Department of Energy
Washington, DC 20585

NOV 0 3 1997

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 tenth 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 July 1 through September 30, 1997. The detailed status of these milestones, including impacts and mitigation options, is fully discussed in the Quarterly Report.

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,

Alvin L. Alm
Assistant Secretary
for Environmental Management

Enclosure

97/3638

DEFENSE NUCLEAR FACILITIES SAFETY BOARD
RECOMMENDATION 94-1 IMPLEMENTATION

QUARTERLY REPORT

Covering the period
July 1 – September 30, 1997

Submitted: _____ Date: 10/20/97
John C. Tseng
Acting Director
Nuclear Materials Stabilization Task Group

Reviewed,
Recommending
Approval: _____ Date: 10/29/97
FOR David G. Huizenga
Acting Deputy Assistant Secretary for
Nuclear Material and Facility Stabilization

Approved: _____ Date: 11/1/97
Alvin L. Alm
Assistant Secretary for
Environmental Management

I. PROGRAM OUTLOOK

Major Activities and Issues

Rocky Flats

A 94-1 plutonium residues and liquids program rebaselining effort has been undertaken at Rocky Flats to incorporate recommendations and/or address technical issues identified in the various trade studies that have been completed to date. The benefits from this process include reducing the number of operators required to perform stabilization, reducing the number of waste drums generated, and supporting the completion of stabilization commitments for accelerated site closure.

The specific materials affected by the rebaselining include:

- Plutonium Combustibles
- Pyrochemical Salts
- Graphite Fines
- Ash
- Sand, Slag, and Crucible (SS&C)
- High-level Plutonium Solutions

An Implementation Plan change that reflects the results of the rebaselining was approved by the Secretary and forwarded to the Defense Nuclear Facilities Safety Board on September 30, 1997.

Savannah River

The Secretary of Energy approved a Phased Canyon Strategy on July 17, 1997, resulting in the decision to utilize both F- and H-Canyons for material processing and stabilization. The Secretary issued the Savannah River Site Chemical Separation Facilities Multi-Year Plan to Congress, outlining the Phased Canyon Strategy, on October 3, 1997. The H-Canyon completed prestart readiness reviews and corrective actions, and commenced dissolving Mk-16/22 spent nuclear fuel on July 18, 1997. The Department continues the phased restart of the remaining H-Canyon operations needed to carry out planned stabilization activities.

An Implementation Plan change request proposing the deletion of three milestones related to spent nuclear fuel wet storage basin water chemistry is expected to be provided to the Board by the end of November 1997. The request will also include a status of other 94-1 activities.

The Office of Nuclear Material and Facility Stabilization, through the Nuclear Materials Stabilization and Stewardship Program, has initiated 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 scheduled to be available by December 1997.

Another *Supplemental Record of Decision for the Interim Management of Nuclear Materials* is being prepared to (1) add an additional management method for the stabilization of plutonium and uranium vault materials, and (2) amend the September 1996 decision for the stabilization of H-Canyon plutonium and neptunium solutions and obsolete neptunium targets to be consistent with the Secretary's July 17, 1997 canyon utilization strategy decision. This Supplemental Record of Decision is expected to be issued in October 1997.

Richland

A trade study was completed in August 1997 that evaluated the alternatives associated with stabilization and long term storage of plutonium metals and oxides in light of the recent *Record of Decision on the Storage and Disposition of Weapons-Usable Fissile Materials Programmatic Environmental Impact Statement.* The study recommended the stabilization of plutonium metals and oxides to meet DOE-STD-3013 utilizing the Stabilization and Packaging System, followed by the offsite shipment of all stabilized plutonium metals and oxides to Savannah River, thereby facilitating early closure of the Plutonium Finishing Plant. A review is currently underway to evaluate the efficacy of this alternative (see Accelerated Shipment of Metals and Oxides in this report).

Additionally, a hold on material movement at the Plutonium Finishing Plant is continuing from December 1996. Hanford plans to resume material movement in November 1997. Telephone conference calls are scheduled on Tuesday and Thursday of each week to brief the DNFSB Staff in Washington, D.C. on the status of restart efforts.

A 94-1 Implementation Plan change is being developed by Richland to document changes in the spent fuel stabilization scope and schedule. In particular, the Spent Nuclear Fuel project is facing a number of challenges to meet SNF stabilization commitments, as discussed in last quarter's report. The construction contractor is still in the process of finalizing a resource loaded critical path schedule that incorporates facility design and construction process changes identified to date. The current proposed plan calls for a change in the start date of fuel removal from the K-Basins to July 31, 1999—a 19-month delay from the original Implementation Plan date of December 1997. A number of actions are being taken by the Richland Operations Office to meet the revised date. The Board will continue to be informed as work progresses, and once the schedule is finalized, an Implementation Plan change will be prepared and submitted.

Los Alamos National Laboratory

An Implementation Plan change for the Los Alamos National Laboratory (LANL) 94-1 program is being prepared by Albuquerque Operations Office. The proposed changes affect previously planned stabilization and repackaging of selected LANL inventory items, but do not compromise

safety issues surrounding their stability, packaging, and storage while either in use or awaiting use for DOE programmatic activities.

Headquarters will review the proposed IP change and coordinate with the Office of Defense Programs, Albuquerque, and LANL to address issues related to this change. Discussions with the Board and Board staff will take place as necessary to ensure proper coordination of this change according to established practices for the 94-1 program.

Oak Ridge

A number of changes have been proposed for the major 94-1 activities underway at Oak Ridge. Technical difficulties with the removal of uranium hexafluoride deposits have created additional scope for the Molten Salt Reactor Experiment stabilization project and are impacting existing milestones. The K-25 Deposit Removal Project will have a reduced scope compared to that originally identified in the 94-1 Implementation Plan for K-25 as a result of a detailed criticality review. However, additional deposit removal activities will be undertaken at K-29. A formal Implementation Plan change is currently being evaluated by the Secretary of Energy.

Lawrence Livermore National Laboratory (LLNL)

Implementation Plan changes to the Lawrence Livermore 94-1 Program have been approved by the Secretary and the Defense Board. These changes reflect delays to complete stabilization due to the procurement of selected stabilization and packaging system components and an increase in the scope of the materials to be stabilized resulting from vulnerability assessment corrective action plan analyses.

Idaho National Engineering and Environmental Laboratory (INEEL)

Construction and startup of a CPP-603 dry storage overpacking station for Idaho's spent nuclear fuel was completed 17 months earlier than scheduled on July 8, 1997.

Accelerated Shipment of Plutonium Metals and Oxides

EM-66 is evaluating various alternatives to accelerate shipment of Hanford and Rocky Flats plutonium metals and oxides to Savannah River. The goals of this effort are to assess the opportunity to reduce the cost of maintaining nuclear materials and facilities at Rocky Flats and Hanford; accelerate the deactivation of former weapons processing facilities at both sites; and support timely site closure for Rocky Flats. Alternatives being evaluated include early shipment of materials to Savannah River for interim storage while awaiting completion of the Actinide Packaging and Storage Facility (APSF); early completion of the APSF to facilitate early shipment and receipt of materials; and expanded capacity at the APSF to accommodate storage of additional materials. If feasible, and after addressing appropriate NEPA issues, materials could be removed from Rocky Flats and Hanford beginning no later than 2002. The results of the evaluation process should be complete in October 1997.

Plutonium Residues Environmental Impact Statement

The Department continues the process of preparing an Environmental Impact Statement (EIS) to evaluate the impacts associated with alternatives to 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 for stabilizing and preparing the affected plutonium residues and scrub alloy for disposition. Departmental review of the EIS was conducted in September 1997. Following comment resolution, the Draft EIS should be issued for public review in October 1997.

II. PROGRAM ACTIVITIES

Nuclear Materials Stabilization and Stewardship

The Office of Environmental Management, through the Nuclear Materials Stabilization and Stewardship (NMSS) program, continues to draw upon the nuclear materials management expertise from DOE Headquarters and the Operations Offices at Albuquerque and Savannah River. A current tasking, managed by the NMSS program, is the Nuclear Material Processing and Needs Assessment. The Assessment will identify all potential excess nuclear materials around the complex that could or should be stabilized or prepared for disposition in the Savannah River canyons.

Consistent with the Needs Assessment effort, the EM Integration initiative's systems engineering approach will be applied to nuclear materials stabilization and disposition. The outcome of this process will be the development of materials stabilization and disposition system flow maps for each major material category and for each site that owns material or will be used for materials stabilization or disposition. Additionally, the NMSS program will be evaluating the opportunities for material consolidation and small site closure consistent with major ongoing EM initiatives under the 2006 Plan.

Plutonium Stabilization and Packaging Procurement Project

All hardware for the prototype Plutonium Stabilization and Packaging System for Rocky Flats has been delivered, and the equipment is being assembled in an off-site warehouse in Broomfield, CO. The full unit will be assembled and tested prior to delivery to Rocky Flats Environmental Technology Site. Representatives from the International Atomic Energy Agency are expected to witness the testing to determine and validate the ability to apply international safeguards to the stabilization process.

Research and Development Progress

The Research and Development Plan is in the process of being updated for 1998. The update is an annual DNFSB 94-1 milestone and is used by the Nuclear Materials Stabilization Task Group to provide formal guidance to the 94-1 R&D program, managed by Los Alamos National Laboratory. The Plan, first issued in 1995, has provided a focus for the implementation of

successful technologies of nuclear materials stabilization, and the termination of those technologies that are too immature to contribute to stabilization goals. A final draft plan was completed on September 29, 1997 and is being distributed to the appropriate personnel for review and comment.

The R&D Program utilizes Los Alamos National Laboratory to conduct most of the research program activities. However, the R&D program also utilizes capabilities at other research facilities to obtain the best result to meet plutonium stabilization requirements. For example, three projects, Nitric Acid-Phosphoric Acid Oxidation, Immobilization of Rocky Flats Graphite Fines Residues, and Plutonium Phosphate Solution Chemistry are conducted at Savannah River. Pyrochemical Salt Filtration is done at Lawrence Livermore National Laboratory. Pacific Northwest National Laboratory contributes to Vitrification Issues with Ash and Sand, Slag and Crucible, and Mediated Electrochemical Oxidation.

Key areas of focus for the R&D program include the following:

- *Techniques to identify water and other hydrogen compounds that may remain in stabilized materials as alternatives to loss-on-ignition testing.* A process for extraction by supercritical carbon dioxide fluid has been developed to quantify hydrogen compounds in stabilized material. The technique quantitatively identifies free water and many other hydrogen compounds in stabilized material.

- *A neutron-based moisture probe to measure the hydrogen content of sealed 3013 containers.* The estimated sensitivity limit of the bench-top model for moisture detection in PuO_2 is 0.06 % by weight water (with measured hydrogen expressed as water) at one sigma above background. The predicted sensitivity of an optimized system is less than 0.02 % moisture. Therefore, the technique can verify that sealed containers possess less than 0.5 % moisture as required by the 3013 standard.

- *Acoustic Resonance Spectrometry, which measures changes in gas pressure and composition in sealed 3013 containers.* This method measures the characteristics of standing waves produced in gas within the containers using acoustic excitation and detection. Recent results link detected resonance amplitude to gas pressure and resonance frequency to gas composition that promise to allow routine surveillance of sealed containers.

These methods are particularly useful in demonstrating conditions for the safe storage of sealed 3013 containers due to the ability to apply them non-invasively and nondestructively.

The R&D Program is also responding to the evolution of the Stewardship Program within DOE's Environmental Management Program. The Materials Identification and Surveillance (MIS) Project had established materials for safe storage. Now the MIS anticipates sampling pressures and compositions of gases evolved from well characterized materials in sealed containers. These results would confirm the anticipated safe behavior of the stabilized materials. The MIS is gathering data in the alpha-beta phase transformation experiment.

An Applied Technology Program Review Report was completed and furnished to NMSTG for review and comments. This report addressed issues covered during the Applied Technology Meeting conducted at Los Alamo. The Applied Technology Report will become part of the annual update of the Research and Development Plan currently in progress.

The Technical Advisory Panel (TAP) reviewed several research technology "White Papers" during the quarter. The TAP provides a technical feasibility and systems engineering review of technologies proposed by research facilities, and furnishes a recommendation to the NMSTG on the usefulness of the proposed technologies. Among technologies reviewed during the quarter were:

- Ash Glass - A Proposal to Immobilize Ash and Ash-like Residues at RFETS Using Vitrification and Conventional Furnaces

- Recovery of Plutonium from Plutonium Scrap and Residue with Conversion of Secondary Wastes to Borosilicate Glass

- Electro-scrubbing of RFETS $CaCl_2$ Salt Residues.

Recommendations regarding these technologies were submitted to the Plutonium Focus Area for consideration.

III. MILESTONE SUMMARY

Progress to Date: Milestones Summary

- 169 total milestones in Implementation Plan*
- 92 milestones completed since February 1995
  - 34 milestones completed early
  - 39 milestones completed on time
  - 19 milestones completed late
- 6 milestones past due

** A complete listing of milestones is included as an attachment to this report. The milestone total has been revised due to changes to the LLNL and Rocky Flats portions of the implementation plan.*

Milestones Past Due

IP-3.6-040 *Complete vacuum consolidation of Savannah River's K-Reactor Disassembly Basin Sludge* (September 1996)

IP-3.6-041 *Remove consolidated basin sludge from Savannah River's K-Reactor Disassembly Basin* (September 1997)

IP-3.6-042 *Remove consolidated basin sludge from Savannah River's L-Reactor Disassembly Basin* (September 1997)

With regard to the three milestones above, upgrades to basin water chemistry have negated the need for basin sludge consolidation and removal in the near term. These milestones are to be deleted in the forthcoming Savannah River Implementation Plan revision.

IP-3.3-012A *Begin Stabilization at Rocky Flats by pyrochemical oxidation 6,000kg of higher risk plutonium salts.* (September 1997)

Delays in completion of glovebox modifications, furnace heater element failures, hardware and software problems with nuclear materials measurement systems, and deficiencies in operator proficiency resulted in further postponement of the Readiness Assessment into mid-October 1997. Stabilization is now scheduled to begin in November 1997.

IP-3.1-022 *Begin Processing Solutions at Plutonium Finishing Plant* (June 1997)

Installation of solution processing equipment is ongoing but slow due to the curtailment of fissile material movement and issues related to the technical scope of work. Projected start of solution stabilization is February 1998.

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 process operations needed to meet this milestone were not available in July and August due to repairs being made to leaks in the nitrate ion exchange processing room. These delays are expected to prevent completion of this milestone until January 1998.

Milestones Completed Late

IP-3.6-033 *Begin stabilization of Mark-16/22 HEU SNF at Savannah River* (November 1996)

Mark-16/22 spent fuel stabilization was initiated in July 1997. Stabilization completion is scheduled for December 2000.

IP-3.6-036 *Reorient fuel in Savannah River K-Reactor Disassembly Basin to a horizontal configuration* (February 1997)

Reorientation of K-Basin fuel was completed late in July 1997.

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NUCLEAR MATERIALS STABILIZATION TASK GROUP

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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	HAN	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. Ongoing Trade Study will recommend policy for site's Pu met/ox path forward. (Aug 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			
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.

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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. No progress has been made since the fissile mat'l handling work stoppage in Dec 96. ORR required for restart delays completion, contingent upon resuming handling in Oct 97, until Feb 98. (Aug 97 Rpt)
IP-3.1 -017	022	*	Pu Soln	3, 36 37	HAN	Stabilization of 4,800 liters at PFP completed.	Jan 1999			FY-97 C-226 project cost overrun delays preteatment design and installation into FY-98 and beginning pretreatment of impure and dilute solutions. Estimate completion in August 1999. (Aug 97 Rpt)
IP-3.6 -001	032	*	SNF	5, 96 105 112	HAN	Complete removal of all SNF from K-Basins.	Dec 1999			Explanation of impact of beginning fuel and sludge removal delay (see IP-3.6-012) will issued by the site shortly. (Aug 97 Rpt)
IP-3.6 -010	030		SNF	101 103 105	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			At Risk. Fuel removal is delayed, schedule heassessed and DNFSB, US-EPA and Wash. St. Dept of Ecology notified. Final baseline schedule and proposed 94-1 IP change will be forwarded shortly. (Aug 97 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			Explanation of impact of beginning fuel and sludge removal delay (see IP-3.6-012) will issued by the site shortly. (Aug 97 Rpt)

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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 -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.
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			90 of 99 Phase I, Group I fuel transfers complete. Phase VII, Group II fuel transfer preps continue, Phase VIII, Group III progressing, and Phase VII, Group III initiated. (May 97 Qrtly Rpt)
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. (May 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			At risk. Equipment failures and inventory adjustments will preclude completing all categories (SS&C, hydroxide precipitate, silica solids, & cellulose cleanup rags) of materials before January 1, 1998. (Aug 97 Rpt)
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			LANL/Albuquerque/DP are working to resolve projected funding shortfalls. Specific impacts of shortfalls are being evaluated. (Aug 97 RPT)
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.

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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 -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."
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			
IP-3.2 -042	054	*	Pu Met/Ox	49	LLNL	Complete the Plutonium ES&H Corrective Action Plan at LLNL.	Jan 1997	Oct 1997		Packaging assessment is progressing approximately on schedule. (Aug 97 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			
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		BNFL increased bagless transfer system cost 55% increasing it beyond LLNL's 94-1 program funding. System is critical path item for stabilizing Pu. Milestone completion may be delayed if funding issue not resolved by Sep/early Oct 97. (Aug 97 Rpt)
IP-3.3 -041	060	*	Pu Res	4, 71 73	LLNL	Stabilize and package 111 cans of ash/residue.	Apr 1998	Apr 1999		IP change revised text and milestone due date. Preparation phase is progressing slightly behind schedule. (Jun 97 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		IP change revised text and milestone due date.
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		Packaging assessment is progressing approximately on schedule. (Aug 97 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

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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 1997			The first annual update is submitted. (November 26, 1996)
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.
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	112	NMSTG	Repository EIS ROD.	Sep 2000			
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		OR has revised program and SISMP to accelerate milestone completion to December 2000. Site plans to ship to LLNL, however shipping to SR is being evaluated. (Aug 97 Rpt)

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IP-3.5 -003A	084	*	Uranium	87, 92 93	OR	Place Category I deposits in a safe configuration	Sep 1997	Dec 1997		3 K-25 Valley Iron Pump deposit removals completed 5 wks ahead of schedule. K-29 deposit removal assessment was conducted, open items & findings corrected, deposit removal proceeding. K-29 removals are 4 weeks behind schedule (Aug 97 Rpt)
IP-3.5 -004A	086	*	Uranium	87, 92 93	OR	Place Category II deposits in a safe configuration	Apr 1998	Mar 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		Blockage bypass headers have been used to evacuate gases from flush salt drain tank, fuel processing system distillation cabinet, and Vent House off-gas piping. 1,495 gms of U-233 have been removed from Reactive Gas Removal System. (Aug 97 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.
IP-3.5 -011	087	*	Uranium	92	OR	Fuel salts at OR's MSRE project removed.	May 2001	May 2002		Draft action plan submitted to EPA and Tenn. Dept. of Environmental Conservation. Design of drain cell mockup is underway. (Aug 97 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			
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			On schedule. Second B371 bagless transfer system, needed for schedule acceleration, is unfunded in FY98. Potential impact on completion of the milestone is being evaluated. (Aug 97 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		On schedule. (Aug 97 Rpt)

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IP-3.3 -014B			Pu Res		RF	Complete shipping SS&C to Savannah River.	TBD			Place holder milestone added by NMSTG.
IP 3.3 -014A	154	*	Pu Res		RF	BEGIN stabilization of graphite fines.	Sep 1997	Mar 1998		On schedule. (Aug 97 Rpt)
IP-3.3 -014C			Pu Res		RF	Begin shipping SS&C to Savannah River.	TBD			Place holder milestone added by NMSTG.
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		On schedule. (Aug 97 Rpt)
IP-3.3 -012A	155	*	Pu Res		RF	BEGIN stabilization by pyrochemical oxidation 6,000 kg higher-risk Pu salts.		Aug 1997		Past due. Glovebox construction delays delay start of Readiness Assessment until September. Stabilization is now projected to begin in October. (Aug 97 Rpt)
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. (Aug 97 Rpt)
IP-3.3 -013A			Pu Res		RF	Complete stabilization of remaining salt residues	May 2002	Jul 2001		
IP-3.3 -017	101	*	Pu Res	4, 61 73	RF	Stabilize high risk combustibles (11,000 kgs).	Nov 1998	Apr 1999		On schedule. (Aug 97 Rpt)
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. (Aug 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		
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.

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IP-3.1-020K	166	*	Pu Soln		RF	COMPLETE processing all liquids in B371 and B771.		Jun 1999		
IP-3.1-020W		*	Pu Soln		RF	Complete processing liquids from the B771 high level tanks and B371 bottles.	Jul 1998			
IP-3.1-020X		*	Pu Soln		RF	Complete draining four (4) B771 high level tanks.	Dec 1997			
IP-3.1-020Y		*	Pu Soln		RF	Complete draining of remaining B371 criticality line tanks.	Jul 1998			
IP-3.1-020Z		*	Pu Soln		RF	Start tap and draining of B371 room/systems.	Jun 1998			
IP-3.1-020V			Pu Soln		RF	Start tap and draining of B771 room/systems.	Jan 1998			
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			
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 August 13, 1996.
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	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			
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			

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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			At Risk. Reported on schedule in July 1997, however, March 1998 completion is now projected because investigation and follow-up of F-Canyon Pu intake occurences delays processing start from May 1997 to November 1997. (Aug 97 Rpt)
IP-ES -032	120	*	Pu Res	4, 65 74	SR	Stabilize all other residues at SR.	May 2002			Projected completion date is slipping. Reported on schedule in June 1997, slipped to September 2002 in July and January 2003 in August. (Aug 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. ROD issued 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			Projected for April 1999 completion. (Jun 97 Rpt)
IP-3.1 -013	125		Pu Soln	35	SR	SR's HB-Line Phase II start-up.	Feb 1999			Projected for March 1999 completion. (Jun 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			
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			Projected completion continues to be in December 2000. (Aug 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			Projected completion date continues to be TBD. (Aug 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.

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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 -040	134	*	SNF	110	SR	Complete vacuum consolidation of SR's K-Reactor Disassembly Basin sludge.	Sep 1996			Past due. As reported beginning in June 1997, excellent basin water quality maintenace eliminates urgency to remove sludge. Deletion of milestone will be justified in forthcoming SRS IP mod. (Aug 97 Rpt).
IP-3.6 -041	137	*	SNF	110	SR	Remove consolidated basin sludge from SR's K-Reactor Disassembly Basins.	Sep 1997			Past due. Excellent basin water quality maintenance eliminates urgency to remove sludge. Deletion of milestone will be justified in forthcoming SRS IP mod. (Aug 97 Rpt).
IP-3.6 -042	138	*	SNF	110	SR	Remove consolidated basin sludge from SR's L-Reactor Disassembly Basins.	Sep 1997			Past due. Excellent basin water quality maintenance eliminates urgency to remove sludge. Deletion of milestone will be justified in forthcoming SRS IP mod. (Aug 97 Rpt).
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
IP-3.4 -015	146	*	Spec Iso	84	SR	Start vitrification of Am/Cm Solutions.	Mar 1998			Projected completion has slipped from Jun 99 reported in June 1997 to January 2000 as reported in July 1997. (Aug 97 Rpt)
IP-3.4 -016	147	*	Spec Iso	3, 77 80, 84	SR	Complete vitrification of Am/Cm Solutions.	Sep 1998			Projected completion has slipped from Nov 99 reported in June 1997 to June 2000 as reported in July 1997. (Aug 97 Rpt)

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IP-3.4 -019	148	*	Spec Iso	84	SR	Begin stabilization of Np-237 Solutions HB-Line, Phase II.	Jul 2001			On schedule for early completion in Oct 98. (Jun 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			Projected completion has slipped from September 2003 reported in June and July 1997 to November 2003. (Aug 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			At Risk. Completion date continues as TBD. (Aug 97 Rpt)