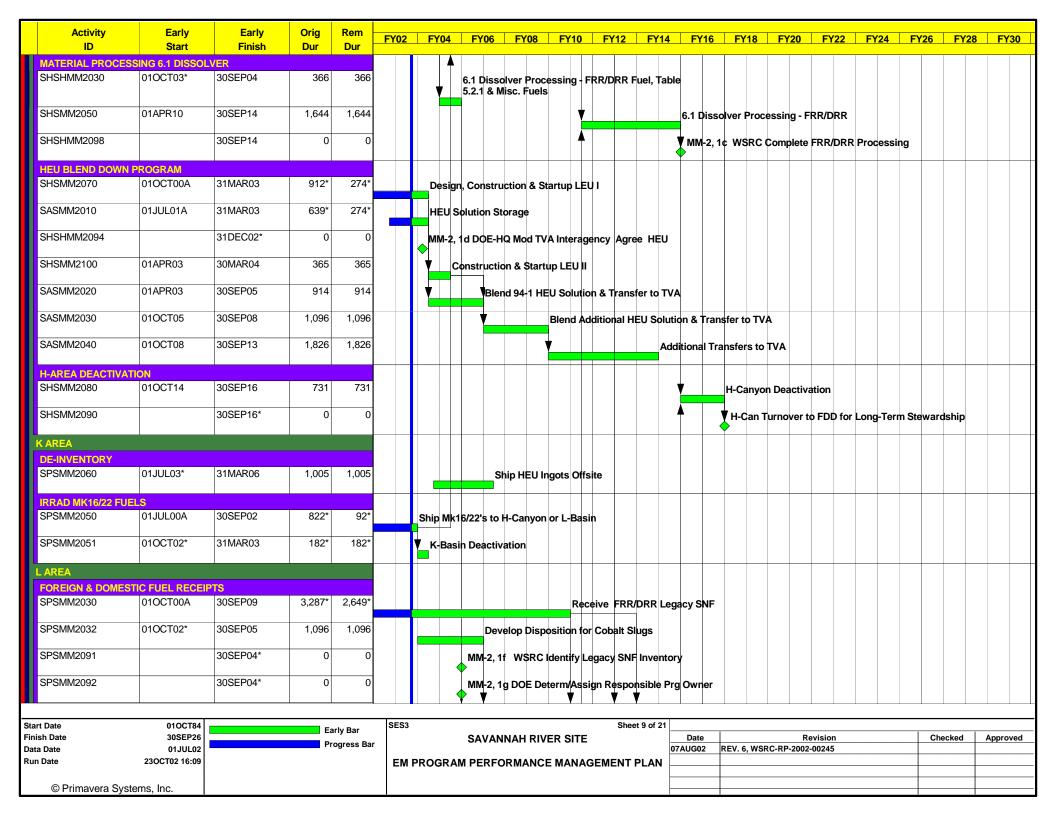
RISK BASED TANK C	Start CLOSURES	Finish 30JUN02A	Dur	Dur	
W2WM02TF01		30JUN02A			
W2WM02TF02			0	0	GAIN SCDHEC AND EPA APPROVALS TO DEFER THE CLOSURE OF TANK 19 UNTIL THE CLOSURE OF TANK 18 IS READY, SO THESE TWO TANKS CAN BE CLOSED AS A GROUP
		31JUL02*	0	0	ISSUE TANK CLOSURE EIS RECORD OF DECISION
W2WM02TF03		30SEP02*	0	0	SUBMIT TANK 19 CLOSURE MODULE TO SCOHEC
W2WM02TF04		31DEC02*	0	0	OBTAIN SCOHEC APPROVAL OF THE TANK 19 CLOSURE MODULE
W2WM20TF07		30MAY03*	0	0	SUBMIT TANK 18 CLOSURE MODULE TO SCOHEC
W2WM20TF09		30AUG03*	0	0	OBTAIN SCOHEC APPROVAL OF TK 18 CLOSURE MODULE
W2WM04TF01		30JUN04*	0	0	COMPLETE THE FIRST TANK GROUP CLOSURE (TANKS 17-20)
W2WM08TF01		30SEP08*	0	0	SUBMIT CLOSURE PLANS FOR TANKS 1-8 TO SCOHEC
W2WM09TF01		31MAR09*	0	0	OBTAIN SCHEC APPROVAL OF THE TANKS 1-8 CLOSURE PLANS
W2WM09TF02	30APR09*		0	0	INITIATE CLOSURE ACTIVITIES FOR TANKS 1-8.
W2WM11TF01		28MAR11*	0	0	COMPLETE THE SECOND TANK GRP CLOSURE (TANKS 1-8)
W2WM11TF02		31MAR12*	0	0	COMPLETE 25% OF ALL TANK CLOSURES
W2WM13TF01		30SEP14*	0	0	COMPLETE 50% OF ALL TANK CLOSURES
W2WM15TF01		30SEP16*	0	0	COMPLETE 75% OF ALL TANK CLOSURES
W2WM18TF01		30SEP20*	0	0	CLOSE ALL TANKS
RISK BASED FACILIT W2WM03TF01	TY CLOSURES	31JAN04*	0	0	DESIGNATE SRS AS A LONG-TERM NATIONAL SECURITY SITE WITH LONG-TERM MONITORING COMMITMENT
W2WM10TF01		30SEP10*	0	0	DEVELOP STRATEGY FOR COMPLETING FACILITY CLOSURES AFTER THE DESIGNATION OF SR\$ AS A LONG- TERM SECURITY SITE IS COMPLETED AND MODIFICATIONS TO DOE ORDER 435.1 ARE COMPLETED
W2WM11TF03	30JUN19*		0	0	INITIATE PROCESSING FACILITY CLOSURES
W2WM20TF05		30SEP20*	0	0	COMPLETE PROCESSING FACILITY CLC
t Date	01OCT84				SES3 Sheet 4 of 21
sh Date	30SEP26			rly Bar ogress Bar	SAVANNAH RIVER SITE Date Revision Checked App
a Date Date	01JUL02 23OCT02 16:09		Pro	yu coo Dal	EM PROGRAM PERFORMANCE MANAGEMENT PLAN
© Primavera Syste					

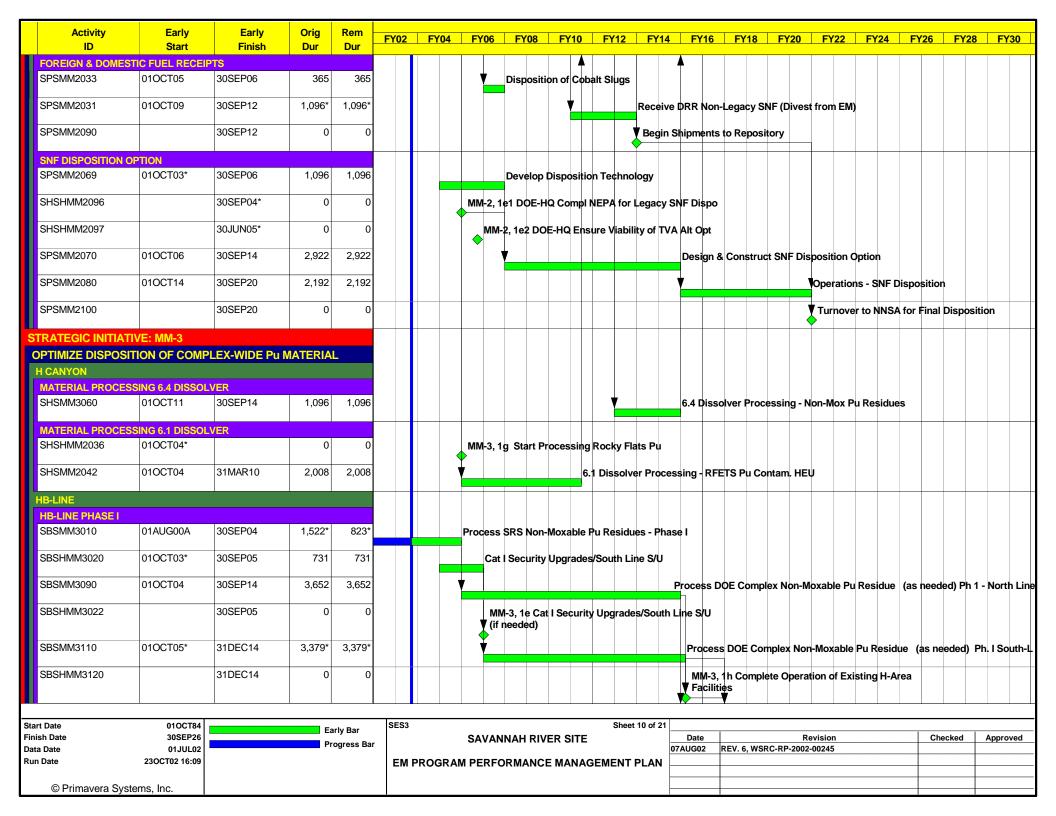


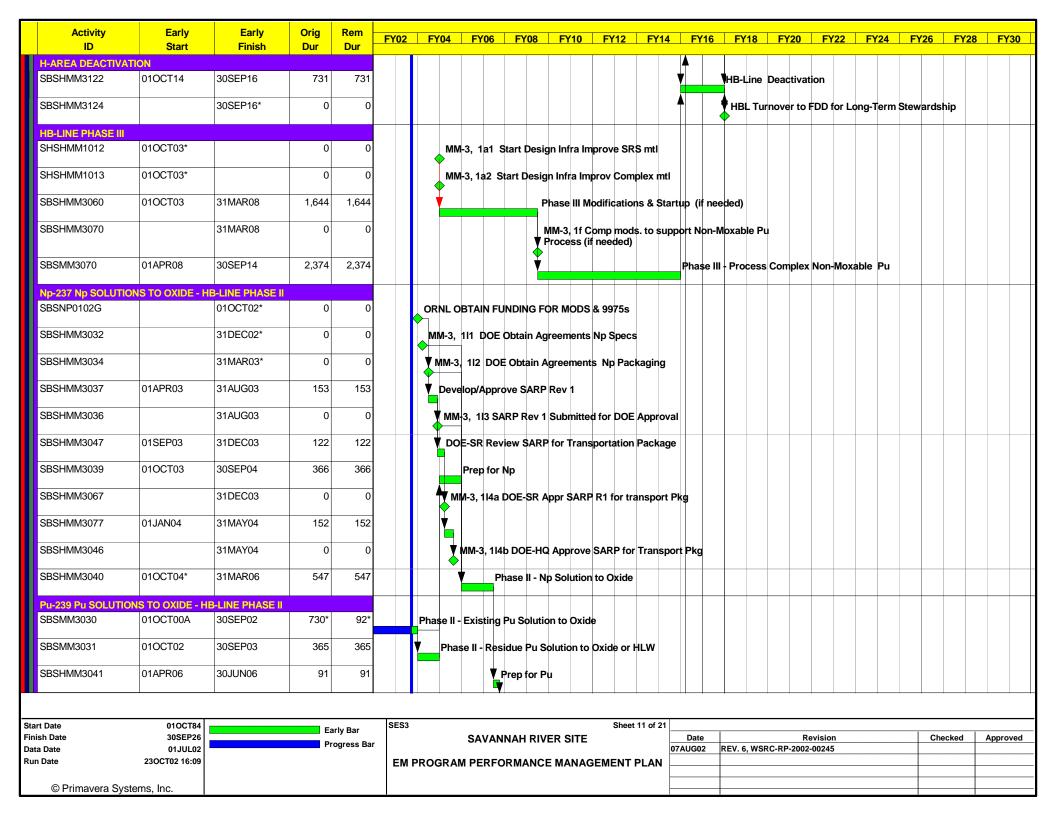


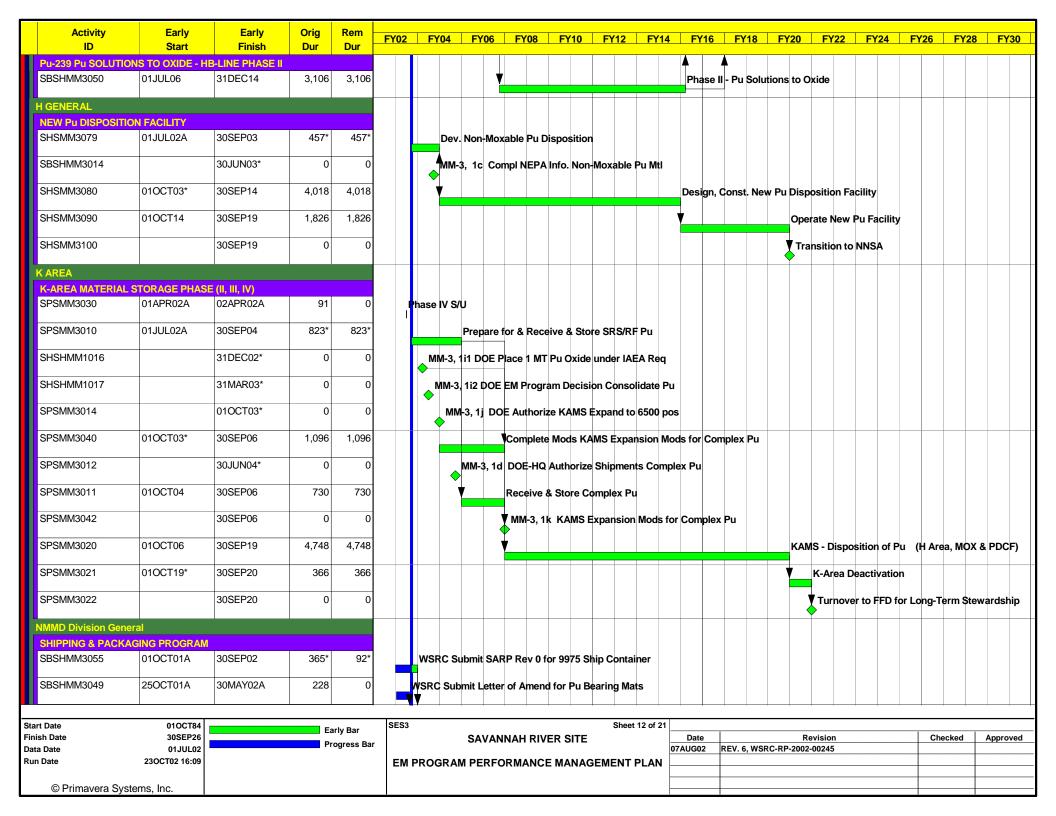












Activity ID	Early Start	Early Finish	Orig Dur	Rem Dur	FY02 FY04 FY06 FY08 FY10 FY12 FY14 FY16 FY18 FY20 FY22 FY24 FY26 FY28 FY30
SHIPPING & PACKA	AGING PROGRAM				
SBSHMM3053	30MAY02A	31AUG02	94*	62*	DOE Review - Letter of Amend for Pu Bearing Mats
SBSHMM3052		30MAY02A	0	0	MM-3, 1m1 Amend Letter for Pu Brg Mats Submitted
SBSHMM3054		31AUG02	0	0	MM-3, 1m2 Amend Letter for Pu Brg Mats Approved
SBSHMM3056		30SEP02	0	0	MM-3, 1n1 SARP ID Rev 0 for 9975 Container Compl
SBSHMM3057	01OCT02	31JAN03	123	123	DOE-SR Review of SARP R0 for 9975 Ship Container
SBSHMM3058		31JAN03	0	0	MM-3, 1n2a DOE-SR SARP R0 for Container Apprved
SBSHMM3068		31JAN03	0	0	MM-3, 1n2b DOE-HQ SARP R0 for Container Apprved

 Start Date
 010CT84

 Finish Date
 30SEP26

 Data Date
 01JUL02

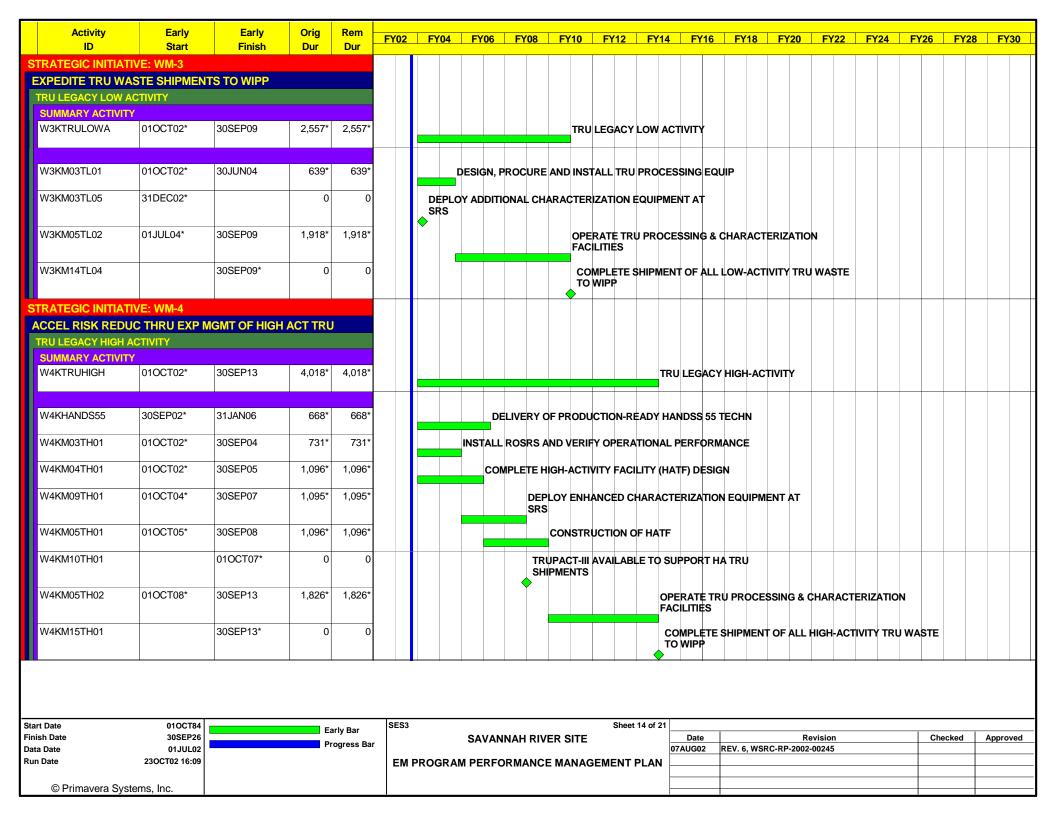
 Run Date
 23OCT02 16:09

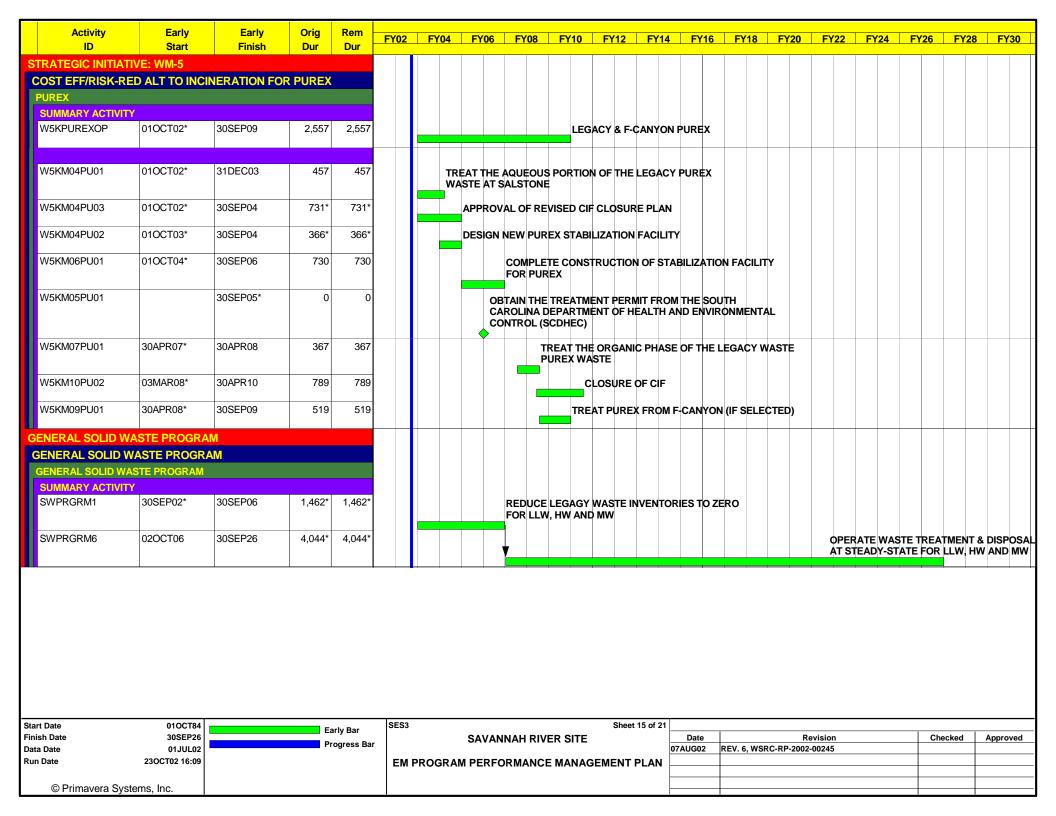
 © Primavera Systems, Inc.

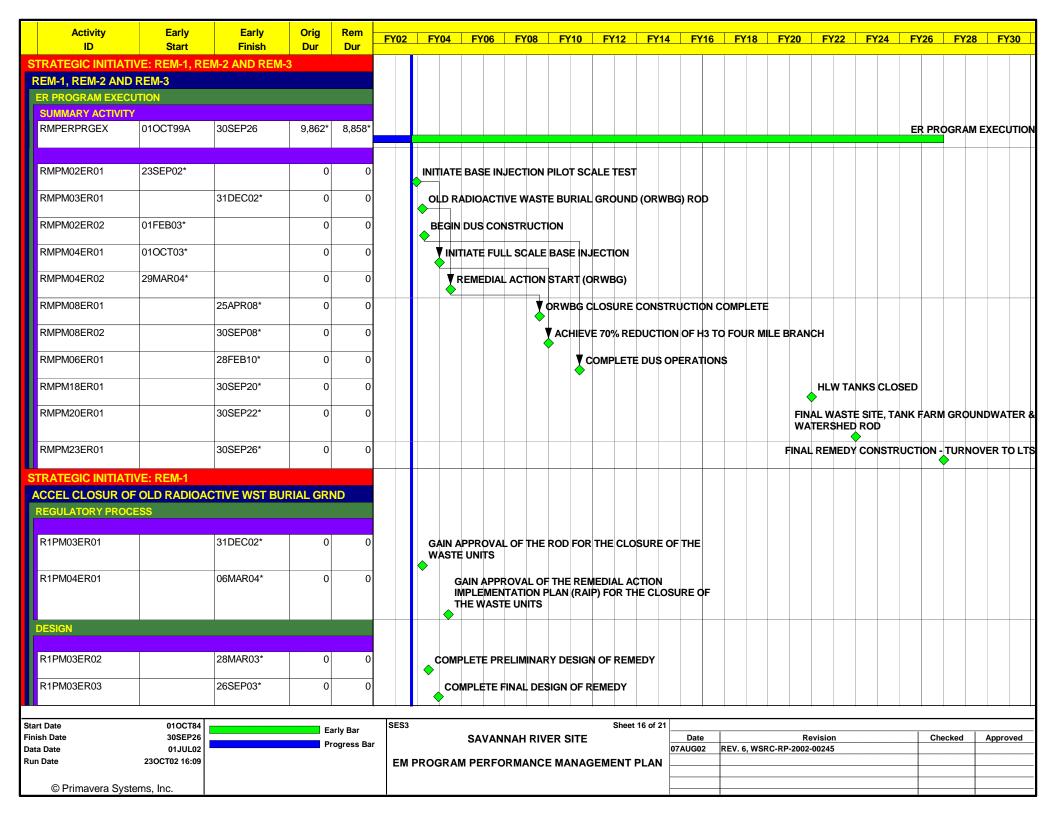
Early Bar
Progress Bar

SES3 Sheet 13 of 21
SAVANNAH RIVER SITE
EM PROGRAM PERFORMANCE MANAGEMENT PLAN

Date	Revision	Checked	Approved
07AUG02	REV. 6, WSRC-RP-2002-00245		







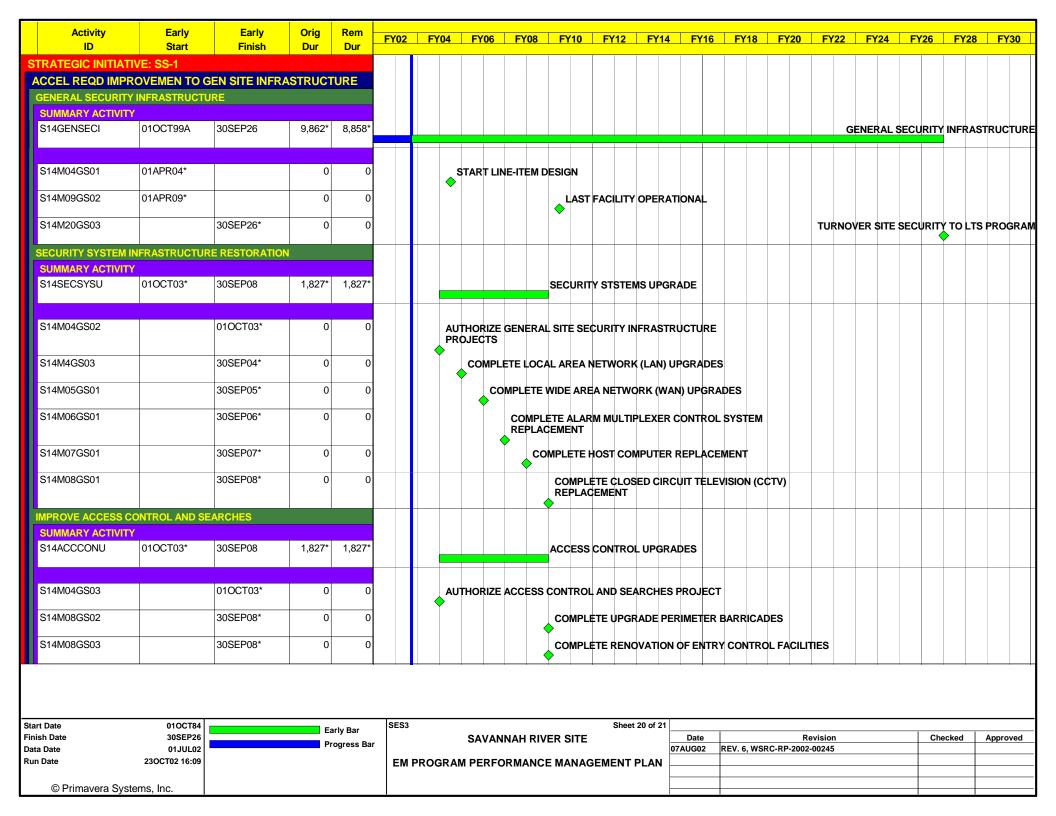
a Date 01JUL02 Progress Bar 07AUG02 REV. 6, WSRC-RP-2002-00245	Activity ID	Early Start	Early Finish	Orig Dur	Rem Dur	FY02 FY04 FY06 FY08 FY10 FY12 FY14 FY16 FY18 FY20 FY22 FY24 FY26 FY28	FY3
RIPMADERO	CONSTRUCTION						
REPAIDSERGS 01APR03* 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	DADMOAFDOO	00144504*					
CONSTRUCTION COMPLETE	KTPMU4EKU2	29MAR04*		0	0		
RAPPMOSERU2 25JUL08* 0 0 0 RATEGIC INITIATIVE: REM.2 COEL CONTAINMANT REDUC IN FOURMILE BRANCH STRM ASSEMBLETION RAPPMOSERU1 23SEPU2* 0 0 0 RAPPMOSERU2 01APRO3* 0 0 0 RAPPMOSERU3 01APRO3* 0 0 0 0 RAPPMOSERU3 01APRO3* 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	R1PM07ER01		25JUN07*	0	0	COMPLETE CONSOLIDATION OF SOILS AND MATERIALS	
RATEGIC INITIATIVE: REM-2 25JUL08" 0 0 0 0 0 0 0 0 0	R1PM08ER01		25APR08*	0	0	CONSTRUCTION COMPLETE	
CONSTRUCTION COMPLETE OF THE ACTION CONSTRUCTION OF THE FAREA SEPAGE BASEN STODE TERMINE FEASIBILITY OF FULL SCALE PASSIBILITY							
R2PM03ER01 23SEP02* 0 0 0 R2PM03ER01 23SEP02* 0 0 0 R2PM03ER01 01OCT02* 0 0 R2PM03ER01 01OCT02* 0 0 R2PM03ER02 01APR03* 0 0 R2PM03ER02 01APR03* 0 0 R2PM03ER03 01OCT03* 0 0 R2PM03ER04 01OCT03* 0 0 R2PM03ER05 01FEB03* 0 0 R2PM03ER05 01FEB03* 0 0 R2PM03ER06 01OCT03* 0 0 R2PM03ER06 01OCT03* 0 0 R2PM03ER06 01APR03* 0 0 R2PM03ER06 R2PM03ER06 01APR03* 0 0 R2PM03ER06 R2PM03ER06 01APR03* 0 0 R2PM03ER06 R2PM03ER0	R1PM08ER02		25JUL08*	0	0		
NITITATE PILOT SCALE TEST SOUTH OF THE F-AREA SEEPAGE BASINS TO DETERMINE FEASIBILITY OF FULL SCALE TEST SOUTH OF THE F-AREA SEEPAGE BASINS TO DETERMINE FEASIBILITY OF FULL SCALE TEST SOUTH OF THE F-AREA SEEPAGE BASINS TO DETERMINE FEASIBILITY OF FULL SCALE BASE INJECTION PILL SCALE BASE INJECTION SYSTEM DESIGN TO SCOPIEC INTITATE FULL-SCALE BASE INJECTION SYSTEM DESIGN TO SCOPIEC INTITATE FULL-SCALE BASE INJECTION OF PRATICINS SUBMIT FULL-SCALE BASE INJECTION OF PRATICINS STREAM	RATEGIC INITIAT	IVE: REM-2					
R2PM03ER01 23SEP02"	CCEL CONTAMIN	IANT REDUC IN	I FOURMILE BI	RANCH ST	ΓRM		
SEEPAGE BASINS TO DETERMINE FEASIBILITY OF FULL	ASE INJECTION						
SEEPAGE BASINS TO DETERMINE FEASIBILITY OF FULL	DODMOSEDO4	220500*					
PLANS PLANS PLANS PLANS	KZMIUZEKU1	230EPU2*		0	U	SEEPAGE BASINS TO DETERMINE FEASIBILITY OF FULL	
TO SCOMEC	R2PM03ER01		01OCT02*	0	0		
Note	R2PM03ER02		01APR03*	0	0	TO SCOHEC	
### STREAM ###################################	R2PM04ER01	01OCT03*		0	0		
R2PM03ER05	R2PM07ER01		30SEP07*	0	0		
DESIGN TO SCOHEC SUBMIT PRECISION GROUND WATER EXTRACTION SYSTEM DESIGN TO SCOHEC SUBMIT FINAL DESIGN OF SPRAY IRRIGATION SYSTEM FOR F AND H AREAS TO SCOHEC INITIATE INSTALLATION OF MWMF EXPANDED PHYTOREMEDIATION SYSTEM BEGIN INSTALLATION OF SPRAY IRRIGATION SYSTEM BEGIN INSTALLATION OF SPRAY IRRIGA	PHYTOREMEDIATION	N WITH SPRAY IF	RRIGATION				
Design To ScDHEC Submit Precision Ground Water Extraction System Design To ScDHEC Submit Precision Ground Water Extraction System Design To ScDHEC Submit Final Design of Spray Irrigation System For Fand Hareas To ScDHEC Initiate Installation of MWMF Expanded Phytoremediation System Begin Installation of Spray Irrigation System Stray Irrigation System Stray Irrigation System Begin Installation of Spray Irrigation System Begin Installation of Spray Irrigation System Stray Irrigation System Stray Irrigation System Begin Installation of Spray Irrigation System Stray Irrigation System	D2DM02ED05		01EED03*		0	CURNIT MANAGE EVEN AND ED DI IVI ODEN ED LE CON OVOTEM	
DESIGN TO SCDHEC SUBMIT FINAL DESIGN OF SPRAY IRRIGATION SYSTEM FOR F AND H AREAS TO SCDHEC INITIATE INSTALLATION OF MWMF EXPANDED PHYTOREMEDIATION SYSTEM BEGIN INSTALLATION OF SPRAY IRRIGATION SYSTEM COMPLETE INSTALLATION OF PRECISION GROUNDWATER EXTRACTION SYSTEM Date 10	NZCINIOSEKOS		UIFEBU3		ا		
DESIGN TO SCDHEC SUBMIT FINAL DESIGN OF SPRAY IRRIGATION SYSTEM FOR F AND H AREAS TO SCDHEC INITIATE INSTALLATION OF MWMF EXPANDED PHYTOREMEDIATION SYSTEM BEGIN INSTALLATION OF SPRAY IRRIGATION SYSTEM COMPLETE INSTALLATION OF PRECISION GROUNDWATER EXTRACTION SYSTEM Date 10	R2PM03FR03		01APR03*	0		SUBMIT PRECISION GROUND WATER EXTRACTION SYSTEM	
FOR F AND H AREAS TO SCOHEC INITIATE INSTALLATION OF MWMF EXPANDED PHYTOREMEDIATION SYSTEM			37,47,00		\mathbb{I}		
FOR F AND H AREAS TO SCOHEC	R2PM03ER04		01OCT03*	0	0	SUBMIT FINAL DESIGN OF SPRAY IRRIGATION SYSTEM	
PHYTOREMEDIATION SYSTEM BEGIN INSTALLATION OF SPRAY IRRIGATION SYSTEM COMPLETE INSTALLATION OF PRECISION GROUNDWATER EXTRACTION SYSTEM Date O10CT84 AD Date O1JUL02 Progress Bar O1APR04* O 0 0 SESS SHORT 17 of 21 Date O7AUG02 REV. 6, WSRC-RP-2002-00245							
R2PM04ER03 01APR04* 0 0 COMPLETE INSTALLATION OF PRECISION GROUNDWATER EXTRACTION SYSTEM COMPLETE INSTALLATION OF PRECISION GROUNDWATER EXTRACTION SYSTEM Sheet 17 of 21 Date Progress Bar Date O1JUL02 Progress Bar SES3 SAVANNAH RIVER SITE Date O7AUG02 REV. 6, WSRC-RP-2002-00245	R2PM04ER04	01NOV03*		0	0		
EXTRACTION SYSTEM Date 010CT84 th Date 01JUL02 Date 01JUL02 Early Bar Progress Bar SAVANNAH RIVER SITE Date 07AUG02 REV. 6, WSRC-RP-2002-00245	R2PM04ER02	01APR04*		0	0	BEGIN INSTALLATION OF SPRAY IRRIGATION SYSTEM	
sh Date 30SEP26 Progress Bar SAVANNAH RIVER SITE Date Revision Checked Ap O7AUG02 REV. 6, WSRC-RP-2002-00245	R2PM04ER03		01APR04*	0	0		
sh Date 30SEP26 Progress Bar SAVANNAH RIVER SITE Date Revision Checked Ap O7AUG02 REV. 6, WSRC-RP-2002-00245							
h Date 30SEP26 Date 01JUL02 Progress Bar SAVANNAH RIVER SITE Date Revision Checked Ap 07AUG02 REV. 6, WSRC-RP-2002-00245	D-1-	6400TC:				CFC2 Chou47 of 24	
Date 01JUL02 Progress Bar 07AUG02 REV. 6, WSRC-RP-2002-00245					•		pro
		1		Pr	ogress Bar	07AUG02 REV. 6, WSRC-RP-2002-00245	
EM PROGRAM PERFORMANCE MANAGEMENT PLAN	Date	230010216:09				EM PROGRAM PERFORMANCE MANAGEMENT PLAN	_

Activity ID	Early Start	Early Finish	Orig Dur	Rem Dur	FY02	FY04	FY06	FY08	FY10	FY12	FY14	FY16	FY18	FY20	FY22	FY24	FY26	FY28	FY30
R2PM08ER01		30SEP08*	0	0									LE BRANG ATION FM						
RATEGIC INITIATI	VE: REM-3								Ĭ										
IPRVD REGULATO	DRY PROCES	SES ACCEL RIS	SK REDU	CTION															
YNAMIC UNDERGR	OUND STRIPPII	NG (DUS)																	
R3PM02ER01		30SEP02*	0	0		01 101417													
NOF MOZEINOT		303LF 02		0		SUBIVIII	PERIMITS	5 10 SCD	HEC FOR	APPROVA	L								
R3PM02ER02		31JAN03*	0	0		ОВТА	N SCDHE	C APPRO	OVALS FOI	R PERMIT	S TO CON	ISTRUCT							
R3PM02ER03	01FEB03*		0	0		BEGIN	DUS CO	NSTRUCT	TION										
						♦													
R3PM03ER01	01FEB05*		0	0			BEGIN	DUS ST	ARTUP										
R3PM06ER01		28FEB10*	0	0					•	OMPLET	E DUS OF	PERATION	S (FOREC	AST)					
R3PM07ER01		30SEP12*	0	0							COMPL	ETE POS	T OPERAT	TONS SAM	IPLING				
NHANCED BIOREMI	EDIATION (MICI	ROENFRACTIONA	ATION)																
R3PM02ER04		31JAN03*	0	0		SUBM	IT INTERI	M ROD RI	EVISION T	O SCDHE	C/EPA								
R3PM03ER02		31MAY03*	0	0		ОВТ.	AIN APPR	OVAL OF	ROD REV	ISION									
R3PM03ER03		31MAR04*	0	0			SUBMIT R REGULAT		_ ACTION I	MPLEMEI	NTATION	PLAN TO							
R3PM03ER04		30SEP04*	0	0			OBTAIN	I APPROV	AL OF IMI	LEMENT	ATION PL	.AN							
R3PM03ER05	01NOV04*		0	0			BEGIN	FIELD AC	CTIVITIES										
R3PM04ER01		30NOV05*	0	0			C	OMPLETE	ENHANC	ED BIORE	MEDIATION	ON							

Start Date	01OCT84	Early Bar	SES3 Sheet 18 of 21				
Finish Date	30SEP26		SAVANNAH RIVER SITE	Date	Revision	Checked	Approved
Data Date	01JUL02	Progress Bar		07AUG02	REV. 6, WSRC-RP-2002-00245		
Run Date	23OCT02 16:09		EM PROGRAM PERFORMANCE MANAGEMENT PLAN				
© Prin	navera Systems, Inc.						

	Activity ID	Early Start	Early Finish	Orig Dur	Rem Dur	FY02	FY04	FY06	FY08	FY10	FY12	FY14	FY16	FY18	FY20	FY22	FY24	FY26	FY28	FY30
TRATE	EGIC INITIATI	VE: DD-1																		
ACCEL	ERATE FACI	LITIES DISPO	SITION																	
D&D C	URRENTLY IN	ACTIVE FACILIT	IES																	
SUMN	MARY ACTIVITY	•																		
UDUD	RDAREA	01OCT03*	30SEP06	1,096*	1,096*				D AREA											
UDUD	RMAREA	01OCT03*	30SEP06	1,096*	1,096*				M AREA											
UDUD	PRTNXAR	01OCT03*	30SEP06	1,096*	1,096*				TNX											
UDUM	106DR01		30SEP06*	0	0				COMPL	ETE TNX	D&D									
UDUM	106DR02		30SEP06*	0	0				COMPL	ETE D-AR	EA D&D									
UDUM	109DR01		30SEP06*	0	0				•	ETE M-AR										
ALAN	CE OF SRS F	ACILITY DISP	OSITION																	
BALAN	ICE OF SRS F	FACILITY DISF	POSITION																	
		CILITY DISPOS	TION																	
	MARY ACTIVITY																			
BFSR	SFACD1	01JAN01A	30SEP24	4,778*	4,479*											ESTABLI STRUCT		ID-STATE	S FOR BA	ALANCE
BFSR	SFACD6		30SEP24	0	0												СОМ	LETE FA	CILITY DI	SPOSITI

Start Data	0400704		SES3 Sheet 19 of 21				
Start Date Finish Date	01OCT84 30SEP26	Edily Dai	SES3 Sheet 19 of 21 SAVANNAH RIVER SITE	Date	Revision	Checked	Approved
Data Date	01JUL02	Progress Bar		07AUG02	REV. 6, WSRC-RP-2002-00245	0.1001104	7.55.0.00
Run Date	23OCT02 16:09		EM PROGRAM PERFORMANCE MANAGEMENT PLAN				
© Prima	avera Systems, Inc.						<u> </u>



Activity ID	Early Start	Early Finish	Orig Dur	Rem Dur	FY02	FY04 FY06 FY08 FY10 FY12 FY14 FY16 FY18 FY20 FY22 FY24 FY26 FY	728 FY3
RATEGIC INITIA		FINISH	Dui	Dui			
ENTRALIZE ALA		T CDC					
ENTRALIZE ALA CENTRALIZE ALAR		ISKS					
SUMMARY ACTIVITY S24CENALSY	01OCT99A	30SEP20	7,671*	6,667*		MONITOR OF NITRAL ALARM DVG	TEMO
324CENALS I	010C199A	303EF20	7,071	0,007		MONITOR CENTRAL ALARM SYS	I EIVIS
S24M01CA01	01OCT00A		0	0	MONIT	DRING 2 FERNALD PANELS	
S24M02CA01		01SEP02*	0	0		ASSURE INCOMING TELEPHONE INFRASTRUCTURE REDUNDANCY TO NEGATE A SINGLE POINT FAILURE FROM AFFECTING RECEIPT OF SIGNAL FROM DOE COMPLEX	
S24M02CA02		01OCT02*	0	0		PROVIDE REGULAR PERFORMANCE METRICS ON COST PER PANEL TO PROVIDE ALARM SERVICE TO DOE COMPLEX BASED UPON SRS BASELINE OF \$5,700 PER YEAR	
S24M03CA01		01DEC02*	0	0		DEVELOP PACKAGE FOR DISTRIBUTION BY EM-1, DP-1, NN-1, TO DOE COMPLEX ON THE COST SAVINGS INITIATIVE TO CENTRALIZE ALARM SERVICE AT SRS	
S24M03CA02		31JAN03*	0	0		DOE-HQ TO PROVIDE DIRECTION TO WSRC FOR COMPLEX SUPPORT ACTIVITIES	
S24M03CA03		01FEB03*	0	0		CORRELATE DATA COLLECTED AND PROVIDE REPORT ON ACTUAL AND POTENTIAL SAVINGS RELATIVE TO INITIATIVE	
S24M03CA04		01FEB03*	0	0		IMPLEMENT CAPABILITY TO IMMEDIATELY RECEIVE SIGNALS FROM REPROGRAMMING OF EXISTING ALARM PANELS	
S24M03CA05		01FEB03*	0	0		STAFF ADDITIONAL POSITIONS AT SRS CENTRAL ALARM STATION TO HANDLE OFFSITE ALARM PANELS.	
S24M03CA06		01MAR03*	0	0		DEVELOP THE CENTRAL ALARM SYSTEM DESCRIPTION AND USAGE GUIDANCE DOCUMENTS FOR DOE COMPLEX USE AND IMPLEMENTATION	
S24M03CA07		01MAR03*	0	0		DEVELOP STAFFING FORECAST WITH RELATED BUDGETARY NEEDS FOR FY04 THROUGH FY09 BASED UPON NEW ALARM PANELS SUPPORT NEEDS DURING THE SAME PERIOD UTILIZING REQUESTS FOR SERVICE FROM DOE COMPLEX	
S24M03CA08		01APR03*	0	0		ISSUE DOE-HO GUIDANCE DOCUMENT ON UTILIZATION OF CENTRALIZED ALARM SERVICE AT SRS TO DOE FIELD OFFICES	
S24M08CA02		30SEP08*	0	0		CONNECT SITES BY 2008	
t Date	01OCT84 30SEP26		Ea	ırly Bar	SES3		
sh Date a Date	01JUL02		Pr	ogress Ba	r	SAVANNAH RIVER SITE Date Revision Checked 07AUG02 REV. 6, WSRC-RP-2002-00245	l Approv
Date	23OCT02 16:09				EM	PROGRAM PERFORMANCE MANAGEMENT PLAN	

9.0 Key Decisions, Deliverables and Enabling Milestones Responsibility Assignment Matrix

The following document, organized by EM Program component, depicts the organizational commitments required for completing the SRS Cleanup Reform Vision. The Aggressive Target Cleanup Dates support completion of the EM Cleanup by 2025.

SCOPE	Aggr	essive Targ	get Cleanu	Date		Target Clea	anup Date	
Key Milestones, Decisions, Deliverables	WSRC	DOE-SR	DOE-HQ	Others	WSRC	DOE-SR	DOE-HQ	Others
HIGH	I LEVEL W	VASTE SCO	PE					
WM-1: Expedited High Level Waste Processing								
This initiative will expedite the processing of the 37 million gallons of High Level two major concepts: Tailored Treatment and a Closure Facility concept.	Waste curre	ently stored at	SRS 8 years	earlier than s	cheduled. Th	e initiative wi	ll implement	
Resolve Programmatic Requirement Issues:								
a. Approve movement to a single color of money for EM activities to allow more agile execution of Accelerated Cleanup Plan: 1) Approve movement of many activities out of the Waste		7/15/02				9/30/02		
Removal Line Item.		7/15/02				9/30/02		
Submit recommended PBS Structure to DOE-HQ.		1/31/03				3/30/03		
Modify current PBS structure to allow more flexibility.			9/30/03				9/30/04	
Approve use of a single color of money.			9/30/03				9/30/04	
b. Modify implementation guidelines for DOE Order 435.1 for Key Radionuclides, more realistic Intruder Analysis and less subjective Waste Incidental to Reprocessing. Requirements to support acceleration.								
Submit requested modifications to DOE Order 435.1 implementation guidelines to DOE-HQ.	7/31/02				9/30/02			
Approve Revised Order with modifications incorporated.			1/31/03				7/30/03	
Develop acceptance criteria to determine when waste removal efforts should be completed on tanks.	12/1/03				11/30/04			
 Obtain regulatory concurrence if needed with the revised acceptance criteria for tank closure. 		3/31/04				9/30/05		
c. Modify requirements for Tank Farm Closure Facility.								
Submit Closure Facility Plan detailing modified Requirements.	12/1/02				3/31/03			
Approve Closure Facility Requirements.		3/1/03				6/30/03		
3) Gain DOE-HQ & DNFSB Concurrence.			4/1/03				7/30/03	
Implement Modified Requirements.	10/1/03				6/30/04			
2. Sludge Processing	4/0/00				4/00/00			
 a. Place ~ 4% more waste in canisters at DWPF by raising the fill height. 	4/6/02				4/30/02			
 b. Initiate use of improved Frit at DWPF, which will support increased production rates at DWPF. 					12/31/02			
 c. Increase production rate at DWPF to an average of 280 equivalent canisters per year. 	9/30/04				9/30/05			

SCOPE	Aggr	essive Targ	get Cleanu _l	Date		Target Clea	anup Date	
Key Milestones, Decisions, Deliverables	WSRC	DOE-SR	DOE-HQ	Others	WSRC	DOE-SR	DOE-HQ	Others
d. Complete 30% of Sludge Processing Canisters.	9/30/03				3/30/04			
e. Complete 45% of Sludge Processing Canisters.	9/30/06				3/30/08			
f. Complete 60% of Sludge Processing Canisters.	3/31/10				3/30/12			
g. Complete 75% of Sludge Processing Canisters.	9/30/13				9/30/16			
h. Complete all Sludge Processing.	6/30/19				6/30/24			
i. Receive Am/Cm material from F Canyon.	3/31/03				3/31/03			
Resolve canister storage issues.								
a. Approve & obtain funding authority for FY03 Canister Storage Line			10/1/02				3/30/03	
Item to accommodate additional canister production rate.								
b. Initiate Glass Waste Storage Building (GWSB) II Line Item.	11/1/02				10/1/03			
c. Begin operation of GWSB II.	6/30/06				9/30/07			
d. Commit to an expedited shipment schedule for SRS canisters &								
provide shipment support.			10/1/08				3/30/09	
e. Begin shipments to Federal Repository.	10/1/10				10/1/10			
 Complete shipments to Federal Repository. 	9/30/19				9/28/24			
4. Low Curie Salt Processing.								
a. Gain regulators' concurrence for low curie salt processing.				9/30/02				3/30/03
b. Initiate dissolution of low curie salt in Tank 41.	10/1/02				4/1/03			
5. Low Curie Salt with higher actinide content.								
a. Approve Low Curie Salt with actinides Waste Incidental to		10/31/03				12/30/03		
Reprocessing.								
b. Gain regulators' concurrence for actinide processing.				12/31/03				2/28/04
c. Initiate Low Curie Salt with actinides processing.	4/30/05				4/30/06			
6. High Curie Salt with Higher Actinide Content.								
a. Initiate High Curie Salt Processing.		10/1/08				10/1/09		
7. Salt Processing.								
a. Complete 20% of all Salt Processing.	9/30/06				9/30/07			
b. Complete 30% of all Salt Processing.	9/30/08				3/30/10			
c. Complete 50% of all Salt Processing.	9/30/11				3/30/14			
d. Complete 75% of all Salt Processing.	9/29/14				6/28/18			
e. Complete all Salt Processing.	6/30/19				6/30/24			

SCOPE	Aggr	essive Tarç	get Cleanu	p Date	Target Cleanup Date				
Key Milestones, Decisions, Deliverables	WSRC	DOE-SR	DOE-HQ	Others	WSRC	DOE-SR	DOE-HQ	Others	
WM-2: Risk Based Tank and Facility Closures	_								
This initiative will implement risk based tank and facility closure.									
Risk Based Tank Closures. a. Approve deferral of the closure of Tank 19 until the closure of Tank 18 is ready so these two tanks can be closed as a group (SCDHEC & EPA).				6/30/02 Complete				6/30/02 Complete	
b. Issue Tank Closure EIS Record of Decision (ROD).			7/31/02				9/30/02		
c. Submit Tank 19 Closure module to SCDHEC.	9/30/02				11/30/02				
d. Approve the Tank 19 Closure module (SCDHEC).				12/31/02				2/28/03	
e. Submit Tank 18 Closure module to SCDHEC.	5/30/03				7/30/03				
f. Approve the Tank 18 Closure module (SCDHEC).				8/30/03				10/28/03	
g. Complete the first Tank group closure (Tanks 17-20).	6/30/04				9/30/04				
 h. Complete the Closure Plan modules for Tanks 1-8 and gain regulatory concurrence. 									
 Submit closure plans for Tanks 1-8 to SCDHEC. 	9/30/08				3/31/09				
2) Approve Closure plans (SCDHEC).				3/31/09				9/30/09	
3) Initiate closure activities for Tanks 1-8.	4/30/09				10/31/09				
4) Complete the second Tank group closure (Tanks 1-8).	3/31/11				9/30/12			1	
i. Tank Closures.									
1) Complete 25%.	3/31/12				3/31/13				
2) Complete 50%.	9/30/14				9/30/17				
3) Complete 75%.	9/30/16				9/30/19				
4) Close all tanks. 2 Risk Based Facility Closures.	9/30/20				9/30/25			+	
a. Designate SRS as a Long-Term National Security Site with long-term monitoring commitment.			1/31/04				1/30/05		
 b. Develop strategy for completing facility closures after the designation above are completed and the modifications to DOE Order 435.1 implementation guidelines are completed. 	9/30/10				9/30/11				
c. Initiate Processing Facility Closures.	6/30/19								
d. Close all facilities.C18	9/30/20				9/30/25				

SCOPE	Aggre	essive Targ	get Cleanu	p Date		Target Clea	anup Date	
Key Milestones, Decisions, Deliverables	WSRC	DOE-SR	DOE-HQ	Others	WSRC	DOE-SR	DOE-HQ	Others
NUCLEAR MA	TERIALS	MANAGEM	MENT SCO	PE				
MM-1: Accelerated Nuclear Material Facilities Consolidation	n and Dead	ctivation						
This initiative accelerates the consolidation and deactivation of F Area, the rece	iving basin fo	r offsite fuels	(RBOF), and	the K-Basin N	Nuclear Mater	ials facilities.		
F-Canyon Deactivation								
 a. DOE authorization to proceed with deactivation for F Canyon and FB-Line. (Authorize Suspension Plan for the next Phase, Phase 3 Facility Stabilization and Equipment Shutdown / Isolation). 			9/30/02				12/31/02	
b. 1) WSRC to submit a tailored set of requirements (e.g., S/RIDs) to DOE.	12/31/03				8/31/04			
A set of tailored requirements (e.g., S/RIDs) will be approved for these deactivation activities.		1/31/04				9/30/04		
c. Complete Americium/Curium (Am/Cm) Transfer to HLW.	3/31/03				3/31/03			
d. Transfer cold chemical makeup.	9/30/05				3/31/06			
e. Shutdown the low-activity waste and general purpose evaporator.	6/30/06				3/31/07			
 f. Establish SRTC and C-Lab waste handling in an appropriate facility to ensure shutdown of acid recovery unit. 	9/30/06				9/30/07			
g. Transfer approximately 60,000 gallons of PUREX solvent to an appropriate location.	12/31/06				12/31/07			
 h. Define and implement selected deactivation end-state option for approximately 190,000 gallons of Depleted Uranium (DU) solution. Commence design for cold chemical capabilities. 	6/30/07				6/30/08			
2. FB-Line Deactivation								
 a 1) WSRC to submit a tailored set of requirements (e.g., S/RIDs) to DOE. 	12/31/03				8/31/04			
A set of tailored requirements (e.g., S/RIDs) will be approved for these deactivation activities.		1/31/04				9/30/04		
 b. Package Rocky Flats classified metal through bagless transfer system (existing PBI NMSF/IP230). 	6/30/03				6/30/04			
 c. Provide "SST's" to support FB-Line de-inventory to KAMS, shipping to 235-F, and other inter-site shipments. 		4/30/03				3/31/04		
 d. Characterize/repackage SRS materials for dissolving, disposal, or packaging. 	9/30/05				9/30/06			
 e. Complete packaging into 3013 SRS Pu material that has been produced as of July 2004. 	12/31/04				12/31/05			

SCOPE	Aggre	essive Tar	get Cleanup	Date		Target Cleanup Date			
Key Milestones, Decisions, Deliverables	WSRC	DOE-SR	DOE-HQ	Others	WSRC	DOE-SR	DOE-HQ	Others	
f. Install long-term 3013 Container packaging / surveillance capability in existing facility.	9/30/07				9/30/08				
g. Complete de-inventory of FB-Line vault.	6/30/07				6/30/08				
h. Take 221 FB-Line from Cat. 1 to Cat. 3.		9/30/07				9/30/08			
3. RBOF Deactivation									
 a. 1) WSRC to submit a tailored set of requirements (e.g., S/RIDs) to DOE. 	12/31/02				8/31/03				
 A set of tailored requirements (e.g., S/RIDs) will be approved for these deactivation activities. 		1/31/03				9/30/03			
b. Implement NIST fuel handling capability in L Area.	6/30/04				12/31/04				
 c. Install racks needed for RBOF in L Area. 	9/30/04				6/30/05				
d. Shutdown resin regeneration operations.	9/30/04				6/30/05				
e. De-inventory fuel from RBOF basin.	9/30/04				9/30/06				
f. RBOF Facility Deactivation.	9/30/05				9/30/06				
K-Basin Deactivation									
a. 1) WSRC to submit a tailored set of requirements (e.g., S/RIDs) to DOE.	8/31/02				8/31/02				
 A set of tailored requirements (e.g., S/RIDs) will be approved for these deactivation activities. 		9/30/02				9/30/02			
b. Complete K-Basin de-inventory and deactivation.	3/31/03				3/31/03				
MM-2: Accelerated SNF Disposition This initiative accelerates the start of spent nuclear fuel (SNF) disposition by 6 yr \$1 billion in current baseline costs for SNF disposition. It further supports develors-effective manner with substantially reduced life-cycle expenditures. 1. The following actions associated with this initiative provide accelerated									
SNF disposition and an integrated disposition strategy.									
a. Complete National Environmental Policy Act (NEPA) action to begin Foreign Research Reactor (FRR)/Domestic Research Reactor (DRR) SNF disposition in H Canyon.			12/31/02				3/31/03		
b. Begin processing FRR/DRR, as early as FY03, in H Canyon.	9/30/03				12/31/03				
c. Complete processing FRR/DRR in H Canyon, on a "not to interfere basis", such that L-Basin will have sufficient capacity to maintain the current receipt schedule.	9/30/14				9/30/16				
 d. Modify the TVA interagency agreement as appropriate for Highly Enriched Uranium (HEU) from FRR/DRR. 			12/31/02				3/31/03		

SCOPE	Aggressive Target Cleanup Date					Target Clea	anup Date	
Key Milestones, Decisions, Deliverables	WSRC	DOE-SR	DOE-HQ	Others	WSRC	DOE-SR	DOE-HQ	Others
 e 1) Complete NEPA action for determination of legacy SNF disposition. 			9/30/04				9/30/06	
Ensure viability of TVA or alternate option for additional HEU disposition.			6/30/05				9/30/05	
f. Identify Legacy SNF Inventory, including fuel received to date at SRS and fuel expected to be received at SRS by 2009. Also identify non-legacy aluminum based fuel which may be shipped to SRS; requires DOE-HQ approval.	9/30/04		12/31/04		9/30/05		12/31/05	
g. Determine and assign responsible program owner for disposition of SNF not received at SRS by 2009.			9/30/04				9/30/05	
MM-3: Optimize Disposition of Complex-Wide Plutonium B	earing Ma	terials						
This initiative provides an integrated approach for accelerating the closure of Pudisposition path for these materials.	u missions ac	cross the comp	olex, consolid	ates Pu-beari	ng materials	at SRS, and e	establishes a	
 This initiative requires two NEPA actions, modifications to facilities, and acceleration of existing campaign material. 								
 a. 1) Assess infrastructure improvements for processing SRS material and start specific design work for H Area and 235-F. 	10/1/03				10/1/04			
 Assess infrastructure improvements for processing complex material and start specific design work for H Area and 235-F. 	10/1/03				10/1/04			
 c. Complete NEPA action to identify disposition path for legacy non- MOX-able Pu material. 			6/30/03				6/30/04	
 d. Authorize shipments of complex Pu material. e. Complete modifications for H Area CAT 1 security and HB-Line 			6/30/04				12/31/04	
Phase 1 south line activation (if needed).	9/30/05				6/30/06			
 f. Complete Modifications to H Area to support processing of non- MOX-able Pu material (if needed). 	3/31/08				3/31/09			
g. Start processing of Rocky Flats items.	10/1/04				10/1/05			
h. Complete operation of existing H-Area facilities.	12/31/14				9/30/16			
 i. 1) Place 1 MT Pu oxide under IAEA requirements identified in KAMS TRAC (Technical Requirements and Criteria). 			12/31/02				12/31/02	
EM Programmatic decision to consolidate complex-wide Pu Storage.			3/31/03				3/31/04	
 j. Authorize KAMS funding for expansion to 6500 positions. k. Complete modifications to KAMS to support storage of complexwide Pu material 	9/30/06	10/1/03			9/30/07	10/1/04		

SCOPE	Aggre	essive Targ	get Cleanu _l	p Date		Target Cleanup Date			
Key Milestones, Decisions, Deliverables	WSRC	DOE-SR	DOE-HQ	Others	WSRC	DOE-SR	DOE-HQ	Others	
Obtain Np oxide agreement on material specifications and									
packaging and transportation with receiver site. Have in place all									
transportation requirements on schedule.									
Obtain agreement on Np specifications.		12/31/02				6/30/03			
Obtain agreement on Packaging.		3/31/03				9/30/03			
3) Submit SARP, Rev. 1, for DOE Approval.	8/31/03				8/31/03				
4) Approve SARP, Rev. 1, for transportation package.		12/31/03	5/31/04			12/31/03	5/31/04		
m. 1) Submit Letter of Amendment for Type I, Type II and Type III	5/30/02				11/30/02				
Plutonium-bearing materials.	Actual				5/03/02 act				
2) Approve Letter of Amendment for Type I, Type II and Type III			8/31/02				12/31/02		
Plutonium-bearing materials.	0 10 0 10 0				0/00/00				
n. 1) Submit initial draft SARP Rev. 0 for 9975 shipping container.	9/30/02	4 (0.4 (0.0	4/04/00		9/30/02	4/04/00	4/04/00		
2) Approve SARP Rev. 0 for 9975 shipping container.		1/31/03	1/31/03			1/31/03	1/31/03		
pproximately 4,896 m3 (24,000 drums and 480 polyboxes) of low-activity TRU by WIPP at an average rate of 4,000 equivalent drums per year, eight times the				IPP. INIS AC	ceierated plan	wiii snip this	inventory of	KU Waste	
Provide TRU processing to augment current capability.	our one omp		<u>.</u>						
a. Conduct Authorization basis upgrades to existing manual TRU									
processing facilities to allow a greater inventory of waste to be processed.					9/30/08				
 Modify and augment current manual TRU processing equipment to allow a greater inventory of waste to be processed. 	9/30/03				9/30/08				
 c. Provide fully operational and certified enhanced repackaging capability for TRU waste, based on LANL glovebox system. 				6/30/04				6/30/09	
(National TRU Program, Carlsbad, NM).									
2. Augment characterization capability at SRS.									
a. Deploy additional equipment and resources to increase									
characterization capacity including Pu238 capability				12/31/02				12/31/0	
(National TRU Program, Carlsbad, NM).									
3. Operate enhanced TRU waste processing and characterization facilities.									
a. Commence Operation of augmented Low Activity TRU waste	7/1/04				7/1/09				
processing capabilities. 4. Disposition drums with less than 100 NCi/g by load management.									
			1	i					

RESPONSIBILITY ASSIGNMENT MATRIX (RAM)

SCOPE	Aggre	essive Targ	get Cleanu	Date		Target Clea	anup Date	
Key Milestones, Decisions, Deliverables	WSRC	DOE-SR	DOE-HQ	Others	WSRC	DOE-SR	DOE-HQ	Others
a. Decision to allow load management of shipments to permit disposal of drums with less than 100 NCi/g (National TRU Program, Carlsbad NM). TRUDAGT II.				9/30/02				9/30/07
Implement increased Pu limit for TRUPACT II . a. Regulatory approval of increase to Pu limit for TRUPACT II container (National TRU Program, Carlsbad, NM and NMED) 6. Accelerate shipments of low-activity TRU to WIPP.				9/30/07				9/30/12
 a. Provide TRUPACT-II shipping containers to support accelerated shipments from SRS to WIPP (National TRU Program, Carlsbad, NM). 				9/30/02				9/30/07
b. Complete shipment of all low-activity TRU waste to WIPP.	9/30/09			9/30/09	9/30/14			9/30/14
WM-4: Accelerate Risk Reduction through Expedited Mana	agement of	f High-Acti	vity TRU W	aste				
This initiative accelerates the disposition of legacy TRU waste by providing early Pu-238/Pu-239 waste and bulk containers. The site currently has approximately major concepts; fit for purpose modular designs, use of the existing Remotely C reduction and a new design TRUPACT-III for shipping larger TRU waste contain	5,400 m3 of perated Size	high activity 7	ΓRU drums an	d bulk contain	ners. This init	iative would in	mplement thre	ee
Design and construct modular high-activity TRU waste processing facility								
a. Re-build ROSRS facility and verify operational performance.	9/30/04				9/30/06			
 b. Deliver production-ready HANDSS55 technology (EM-50 funded TRU and MW Focus Area). 				1/30/06				1/30/11
c. Approve line item for HA TRU facility.		12/30/04	12/30/04			12/30/05	12/30/05	
d. Complete the HA TRU facility design.	9/30/05				9/30/10			
e. Complete construction of HA TRU facility.	9/30/08				9/30/13			
f. SCDHEC permit approval for new facility.				9/30/05				9/30/10
Provide facilities for box characterization.								
a. Deploy box characterization equipment at SRS (National TRU Program, Carlsbad, NM).				9/30/07				9/30/12
3. Operate high-activity TRU processing and characterization facilities.								
 a. Commence Operation of new high-activity TRU waste processing facility (including ROSRS). 	10/1/08				10/1/13			
 b. Begin characterization of high-activity TRU waste (National TRU Program, Carlsbad, NM). 				10/1/08				10/1/08
4. Accelerate shipments of high-activity TRU to WIPP.								
Provide TRUPACT-II shipping containers to support accelerated shipments from SRS to WIPP				10/1/08				10/1/08
(National TRU Program, Carlsbad, NM).b. Complete implementation of a TRUPACT-III container for shipping bulk TRU waste containers				9/30/07				9/30/12
(National TRU Program, Carlsbad, NM).								
 c. Complete shipment of all high-activity TRU waste to WIPP. 	9/30/13			9/30/13	9/30/18			9/30/18

WSRC-RP-2002-00245 Revision 6

SCOPE	Aggre	essive Targ	get Cleanu _l	Date	Target Cleanup Date				
Key Milestones, Decisions, Deliverables	WSRC	DOE-SR	DOE-HQ	Others	WSRC	DOE-SR	DOE-HQ	Others	
WM-5: Cost Effective/Risk-Reducing Alternative to Incinera	ation for P	UREX Was	ste						
This initiative implements a new stabilization technology for treatment of organic									
years sooner than the current commitment. It also accelerates the Closure of the									
in the baseline. The early treatment facilitated by this alternative technology red				orage of 25,00	00 gallons of I	egacy organi	c PUREX, 12,	000 gallons	
of legacy aqueous PUREX, and approximately 60,000 gallons of F Canyon PUF	REX waste in	underground	tanks.						
Accelerate the treatment of the aqueous legacy PUREX waste.									
 a. Complete treatment of the aqueous portion of the PUREX waste at Saltstone. 	12/31/03				12/31/05				
Accelerate the treatment of the organic legacy PUREX waste .									
Approve the PUREX treatment permit (SCDHEC).				9/30/05				9/30/06	
b. Complete the design and construction of the new PUREX stabilization facility.	9/30/06				9/30/07				
c. Begin treatment of the organic phase of the legacy PUREX waste .	4/30/07				12/31/07				
d. Complete organic legacy PUREX treatment.	4/30/08				12/31/08				
3. Accelerate closure of Consolidated Incineration Facility (CIF).									
Approve revision of CIF Closure Plan (SCDHEC).				9/30/04				9/30/06	
b. Begin closure of CIF.	3/3/08				3/3/08				
c. Complete closure of CIF.	4/30/10				4/30/10				
If selected as the treatment option, complete treatment of F-Canyon PUREX.									
a. Complete treatment of ~60,000 gallons of F-Canyon PUREX	9/30/09				9/30/09				
General SWD Program Activities not covered above									
This section covers SWD program activities which are not specifically called out	in the three a	acceleration p	proposals outli	ned above.					
Disposition the legacy inventory of wastes of all types									
a. Complete the disposition of the legacy waste volume of low-level waste.	9/30/06				9/30/06				
b. Complete the disposition of the legacy waste volume of untreated mixed waste .	9/30/06				9/30/06				
 c. Complete the disposition of the legacy waste volume of treated mixed waste . 	9/30/06				9/30/06				

RESPONSIBILITY ASSIGNMENT MATRIX (RAM)

SCOPE	Aggressive Target Cleanup Date				Aggressive Target Cleanup Date Target Cleanup D			anup Date	Date	
Key Milestones, Decisions, Deliverables	WSRC	DOE-SR	DOE-HQ	Others	WSRC	DOE-SR	DOE-HQ	Others		
 d. Complete the disposition of the legacy waste volume of hazardous waste . 	9/30/06				9/30/06					
Reach steady state operation with newly-generated wastes of all types.										
 Reach steady-state operation in the treatment of newly generated low-level, mixed and hazardous wastes such that wastes are treated and disposed as they are generated. 	9/30/06				9/30/06					

ENVIRONMENTAL RESTORATION SCOPE

REM-1: Accelerate Closure of the Old Radioactive Waste Burial Ground

This initiative prioritizes the reduction of risk by consolidating, integrating, and accelerating the remediation of five high risk SRS-Environmental Restoration (ER) waste sites. The improved end state is achieved by excavating 35,000 cubic yards of contaminated soil and consolidating and materials from four nearby waste units onto the Old Radioactive Waste Burial Ground (ORWBG). The excavated sites will be backfilled with clean soil and protected by a simple soil cover and institutional controls while any residual radioactivity decays. A low permeability cap will be constructed over the ORWBG, including the consolidated soils from the other waste units, and protected by institutional controls. This action will leave 600,000 curies of INEEL Pit-9-like waste in place that will avoid an additional cost of \$150 million for alternative disposal. Implementation and completion of the initiative will require four primary steps to complete: Regulatory Process, Design, Construction, and Post Construction. The data as shown are planning dates and may vary slightly from the enforceable implementation schedules as approved in the applicable Federal Facilities Agreement appendixes.

 Regulatory Process (* Core team is composed of DOE, USEPA, and 			Core			Core
SCDHEC decision makers).			Team*			Team*
 a. Approve the Record of Decision (ROD) for the closure of the waste units. 			12/31/02			12/31/02
 b. Approve the Remedial Action Implementation Plan (RAIP) for the closure of the waste units. 			3/6/04			3/6/04
2. Design.						
 a. Complete Preliminary Design of Remedy. 	3/28/03			3/28/03		
 b. Complete Final Design of Remedy. 	9/26/03			9/26/03		
3. Construction						
a. Remedial Action start.	3/29/04			3/29/04		
 b. Complete consolidation of soils and materials. 	6/25/07			6/25/07		
c. Construction complete.	4/25/08			4/25/08		
4. Post Construction						
 a. Submit Post Construction Report following construction complete 	7/25/08			7/25/08		
of the action.						

RESPONSIBILITY ASSIGNMENT MATRIX (RAM)

SCOPE	Aggr	essive Tar	get Cleanup	Date	Target Cleanup Date				
Key Milestones, Decisions, Deliverables	WSRC	DOE-SR	DOE-HQ	Others	WSRC	DOE-SR	DOE-HQ	Others	
REM-2: Accelerate Contaminant Reduction in Fourmile Br	anch Strea	am							
his initiative achieves substantial risk reduction in Fourmile Branch by 2007. T	here are cur	rently exceed	ances in the s	tream for gros	ss alpha [i.e.	uranium], col	balt, iodine-12	29,	
adium-226, strontium-90, vanadium and tritium from groundwater discharges a	ssociated wit	h the Mixed V	/aste Manage	ment Facility	(MWMF) and	the F- and H	-Area Hazard	lous	
Vaste Management Facilities. The proposed technologies for this initiative are	base injection	on and phytor	emediation wit	th spray irriga	tion. The da	ta shown are	planning date	s and	
nay vary slightly from the enforceable implementation schedules per the approv	ved RCRA Co	orrective Action	n Plan.				_		
1. Base Injection				SCDHEC				SCDHE	
 a. Initiate pilot scale test south of the F-Area Seepage Basins to determine feasibility of full-scale operations. 	9/23/02				9/23/02				
 b. Receive SCDHEC approval of the Corrective Action Plans. 				10/1/02				10/1/0	
 c. Submit full-scale base injection system design to SCDHEC. 	4/1/03				4/1/03				
d. Initiate full-scale base injection operations.	10/1/03				10/1/03				
e. Achieve metals reduction in Fourmile Branch Stream.	9/30/07				9/30/07				
2. Phytoremediation with Spray Irrigation									
a. Submit precision groundwater extraction system design to SCDHEC.	4/1/03				4/1/03				
 b. Submit final design of spray irrigation system for F and H Areas to SCDHEC. 	10/1/03				10/1/03				
c. Begin installation of spray irrigation system.	4/1/04				4/1/04				
d. Complete installation of precision groundwater extraction system.	4/1/04				4/1/04				
 e. Submit MWMF expanded phytoremediation system design to SCDHEC. 	2/1/03				2/1/03				
f. Initiate installation of MWMF expanded phytoremediation system.	11/1/03				11/1/03				
g. Reduce tritium flux to Fourmile Branch Stream as measured at	9/30/08				9/30/08				
monitoring station FM-A7U by 70%.									
REM-3: Improved Regulatory Processes Accelerate Risk R his initiative accelerates risk reduction and reduced life cycle cost for the Envir echnologies and streamlined regulatory processes. Aggressive and efficient so arlier than traditional technologies. The data as shown are planning dates and epplicable Federal Facilities Agreement appendices and Resource Conservation	onmental Re ource clean u may vary slig	storation Prog p will achieve ghtly from the	ram's cleanup low-cost mon enforceable ir	o projects to be itoring end standard	ne achieved be	by using innov	ative ades	ocess	
pplicable Federal Facilities Agreement appendices and Resource Conservation 1. Dynamic Underground Stripping (DUS) for the removal of 1.0-1.5 million	ii aiiu Recove	T ACL CORRECT	ilive Action pia	1115.	1	T	1	_	
pounds of solvent at the Western Sector, M-Basin.									
a. Submit permits to SCDHEC for approval.	9/2/02				9/2/02		-	-	
b. Approve permits to SCDMEC for approval.	9/2/02			1/3/03	9/2/02			1/3/0	
,, ,	2/2/02			1/3/03	2/2/02			1/3/0	
c. Begin DUS construction.d. Begin DUS startup.	2/3/03				2/2/03				
a. degin dos startup.	2/3/05				2/5/05				

WSRC-RP-2002-00245 Revision 6

SCOPE	Aggressive Target Cleanup Date Targe						leanup Date		
Key Milestones, Decisions, Deliverables	WSRC	DOE-SR	DOE-HQ	Others	WSRC	DOE-SR	DOE-HQ	Others	
e. Complete DUS operations (forecast).	2/10/10				2/10/10				
f. Complete post operations sampling.	9/12/12				9/7/12				
2. Enhanced Bioremediation (Microenfractionation) of 5,000 cubic yards of				Core				Core	
contaminated soils at the Chemicals, Metals, and Pesticides (CMP) Pits.				Team				Team	
a. Submit Interim ROD revision to SCDHEC/EPA	1/3/03				1/2/03				
b. Approve Interim ROD revision.				5/2/03				5/2/03	
 c. Submit Remedial Action Implementation Plan to Regulators. 	3/3/04				3/3/04				
d. Approve Implementation Plan.				9/3/04				9/3/04	
e. Begin field activities.	11/3/04				11/3/04				
f. Complete Enhanced Bioremediation.	11/4/05				1/4/05				
Balance of high-risk projects .									
CERCLA Projects:				Core				Core	
a. Submit Appendix D/E Implementation Schedules to EPA/SCDHEC	11/2/02				11/2/02				
(annually thereafter).									
 b. Approve Appendix D/E Implementation Schedules (annually) 				1/3/03				1/3/03	
RCRA Projects:				SCDHEC				SCDHEC	
 a. Approve Corrective Action Plans approximately six months after 	As needed			As needed	As needed			As needed	
WSRC submittal of Corrective Action Plans.									
General ER Program									
These initiatives complete necessary completion/closure actions not specially ca	alled out in RE	M-1, REM-2	and REM-3,	which follow.					
Last High-Level Waste Tank closed; begin remediation.	9/30/20				9/30/25				
Approve final waste site (Tank Farm Groundwater & Watershed) Record	0.00.20				0.00.20				
of Decision.			9/30/22				9/30/27		
Final remedy construction turned over to Long Term Stewardship	9/30/26		0.00.22		9/30/30		0,00,2.		
	TIES DISPO	OSITION S	COPE				•		
	-								
DD-1: Accelerate Facilities Disposition									
This initiative accomplishes the demolition of currently inactive facilities outside	the site's cen	tral core area	by 2006. Th	is will entail th	e removal of	up to 72 facil	ities,		
with a footprint of approximately 567,000 square feet, located in the T, D and M									
located in a remote area near the Savannah River, and M Area is located in clos									
planned reuse reduces the inherent risk to site workers, the public and the envir									
1. Planning									
Submit proposed site specific release criteria and Multi Agency									
				1			1	1	
Radiation Survey and Site Investigation Manual (MARSSIM - DOE,	9/30/03				9/30/03				

SCOPE	Aggr	essive Tar	get Cleanu	Date		Target Clea	anup Date	
Key Milestones, Decisions, Deliverables	WSRC	DOE-SR	DOE-HQ	Others	WSRC	DOE-SR	DOE-HQ	Others
 b. Approve proposed site specific release criteria and MARSSIM sampling protocol. 			4/1/04				4/1/04	
 c. Revise SRS 1C Facilities Disposition Manual to include requirements in the DOE LCAM Order and the DOE Program and Project Management Manual 	9/30/03				9/30/03			
 d. Publish the technical, cost and schedule baseline for D&R of facilities in the T, D and M Areas 	9/30/03				9/30/03			
2. Execution								
a. Complete D&R activities in T, D and M Areas	9/30/06				9/30/06			
General Facility Disposition Program Activities				1				
Shutdown/Transition operating facilities at the end of their mission					Ī			
to the FDD Program. Deactivate and/or Decommission excess								
facilities and maintain the deactivated facilities in safe condition.	9/30/24				9/30/24			
SI	TE SECUF	RITY SCOP	E					
SS-1: Accelerate Required Improvements to General Site Ir	nfrastructu	ıre						
In light of the September 11th terrorist attacks on our country, proposed improve	ements to se	curity facilities	s have been id	entified. The	required impr	ovements inc	lude	
improving site perimeter barricades, upgrade or replacement of Entry Control Fa								
existing physical security system infrastructure are also needed to continue sup	porting curre	nt and propos	ed site missio	ns, including	missions des	cribed in MM-	1 and MM-3.	
Security System Infrastructure Restoration.								
Correct existing physical security system shortcomings due to equipment								
obsolescence, and provide technology improvements that would minimize								
Protective Force and maintenance staffing:								
a. Authorize General Site Security Infrastructure Projects.			10/1/03				10/1/03	
b. Complete Local Area Network (LAN) Upgrades.	9/30/04				9/30/04			
c. Complete Wide Area Network (WAN) Upgrades.	9/30/05				9/30/05			
d. Complete Access Control Device Replacement.	9/30/06				9/30/06			
e. Complete Alarm Multiplexer Control System Replacement.	9/30/06				9/30/06	-	-	
f. Complete Host Computer Replacement.	9/30/07				9/30/07			
g. Complete Closed Circuit Television (CCTV) Replacement.	9/30/08				9/30/08			

SCOPE	Aggr	essive Tarç	get Cleanu	o Date		Target Cleanup Date			
Key Milestones, Decisions, Deliverables	WSRC	DOE-SR	DOE-HQ	Others	WSRC	DOE-SR	DOE-HQ	Others	
2. Improve Access Control and Searches.									
Site security is effected primarily by vehicular inspection, personnel									
 a. Authorize Access Control and Searches Project 	10/1/03				10/1/03				
b. Complete Upgrade Perimeter Barricades	9/30/08				9/30/08				
c. Complete Renovation of Entry Control Facilities	9/30/08				9/30/08				
SS-2(C): Centralize Alarm Service at SRS									
The Savannah River Site has the only Underwriters Laboratory (UL) listed Cent	ral Alarm Sta	tion in the Fed	deral Governn	nent, and has	sufficient ca	pacity to prom	ote remote m	onitoring	
of fire, commercial security, and process alarms from across the DOE Complex	utilizing com	mercial techn	ology 24 hour	s a day, seve	n days a wee	ek (24/7).		_	
Security System Infrastructure Restoration.									
Assure incoming telephone infrastructure redundancy to negate a	9/1/02				9/1/02				
single point failure from affecting receipt of signal from DOE									
Complex.									
b. Provide regular performance metrics on cost per panel to provide	9/30/02				9/30/02				
alarm service to DOE Complex based upon SRS Baseline of									
\$5,700 per year. c. Develop package for distribution by EM-1, DP-1, NN-1 to DOE	12/1/02				12/1/02				
Complex on the cost savings initiative to Centralize Alarm Service	12/1/02				12/1/02				
at SRS. Package is to include request for information on number									
and types of existing panels utilizing central station service which									
can be reprogrammed to utilize SRS's capability, planned alarm									
panel modifications that can utilize the service, and infrastructure									
upgrades planned or underway.									
d. EM-1 response and direction.			1/31/03				1/31/03		
e. DP-1 response and direction.			1/31/03				1/31/03		
f. NN-1 response and direction.			1/31/03				1/31/03		
The following milestones apply only to the extent that use of SRS									
system cabablity is authorized:									
g. Implement capability to immediately receive signals from	2/1/03				2/1/03				
reprogramming of existing alarm panels.	0///00				0.14.10.0				
h. Develop the Central Alarm System description and usage	3/1/03				3/1/03				
guidance documents for DOE Complex use and implementation.	-		4/4/00				4/4/02		
i. Issue DOE-HQ guidance document on utilization of Centralized			4/1/03				4/1/03		
Alarm Service at SRS to DOE Field Offices.	1					1	1	1	

SCOPE	Aggre	essive Targ	get Cleanup	Date		Target Cleanup Date			
Key Milestones, Decisions, Deliverables	WSRC	DOE-SR	DOE-HQ	Others	WSRC	DOE-SR	DOE-HQ	Others	
BUSINESS N	MANAGEM	ENT REQU	IREMENTS	1					
Develop and execute a business strategy consistent with an accelerated, risk-based	ased cleanup	and closure r	nission.						
DOE/WSRC Contract Actions a. Establish a corporate executive strategy team structure that disseminates information and integrates a corporate executive Board of Trustees to foster key decision-making, breakdown barriers, and capitalize on opportunities.			10/1/02				10/1/02		
 Annually provide the appropriate Federal resources required to implement the PMP. 			Starting 10/01/02				Starting 10/01/02		
 c. Approve Contract Strategy and modifications consistent with PMP objectives. 		8/31/02	8/31/02			8/31/02	8/31/02		
 d. Renegotiate contract PBIs and incentives with emphasis on risk reduction, focused on performance and end points. 	9/30/02	9/30/02			9/30/02	9/30/02			
Develop an Accelerated Cleanup Integrated Lifecycle Baseline (verified using the SRS process developed for the current baseline) that supports the accelerated risk reduction and cleanup	10/1/02	10/1/02			10/1/02	10/1/02			
f. Establish change control management of the Accelerated Cleanup Integrated Lifecycle Baseline.	10/1/02	10/1/02	10/1/02		10/1/02	10/1/02	10/1/02		
2. Business Management Practices									
a. Prepare and Issue the EM Program PMP.b. Approve the EM Program PMP.	7/30/02	8/1/02	8/1/02		7/30/02	8/1/02	8/1/02		
c. Publish a Project Annual Report.	Annually Jan 31	0/1/02	0/1/02		Annually Jan 31	0/1/02	0/1/02		
 d. Prepare Quarterly Project Progress Reports and Conduct Performance Reviews. 	Quarterly				Quarterly				
Site Support Activities a. Provide standard General and Administrative (G&A) support services to the ongoing site operations.	Ongoing				Ongoing				
 b. Provide Essential Site Services (ESS) to the ongoing site operations. 	Ongoing				Ongoing				
4 New B&R Code	_								
a. Send request for new B&R Code to DOE-HQ.		9/30/02							
b. Submit Request to OMB as part of the FY04 President's Budget.			11/30/02						