

97-0001503

Department of Energy

Washington, DC 20585

APR 3 0 1997

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

Dear Mr. Chairman:

Enclosed for your information is the eighth 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, 1997. The detailed status of these milestones, including impacts and mitigation options, is fully discussed in the quarterly report.

Lastly, and in follow-up to our recent discussions regarding the Department's periodic status reports updating Board related actions, should you or the other Board Members prefer, we would be pleased to provide future reports of this nature in the form of a scheduled briefing rather than in their current written format. Please confirm the Board's preference. 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, (202) 586-0383.

Sincerely,

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Alvin L. Alm Assistant Secretary for Environmental Management

Enclosure





DEFENSE NUCLEAR FACILITIES SAFETY BOARD RECOMMENDATION 94-1 IMPLEMENTATION

QUARTERLY REPORT

Covering the period January 1 – March 31, 1997

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Submitted:

C. Tseng

Date: <u>4/6/9</u>7

Acting Director Nuclear Materials Stabilization Task Group

Reviewed, Recommending Approval:

Approved:

Date: 4/14/97

David G. Huizenga Acting Deputy Assistant Secretary for Nuclear Material and Facility Stabilization

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Date: <u>4/29/97</u>

Alvin L. Alm Assistant Secretary for Environmental Management

I. PROGRAM OUTLOOK

Major Activities and Issues

Rocky Flats

As a result of the recommendations provided through completion of the residues trade studies, progress on selected R&D initiatives, and the new safeguards termination criteria, Rocky Flats is evaluating various alternatives for integrating site-wide residue stabilization and disposition activities. With the addition of the preparation of an environmental impact statement to address disposition of selected Rocky Flats residues, Rocky Flats management is reexamining the current stabilization plans to determine more cost effective plans, if any, for remediating selected residues. A workout session is planned at DOE headquarters for April 23, 1997, to identify preferred residue stabilization options to support offsite material shipment and stabilization. The session will be attended by representatives from each interested site including Rocky Flats, Savannah River, and Los Alamos.

Savannah River

Savannah River program managers at the Operations Office and Headquarters continue to examine the impacts of various scenarios for canyon utilization at the site. DOE is preparing a report to Congress on the various options associated with canyon utilization that is expected to be completed by July 1997. The site remains in the process of implementing a phased restart of H-Canyon. Any impacts and revisions to IP milestones from canyon utilization decisions will be reflected in an IP change.

Richland

DOE-RL has proposed a change to the Richland stabilization baseline and long term storage of plutonium metals and oxides in light of the recent Record of Decision (ROD) on the Storage and Disposition of Weapons-Usable Fissile Materials Programmatic Environmental Impact Statement (S&D PEIS). Richland proposes using the interim storage standard "*Criteria for Interim Safe Storage of Plutonium-Bearing Solid Materials*" rather than the "*Criteria for Safe Storage of Plutonium Metals and Oxides*" (DOE STD-3013-96). Richland states that the Interim Storage Criteria is acceptable for 20 year storage and that PFP storage practices are consistent with the Interim Storage Criteria. Richland also contends that the S&D PEIS ROD will eliminate the need to package metals and oxides for long term storage. A study of the options presented by Richland will be conducted to provide a reasoned analysis of the issues and the potential impacts associated with deviating from the original stabilization baseline. The study is scheduled to be completed by August 1, 1997. Pending the study's completion, all current 94-1 commitments will be adhered to.

Los Alamos National Laboratory

In December 1996, the Secretary of Energy signed the Record of Decision for the Programmatic Environmental Impact Statement for Stockpile Stewardship and Management. As a result, the end-state disposition of the Los Alamos 94-1 plutonium inventory was redefined. Disposition of

the inventory has been expanded from only being destined for long-term storage, to additionally being made available for new or growing DOE programmatic activities at the Laboratory. With this change, not all material will be packaged in DOE-STD-3013 containers. Appropriate Implementation Plan changes and SISMP changes will be prepared as the specific material plans are identified.

Plutonium Residues EIS

The Department is in 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 or disposal. The EIS will serve to ensure that the significant effects of the treatment alternatives are identified and decisions are made on safe and cost-effective treatment for disposal of the affected plutonium residues and scrub alloy. A preliminary draft of the EIS is expected to be available for initial review in June 1997.

Implementation Plan

A number of individual site Implementation Plan changes are being prepared by the sites to describe proposed changes to the site specific stabilization plans. These changes will be based on significantly different approaches or processes to stabilization than those originally described in the 94-1 Implementation Plan. EM-66 has recently received proposed Implementation Plan changes for Lawrence Livermore National Laboratory, Oak Ridge and Richland Spent Nuclear Fuel. The proposed changes will be reviewed in consultation with the DNFSB staff and briefed to the Board as they evolve. As appropriate, on completion of the review process, formal IP change proposals will be prepared.

II. PROGRAM ACTIVITIES

Nuclear Materials Stabilization and Stewardship

EM is establishing a Nuclear Materials Stabilization and Stewardship (EM-NMSS) program that will draw upon the nuclear materials management expertise from DOE Headquarters and the Operations Offices at Albuquerque and Savannah River. The focus of the NMSS program will be to define, evaluate, and implement nuclear materials stabilization, consolidation, storage, and disposition tasks, and to ensure close cooperation with other DOE programs and stakeholders who share responsibilities or interests in nuclear materials management issues.

The EM-NMSS program will develop policy and provide technology and implementation support for all materials that are within the scope of the emerging EM Ten-Year Plan to include excess weapons-capable fissile materials and byproduct materials that will be retained or stabilized for safe disposition. Stewardship will be implemented in a way that permits a possible hand-off to any future organization that may be assigned responsibility for all Department nuclear materials that are excess to National Security.

A Nuclear Materials Stewardship workshop was conducted in February 1997, hosted by the Albuquerque Operations Office, with representatives from all of the major DOE Sites and Offices

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with nuclear materials management responsibilities. The participants of the workshop identified 10 key issues that the Nuclear Materials Stewardship Program needed to address in the near term to support the overall EM program. Action plans are being developed to address these issues as part of the Stewardship Program Plan. Both the Albuquerque and the Savannah River Operations Offices are in the process of identifying personnel to fill three federal positions each in support of the stewardship program; to date, one position has been filled at each site.

The Stewardship Program is coordinating the planning efforts for the offsite shipment of plutonium pits from Rocky Flats. In a January 1997 meeting, the program helped organize initial shipments of Rocky Flats pits to the Pantex plant, as decided in the Materials Disposition Record of Decision. As a result, activities have been initiated in support of the pit transfers. The program is continuing coordination with pit shipment activities to help address issues associated with the packaging of pits for shipment at Rocky Flats and the receipt and repackaging of the pits at Pantex plant. The Nuclear Material Stewardship program is also providing support to Pantex in the certification of shipping containers to the revised (more stringent) requirements for leak testing provided by the Nuclear Regulatory Commission to support removal of all pits from the site by FY99. The current shipping container certification expires on April 15, 1997; the containers will be recertified to the new requirements beginning in late April to support the shipment of all Rocky Flats pits to Pantex by January 1999.

Plutonium Stabilization and Packaging Procurement Project

The first shipment of hardware for the prototype Plutonium Stabilization and Packaging System for Rocky Flats was delivered to Denver on March 21, 1997. This is the first in a series of shipments that will continue over the next few months. Once all shipments are completed, the full unit will be assembled and tested prior to delivery to DOE Rocky Flats in the summer.

The project management responsibilities for the stabilization and packaging system were transferred from DOE Headquarters to the Oakland Operations Office in March 1997. This transfer was made consistent with the redeployment of EM headquarters functions to the field and provides collocation of project management with contract management functions at the Oakland Operations Office. It is anticipated, however, that these functions will be ultimately fulfilled as a part of the SRS stewardship responsibilities.

Research and Development Progress

The following is a summary of significant 94-1 program R&D progress related to tasks being conducted by Los Alamos National Laboratory as the lead plutonium research laboratory:

- Work to support the pyrochemical salt distillation process have resulted in over 30 full scale distillation runs since January. The process requirements for coupling oxidation and distillation for ER salts should be completed by mid-April 1997.
- Polycube pyrolysis activities to support Hanford polycube stabilization are on schedule to have a May 1997 demonstration of the pyrolysis reactor and off-gas treatment unit.

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- Development activities on the plutonium combustibles washing task indicate a demonstration unit consisting of the Parr reactor for the treatment of organic contaminated materials will be installed and operational for plutonium testing in April 1997. The unit installed is identical to the units currently being built for RFETS.
- The Materials Identification and Surveillance Program has begun the analysis of some Hanford materials. Furthermore, the use of supercritical CO2 as an alternative to the losson-ignition (LOI) experiment for the specific measurement of water is being evaluated. Another technique that is also being evaluated is neutron scattering.
- Research in proceeding on the use of acoustic resonance spectroscopy to support storage container surveillance. The technique is being demonstrated to show both increases in container pressure and the identity of the gases responsible for the pressure increase.
- The Core Technology Program (see discussion below) is proceeding. The corrosion research team is currently evaluating storage corrosion issues associated with gallium in chlorides. This information is of vital interest for the safe long term storage of actinide bearing materials currently in inventory.

Plutonium Focus Area Activities

Selected members of the Technical Advisory Panel (TAP) conducted a review of the Lead Laboratory Core Technology Program on Feb 6 & 7. Discussions were held to provide an overview of the program, the rationale for project selection, funding, and other programmatic issues. Five technical programs; Corrosion, Thermodynamics, Actinide/Surface Interactions, Plutonium Chemical State Changes, and Polymer Filtration were presented by each project Principal Investigator. The technical merit of each was considered; as well as linkage to potential or identified 94-1 needs, technical maturity, and technical achievements/issues. Eleven additional projects contained in the Core Technology program were presented, in lesser detail, by the Program Manager. A report of the review was prepared by the team and will be presented to the full TAP at its next regularly scheduled meeting on April 29, which will emphasize applied technologies in direct support of 94-1 milestones.

Additionally, seven new white papers were received by the Focus Area for consideration of their technical merit to be included as part of the Focus Area program. Two of the papers will be forwarded to the TAP for review and recommendation on April 29. Additional information concerning two other papers will be requested prior to completing the initial screening. The remaining papers do not address 94-1 concerns and will not receive further consideration as part of the 94-1 program.

The 1997 PFA Technology Summary (The Rainbow Book) draft was prepared in March 1997. This version of the technology summary will focus on the approaches taken to focus technology development based on compelling program requirements. The summary will provide an overview of the ongoing research and a close look at new research (Integrated Monitoring & Surveillance System, Recycled Scrap Metal, Cold Ceramification, Ash Trade Study and White Paper Process) started this year.

III. MILESTONE SUMMARY

Progress to Date: Milestones Summary

- 165 total milestones in Implementation Plan*
- 84 milestones completed since February 1995
 - 29 milestones completed early
 - 39 milestones completed on time
 - 16 milestones completed late
- 6 milestones past due
- * A complete listing of milestones is included as an attachment to this report.

Milestones Completed Late This Quarter

IP-3.6-002Complete Stabilization of Mk 31 Targets Via Dissolution in Savannah River
F-Canyon (September 1996)

During mid-1996, Westinghouse Savannah River Company investigated seismic structural concerns with the F- and H-Canyons. As a result, progress on stabilization was delayed due to restrictions on introducing new materials into the canyons until resolution of the seismic concerns. The issues related to F-Canyon were resolved in August, and processing of Mk 31 targets has progressed well since recommencement of dissolution activities. This milestone was completed January 2, 1997.

IP-3.2-012 Thermally Stabilize Backlog of Reactive Plutonium Oxides at Rocky Flats (October 1996)

> Delays were experienced due to emerging criticality concerns regarding storage of fissile material in the Building 371 stacker retriever and the storage of moderated residues in other vaults. Existing analyses did not adequately model either condition. These issues were resolved in late October, however, subsequent mechanical failure of the "XY Retriever" prevented movement of the last four plutonium metal items and 10 kg of plutonium oxide that remained to be stabilized and packaged. This milestone was completed on January 9, 1997.

Milestones Past Due

IP-3.2-045 Begin Repackaging Material to Meet Metal and Oxide Storage Standard at Lawrence Livermore National Laboratory (May 1996)

> Packaging <u>will begin in April 1998</u>. The original plans anticipated procurement of a full plutonium stabilization and packaging system. However, a full system would be costly relative to the small amount of material at LLNL. Livermore

has identified and will obtain sufficient stabilization and packaging equipment to complete stabilization and packaging by May 2002.

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

Upgrades to basin water chemistry have superseded the need for basin sludge consolidation and removal in the near term. An Implementation Plan revision reflecting this change will be prepared.

IP-3.6-033 Begin Stabilization of Mk-16/22 HEU SNF at Savannah River (November 1996)

Mk 16/22 spent fuel was scheduled to follow stabilization of Mk 31 targets. Stabilization of Mk 31 targets in the F-Canyon facility has been delayed due to canyon seismic issues. Additionally, more spent fuel (TRR/EBR-II) requiring processing has been added to the schedule. Mk 16/22 stabilization is now scheduled to commence in H-Canyon July 1997.

IP-3.2-042Complete the Plutonium ES&H Corrective Action Plan at LLNL (January 1997)IP-3.3-045Identify, characterize, and non-destructively assay all Pu items at LLNL
(January 1997)

Management shutdown of the Pu facility caused some operational delays. Additionally, the scope of the assessment of packaging has been increased to include 600 items of plutonium (those under 40 grams per item). These milestones are now expected to be complete in October 1997.

IP-3.6-036 Reorient Fuel in Savannah River K-Reactor Disassembly Basin to a Horizontal Configuration (February 1997)

> Reorientation of K-Basin fuel has been adversely impacted by recent construction craft staff reductions and problems with basin turbidity. These personnel reductions have delayed the removal of old racks in K-Basin which is necessary to permit rebundling of the fuel for horizontal storage. Additionally, suspended solids present in the basin reduce visibility during reorientation operations delaying overall progress. Reorientation is expected to be complete in May 1997.

165 Milestones (173 proposed)

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NMSTG Milestone Number	SIMS Cmt #	Key Milestones	Mat'l Group	iP Page #	DOE Site	Milestone	Due Date	Revised Due Date	Com <i>p</i> letion Date	Status	Code
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			RF - Bidg. 771 tank draining ORR completed August 1, 1995. First three tanks drained September 29, 1995.	
(P-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.	cc
IP-3.2-029	003		Pu Met/Ox	47	HAN	Complete detailed design, equipment procurement, and installation of a new repackaging system.	Dec 1998		<u> </u>	Procurement timing under review per the 1998 budget process. (January Prgm Review)	ww
IP-3.2-033	004	1	Pu Met/Ox	48	HAN	Start restabilizing high assay oxides at the PFP.	Jul 1999		<u> </u>		+
IP-3.2-030	005		Pu Met/Ox	47	HAN	Train staff, prepare procedures, perform operational readiness testing (prior to commencing operations).	Sep 1999				\uparrow
IP-3.2-031	006	*	Pu Met/Ox	47	HAN	Commence repackaging operations at Hanford.	Oct 1999				1
IP-3.2-032	007		Pu Met/Ox	47	HAN	Complete metal repackaging at Hanford.	Sep 2000		<u> </u>		1
IP-3.2-018	008		Pu Met/Ox	41 , 4 8, 50	HAN	Thermally stabilize and repackage all plutonium oxide to meet the metal and oxide storage standard.	May 2002				1
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 on June 13, 1995.	CE
IP-3.3-032	010	*	Pu Res	4, 67, 73	HAN	Stabilize 46 cans of selected ash from RF in the muffle fur naces.	Mar 1996		Jan 1996	Completed early in January 1996.	CE
IP-3.3-028	011	*	Pu Res	67	HAN	Stabilization of Polycubes begins.	Jul 1999			Currently on schedule (January Prgm Review)	+
IP-3.3-026	012	*	Pu Res	67	HAN	Stabilization of reactive solids (SS&C) completed.	Jan 2000				1
1P-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		1	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 on April 28, 1995.	CE
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 on May 16, 1995.	CE
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.	cc
IP-3.1-021	019	1.	Pu Soln	37	HAN	Complete solution technology development at Hanford Plutonium Finishing Plant (PFP).	Mar 1996	1	Apr 1996	Completed late in April 1996.	CL

165 Milestones (173 proposed)

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NMSTG Milestone Number	SIMS Cmt#	Key Milestones	Mat'l Group	IP Page #	DOE Site	Milestone	Due Date	Revised Due Date	Completion Date	Status	Code
IP-3.1-016	020		Pu Soln	36, 37	HAN	ROD issued for PFP Clean-out and Stabilization EIS.	Jun 1996		Jun 1996	Completed. ROD was approved on June 25, 1996 and published in the Federal register on July 10, 1996. (June 96 RPT)	cc
IP-3.1+022	021		Pu Soln	37	HAN	Begin processing solutions at PFP.	Jun 1997			Jun 97 date will not be met due to PFP curtaliment of fissile material movement. This milestone is expected by Sep 97. The rescheduled start is not expected to delay complete stabilization of 4,800 I of solution (IP-3,1-017) by Jan 99. (Mar 97 RPT)	w
IP-3.1-017	022	•	Pu Soln	3, 36, 37	HAN	Stabilization of 4,800 liters at PFP completed.	Jan 1999				1
IP-3.6-016	023		SNF	105	HAN	Complete cofferdam installation in K-West Basin	Feb 1995		Feb 1995	Completed February 1995; USQ package approved by DOE (RL) June 7, 1995.	cc
IP-3.6-014	024		ŚŃF	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. Published in the Federal Register on March 28, 1995.	co
IP-3.6-017	026		SNF	5, 105	HAN	Complete cofferdam installation in K-East Basin	Apr 1995		Apr 1995	Completed April 1995; USQ package approved by DOE (RL) June 7, 1995.	í cc
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.	CE
IP-3.6-018	028	+	SNF	5, 102, 105, 112	HAN	Start fuel characterization in K-Basin hot cells	Apr 1995		Apr 1995	Completed. Started fuel transfer to PNL & characterization on March 30, 1995.	CC
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. Schedule issued April 25, 1995.	CE
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 on March 4, 1996.	cı
IP-3.6-012	031	1	SNF	105, 112	HAN	Begin SNF and sludge removal from K-Basins.	Dec 1997			According to the contractors (Fluor-Daniel Hanford Company) review, this milestone will be about five months late. (Jan 97 RPT)	w
IP-3.6-001	032	. *	SNF	5, 96, 105, 112	HAN	Complete removal of all SNF from K-Basins.	Dec 1999			15 fuel elements from the KW-Basin to the 300 Area hot cells was completed. They were selected to span the damage state o the KW-Basin fuel inventory. Test to determined the cold vacuum drying and hot conditioning will begin in Mar 97. (Feb 97 RPT)	 w
IP-3.6-201	153	1.	SNF		HAN	Complete removal of all sludge from K-Basins.	Dec 2000			IP-3.6-201 added to separate original milestone, IP-3.6-001, into two parts; SNF removal (001) followed by sludge removal (201).	
IP-3.6-045	033	•	SNF	111	ID	Begin movement of CPP-603 South Basin SNF.	Jul 1995		May 1995	Completed early on May 12, 1995.	CE
IP-3,6-043	034	1.	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 on September 11, 1995.	CE

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NMSTG Milestone Number	SIMS Cmt#	Key Milestones	Mat'l Group	ip Page #	DOE Site	Milestone	Due Date	Revised Due Date	Completion Date	Status	Code
1P-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 on August 5, 1996.	CE
1P-3.6-046	036	•	SNF	111, 113	ID	Complete the removal of all SNF not requiring overpacking from CPP- 603.	Dec 1998				
1P-3.6-047	037	*	SNF	111, 113	ID	Construct and startup a CPP-603 dry storage overpacking station.	Dec 1998				\square
IP-3.6-005	038	*	SNF	96, 110,	ID	Remove all SNF from the CPP-603 Fuel Storage Facility.	Dec 2000				\Box
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.	co
IP-3.2-039	040		Pu Met/Ox	49	LANÉ	Integrate and demonstrate repackaging operations at the TA-55 plutonium facility at LANL.	Apr 1995		Apr 1995	Completed April 29, 1995. Cold operations demonstrated April 28, 1995; hot operations demonstrated June 1, 1995.	co
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; repackaging operations commenced May 1995.	c
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			The Pu stabilization and packaging have been in operation since late January. In Feb 97, 30 metal items containing 45.5 kg Pu was stabilized and made available for packaging DOE-STD- 3013 containers. (Feb 97 RPT)	~
IP-3.2-014	043	1	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				
IP-3.3-035	044		Pu Res	73	LANL	Perform 100% visual inspection of vault inventory.	May 1995		Apr 1995	Completed early on April 7, 1995.	CI
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 (January Prgm review)	cı
IP-ES-100	046	•	Pu Res	4	LANL	Stabilize 220 kgs of residues.	Oct 1995		Oct 1995	Completed in October 1995.	C
IP-3,3-037	047	*	Pu Res	74	LANL	Process 90% of analytical solutions.	Oct. 1995	1	Aug 1995	Completed early on August 31, 1985.	CI
IP-3.3-036	048		Pu Res	74	LANL	Recover 100 neutron sources.	Oct 1995		Apr 1995	Completed early on April 21, 1995.	CI
IP-3.3-038	049		Pu Res	74	LANL	Process 100 kgs of sand, slag and crucible materials.	Oct 1995		Apr 1995	Completed early on April 21, 1995.	C
IP-3.3-039	050		Pu Res	74	LANL	Process 70 kgs of hydroxide solids.	Oct 1995		Apr 1995	Completed early on April 21, 1995.	C
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."	C
IP-3.2-044	052		Pu Met/Ox	49	LLNL	Begin initial inspection of metal items.	Apr 1995		Apr 1995	Completed in April 1995. Inspections finished in November 1995.	C
IP-3.2-045	053	*	Pu Met/Öx	49	LLNL	Begin repackaging material to meet the metal and oxide storage standard	May 1996			Past Due. Milestone will have to be revised based on standard complex-wide procurement. Site estimates repackaging will begin in April 1998.	PI
4	1	1	1	1	1		1	1	1		1

A CONTRACT

NMSTG Milestone Number	SIMS Cmt #	Key Milestones	Mat'l Group	ip Page #	DOE Site	Milestone	Due Date	Revised Due Date	Completion Date	Status	Code
IP-3.2-042	054	•	Pu Met/Ox	49	LLNL	Complete the Plutonium ES&H Corrective Action Plan at LLNL.	Jan 1997			First component of this milestone was completed on January 1997. Second parts expected completion date is April 1997. (December 96 Bots)	PP
IP-3.2-043	055	ŀ	Pu Met/Ox	49	LLNL	Excess plutonium metal items at LLNL repackaged in compliance with DOE-STD-3013-94.	May 2002			This project is in the Preparation Phase. Additional 600 items were added to the scope of this assessment in an effort to assure a comprehensive assessment of the total inventory of Pu at LLNL, (Feb 97 RPT)	
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-3.3-042	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 November 1996. (Feb 97 RPT)}	CL
IP-3.3-045	058	·	Pu Res	73	LLNL	Identity, characterize, and non-destructively assay all Pu items.	Jan 1997			Due to facility delays this milestone is late. Expected completion date is April 1997 (December 96 Bots)	PP
IP-3.3-043	059	•	Pu Res	71	LLNL	Materials identified in the Pu ES&H Vulnerability study requiring stabilization will be processed during the first year of Phase 3 operations.	Apr 1997				
IP-3.3-041	060	·	Pu Res	4, 71, 73	LLNL	Stabilize and package all containers of ash/residue.	Apr 1998			Milestone is at its preparation phase as describe by the RFETS Trade Study. (Feb 97 RPT)	
IP-3.3-046	061	•	Pu Res	73	LLNL	Ship all excess items to LANL.	May 2002			Milestone to be deleted in a IP change. LLNL will process and store items.	1
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.	cc
IP-3.2-101	063	$ \cdot $	Pu Met/Ox	50	Mound	Repackage all plutonium metals and oxides to meet the DOE metal and oxide storage standard.	May 2002		Sep 1996	Completed September 26, 1996. All material shipped to LANL. (September 96 RPT)	cc
IP-ES-001	064		General	2	NMSTG	Issue a DNFSB 94-1 Integrated Program Plan.	Feb 1995	1	Feb 1995	Completed February 28, 1995.	cc
IP-ES-004	065	•	General	3	NMSTG	Research Committee established.	Mar 1995		Mar 1995	Completed March 15, 1995.	CC
IP-ES-005	066	•	General	3	NMSTĞ	Research Committee's comprehensive Research and Technology Development Plan issued (RC).	Nov 1995		Nov 1995	Completed November 30, 1995	сс
IP-ES-041	067		Gəneral	5	NMSTG	Complete the "Facilities Section" of the Integrated Program Plan (IWG).	Dec 1995		Nov 1995	Completed early on November 7, 1995	CE
IP-ES-006	068	1	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.	cc
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 on January 25, 1996.	CL
IP-3.6-100	071	1	SNF	100	NMSTG	Issue Final Programmatic SNF EIS.	Apr 1995		Apr 1995	Completed in April 1995.	cc
IP-3.6-053	072		SNF	100, 103,	NMSTG	Issue Programmatic SNF EIS ROD.	Jun 1995		Jun 1995	Completed. Published in Federal Register June 1, 1995.	cc
IP-3.6-006	073		SNF	99, 112	NMSTG	Issue the SNF Program Plan	Nov 1995		Nov 1995	Completed November 30, 1995	CC

NMSTG Milestone Number	SIMS Cmt#	Key Milestones	Mat'i Group	IP Page #	DOE Site	Milestone	Due Date	Revised Due Date	Completion Date	Status	Code
IP-3.6-008	074		SNF	100, 112	NMSTG	Issue Foreign Research Reactor SNF EIS ROD.	Dec 1995		May 1996	Completed late on May 13, 1996.	CL
IP-3.6-048	075	1	SNF	112	NMSTG	Environmental Management PEIS ROD issued	Sep 1995		Jun 1995	Completed early on June 1, 1995	CE
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.	1
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.	\top
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.	\uparrow
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			Actions planned in the preparation phase for the inspection an repackaging of Pu holdings are schedule. (Feb 97 RPT.)	đ
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.	cc
IP-3.5-003	084	•	Uranium	87, 92, 93	OR	Complete mechanical removal of HEU deposits at OR's K-25 Plant.	Sep 1997			Milestone completion date is uncertain. Mechanical removal is limited in use. (H. Johnson) New resource schedule and plans are being developed. The plan focuses on disposition of as many deposits as possible by end of FY 1997. (Jan. 97 RPT)	ww
IP-3.5-004	086	•	Uranium	87, 92, 93	OR	Complete chemical removal of remaining HEU deposits at OR's K-25 plant	Apr 1999				
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			Gas removal continued in January. Contingency plans have been initiated because final purging of gas will be difficult. (Jan. 97 RPT)	ww
IP-3.5-005A	170	1.	Uranium		OR	Complete MSRE uranium deposit removal.		Feb 1999		Denaturing of the Uranium deposit contained in the Auxiliary Charcoal Bed will start by end of April 1997, (Jan 97 RPT)	ww
IP-3.5-005B	171	•	Uranium		OR	Complete MSRE reactive gas and uranium deposit conversion.		May 2000		Proposed implementation Plan milestone addition. (September 96 RPT)	
IP-3.5-011	087	•	Uranium	92	OR	Fuel salts at OR's MSRE project removed.	May 2000			The D1 version of the CERCLA study was completed and issued to DOE. (Feb 97 RPT)	
IP-3.5-011A	172	•	Uranium		OR	Complete MSRE fuel salt removal.		May 2002			
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 on September 30, 1995. Late completion due to Bldg. 371 ventilation and Stacker/Retriever problems.	CL

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NMSTG Milestone Number	SIMS Cmt #	Key Milestones	Mat'i Group	IP Page #	DOE Site	Milestone	Due Date	Revised Due Date	Completion Date	Status	Code
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 on 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. (Jan 97 RPT)	CI
IP-3.2-012	091	† •	Pu Met/Ox	41, 50	RF	Thermally stabilize the existing backlog of all known reactive olutonium oxide at Rocky Flats. (Est.: 63 kgs.)	Oct 1996	Nov 1996	Jan 1997	Completed January 9, 1997. (Jan 97 RPT)	CI
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. Procurement priorities under review for 1998 budget. (Feb 97 RPT)	wv
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	!			1
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 on September 25, 1995.	CI
IP-3.3-008	095	•	Pu Res	63	RF	Vent 700 unvented residue drums.	Oct1996		Dec 1995	Completed early on December 22, 1995.	С
IP-3.3-015	096	+	Pu Res	4, 73	AF	Vent all inorganic residues.	Oct 1996		Dec 1995	Completed early on December 22, 1995.	CI
IP-3.3-016	097	•	Pu Res	4.73	BF	Vent all wet/miscellaneous residues	Oct 1996		Dec 1995	Completed early on December 22, 1995.	CI
IP-3.3-014	098	•	Pu Res	4, 63, 73	RF	Stabilize all sand, slag, and crucible materials and graphite fines.	May 1997	May 1998		Implementation Plan change approved August 20,1996.	
IP 3.3-014A	154	†	Pu Res		RF	BEGIN stabilization of SS&C and graphite fines.		Sep 1997		Implementation Plan change approved August 20,1996. On schedule. (Feb 97 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	' Feb 1998		Implementation Plan change approved August 20,1996. On schedule. (September. 96 RPT)	
IP-3.3-012A	155		Pu Res		ĤF	BEGIN stabilization by pyrochemical oxidation 6,000 kg higher-risk Pu salts.		Aug 1997		Implementation Plan change approved August 20,1996. On schedule. (Feb 97 RPT)	
IP-3.3-013	100	1	Pu Res	4, 61, 73	RF	Stabilize remaining high risk salts (4,000 kgs.) via chemical oxidation	Dec 1997	Jun 1998	1	Implementation Plan change approved August 20,1996. On schedule (Sentember 96 BPT)	<u></u>
IP-3.3-017	101		Pu Res	4, 61, 73	AF	Stabilize high risk combustibles (11,000 kgs).	Nov 1998	1		On schedule. (September, 96 RPT)	T
IP-ES-025	102		Pu Res	4, 63	RF	Repackage all Pu inorganic oxides and wet/miscellaneous residues (1,113 drums).	May 2002	2			
IP-3.1-004	103		Pu Soin	34, 37	RF	Complete NEPA analysis (an Environmental Assessment) for solution stabilization.	Apr 1995		Apr 1995	Completed April 28, 1995.	c
IP-3.1- 020A	156	•	Pu Soln		ĤÊ	START draining B771 hydroxide tanks and begin processing.	1	Nov 1996	Nov 1996	Milestone IP-3.1-020A was completed on November 4, 1996 when hydroxide precipitation processing was started. (Nov 96 RPT)	- CO
IP-3.1-020B	157		Pu Soln	1	RF	COMPLETE draining four (4) B771 hydroxide tanks.		Jan 1997	Aug 1996		C
IP-3.1-020C	158	•	Pu Soln		RF	COMPLETE B771 hydroxide precipitation process.		Mar 1997		80% of the 300 liters (239 liters) have been completed. (Feb 97 RPT)	
IP-3.1-020D	159		Pu Soln		RF	START draining five (5) B771 high level tanks and begin oxalate processing.		Nov 1997			T
IP-3.1-020E	160	•	Pu Soln		RF	COMPLETE processing liquids from B771 high level tank & bottles.		May 1998			
IP-3.1-020F	161		Pu Soin	1	RF	COMPLETE processing all liquids in B771		Sep 1998	1		

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NMSTG Milestone Number	SIMS Cmt #	Key Milestones	Mat'l Group	IP Page #	DOE Site	Milestone	Due Date	Revised Due Date	Completion Date	Status	Code
IP-3.1-020G	162	1.	Pu Soln		RF	START draining B371 tanks and begin processing.	1	Dec 1996	Dec 1996	Completed December 1996. (Jan 97 RPT)	cc
IP-3.1-020H	163	1.	Pu Soln	f	RF	COMPLETE draining six (6) B371 Cat B tanks.	<u>├</u> ──	Feb 1997	Feb 1997	Completed February 18, 1997 (Feb. 97 RPT)	CC
IP-3.1-020I	164	· ·	Pu Soln		RF	COMPLETE draining two (2) B371 criticality tanks.	<u> </u>	Jun 1997			<u>8</u> 60000
IP-3.1-020J	165	•	Pu Soln		RF	COMPLETE processing liquids from eight (8) B371 tanks.		Jun 1997			1
IP-3.1-020K	166		Pu Soln		RF	COMPLETE processing all liquids in B371.		Jun 1999			
IP-3.1-005	105	•	Pu Soln	34, 37	RF	All solutions in Building 771 (12,000 l.) stabilized.	Dec 1997	Sep 1998		CWTS have processed approximately 1,700 liters, bringing it to total of approximately 3,800 liters processed. (Feb 97 RPT)	
IP-3.1-006	106	·	Pu Soln	3, 34, 37	RF	18,000 I. of solutions in Building 371 stabilized.	Jun 1999				1-
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				\uparrow
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.	CL
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	Milestone IP-3,5-001 was completed on Nov. 8, 1996 when all HEUN solutions from B886 were shipped offsite. (November 96 RPT.)	cc
IP-ES-018	110		General	4	RF, SR, Mound	All Pu Metal in direct contact with plastic repackaged.	Sep 1996		Sep 1996	RF completed on November 14, 1995. SR completed November 1995. Mound September 1996.	CC
IP-3.2-100	111		General	101	SR	Final IMNM EIS issued.	May 1995		Oct 1995	Completed in May 1995. Issued for public distribution and NOA to EPA October 13, 1995. NOA in Federal Register October 20, 1995.	cc
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 on December 12, 1995. Added TRR fuel (82 cans).	CL
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 on November 20, 1995.	CE
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			On Schedules. (March PRG Rev)	
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	1.	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				
IP-3.3-021	117	1.	Pu Res	65	SR	Processing in F-Area begins.	Sep 1996		Jun 1996	Completed early in June 1996, however, the site does not expect to complete Pu residue processing on time.	CE
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			Ahead of schedule. (Jan 97 RPT.)	

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NMSTG Milestone Number	SIMS Cmt #	Key Milestones	Mat'l Group	IP Page #	DOE Site	Milestone	Due Date	Revised Due Date	Completion Date	Status	Code
IP-3.3-022	119	•	Pu Res	4, 65, 74	SR	Processing of existing inventories of SS&C material completed.	Dec 1997			On schedule. (January 97 RPT.)	ŴV
IP-ES-032	120	•	Pu Res	4, 65, 74	SR	Stabilize all other residues at SR.	May 2002			See IP-3.3-021. Although processing began ahead of schedule the site does not expect to complete Pu residue process on time due to conflicting E-canyon requirements	
IP-3.1-007	121	Τ	Pu Soln	35, 37	SR	ROD for the F-Canyon plutonium solutions issued.	Feb 1995		Feb 1995	Completed. ROD issued February 2, 1995.	cc
IP-3.1-008	122		Pu Soln	35, 37	SR	Begin F-Canyon processing operations.	Feb 1995		Feb 1995	Completed. Processing commenced February 3, 1995.	co
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 on April 11, 1996.	СГ
IP-3.1-011	124		Pu Soln	35, 37	SR	Begin H-Canyon stabilization operations.	Feb 1999			IP text change and milestone revision will be submitted under separate cover. (August 96 RPT.)	w
IP-3.1-013	125		Pu Soln	35	SR	SR's HB-Line Phase II start-up.	Feb 1999			IP text change and milestone revision will be submitted under separate cover. (August 96 RPT.)	wv
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 text change and milestone revision will be submitted under separate cover. (August 96 RPT.)	wv
IP-3.6-101	127		SNF	109	SR	Re-examine L-Basin corrosion surveillance coupons.	Feb 1995		Feb 1995	Completed in February 1995.	cc
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 on March 31, 1995.	CE
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 on November 29, 1995.	CE
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 on August 26, 1996. (August 96)	ςι
IP-3.6-032	131	•	SNF	107, 110,	SR	Begin Mk31 target stabilization in SR's F-Area.	Nov1995		Feb 1996	Completed late on February 12, 1996.	CL
IP-3.6-038	132	•	SNF	5,109,	SR	Complete K- & L-Reactor Disassembly Basin upgrades.	May 1996		May 1996	Completed May 31, 1996.	co
IP-3.6-002	133		SNF	5,96, 108,110,	SR	Complete stabilization of SR's Mk31 targets via dissolution in F- Canyon.	Sep 1996		Jan 1997	Completed MK-31 Processing on January 2, 1997	cı
IP-3.6-040	134		SNF	110	SR	Complete vacuum consolidation of SR's K-Reactor Disassembly Basin sludge.	Sep 1996			Past due. Work deferred because no longer necessary for water chemistry control. Expected completion date is July 1997. (December los BPT)	PF
IP-3.6-033	135	*	SNF	108, 110, 112	SR	Begin stabilization of SR's Mk16 and Mk22 HEU SNF.	Nov 1996			Past due. Start stabilization of Mk-16 & Mk-22 delayed because TRR & EBR-II added to F-Canyon schedule. Mk-31 transfers to F-Canyon delayed & concentration of resources on F-Canyon restart delay discolver availability. Expected July 97 (December 96 BPT)	PF
IP-3.6-036	136		SNF	109	SR	Reorient fuel in SR's K-Reactor Disassembly Basin to a horizontal configuration.	Feb 1997			Past due. (March PRG Rev)	PI
IP-3.6-041	137	1.	SNF	110	SR	Remove consolidated basin sludge from SR's K-Reactor Disassembly Basins.	Sep 1997			IP text change and milestone revision will be submitted under separate cover. (August 96 RPT.)	w
IP-3.6-042	138	1.	SNF	110	SR	Remove consolidated basin sludge from SR's L-Reactor Disassembly Basins.	/ Sep 1997			IP text change and milestone revision will be submitted under separate cover. (August 96 RPT.)	w

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NMSTG Milestone Number	SIMS Cmt #	Key Milestones	Mat'l Group	IP Page #	DOE Site	Milestone	Due Date	Revised Due Date	Completion Date	Status	Code
IP-3.6-003	139		SNF	5,96, 108,110,	SR	Complete dissolution of SR's Mk16 and MK22 SNF.	Nov 1999			See IP-3.6-033. SNF processing delay will cause delay in completion until April 2000. (August 96 RPT.)	ww
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			See IP-3.6-033. SNF processing delay will cause delay in completion until April 2000. (August 96 RPT.)	ww
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.	cc
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 on March 2, 1995.	CE
IP-ES-008	143		Spec Iso	3, B1	SR	Conceptual design report for the stabilization of Am/Cm Solutions completed.	Dec 1995		Nov 1995	Completed early on November 30, 1995	CE
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 ahead of schedule.	CE
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 Pu-242 stabilization on December 1996	CE
IP-3.4-015	146	·	Spec Iso	84	SR	Start vitrification of Am/Cm Solutions.	Mar 1998			Project delayed for at least 15 months due to melter failures. (Mar 97 PRG Rev)	ww
IP-3.4-016	147	·	Spec iso	3, 77, 80, 84	SR	Complete vitrification of Am/Cm Solutions.	Sep 1998			See IP-3.4-015 status. (Mar 97 PRG Rev.)	ww
IP-3.4-019	148		Spec Iso	84	SR	Begin stabilization of Np-237 Solutions HB-Line, Phase II.	Jul 2001			HB -Line, Phase II startup has been deleted. Solutions will be transported from H-Canyon to F-Canyon for vitrification in the Multi- Purpose Processing Facility (MPPF) after Am/Cm is stabilized. (August 96 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			IP text change and milestone revision will be submitted under separate cover. (August 96 RPT.)	ww
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. Surveillance and monitoring programs are in place and are ongoing.	° cc
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 on July 25, 1996.	cc
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				ww