Department of Energy
Washington, DC 20585

June 23, 1998

The Honorable John T. Conway
Chairman
Defense Nuclear Facilities Safety Board
625 Indiana Avenue, NW
Suite 700
Washington, DC 20004

Dear Mr. Chairman:

Enclosed for your information is the Quarterly Report on the Implementation of Defense Nuclear Facilities Safety Board Recommendation 94-1 by the Nuclear Materials Stabilization Task Group. This report presents the status of actions and milestones associated with the 94-1 Implementation Plan and describes activities underway to address emerging issues associated with nuclear materials stabilization for the period January 1 through March 31, 1998. The detailed status of these milestones, including impacts and mitigation options, is fully discussed in the Quarterly Report.

You will soon receive the Department's technical update of the 94-1 Implementation Plan. That document will provide you with the known changes and current plans for stabilizing the materials addressed in Section 3 of the plan. It also will describe the remaining actions which need to be taken to prepare the comprehensive 94-1 Implementation Plan revision which is targeted for completion by the end of the year.

If you have any questions, please feel free to contact me or have your staff contact Mr. John Tseng, Acting Director, Nuclear Materials Stabilization Task Group, at (202) 586-0383.

Sincerely,

James M. Owendoff

James M.Owendoff
Acting Assistant Secretary
for Environmental Management

Enclosure

cc: M. Whitaker, S-3.1

DEFENSE NUCLEAR FACILITIES SAFETY BOARD
RECOMMENDATION 94-1 IMPLEMENTATION

QUARTERLY REPORT

Covering the period
January 1 – March 31, 1998

Submitted: _____ Date: 5/4/98
John C. Tseng
Acting Director
Nuclear Materials Stabilization Task Group

Reviewed,
Recommending
Approval: _____ Date: 5/28/98
for David G. Huizenga
Acting Deputy Assistant Secretary for
Nuclear Material and Facility Stabilization

Approved: James M. Owendoff Date: 6-23-98
James M. Owendoff
Acting Assistant Secretary for
Environmental Management

TABLE OF CONTENTS

I. PROGRAM OUTLOOK

Major Activities and Issues

Implementation Plan Changes

On February 23, 1998, the Nuclear Materials Stabilization Task Group (NMSTG) distributed a request for updated 94-1 Implementation Plans to program managers responsible for 94-1 site activities. The memorandum requested that all 94-1 field offices report both currently known changes and changes contingent on pending decisions. The responses received from the sites are now being coordinated by the NMSTG to ensure that all intersite integration issues have been captured and that responsible parties have agreed upon processes for reaching the needed decisions. The NMSTG will produce an interim Implementation Plan change document describing the path to arrive at a comprehensive Implementation Plan revision by the end of 1998. The major changes expected in each site's plans are described below.

Idaho National Environmental and Engineering Laboratory

Idaho proposes to change the required completion date for IP-3.6-046, "Complete the removal of all spent nuclear fuel not requiring overpacking from CPP-603," from December 1998 to December 2000. This change will allow movement of this fuel directly from CPP-603 wet storage to dry storage in the Irradiated Fuel Storage Facility (IFSF), vice to interim wet storage in the CPP-666 wet storage facility. This will coincide with completion of the milestone to complete removal of all fuel from CPP-603, including fuel to be processed through the dry overpacking station in the IFSF dry storage area. This change will eliminate a significant amount of fuel handling sequences and move some EBR-II fuel canisters with potential for water in leakage directly into dry storage vice into continued wet storage.

Los Alamos National Laboratory

Los Alamos (LANL) proposes two significant changes to its site 94-1 activities. First, some of the plutonium stabilized under the 94-1 program will not be packaged to the long-term storage standard as described in the 1995 Implementation Plan. Rather, it will be packaged in accordance with LANL vault storage requirements and retained for use in new or expanding programmatic activities at the laboratory. Second, LANL proposes to extend its schedule for stabilization of legacy residue materials (those materials with a creation date prior to May 1994) from 2002 to 2005. This change is needed in order to integrate stabilization of newly generated residue items into their processing schedule using a risk-based prioritization methodology. The extended schedule also takes into account actual process and throughput efficiencies that are lower than were projected in the original Implementation Plan. Additional changes are being prepared to include plans for processing Rocky Flats materials pending completion of the necessary National Environmental Policy Act (NEPA) decision process. The schedule impact from processing RFETS material is in review and is not included in the currently proposed schedule expansion to 2005.

Rocky Flats Environmental Technology Site

The Rocky Flats change proposal reflects sampling and analysis work that has resulted in the re-characterization of ash and graphite fines as low hazard. This will allow packaging and direct disposal of these materials without further processing. Additionally, it is consistent with the expected successful resolution of a path forward to terminate safeguards on a large portion of Rocky Flats' residues. Thus, the change will show direct disposal to the Waste Isolation Pilot Plant as the path for ash, graphite fines, and most of the salts. Some of the salts with higher plutonium content will go to Los Alamos, while plutonium fluorides, sand, slag and crucible, and scrub alloy will go to Savannah River, all pending the decision of the Rocky Flats Residues Environmental Impact Statement. The Department is also considering accelerating the movement of metals and oxides to Savannah River for storage in K-Area.

Hanford: Plutonium Finishing Plant

The proposed change to the 94-1 Implementation Plan at Hanford's Plutonium Finishing Plant describes the delays in stabilization activities caused by over a year of suspended fissile material operations following a December 1996 shut down. The change also reflects re-prioritization of site stabilization actions based on potential budget and technical limitations and an Unresolved Safety Question concerning potential hydriding of plutonium metal currently in storage. The basis and appropriateness of the proposed prioritization are currently being examined by Headquarters and the Richland Operations Office.

Hanford: Spent Nuclear Fuel

The Hanford Spent Nuclear Fuel Project provided a text change describing two key changes in the path forward for stabilizing spent fuel and sludge in the K-Basins from that described in the original Implementation Plan. The first change is that the spent fuel from the K-Basins will be loaded into multi-canister overpacks (MCOs) and vacuum dried at a cold vacuum drying facility before being stored in the Canister Storage Building, as opposed to being stored in a wet or damp state in MCOs for some interim period before being dried and passivated. The second change is that the sludge from the K-Basins will not be placed in MCOs, but rather it will be retrieved, characterized, conditioned and transferred to the 200 Area underground double-shell waste tanks. The dates for revised milestones concerning the K-Basins spent nuclear fuel program are also part of Tri-Party Agreement negotiations among DOE, the Environmental Protection Agency, and the Washington Department of Ecology and, therefore, have not been released pending completion of the negotiations.

Savannah River Site

Savannah River's change updates the Implementation Plan to reflect the Phased Canyon Strategy, which was provided to Congress in the *Savannah River Site Chemical Separation Facilities Multi-Year Plan* in October 1997, and changes that have occurred subsequent to finalizing that strategy. The Phased Canyon Strategy includes plans for processing Rocky Flats materials pending completion of the necessary NEPA decision process. Issues that will remain for resolution after this initial change include the decision on the method for Am/Cm stabilization, and the path forward and schedule for blending down highly enriched uranium and

shipping it off-site. The Department is also considering accelerating the movement of Rocky Flats metals and oxides to K-Area for storage.

II. PROGRAM ACTIVITIES

Processing Needs Assessment

The Office of Nuclear Material and Facility Stabilization, through the Nuclear Materials Stabilization and Stewardship Program, has conducted a Nuclear Material Processing and Needs Assessment. The purpose of the assessment is to ensure that the appropriate infrastructure and capabilities exist to meet long-term materials stabilization and disposition needs as excess sites and facilities are prepared for closure. The focus of the study is to identify all potential excess nuclear materials around the complex that should be stabilized or prepared for disposition in the Savannah River canyons. National Environmental Policy Act reviews will be performed, as appropriate, before any decisions are made on recommendations resulting from this study. Should additional materials be identified for stabilization or preparation for disposition through the canyons, any impacts to the canyon operating schedules for implementation of the Phased Canyon Strategy are expected to be small. The results of the assessment are currently being evaluated by Headquarters and Field program managers.

Plutonium Residues Environmental Impact Statement

The Department continues the process of finalizing an Environmental Impact Statement (EIS) to evaluate the impacts associated with alternatives for preparing plutonium residues and scrub alloy currently being stored at Rocky Flats for disposition. The EIS will ensure that the significant effects of the treatment alternatives are identified for safe and cost-effective treatment to stabilize and prepare the affected plutonium residues and scrub alloy for disposition. Since the final draft, two additional alternatives have been added that may be preferable for some residue materials. The first is direct disposal of some residue materials to WIPP after termination of safeguards. The second is cold ceramification immobilization—an immobilization process technology particularly suited to ash residues. The final EIS is expected to be issued in May 1998, which would allow the earliest Record of Decision to be issued in June, with subsequent Records of Decision issued as necessary.

Nuclear Material Integration

The Environmental Management Nuclear Material Integration (NMI) Project has commenced gathering information on inventories, characteristics, and locations of excess Environmental Management-related nuclear materials. Teams were formed in February and began making site visits in March to identify materials in various categories and obtain information their baseline paths to disposition. The NMI project is expected to fill any remaining gaps in the stabilization baselines for 94-1 materials. Results of NMI will be factored into the comprehensive 94-1 Implementation Plan Revision to be produced late this year.

Plutonium Stabilization and Packaging Project

Preparations continued through March to prepare the prototype Plutonium Stabilization and Packaging System (PuSPS) in an off-site facility at Rocky Flats Environmental Technology Site for a full system demonstration and DOE acceptance of the unit. The 2- and 6-can demonstrations were scheduled to occur in April. As of the end of March, the Rocky Flats integrating contractor had proposed (and DOE was considering) various options for utilization of all or portions of the system to stabilize and package Rocky Flats' material, as well as an alternative to site the equipment in Building 371 vice Building 707.

Research and Development

Experimental data gathered to support long-term storage requirements have identified issues regarding stabilization temperature, identity and quantity of impurities, material density and the storage temperature for metal. This data defines a different set of bounding conditions than originally used in the DOE-STD-3013-96 standard, and is being used in the development of a new standard intended to encompass a broader range of plutonium-bearing materials. Thermal desorption/steam passivation process conditions for the stabilization of organic-contaminated combustibles is fully developed, awaiting decisions from Rocky Flats on quality control aspects and modifications. The process equipment for the treatment of HEPA filter contaminated combustible material has been delivered to RFETS. Los Alamos National Laboratory continues to look at improvements to the salt oxidation process to improve the performance of the distillation step. A number of the solutions do not represent viable possibilities for implementation at RFETS. Pyrolysis of polycubes continues forward with a number of improvements in both off-gas treatment technologies. Los Alamos is moving forward on neutron scattering as an alternative to the Loss-On-Ignition method for water determination, as it represents a faster and cheaper alternative to measure total water on a fully-packed, long-term storage container of plutonium oxide. Finally, the core technology program has made some interesting and valuable contributions in the area of combustible nitration, which should be of value to RFETS in developing a scientific basis for reducing the volume of organic combustibles that have been identified as high-risk.

Safeguards Termination

Safeguards termination allows for specific low-grade nuclear materials to be placed under waste management controls and disposed as waste. The Waste Isolation Pilot Plant (WIPP) can accept this material after domestic safeguards, material control and accountability as special nuclear material are terminated.

The Nuclear Materials Stabilization Task Group is working with Rocky Flats, the Office of Arms Control and Nonproliferation, and other organizations to establish a path forward for variance approval for ash and salt residues. The approach will consist of ensuring the proliferation resistance of nuclear materials to be disposed as waste. Senior Departmental management is committed to resolve this issue.

III. MILESTONE SUMMARY

Progress to Date: Milestones Summary

- 164 total milestones in Implementation Plan*
- 98 milestones completed since February 1995
  - 36 milestones completed early
  - 42 milestones completed on time
  - 20 milestones completed late
- 9 milestones past due

** A complete listing of milestones is included as an attachment to this report. The milestone total has been revised as of December 1997 due to deletion of three Savannah River milestones, which were effectively resolved by means other than those described in the original implementation plan.*

Milestones Past Due

IP-3.2-035 *Stabilize and repackage high-risk vault items to meet the long-term storage standards at Los Alamos National Laboratory* (September 1997)

Chemical recovery operations in Building TA-55 were slowed during 1997 because of competing missions for limited resources and repairing leakage problems in the processing equipment. The equipment leaks have been repaired, however, the processing capacity continues to be balanced between the legacy 94-1 material and newly generated residues. Completion of stabilization of the high-risk legacy inventory is projected for May 1998.

IP-3.1-022 *Begin processing solutions at Plutonium Finishing Plant* (June 1997)

Fissile material handling at the site has been suspended since December 1996 because of criticality safety issues. A Readiness Assessment was completed in March 1998 to allow fissile material movement operations to resume. Due to the continuing delay in resuming stabilization work and prioritization of PFP activities, the milestone to begin processing solutions may slip into FY 2000. A reassessment of the schedule is continuing.

IP-3.6-012 *Begin spent nuclear fuel and sludge removal from Hanford K-Basins* (December 1997)

Construction of the facilities for processing and storage of spent nuclear fuel (SNF) was delayed while the facility was redesigned to meet more stringent construction standards, and to permit using an improved technology for processing the fuel for storage. A new project baseline schedule with the start of SNF removal in July 1999 was approved by the Richland Operations Office in December 1997. The Tri-Party Agreement being negotiated by DOE, the Environmental Protection Agency, and the State of Washington Department of Ecology is nearing completion. When the Tri-Parties reach agreement, a Recommendation 94-1 Implementation Plan change request will be finalized and submitted.

IP-3.2-042 *Complete the Plutonium ES&H Corrective Action Plan at Lawrence Livermore National Laboratory* (October 1997)

Operations in the plutonium facility, Building 332, were suspended in October 1997 due to a criticality safety infraction. Full operations are scheduled to resume in summer 1998, and it is estimated that the milestone will be completed in January 1999.

IP-3.3-045 *Identify, characterize, and non-destructively assay all plutonium items in the LLNL inventory including residues* (October 1997)

(See the discussion about milestone IP-3.3-042 above.) Returning the facilities in Building 332 to operational status is also required to complete this milestone. A January 1999 completion is projected.

IP-3.3-022 *Complete processing of existing inventories of sand, slag, and crucible material at Savannah River* (December 1997)

Resolution of issues with complexing of fluoride with boron caused the start of dissolution to be delayed. Dissolution began October 2, 1997; a July 1998 completion is projected.

IP-3.5-002 *Complete FA-Line blending and processing of 230,000 liters of HEU solutions into a stable oxide* (December 1997)

Blending is being delayed until the ultimate end-use of the material is defined. Potential users include the Tennessee Valley Authority. A disposition decision is expected in October 1998.

IP-3.4-015 *Start vitrification of Am/Cm solutions at Savannah River* (March 1998)

Following repeated problems with the slab melter technology originally proposed, vitrification of the Am/Cm solutions with a cylindrical induction melter is being investigated. A revised Technology Program Plan for the Am/Cm solution stabilization is scheduled to be produced in May 1998, with a decision to resume design and construction utilizing the new technology expected in September 1998.

IP-3.3-014A *Begin stabilization of graphite fines at Rocky Flats* (March 1998)

Rocky Flats' graphite fines inventory has been sampled and analyzed to determine to a 95% confidence level that these materials can be reclassified as low risk. Rocky Flats has proposed an implementation plan change to reflect direct repackaging and disposal of these materials without processing. This milestone would be deleted and new milestones describing use of the pipe overpack container would be added.

DEPARTMENT OF ENERGY

NUCLEAR MATERIALS STABILIZATION TASK GROUP

DNFSB Recommendation 94-1 Implementation Plan Milestones

March 18, 1998

164 Milestones

NMSTG Milestone Number	SIMS Cmt #	Key Milestones	Material Group	IP Page #	DOE Site	Milestone	Due Date	Revised Due Date	Completion Date	Status
IP-ES -042	001	*	General	6	All	Facilities will be started or restarted in accordance with DOE Order 5480.31. These restart and start-up requirements will be taken into account in the development of the "Facilities Section" of the Program Plan.	None			
IP-3.2 -028	002		Pu Met/Ox	47		Start engineering studies of a new repackaging line at Hanford.	Sep 1995		Sep 1995	Completed September 8, 1995.
IP-3.2 -029	003		Pu Met/Ox	47	HAN	Complete detailed design, equipment procurement, and installation of a new repackaging system.	Dec 1998			Site reports budget shortfall delays PuSAP buy. PuSAP System Preparation Phase stalled 28% complete since PFP Dec 96 shutdown. (Aug 97 Rpt) DOE-RL recommended approval of Trade Study Case 3' - ship pu to SRS in 3013 containers. (Sep 97 Rpt)
IP-3.2 -033	004	*	Pu Met/Ox	48	HAN	Start restabilizing high assay oxides at the PFP.	Jul 1999			
IP-3.2 -030	005		Pu Met/Ox	47	HAN	Train staff, prepare procedures, perform operational readiness testing (prior to commencing operations).	Sep 1999			Budget shortfall delays PuSPS purchase. Completion delayed until Sep 2000. (May 97 Rpt)
IP-3.2 -031	006	*	Pu Met/Ox	47	HAN	Commence repackaging operations at Hanford.	Oct 1999			Budget shortfall delays PuSPS purchase. Completion delayed until Oct 2000. (May 97 Rpt) Preparation phase activities have been stalled at 80% complete since PFP shutdown in Dec 96. (Jun 97 Rpt)
IP-3.2 -032	007	*	Pu Met/Ox	47	HAN	Complete metal repackaging at Hanford.	Sep 2000			Budget shortfall delays PuSPS purchase. Completion delayed until Sep 2001. (May 97 Rpt)
IP-3.2 -018	008	*	Pu Met/Ox	41, 48 50	HAN	Thermally stabilize and repackage all plutonium oxide to meet the metal and oxide storage standard.	May 2002			Initial FY98 funding scope ($72.9M) does not support meeting May 2002 due date. (Jan 98 Rpt)
IP-3.3 -031	009	*	Pu Res	4, 67 73	HAN	Stabilize existing inventory of sludge (low organic residues) in muffle furnaces.	Sep 1995		Jun 1995	Completed early June 13, 1995.
IP-3.3 -032	010	*	Pu Res	4, 67 73	HAN	Stabilize 46 cans of selected ash from RF in the muffle furnaces.	Mar 1996		Jan 1996	Completed early in January 1996.
IP-3.3 -028	011	*	Pu Res	67	HAN	Stabilization of Polycubes begins.	Jul 1999			Preparation phase progress remains stalled at 10%. (Jun 97 Rpt)
IP-3.3 -026	012	*	Pu Res	67	HAN	Stabilization of reactive solids (SS&C) completed.	Jan 2000			
IP-3.3 -029	013	*	Pu Res	67, 73	HAN	Stabilization of Polycubes completed.	Jan 2001			
IP-3.3 -027	014		Pu Res	67	HAN	Stabilization and repackaging of interim-stabilized materials completed.	Jan 2002			Supporting action necessary to meet IP-3.3-033 due May 2002.
IP-3.3 -033	015	*	Pu Res	4, 67 73	HAN	Stabilize and package all remaining residues to safe storage standards.	May 2002			
IP-3.1 -024	016	*	Pu Soln	3, 36 37	HAN	Complete transfer of 22,700 liters of PUREX solutions to tank farms at Hanford.	Aug 1995		Apr 1995	Completed early April 28, 1995.
IP-3.1 -014	017		Pu Soln	36	HAN	All bottles of plutonium solutions at Hanford inspected to ensure proper venting.	Sep 1995		May 1995	Completed early May 16, 1995.

DEPARTMENT OF ENERGY

NUCLEAR MATERIALS STABILIZATION TASK GROUP

DNFSB Recommendation 94-1 Implementation Plan Milestones

March 18, 1998

164 Milestones

NMSTG Milestone Number	SIMS Cmt #	Key Milestones	Material Group	IP Page #	DOE Site	Milestone	Due Date	Revised Due Date	Completion Date	Status
IP-3.1 -015	018		Pu Soln	36	HAN	220 liters of chloride solutions at Hanford stabilized as part of a developmental testing program.	Sep 1995		Sep 1995	Completed September 29, 1995.
IP-3.1 -021	019	*	Pu Soln	37	HAN	Complete solution technology development at Hanford Plutonium Finishing Plant (PFP).	Mar 1996		Apr 1996	Completed late in April 1996.
IP-3.1 -016	020		Pu Soln	36, 37	HAN	ROD issued for PFP Clean-out and Stabilization EIS.	Jun 1996		Jun 1996	Completed in June 1996.
IP-3.1 -022	021	*	Pu Soln	37	HAN	Begin processing solutions at PFP.	Jun 1997			Past due. Fissile material handling work stoppage continues. Continued delay and FY98 funding shortfall "push" estimated completion date to August 1999. Calciner install will be completed to hot tie-in and then placed on hold. (Jan 98 RPT)
IP-3.1 -017	022	*	Pu Soln	3, 36 37	HAN	Stabilization of 4,800 liters at PFP completed.	Jan 1999			See IP-3.1-022. Schedule for solution stabilization is being reassessed.
IP-3.6 -001	032	*	SNF	5, 96 105, 112	HAN	Complete removal of all SNF from K-Basins.	Dec 1999			See IP-3.6-012. (Nov 97 Rpt)
IP-3.6 -010	030		SNF	101, 103 105, 112	HAN	Issue "Management of SNF from the K-Basins" EIS ROD.	Dec 1995		Mar 1996	Completed late March 4, 1996.
IP-3.6 -012	031	*	SNF	105 112	HAN	Begin SNF and sludge removal from K-Basins.	Dec 1997			Past Due. 64% of TECH-17 actions are closed. Redesign of MCO increasing pressure from 150 to 450 psi is being evaluated. April 1998 delivery of three remaining MCO transprot casks is on track. (Feb 98 Rpt)
IP-3.6 -014	024		SNF	105	HAN	Develop K-Basin potential funding options and an acquisition strategy, as appropriate.	Mar 1995		Mar 1995	Completed March 1995.
IP-3.6 -015	025		SNF	105 112	HAN	Issue Notice of Intent for K-Basins EIS.	Mar 1995		Mar 1995	Completed March 1995.
IP-3.6 -016	023		SNF	105	HAN	Complete cofferdam installation in K-West Basin	Feb 1995		Feb 1995	Completed February 1995.
IP-3.6 -017	026		SNF	5, 105	HAN	Complete cofferdam installation in K-East Basin	Apr 1995		Apr 1995	Completed April 1995.
IP-3.6 -018	028		SNF	5,102 105, 112	HAN	Start fuel characterization in K-Basin hot cells	Apr 1995		Apr 1995	Completed March 30, 1995.
IP-3.6 -019	027		SNF	105	HAN	Initiate sludge retrieval demonstration in conjunction with cofferdam installation in K-Basins.	Apr 1995		Dec 1994	Completed early in December 1994.
IP-3.6 -020	029		SNF	105 112	HAN	K-Basins Integrated Path Forward Schedule providing details of major system acquisitions and material movements issued.	May 1995		Apr 1995	Completed early April 25, 1995.
IP-3.6 -201	153	*	SNF		HAN	Complete removal of all sludge from K-Basins	Dec 2000			See IP-3.6-012. (Nov 97 Rpt)
IP-3.6 -045	033	*	SNF	111	ID	Begin movement of CPP-603 South Basin SNF.	Jul 1995		May 1995	Completed early May 12, 1995.
IP-3.6 -043	034	*	SNF	110, 111 113	ID	Move an additional 189 SNF units from CPP-603 North and Middle Fuel Storage Facility to CPP-666.	Dec 1995		Sep 1995	Completed early September 11, 1995.

DEPARTMENT OF ENERGY

NUCLEAR MATERIALS STABILIZATION TASK GROUP

DNFSB Recommendation 94-1 Implementation Plan Milestones

March 18, 1998

164 Milestones

NMSTG Milestone Number	SIMS Cmt #	Key Milestones	Material Group	IP Page #	DOE Site	Milestone	Due Date	Revised Due Date	Completion Date	Status
IP-3.6 -044	035	*	SNF	110, 111 113	ID	Move all SNF (6.84 metric tons) from CPP-603 North/Middle Basins to CPP-666.	Dec 1996		Aug 1996	Completed early August 5, 1996.
IP-3.6 -046	036	*	SNF	111 113	ID	Complete the removal of all SNF not requiring overpacking from CPP-603.	Dec 1998	Dec 2000		Completion date revised by March 98 IP change proposal. SNF will be transferred directly to CPP-603 Irradiated Fuel Storage Facility vice via CPP-666 interim underwater storage as originally planned. (INEEL Mar 98 IP change)
IP-3.6 -047	037	*	SNF	111 113	ID	Construct and startup a CPP-603 dry storage overpacking station.	Dec 1998		Jul 1997	Completed early July 8, 1997.
IP-3.6 -005	038	*	SNF	96, 110 112, 113	ID	Remove all SNF from the CPP-603 Fuel Storage Facility.	Dec 2000			Preps for Phase VIII Groups I and II fuel transfers continue - Group I expected to begin in Oct 97, Group II expected to begin in May 1998. (Aug 97 Qrtly Rpt)
IP-3.2 -037	039		Pu Met/Ox	49	LANL	Complete peer review of LANL packaging operations for long term storage.	Apr 1995		Apr 1995	Completed April 28, 1995.
IP-3.2 -039	040		Pu Met/Ox	49	LANL	Integrate and demonstrate repackaging operations at the TA-55 plutonium facility at LANL.	Apr 1995		Apr 1995	Completed April 28, 1995.
IP-3.2 -040	041		Pu Met/Ox	49	LANL	Begin repackaging of plutonium metal and oxide at the TA-55 plutonium facility in LANL.	May 1995		May 1995	Completed May 1995.
IP-3.2 -035	042	*	Pu Met/Ox	48	LANL	Stabilize and repackage high risk vault items to meet the long-term storage standards.	Sep 1997			Past due. Stabilization of 3 of 4 material categories are expected to be completed in 2nd qtr FY-98, but funding shortfall has stopped packaging. (Jan 97 Rpt and followup)
IP-3.2 -014	043	*	Pu Met/Ox	41, 48 49, 50	LANL	Thermally stabilize and repackage all plutonium oxide to meet the metal and oxide storage standard.	May 2002			All packaging efforts remain unfunded in FY98. Focus has been shifted from 94-1 materials to other items in vault storage and residues being currently generated. (Jan 97 Rpt and followup)
IP-3.3 -035	044		Pu Res	73	LANL	Perform 100% visual inspection of vault inventory.	May 1995		Apr 1995	Completed early April 7, 1995.
IP-3.3 -034	045		Pu Res	73	LANL	(LANL lead; HAN, LLNL, RF and SR assist) Develop risk-based, complex-wide categorization and prioritization decision criteria that all stored residues will be required to meet.	Sep 1995		Mar 1996	Completed late March 1996
IP-ES -100	046	*	Pu Res	4	LANL	Stabilize 220 kgs of residues.	Oct 1995		Oct 1995	Completed in October 1995.
IP-3.3 -037	047	*	Pu Res	74	LANL	Process 90% of analytical solutions.	Oct 1995		Aug 1995	Completed early August 31, 1995.
IP-3.3 -036	048		Pu Res	74	LANL	Recover 100 neutron sources.	Oct 1995		Apr 1995	Completed early April 21, 1995.
IP-3.3 -038	049		Pu Res	74	LANL	Process 100 kgs of sand, slag and crucible materials.	Oct 1995		Apr 1995	Completed early April 21, 1995.
IP-3.3 -039	050		Pu Res	74	LANL	Process 70 kgs of hydroxide solids.	Oct 1995		Apr 1995	Completed early April 21, 1995.
IP-3.3 -040	051	*	Pu Res	74	LANL	Oxidize 50 kgs of corroded metal items.	Oct 1995		Oct 1995	Completed revised milestone on time. Revised milestone is: "Stabilize 100 metal items by October 31, 1995."

DEPARTMENT OF ENERGY

NUCLEAR MATERIALS STABILIZATION TASK GROUP

DNFSB Recommendation 94-1 Implementation Plan Milestones

March 18, 1998

164 Milestones

NMSTG Milestone Number	SIMS Cmt #	Key Milestones	Material Group	IP Page #	DOE Site	Milestone	Due Date	Revised Due Date	Completion Date	Status
IP-3.2 -015	056	*	Pu Met/Ox	2, 41 50	LLNL	Thermally stabilize and repackage all plutonium oxide to meet the metal and oxide storage standard.	May 2002			Completion by September 2001 is projected. (Feb 98 Rpt)
IP-3.2 -042	054	*	Pu Met/Ox	49	LLNL	Complete the Plutonium ES&H Corrective Action Plan at LLNL.	Jan 1997	Oct 1997		Past due. Bldg 332 remains in standby because of criticality infractions. Summer 1998 resumption of operations expected. January 1999 completion of milestone is projected. (Mar 98 Rpt)
IP-3.2 -043	055	*	Pu Met/Ox	49	LLNL	Excess plutonium metal items at LLNL repackaged in compliance with DOE-STD-3013-94.	Jan 2002			Completion by May 2002 is projected. (Mar 98 Rpt)
IP-3.2 -044	052		Pu Met/Ox	49	LLNL	Begin initial inspection of metal items.	Apr 1995		Apr 1995	Completed in April 1995.
IP-3.2 -045	053	*	Pu Met/Ox	49	LLNL	Begin repackaging material to meet the metal and oxide storage standard when bagless transfer capability is established.	May 1996	Apr 1998		At Risk. Bagless transfer system delivery in July 1998. Installation begins in October 19[illegible] equipment operations in May 1999 pending summer resumption of B332 operations. (Mar [illegible]
IP-3.3 -041	060	*	Pu Res	4, 71 73	LLNL	Stabilize and package 111 cans of ash/residue.	Apr 1998	Apr 1999		Items will either be stabilized and packaged for storage using the PuSAP equipment, or in some cases solidified for disposal at WIPP. Completion by May 2000 is projected. (Mar 98 Rpt)
IP-3.3 -042	057		Pu Res	71 73	LLNL	Complete trade-off study to develop plans for the stabilization and packaging of ash/residues for long-term storage.	Apr 1996		Nov 1996	Completed late in November 1996.
IP-3.3 -043	059	*	Pu Res	71	LLNL	Stabilize, process, and package all other residues.	Apr 1997	Apr 2000		February 2001 milestone completion is projected. (Feb 98 Rpt)
IP-3.3 -045	058	*	Pu Res	73	LLNL	Identify, characterize, and non-destructively assay all Pu items in the inventory including reisdues.	Jan 1997	Oct 1997		Resumption of work on milestone begins in November 1998 pending summer 1998 resumption of Building 332 operations. Completion in January 1999 is projected. (Mar 98 Rpt)
IP-3.2 -003	062	*	Pu Met/Ox	41 50	Mound	Repackage all plutonium metal in direct contact with plastic.	Sep 1996		Sep 1996	Completed September 26, 1996.
IP-3.2 -101	063	*	Pu Met/Ox	50	Mound	Repackage all plutonium metals and oxides to meet the DOE metal and oxide storage standard.	May 2002		Mar 1997	Completed early on March 31, 1997
IP-ES -001	064	*	General	2	NMSTG	Issue a DNFSB 94-1 Integrated Program Plan.	Feb 1995		Feb 1995	Completed February 28, 1995.
IP-ES -004	065	*	General	3	NMSTG	Research Committee established.	Mar 1995		Mar 1995	Completed March 15, 1995.
IP-ES -005	066	*	General	3	NMSTG	Research Committee's comprehensive Research and Technology Development Plan issued (RC).	Noc 1995		Nov 1995	Completed November 30, 1995
IP-ES -041	067	*	General	5	NMSTG	Complete the "Facilities Section" of the Integrated Program Plan (IWG).	Dec 1995		Nov 1995	Completed early November 7, 1995
IP-ES -006	068	*	General	3	NMSTG	Research and technology development efforts will be measured against the comprehensive plan, which will be updated annually.	Nov 1998			The second annual update is complete. (November 22, 1997)
IP-3.2 -011	069		Pu Met/Ox	2, 41	NMSTG	Pu Metals/Oxides Trade Study Completed	May 1995		May 1995	Completed May 15, 1995.

DEPARTMENT OF ENERGY

NUCLEAR MATERIALS STABILIZATION TASK GROUP

DNFSB Recommendation 94-1 Implementation Plan Milestones

March 18, 1998

164 Milestones

NMSTG Milestone Number	SIMS Cmt #	Key Milestones	Material Group	IP Page #	DOE Site	Milestone	Due Date	Revised Due Date	Completion Date	Status
IP-3.3 -050	070	*	Pu Res	73	NMSTG	Develop complex-wide secondary material storage standard for materials that are less than 50% assay.	Dec 1995		Jan 1996	Completed late January 25, 1996.
IP-3.6 -100	071		SNF	100	NMSTG	Issue Final Programmatic SNF EIS.	Apr 1995		Apr 1995	Completed in April 1995.
IP-3.6 -053	072		SNF	100, 103 112	NMSTG	Issue Programmatic SNF EIS ROD.	Jun 1995		Jun 1995	Completed June 1, 1995.
IP-3.6 -006	073		SNF	99 112	NMSTG	Issue the SNF Program Plan	Nov 1995		Nov 1995	Completed November 30, 1995
IP-3.6 -008	074		SNF	100 112	NMSTG	Issue Foreign Research Reactor SNF EIS ROD.	Dec 1995		May 1996	Completed late May 13, 1996.
IP-3.6 -048	075		SNF	112	NMSTG	Environmental Management PEIS ROD issued	Sep 1995		Jun 1995	Completed early June 1, 1995
IP-3.6 -049	076		SNF	112134	NMSTG	Repository EIS ROD.	Sep 2000			EIS ROD is being drafted by YUCCA Mtn Project Office (Wendy Dixon). Projected draft completion in FY98. (Status as of 24Nov 97)
IP-3.4 -012	077		Spec Iso	80	NMSTG	Activities will be initiated to clarify end-states and disposition pathways.	None			Will be addressed by the IWG Small Sites, Small Holdings Initiative.
IP-3.4 -013	078		Spec Iso	80	NMSTG	Activities will be initiated to establish storage standards and/or criteria for unique material forms as required.	None			Local standards/criteria for material storage are being developed for Am/Cm, Np and Pu-238.
IP-3.4 -014	079		Spec Iso	80	NMSTG	Activities will be initiated to resolve transportation, storage space, and consolidation issues related to Special Isotopes.	None			Will be addressed by the IWG Small Sites, Small Holdings Initiative.
IP-3.4 -009	080		Spec Iso	78	NMSTG	Non-defense users will define requirements for programmatic and National Asset reserves, in concert with DOE representatives (including NE). Inventories in excess of these requirements will be considered for long-term storage or disposal.	None			Will be addressed by the IWG Small Sites, Small Holdings Initiative.
IP-3.4 -008	081		Spec Iso	78	NMSTG	Strategic goals will be refined for which parts of current inventories must be retained for future use. DOE(DP) will define isotope quantities and forms that will be reserved for national security needs.	None			
IP-3.2 -017	082	*	Pu Met/Ox	2, 41 50	OR	Thermally stabilize and repackage all plutonium oxide to meet the metal and oxide storage standard.	May 2002	Dec 2000		Production Phase on schedule. Shipping to LLNL or SRS is being studied. (Jan 98 Rpt & followup)
IP-3.5 -003A	084	*	Uranium	87, 92 93	OR	Place Category I deposits in a safe configuration	Sep 1997	Dec 1997	Dec 1997	Completed December 9, 1997.
IP-3.5 -004A	086	*	Uranium	87, 92 93	OR	Place Category II deposits in a safe configuration	Apr 1998	Mar 1998	Jan 1998	Completed early on 29 January 1998.
IP-3.5 -005	085	*	Uranium	87, 92 93	OR	Remove HEU Uranium deposits for ORNL's Molten Salt Reactor Experiment (MSRE) project.	Feb 1998	Feb 1999		600 more gms U233 removed from off-gas system. 8.1 Kg total to-date. Depoait removal preps continue. Total UF6 may exceed 15 kg. Around-the-clock ACB denaturing underway since February 10th. Fuel laden filter media removal started. (Feb98 Rpt)
IP-3.5 -010	083	*	Uranium	92, 93	OR	Complete "interim corrective measures:" drain water from ACB cell; partition the off-gas system; eliminate water sources.	Nov 1995		Nov 1995	Completed November 29, 1995.

DEPARTMENT OF ENERGY

NUCLEAR MATERIALS STABILIZATION TASK GROUP

DNFSB Recommendation 94-1 Implementation Plan Milestones

March 18, 1998

164 Milestones

NMSTG Milestone Number	SIMS Cmt #	Key Milestones	Material Group	IP Page #	DOE Site	Milestone	Due Date	Revised Due Date	Completion Date	Status
IP-3.5 -011	087	*	Uranium	92	OR	Fuel salts at OR's MSRE project removed.	May 2001	May 2002		Comments incorporated & Interim Action MSRE Fuel & Flush Salt Disposition ROD resubmitted for review. Preps for removal continue. Upper drain tank cell shield blocks are being removed. No increase in radiation observed. (Feb 98 Rpt)
IP-3.2 -046	088	*	Pu Met/Ox	50	RF	Conduct a sampling and inspection program at Rocky Flats to determine the relative risk and priority for repackaging plutonium metals and oxides in close proximity to plastic and other synthetic materials.	Jul 1995		Sep 1995	Completed late September 30, 1995.
IP-3.2 -020	089	*	Pu Met/Ox	41, 45 50	RF	Repackage a total of 256 items in Building 707 where Pu metal is in direct contact with plastic.	Oct 1995		Nov 1995	Completed late November 14, 1995.
IP-3.2 -021	090	*	Pu Met/Ox	45, 50	RF	Repackage 1,602 Rocky Flats Pu metal items not in direct contact with, but in proximity to, plastic.	Oct 1996	Nov 1996	Dec 1996	Completed late in December 1996.
IP-3.2 -012	091	*	Pu Met/Ox	41, 50	RF	Thermally stabilize the existing backlog of all known reactive plutonium oxide at Rocky Flats. (63 kgs.)	Oct 1996	Nov 1996	Jan 1997	Completed late January 9, 1997.
IP-3.2 -022	092	*	Pu Met/Ox	45	RF	New Pu metal/oxide processing line operational in Building 371 at Rocky Flats.	Sep 1998			At risk. Unfunded in FY97 & FY98. Evaluation of impact ongoing. Projected completion in Dec 99. (Jan 98 Rpt)
IP-3.2 -016	093	*	Pu Met/Ox	2, 41 50	RF	Thermally stabilize and repackage all plutonium oxide to meet the metal and oxide storage standard.	May 2002			Delivery of PuSAP prototype delayed until 3/98 pending successful throughput capacity testing. (Feb 98 Rpt)
IP-3.3 -011	094	*	Pu Res	4, 63 73	RF	Vent 2,045 residue drums with a potential for hydrogen gas generation.	Oct 1995		Sep 1995	Completed early September 25,1995.
IP-3.3 -008	095	*	Pu Res	63	RF	Vent 700 unvented residue drums.	Oct 1996		Dec 1995	Completed early December 22, 1995.
IP-3.3 -015	096	*	Pu Res	4, 73	RF	Vent all inorganic residues.	Oct 1996		Dec 1995	Completed early on December 22, 1995.
IP-3.3 -016	097	*	Pu Res	4, 73	RF	Vent all wet/miscellaneous residues.	Oct 1996		Dec 1995	Completed early December 22, 1995.
IP-3.3 -014	098	*	Pu Res	4, 63 73	RF	Complete stabilizing graphite fines and high hazard incinerator ash.	May 1997	Sep 1998		At risk. Estimated to be on schedule, but see milestone IP-3.3-014A. (Jan 97 Rpt).
IP 3.3 -014A	154	*	Pu Res		RF	BEGIN stabilization of graphite fines.	Sep 1997	Mar 1998		Past due. Graphite fines are now categorized as low risk. Recovery plan is being evaluated by DOE-HQ. (Feb 98 Rpt)
IP-3.3 -012	099	*	Pu Res	4, 61 73	RF	Stabilize by pyrochemical oxidation and repackage 6,000 kgs of higher risk Plutonium containing salts.	May 1997	Jan 1999		Impact of delayed startup will be evaluated after 2 shift furnace production fully operational. (Feb 98 Rpt)
IP-3.3 -012A	155	*	Pu Res		RF	BEGIN stabilization by pyrochemical oxidation 6,000 kg higher-risk Pu salts.		Aug 1997	Jan 1998	Completed late on January 8, 1998. (Jan 98 Update)
IP-3.3 -013	100	*	Pu Res	4, 61 73	RF	Stabilize remaining high risk salts (4,000 kgs.) via chemical oxidation.	Dec 1997	Sep 1999		On schedule. (Jan 97 Rpt)
IP-3.3 -013A			Pu Res		RF	Complete stabilization of remaining salt residues	May 2002	Jul 2001		On schedule. (Jan 97 Rpt)
IP-3.3 -017	101	*	Pu Res	4, 61 73	RF	Stabilize high risk combustibles (11,000 kgs).	Nov 1998	Apr 1999		Projected completion date revised to January 2000. Recovery plan being developed. (Feb 98 Rpt)

DEPARTMENT OF ENERGY

NUCLEAR MATERIALS STABILIZATION TASK GROUP

DNFSB Recommendation 94-1 Implementation Plan Milestones

March 18, 1998

164 Milestones

NMSTG Milestone Number	SIMS Cmt #	Key Milestones	Material Group	IP Page #	DOE Site	Milestone	Due Date	Revised Due Date	Completion Date	Status
IP-ES -025	102	*	Pu Res	4, 63	RF	Repackage all Pu inorganic oxides and wet/miscellaneous residues (1,113 drums).	May 2002			On schedule. (Jan 97 Rpt)
IP-3.1 -004	103	*	Pu Soln	34, 37	RF	Complete NEPA analysis (an Environmental Assessment) for solution stabilization.	Apr 1995		Apr 1995	Completed April 28, 1995.
IP-3.1 -020A	156	*	Pu Soln		RF	START draining B771 hydroxide tanks and begin processing.		Nov 1996	Nov 1996	Completed November 4, 1996.
IP-3.1-020B	157	*	Pu Soln		RF	COMPLETE draining four (4) B771 hydroxide tanks.		Jan 1997	Aug 1996	Completed early in August 1996.
IP-3.1-020C	158	*	Pu Soln		RF	COMPLETE B771 hydroxide precipitation process.		Mar 1997	Mar 1997	Completed in March 1997.
IP-3.1-020D	159	*	Pu Soln		RF	START draining four (4) B771 high level tanks and begin processing.		Sep 1997	Sep 1997	Completed in September 1997.
IP-3.1-020F	161	*	Pu Soln		RF	COMPLETE removal of all liquids in B771		Sep 1998		At risk. Milestone in jeopardy because of delay in draining of hold-up liquids because of safety concerns caused by hydrogen, chemical compatibility, and criticality. Draining is targeted to begin in May 1998. (Feb 98 Rpt)
IP-3.1-020G	162	*	Pu Soln		RF	START draining B371 tanks and begin processing.		Dec 1996	Dec 1996	Completed in December 1996.
IP-3.1-020H	163	*	Pu Soln		RF	COMPLETE draining six (6) B371 Cat B tanks.		Feb 1997	Feb 1997	Completed February 18, 1997.
IP-3.1-020I	164	*	Pu Soln		RF	COMPLETE draining one (1) B371 criticality tanks.		Jun 1997	May 1997	Completed early on May 12, 1997.
IP-3.1-020J	165	*	Pu Soln		RF	COMPLETE processing liquids from seven(7) B371 tanks.		Jun 1997	Jun 1997	Completed June 12, 1997.
IP-3.1-020K	166	*	Pu Soln		RF	COMPLETE processing all liquids in B371 and B771.		Jun 1999		Scheduled completion slipped to Dec 99. Developing recovery plan. (Jan 98 Rpt)
IP-3.1-020W		*	Pu Soln		RF	Complete processing liquids from the B771 high level tanks and B371 bottles.	Jul 1998			On schedule. 468 liters processed. (Feb 98 Rpt)
IP-3.1-020X		*	Pu Soln		RF	Complete draining four (4) B771 high level tanks.	Dec 1997		Dec 1997	Completed in December 1997.
IP-3.1-020Y		*	Pu Soln		RF	Complete draining of remaining B371 criticality line tanks.	Jul 1998		Feb 1998	Completed early on February 23, 1998. (Feb 98 Rpt)
IP-3.1-020Z		*	Pu Soln		RF	Start tap and draining of B371 room/systems.	Jun 1998			On schedule. (Jan 87 Rpt)
IP-3.1-020V			Pu Soln		RF	Start tap and draining of B771 room/systems.	Jan 1998		Jan 1998	Completed in January 1998. (Feb 98 Verbal Rpt)
IP-3.1-003	107	*	Pu Soln	31	RF	Place plutonium metal and oxide generated from stabilizing solutions at RF in a form suitable for safe storage.	May 2002			On schedule. (Jan 98 Rpt)
IP-3.5-006	108	*	Uranium	90, 93	RF	Begin bottling and shipping 2,700 liters of HEU solutions offsite for stabilization.	May 1996		Aug 1996	Completed late on August 13, 1996.

DEPARTMENT OF ENERGY

NUCLEAR MATERIALS STABILIZATION TASK GROUP

DNFSB Recommendation 94-1 Implementation Plan Milestones

March 18, 1998

164 Milestones

NMSTG Milestone Number	SIMS Cmt #	Key Milestones	Material Group	IP Page #	DOE Site	Milestone	Due Date	Revised Due Date	Completion Date	Status
IP-3.5-001	109	*	Uranium	87, 90 93	RF	Remove all HEU uranyl nitrate solutions (2,700 liters) from Building 886 and complete all shipments offsite.	Sep 1996	Nov 1996	Nov 1996	Completed November 8, 1996.
IP-ES-018	110	*	General	4	RF, SR, Mound	All Pu Metal in direct contact with plastic repackaged.	Sep 1996		May 1997	Completed late. SR completed in November 1995, Mound in September 1996, and Rocky Flats in May 1997.
IP-3.2-100	111		General	101	SR	Final IMNM EIS issued.	May 1995		Oct 1995	Completed in May 1995.
IP-3.2-024	112		General	5, 35 37, 46 64, 81 82, 90 101 112	SR	IMNM EIS ROD issued. (The ROD will select a method for stabilizing SR fuel and targets, H-Canyon Pu-239 solutions, metals & oxides, Pu residues, special isotopes, and HEU solutions.)	Jul 1995		Dec 1995	Completed late December 12, 1995. Added TRR fuel (82 cans).
IP-3.2-025	113	*	Pu Met/Ox	46, 50	SR	Metal turnings where plutonium metal is known to be in direct contact with plastic at Savannah River will either be processed (using the F-Canyon and FB-Line facilities) to a safe storable form, or repackaged.	Dec 1995		Nov 1995	Completed early November 20, 1995.
IP-3.2 -027	114		Pu Met/Ox	47, 65	SR	Modifications to the FB-Line facility (installation of a bagless transfer system) completed.	Sep 1997		Aug 1997	Completed early August 28, 1997.
IP-3.2 -026	115		Pu Met/Ox	46, 65	SR	A new or modified Actinide Repackaging Facility at Savannah River, required to fully meet the metal and oxide storage standard, is available. (Assumes the approval of an FY98 Line Item Project).	Dec 2001			Contractor projects early completion in October 2001. (Dec 97 Rpt)
IP-3.2 -013	116	*	Pu Met/Ox	2, 41 46, 50	SR	Thermally stabilize and repackage all plutonium oxide to meet the metal and oxide storage standard.	May 2002			Contractor projects completing commitment on-time. Metal repackaging began in Dec 97 and is 18% complete - finish projected by Sep 98. (Dec 97 Rpt)
IP-3.3 -021	117	*	Pu Res	65	SR	Processing in F-Area begins.	Sep 1996		Jun 1996	Completed early in June 1996.
IP-3.3 -018	118		Pu Res	65	SR	Characterization methods used will include NDA using digital radiography equipment, with selected sampling of containers using existing gloveboxes with modifications.	Dec 1997		Mar 1997	Completed early in March 1997.
IP-3.3 -022	119	*	Pu Res	4, 65 74	SR	Processing of existing inventories of SS&C material completed.	Dec 1997			Past Due. Need to revise chemical formula for dissolution caused delay. Dissolution resumes in Feb 98. (Dec 97 Rpt)
IP-ES -032	120	*	Pu Res	4, 65 74	SR	Stabilize all other residues at SR.	May 2002			Contractor's projected completion date slipped to February 2003. (Dec 97 Rpt)
IP-3.1 -007	121		Pu Soln	35, 37	SR	ROD for the F-Canyon plutonium solutions issued.	Feb 1995		Feb 1995	Completed February 2, 1995.
IP-3.1 -008	122		Pu Soln	35, 37	SR	Begin F-Canyon processing operations.	Feb 1995		Feb 1995	Completed February 3, 1995.
IP-3.1 -009	123	*	Pu Soln	3, 35 37	SR	Complete Stabilization of F-Canyon plutonium solutions (320,000 liters converted to metal).	Jan 1996		Apr 1996	Completed late April 11, 1996.
IP-3.1 -011	124	*	Pu Soln	35, 37	SR	Begin H-Canyon stabilization operations.	Feb 1999			Contractor's projected completion date slipped to October 1999. (Dec 97 Rpt)

DEPARTMENT OF ENERGY

NUCLEAR MATERIALS STABILIZATION TASK GROUP

DNFSB Recommendation 94-1 Implementation Plan Milestones

March 18, 1998

164 Milestones

NMSTG Milestone Number	SIMS Cmt #	Key Milestones	Material Group	IP Page #	DOE Site	Milestone	Due Date	Revised Due Date	Completion Date	Status
IP-3.1 -013	125		Pu Soln	35	SR	SR's HB-Line Phase II start-up.	Feb 1999			Contractor's projected completion date slipped to October 1999. WSRC RA complete, ORR began January 6, 1998. (Jan 97 Rpt)
IP-3.1 -012	126	*	Pu Soln	35, 37	SR	Stabilization operations completed for Pu-239 solutions in SR's H-Canyon (34,000 liters converted to oxide).	Feb 2000			Contractor's projected completion date slipped to August 2000. (Dec 97 Rpt)
IP-3.6 -002	133	*	SNF	5, 96 108, 110 112	SR	Complete stabilization of SR's Mk31 targets via dissolution in F-Canyon.	Sep 1996		Jan 1997	Completed late January 2, 1997
IP-3.6 -003	139	*	SNF	5, 96 108, 110 112	SR	Complete dissolution of SR's Mk16 and MK22 SNF.	Nov 1998			Contractor's projected completion date slipped to December 2000. (Dec 97 Rpt)
IP-3.6 -004	140	*	SNF	5, 96 110, 112	SR	Complete stabilization of SR's resultant Uranium solutions from the dissolution of Mk16/22 SNF.	Apr 2000			Contractor's projected completion date slipped to December 2000. (Dec 97 Rpt)
IP-3.6 -032	131	*	SNF	107, 110 112	SR	Begin Mk31 target stabilization in SR's F-Area	Nov 1995		Feb 1996	Completed late February 12, 1996.
IP-3.6 -033	135	*	SNF	108, 110 112	SR	Begin stabilization of SR's Mk16 and Mk22 HEU SNF.	Nov 1996		Jul 1997	Completed late July 21, 1997.
IP-3.6 -034	128	*	SNF	109	SR	Complete vacuum consolidation of SR's L-Reactor Disassembly Basin sludge.	Sep 1995		Mar 1995	Completed early March 31, 1995.
IP-3.6 -035	129	*	SNF	109	SR	Reorient fuel in SR's L-Reactor Disassembly Basin to a horizontal configuration.	Feb 1996		Nov 1995	Completed early November 29, 1995.
IP-3.6 -036	136	*	SNF	109	SR	Reorient fuel in SR's K-Reactor Disassembly Basin to a horizontal configuration.	Feb 1997		Jul 1997	Completed late in July 1997.
IP-3.6 -037	130	*	SNF	110 112	SR	Complete fuel consolidation to free up approximately 1,250 additional storage spaces in SR's RBOF.	Dec 1995		Aug 1996	Completed late August 26, 1996.
IP-3.6 -038	132	*	SNF	5, 109 110, 112	SR	Complete K- & L-Reactor Disassembly Basin upgrades.	May 1996		May 1996	Completed May 31, 1996.
IP-3.6 -101	127		SNF	109	SR	Re-examine L-Basin corrosion surveillance coupons.	Feb 1995		Feb 1995	Completed in February 1995.
IP-3.4 -001	141		Spec Iso	77	SR	Immediately discontinue active water cooling for Am/Cm solutions in F-Canyon.	Feb 1995		Feb 1995	Completed in February 1995.
IP-3.4 -021	142		Spec Iso	77, 83 84	SR	Transport Pu-238 solids currently in inadequate storage to the HB-Line for venting and repackaging.	Apr 1995		Mar 1995	Completed early March 2, 1995.
IP-ES -008	143		Spec Iso	3, 81	SR	Conceptual design report for the stabilization of Am/Cm Solutions completed.	Dec 1995		Nov 1995	Completed early November 30, 1995
IP-3.4 -017	144	*	Spec Iso	82, 84	SR	Begin stabilization of Pu-242 Solutions at HB-Line, Phase III.	May 1997		Aug 1996	Completed early in August 1996.
IP-3.4 -018	145	*	Spec Iso	3, 77 82, 84	SR	Complete stabilization of Pu-242 Solutions at HB-Line, Phase III.	Nov 1997		Dec 1996	Completed early in December 1996

DEPARTMENT OF ENERGY

NUCLEAR MATERIALS STABILIZATION TASK GROUP

DNFSB Recommendation 94-1 Implementation Plan Milestones

March 18, 1998

164 Milestones

NMSTG Milestone Number	SIMS Cmt #	Key Milestones	Material Group	IP Page #	DOE Site	Milestone	Due Date	Revised Due Date	Completion Date	Status
IP-3.4 -015	146	*	Spec Iso	84	SR	Start vitrification of Am/Cm Solutions.	Mar 1998			At Risk. WSRC forwarded Am/Cm Vitrification Development Program Plan outlining technical, developmental, and operational issues to DOE-SR. Contractor's projected completion date slipped to January 2000. (Dec 97 Rpt)
IP-3.4 -016	147	*	Spec Iso	3, 77 80, 84	SR	Complete vitrification of Am/Cm Solutions.	Sep 1998			At risk. Contractor's projected completion date slipped to June 2000. (Dec 97 Rpt)
IP-3.4 -019	148	*	Spec Iso	84	SR	Begin stabilization of Np-237 Solutions HB-Line, Phase II.	Jul 2001			Revision of milestone is awaiting pending material diposition/shipment decisions. Contractor's projected completion date TBD. (Dec 97 Rpt)
IP-3.4 -020	149	*	Spec Iso	3, 77 84	SR	Complete stabilization of Np-237 Solutions at HB-Line, Phase II.	Dec 2002			See Milestone IP-3.4-019. (Dec 97 Rpt)
IP-3.4 -003	150		Spec Iso	77	SR	Implement effective surveillance and monitoring programs to reduce the risk of extended storage of special isotope solutions.	None		Mar 1995	Completed in March 1995.
IP-3.5 -008	151	*	Uranium	91	SR	Complete construction of blending facilities at F- and H-Areas (HEU Dilution Project).	Jul 1996		Jul 1996	Completed July 25, 1996.
IP-3.5 -002	152	*	Uranium	3, 87 91, 93	SR	Complete FA-Line blending and processing of 230,000 liters of HEU solutions into a stable oxide.	Dec 1997			Past Due. Requires HEU blending decision. Contractor's projected completion date TBD. (Dec 9 Rpt)