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Washington, DC 20585

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DNF SAFETY BOARD

October 28, 1996

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 sixth 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 June 1 through August 31, 1996. As per our discussions, my deputy Mr. Ronald Izatt, will be my advocate in the management of these issues to achieve the successful completion of this important recommendation.

It should be noted that actions within the report anticipated for September completion, have now been completed. If you have any questions, please feel free to contact me or have your staff contact Mr. Frank Cole, Acting Director, Nuclear Materials Stabilization Task Group, (202) 586-5266.

Sincerely,

A handwritten signature in cursive script that reads "Alvin L. Alm".

Alvin L. Alm
Assistant Secretary
for Environmental Management

Enclosure





DEFENSE NUCLEAR FACILITIES SAFETY BOARD
RECOMMENDATION 94-1 IMPLEMENTATION

QUARTERLY REPORT

Covering the period
June 1 - August 31, 1996

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DNF SAFETY BOARD

Submitted: *G. Frank Cole* Date: 9/30/96
for G. Frank Cole
Acting Director
Nuclear Materials Stabilization Task Group

Reviewed,
Recommending
Approval: *Jill E. Lytle* Date: 10/9/96
for Jill E. Lytle
Deputy Assistant Secretary for
Nuclear Material and Facility Stabilization

Approved: *Alvin L. Alm* Date: 10/27/96
Alvin L. Alm
Assistant Secretary for
Environmental Management

I. PROGRAM OUTLOOK***Implementation Plan***

The Secretary has submitted to the Chairman, Defense Nuclear Facilities Safety Board (DNFSB), a proposed Implementation Plan change for Rocky Flats. Additional individual site Implementation Plan changes will be prepared in consultation with the DNFSB staff and briefed to the Board. A roll-up of the individual changes to the 94-1 Implementation Plan is planned in early calendar 1997.

Site Specific Program Issues and Major Activities**Rocky Flats**

Implementation Plan changes have been submitted to the Board for Rocky Flats, modifying three areas of the plan:

1. Highly-enriched uranium solutions will now be drained directly to bottles vice the original plan to blend down prior to shipment off-site. Because of delay in certifying the shipping containers, shipments of the uranium solutions will be completed by November 1996 instead of September 1996.
2. Schedules for solid residue stabilization have been revised to reflect delays in completion of higher risk salt stabilization by six months, from December 1997 to June 1998, and sand, slag, and crucible stabilization by one year, from May 1997 to May 1998.
3. Schedules for liquid residue stabilization have been revised to reflect a nine-month delay, from December 1997 to September 1998, in completion of stabilization activities in Building 771. Additional interim milestones have been added for Buildings 771 and 371.

Specific milestone changes and additions are included in the attached milestone list.

Savannah River

Over the past quarter, operation of the Savannah River canyons had been limited to stabilizing materials already within the canyons (small numbers of Mk31 target slugs, Pu-238 residues, and actinide solutions) due to recently identified seismic structural concerns. Under Secretary Grumbly, on August 20, 1996, authorized introduction of additional nuclear material into F-Canyon beginning August 26, 1996. A decision for H-Canyon is expected in November 1996. In parallel with examining the impacts of the canyon seismic issue, the Savannah River program managers at the Operations Office and Headquarters continue to examine the impacts of various scenarios for canyon utilization at the site. Any impacts and revisions to IP milestones will be reflected in an IP change.

A laboratory demonstration of the second generation Am/Cm test melter, used to support Am/Cm vitrification process development, was performed with inadequate conduct of operations by the research staff and experienced an equipment failure resulting in the destruction of the melter. The full schedule impact will not be completely evaluated until late October, but it is anticipated that the March 1998 schedule to begin vitrification of the Am and Cm will be significantly affected.

Richland

DOE and contractor management at the Plutonium Finishing Plant (PFP) are implementing breakthrough strategies to integrate stabilization activities with facility deactivation. These strategies include installing stabilization and packaging system equipment in the vault building rather than in PFP. These and other initiatives may result in changes to the methods and locations of stabilization activities. Once finalized, any changes from the breakthrough strategies will be included in an IP change.

Richland is delaying the stabilization of polycubes from the accelerated schedule identified in its June 1996 Site Integrated Stabilization Management Plan. Stabilization of polycubes will still be completed by January 2001, as scheduled in the Implementation Plan. Decelerating polycube stabilization will allow resources to be focused on higher priority solution stabilization and plutonium packaging needs, which are part of the 94-1 program.

Oak Ridge

Oak Ridge has submitted a draft implementation change to the NMSTG for the Molten Salt Reactor (MSRE) Project. In addition to the three original milestones, five new milestones are being proposed to align project progress with CERCLA activities involving the fuel salt and provide for a final stabilized disposition for both the fuel salt and uranium.

The K-25 Enriched Uranium Deposit Removal Program at Oak Ridge is under review at this time and could possibly result in Implementation Plan changes in the near future. Recent criticality assessments indicate that there may exist low enriched deposits in the K-29 Building that exceed risks imposed by the K-25 deposits. DOE is evaluating the K-29 criticality concerns to determine if reprioritizing deposit removal activities will be necessary.

Mound

A program review was conducted at Mound on May 8, 1996, at which the conclusion was reached that plutonium could be shipped to Los Alamos without significant repackaging thereby reducing repackaging costs by over \$500,000 and reducing the schedule by approximately 9 months. During the quarter Mound shipped 1.2 kg of plutonium to Richland and 1.3 kg to Los Alamos. The site is working toward shipment of all plutonium holdings to LANL by the end of September. The process of shipping and repackaging at the receiving site will accomplish Mound's milestone of repackaging all plutonium in contact with plastic by September 1996.

Plutonium Residues EIS

The current RFETS baseline path for residues satisfies DNFSB commitments for safe interim storage. However, for approximately 43 metric tons of the residue inventory, implementation of different options, in addition to or in place of those identified in the baseline, may be desirable in order to ensure that the resulting waste forms will meet the new safeguards and security requirements (issued on July 22, 1996, by the Office of Safeguards and Security, NN-51) and provide further advantages with respect to waste minimization and ALARA.

The Department intends to prepare 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 Notice of Intent (NOI) to conduct the EIS is currently in draft, and is expected to be issued in September 1996. The EIS is currently scheduled for completion in July 1997, and will have minimal impact, if any, to completion of baseline implementation plan milestones.

II. ACTIVITIES

Trade Studies

The following two trade studies have been chartered to determine the preferred method for dealing with certain residue materials located at Rocky Flats, LANL, Hanford, LLNL, and other sites. The objective of each study is to evaluate alternatives for treating a category of residues to an end-state suitable for disposition. An end-state is either plutonium metal or oxide suitable for storage per the standard or a form that meets criteria for disposal as waste. All of the studies evaluate worker risk, public risk, worker exposure, waste generation, discharge to the environment, cost, and timeliness as performance measures for comparison of options.

- Disposition of Ash (planned completion September 1996)
- Disposition of Combustibles (planned completion September 1996)

The completion of these studies has been delayed from their originally scheduled dates (Ash to be completed in June, and Combustibles in July) due to the need to modify the methods used to assess performance measures for the various alternatives being considered in each of the respective studies. The modified methods were needed to provide a more accurate assessment of the relatively new technologies associated with the various stabilization alternatives.

Plutonium Stabilization and Packaging Procurement Project

On March 11, 1996, the Oakland Operations Office awarded a \$54 million contract to BNFL, Inc. to provide the Department with plutonium stabilization and packaging equipment. During this quarter the design of the stabilization and packaging system was reviewed and approved; the System Design and System Specification Documents were approved; and the Quality

Assurance Program was approved. Authorization for fabrication of the prototype unit was granted. The prototype is to be delivered to the Rocky Flats Environmental Technology Site by March 21, 1997. Additionally, the plutonium storage package design was given preliminary approval. Prototype storage packages are being fabricated with testing scheduled for September 23-27, 1996. Final approval of the design depends on satisfactory completion of testing and review of the final test reports. The storage package meets the Department's criteria for long-term storage as defined in DOE-STD-3013-94 as well as all modifications presented in the draft DOE-STD-3013-96. The storage package exceeds ASME Boiler and Pressure Vessel Code criteria. Upon final approval of the design the storage package will become the Departmental standard for long-term storage of plutonium.

Research and Development Progress

As the Lead Laboratory for 94-1 plutonium R&D, Los Alamos issued a Technical Program Plan (TPP) outlining the research and development tasks and a work breakdown structure that supports the Research and Development Plan. In FY 1996 there are 180 milestones included in the funded portion of the TPP. 120 R&D milestones were planned through June 1996, with 108 completed as scheduled. The 12 missed milestones were a result of late starts due to personnel availability issues. Plans are in place to retain the appropriate personnel, and make up the missed milestones in the next quarter.

Technical Advisory Panel (TAP) Activities

The Technical Advisory Panel of the PFA is producing the 1996 94-1 R&D Plan scheduled for a September 30 delivery of a draft to the Task Group. This year's plan will narrow the focus of R&D efforts by reducing the alternatives under consideration consistent with results of completed trade studies. Also, traceability to 94-1 Implementation Milestones and derived R&D need dates will be documented formally in the Plan.

Fifteen white papers have been submitted to the PFA for review. Five have been sent by the TAP to the PFA Manager with recommendations, and two have been returned to authors requesting additional information for resubmission. The remaining white papers are under review by the TAP, which will provide recommendations on five papers to the PFA Manager by September 1996.

Additionally, the PFA has completed the first draft of a study investigating the feasibility of using radioactive scrap metal for fabricating the 3013 cans under the Plutonium Stabilization and Packaging System procurement.

III. MILESTONE SUMMARY

Progress to Date: Milestones Completed

- 165 milestones in Implementation Plan
- 69 completed
 - 26 early
 - 31 on time
 - 12 late
- 2 past due
- 8 at risk

A complete listing of milestones is included as an attachment to this report.

Milestones Completed Late This Quarter

IP-3.5-006 *Begin Blending and Shipping HEUN for Stabilization at Rocky Flats (May 1996)*

Beginning the bottling of HEUN in preparation for shipping the solutions off site began August 1996.

IP-3.6-037 *Complete Fuel Consolidation to Free Up Approximately 1,250 Additional Storage Spaces in Savannah River's RBOF (December 1995)*

Savannah River completed fuel consolidation to free up additional storage space in the Receiving Basin for Offsite Fuel (RBOF) in August 1996.

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 will begin in April 1998. 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 will obtain sufficient stabilization equipment to complete stabilization and packaging by May 2002. The materials will be packaged in the standard storage container to meet DOE-STD-3013. An IP change proposal has been directed to document the modified methodology and revised schedule.

IP-3.3-042 *Complete Trade-off Study to Develop Plans for the Stabilization and Packaging of Ash/Residues for Long-term Storage for Lawrence Livermore National Laboratory (April 1996).*

The Task Group has chartered an Ash Trade Study that addresses ash residues at all applicable sites. The requirements associated with Lawrence Livermore ash will be included in this study, which is scheduled for completion in September 1996. The results of this trade study, applicable to LLNL, will be included in the aforementioned IP change.

Milestones at Risk

Savannah River

The following milestones are at risk as a result of the delay associated with the canyon seismic issue, the review of various canyon utilization strategies or as specifically noted. Revised completion dates are being developed.

- IP-3.6-002 *Complete stabilization of Mk31 targets via dissolution in F-Canyon (September 1996)*
- IP-3.6-040 *Complete vacuum consolidation of Savannah River's K-Reactor Disassembly Basin Sludge (September 1996) - earlier water chemistry problems have been controlled through deionization.*
- IP-3.6-033 *Begin stabilization of Mk16 and Mk22 HEU SNF (November 1996)*
- IP-3.6-003 *Complete dissolution of Mk16 and Mk22 SNF (November 1999)*
- IP-3.6-004 *Complete stabilization of resultant uranium solutions from dissolution of Mk16/22 SNF (April 2000)*
- IP-3.1-011 *Begin processing H-Canyon plutonium solution (February 1999)*
- IP-3.1-013 *Startup HB-line Phase II (February 1999)*
- IP-3.1-012 *Complete processing H-Canyon plutonium solution (February 2000)*
- IP-3.4-015 *Begin Am/Cm stabilization (March 1998) - a modified schedule is being developed to accommodate additional equipment research and development requirements.*
- IP-3.4-016 *Complete Am/Cm stabilization (September 1998)*

DEPARTMENT OF ENERGY
NUCLEAR MATERIALS STABILIZATION TASK GROUP
DNFSB Recommendation 94-1 Implementation Plan Milestones
September 19, 1996

WORKING DRAFT

165 Milestones
(172 proposed)

| 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-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 - Bldg 771 tank draining ORR completed August 1, 1995. First three tanks drained September 29, 1995. | |
| 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. DOE-RL reported that the Milestone is being accomplished, since the overall issue of consolidated procurement of plant equipment has started and is developing information on specifications. | 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 | | | | |
| 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 | | | | |
| IP-3 2-031 | 006 | * | Pu Met/Ox | 47 | HAN | Commence repackaging operations at Hanford | Oct 1999 | | | | |
| IP-3 2-032 | 007 | * | Pu Met/Ox | 47 | HAN | Complete metal repackaging at Hanford | Sep 2000 | | | | |
| 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 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 furnaces | 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 | | | "Pyrolysis Furnace" and "Plutonium Stabilization and Handling" budget shortfall of ~ \$15M is being resolved (by the site) by "delaying polycube stabilization and " until costs can be absorbed in FY97 & FY98 budgets. (JUL 96 RPT) | |
| IP-3 3-026 | 012 | * | Pu Res | 67 | HAN | Stabilization of reactive solids (SS&C) completed | Jan 2000 | | | Impact of termination of safeguards control on cemented items with Pu concentrations less than 2 wt.% after they have been packaged according to TRU waste criteria needs to be evaluated and quantified for 94-1 IP. (JUN 96 RPT) | |
| IP-3 3-029 | 013 | * | Pu Res | 67, 73 | HAN | Stabilization of Polycubes completed. | Jan 2001 | | | | |

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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 3-027 | 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 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 | * | Pu Soln | 37 | HAN | Complete solution technology development at Hanford Plutonium Finishing Plant (PFP). | Mar 1996 | | Apr 1996 | Completed late in April 1996. | CL |
| 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 (JUN 96 RPT) | CC |
| IP-3 1-022 | 021 | * | Pu Soln | 37 | HAN | Begin processing solutions at PFP. | Jun 1997 | | | Vertical calcining test run # 6 completed in July 0.5 wt. % LOI continues to be met, but equipment problems prevent calcining full time. (JUL 96 RPT) | |
| IP-3 1-017 | 022 | * | Pu Soln | 3, 36, 37 | HAN | Stabilization of 4,800 liters at PFP completed | Jan 1999 | | | | |
| 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 | | SNF | 105 | HAN | Develop K-Basin potential funding options and an acquisition strategy, as appropriate | Mar 1995 | | Mar 1995 | Completed March 1995. | CC |
| 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 | CC |
| 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. | 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 |

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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 6-010 | 030 | | SNF | 101, 103, 105 | HAN | Issue "Management of SNF from the K-Basins" EIS ROD. | Dec 1995 | | Mar 1996 | Completed late on March 4, 1996 | CL |
| IP-3 6-012 | 031 | * | SNF | 105, 112 | HAN | Begin SNF and sludge removal from K-Basins | Dec 1997 | | | 39 of 49 CSB concrete placements completed CSB equipment is being reviewed Definition and implementation CSB design criteria has not been resolved - DNFSB June 11, 1996 (JUL 96 RPT) | WW |
| IP-3 6-001 | 032 | * | SNF | 5, 96, 105, 112 | HAN | Complete removal of all SNF from K-Basins | Dec 1999 | | | See IP-3 6-012 | WW |
| IP-3 6-201 | 153 | * | 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 | * | 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 |
| 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 on August 5, 1996 | CE |
| IP-3 6-046 | 036 | * | SNF | 111, 113 | ID | Complete the removal of all SNF not requiring overpacking from CPP-603 | Dec 1998 | | | Preparatory work is progressing Fuel movement plan is approved. Bucket fabrication and handling tool design is underway, safety documentation is being written, and tool mock-ups are being built for Phase VI, Group 4 and 5 fuel (MAY 96 RPT) | |
| IP-3 6-047 | 037 | * | SNF | 111, 113 | ID | Construct and startup a CPP-603 dry storage overpacking station | Dec 1998 | | | Fuel Canning Station installation was completed April 29, 1996. Storage canister deliveries have been delayed until June 1996 because of material shortages. The SO Test procedure was completed in April and testing is currently ongoing. (MAY 96 RPT) | |
| IP-3 6-005 | 038 | * | SNF | 96, 110, 112, 113 | ID | Remove all SNF from the CPP-603 Fuel Storage Facility | Dec 2000 | | | Aluminum plate fuel removal tooling 90% design review is issued. Fuel Movement Plan has been approved. Safety documentation preparation is progressing (May 1996 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 | CC |

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165 Milestones
(172 proposed)

| 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 2-039 | 040 | | Pu Met/Ox | 49 | LANL | Integrate and demonstrate repackaging operations at the 1A-55 plutonium facility at LANL | Apr 1995 | | Apr 1995 | Completed April 28, 1995 Cold operations demonstrated April 28, 1995, hot operations demonstrated June 1, 1995 | CC |
| 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 | CC |
| IP-3 2-035 | 042 | * | Pu Met/Ox | 48 | LANL | Stabilize and repackage high risk vault items to meet long-term storage standards | Sep 1997 | | | "Although several internal milestones appear to be at risk no IP milestones are projected to be at risk " Facility evaporator problems continue Pu solution are backlogged Operations Center Upgrade schedule is not "detailed" (JUL 96 RP1) | WW |
| 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 | | | | |
| 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 | CE |
| 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 | LANL is assisting sites on the specific application of LANL's method and criteria. Hanford has evaluated LANL's methodology and provided feedback to LANL. (HAN JUN 96 RPT) | CL |
| IP-ES-100 | 046 | * | Pu Res | 4 | LANL | Stabilize 220 kgs of residues | Oct 1995 | | Oct 1995 | Completed (if revision of milestone IP-3 3-040 is approved) Milestone is a roll-up of IP's-3 3-038, -039, & -040 | CC |
| IP-3 3-037 | 047 | * | Pu Res | 74 | LANL | Process 90% of analytical solutions | Oct 1995 | | Aug 1995 | Completed early on August 31, 1995. All analytical solutions processing will be completed by September 30, 1995 | CE |
| IP-3 3-036 | 048 | | Pu Res | 74 | LANL | Recover 100 neutron sources | Oct 1995 | | Apr 1995 | Completed early on April 21, 1995 | CE |
| 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 | CE |
| 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 | CE |
| 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." | CC |
| 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. | CC |
| IP-3 2-045 | 053 | * | Pu Met/Ox | 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 | PP |

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|------------------------|------------|----------------|-------------|-----------|----------|---|----------|------------------|-----------------|--|------|
| IP-3-2-042 | 054 | * | Pu Met/Ox | 49 | LLNL | Complete the Plutonium ES&H Corrective Action Plan at LLNL | Jan 1997 | | | 188 of 275 metal items are assessed. 24 assessments completed in July. 15 assessments will be completed per month hereafter to complete milestone by Sep 1997 due date (JUL 96 RPT) | WW |
| IP-3-2-043 | 055 | * | Pu Met/Ox | 49 | LLNL | Excess plutonium metal items at LLNL repackaged in compliance with DOE-STD-3013-94 | May 2002 | | | | |
| 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 | | | Past Due. On February 9, 1996 site reported having done some R&D work to analyze the effectiveness of stabilization technologies but did not intend to do a trade-off study | PP |
| IP-3-3-045 | 058 | * | Pu Res | 73 | LLNL | Identify, characterize, and non-destructively assay all Pu items | Jan 1997 | | | | |
| 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 | | | | |
| IP-3-3-046 | 061 | * | Pu Res | 73 | LLNL | Ship all excess items to LANL | May 2002 | | | Milestone to be deleted with submission of next qtrly rpt. LLNL will process and store items. | |
| IP-3-2-003 | 062 | * | Pu Met/Ox | 41, 50 | Mound | Repackage all plutonium metal in direct contact with plastic | Sep 1996 | | | Completed shipping Phase I materials to Hanford and 1.2 Kg of Pu calorimetry materials to LANL. U-233 material was shipped to OR. Shortage of DOT 9968 containers may impact completing shipping Pu by 9/30/96. (JUL 96 RPT) | |
| 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 | | | Site is on schedule to ship all excess Pu by June 30, 1997. (APR 96 RPT) | |
| IP-ES-001 | 064 | * | General | 2 | NMSTG | Issue a DNFSB 94-1 Integrated Program Plan | Feb 1995 | | 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 | NMSTG | Research Committee's comprehensive Research and Technology Development Plan issued (RC) | Nov 1995 | | Nov 1995 | Completed November 30, 1995 | CC |
| IP-ES-041 | 067 | * | General | 5 | NMSTG | Complete the "Facilities Section" of the Integrated Program Plan (IWG) | Dec 1995 | | Nov 1995 | Completed early on November 7, 1995 | CE |

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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 1996 | | | Plutonium Focus Area replaces Research Committee Pu Focus Area will update | |
| 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 | | 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, 112 | NMSTG | Issue Programmatic SNF EIS Record of Decision | 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 |
| 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 | | 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 Record of Decision | 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 | | | Preparation phase activities remain on schedule (JUL 96 RPT) | |

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| 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 30, 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 | | | The approach for placing Deposit Removal Project deposits in safe storage is being reevaluated in parallel with development of the project's incentive task order. Milestone change requests may be forthcoming (JUL 96 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 | | | Main cart fabrication is proceeding and is expected to be completed in October 1996 (vice August 1996 reported in June) (JUL 96 RPT) | WW |
| IP-3 5-004A | 167 | * | Uranium | | OR | Submit MSRE Fuel Salt Disposition Feasibility Study to EPA/TDEC | | Feb 1997 | | Proposed Implementation Plan milestone addition (AUG 1997) | |
| IP-3 5-004B | 168 | * | Uranium | | OR | Complete MSRE Off-gas System reactive gas removal | | Jun 1997 | | Proposed Implementation Plan milestone addition (AUG 1997) | |
| IP-3 5-004C | 169 | * | Uranium | | OR | Submit MSRE Fuel Salt ROD to EPA/TDEC | | Jan 1998 | | Proposed Implementation Plan milestone addition (AUG 1997) | |
| 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 | | | Nuclear Material Stabilization Program June 12, 1996 review supports a proposed MSRE program plan revision that will incorporate new technical information. The proposal includes four new 94-1 IP milestones to be proposed in August 1996. (JUN 96 RPT) | WW |
| IP-3 5-005A | 170 | * | Uranium | | OR | Complete MSRE uranium deposit removal | | Feb 1999 | | Proposed Implementation Plan milestone revision (AUG 1997) | |
| IP-3 5-005B | 171 | * | Uranium | | OR | Complete MSRE reactive gas and uranium deposit conversion | | May 2000 | | Proposed Implementation Plan milestone addition (AUG 1997) | |
| IP-3 5-011 | 087 | * | Uranium | 92 | OR | Fuel salts at OR's MSRE project removed | May 2000 | | | See Milestone IP-3-5-005 | |
| IP-3 5-011A | 172 | * | Uranium | | OR | Complete MSRE fuel salt removal | | Jun 2002 | | Proposed Implementation Plan milestone revision (AUG 1997) | |
| IP-3 5-011B | 173 | * | Uranium | | OR | MSRE stabilized fuel salt and uranium stored | | Feb 2003 | | Proposed Implementation Plan milestone addition (AUG 1997) | |
| 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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|-------------------------------|-------------------|-----------------------|--------------------|------------------|-----------------|---|-----------------|-------------------------|------------------------|--|-------------|
| 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 DNFSB staff informed November 15, 1995 | CL |
| 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 | | | Site management summary reports at risk, but attached IP summary reports on track (AUG 96 RPT) | RR |
| 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 (Estimate 63 kgs) | Oct 1996 | | | Quarterly Progress Chart indicates behind schedule, but IP summary reports on track (AUG 96 RPT) | WW |
| 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 | | | On schedule RF to receive prototype bagless transfer system. (JUN 96 RPT) | |
| IP-3 2-016 | 093 | * | Pu Met/Ox | 2, 41, 50 | RF | Thermally stabilize and repackage all plutonium oxide to meet the metal and oxide storage standard | May 2002 | | | | |
| 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 | CE |
| IP-3 3-008 | 095 | * | Pu Res | 63 | RF | Vent 700 unvented residue drums | Oct 1996 | | Dec 1995 | Completed early on December 22, 1995 | CE |
| IP-3 3-015 | 096 | * | Pu Res | 4, 73 | RF | Vent all inorganic residues | Oct 1996 | | Dec 1995 | Completed early on December 22, 1995 | CE |
| IP-3 3-016 | 097 | * | Pu Res | 4, 73 | RF | Vent all wet/miscellaneous residues | Oct 1996 | | Dec 1995 | Completed early on December 22, 1995 | CE |
| 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 | |
| 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 | |
| IP-3 3-012A | 155 | * | Pu Res | | RF | BEGIN stabilization by pyrochemical oxidation 6,000 kg higher risk Pu salts | | Aug 1997 | | Implementation Plan change approved August 20, 1996 | |
| IP-3 3-013 | 100 | * | Pu Res | 4, 61, 73 | RF | Stabilize remaining high risk salts (4,000 kgs) via chemical oxidation | Dec 1997 | Jun 1998 | | Implementation Plan change approved August 20, 1996 | |
| IP-3 3-017 | 101 | * | Pu Res | 4, 61, 73 | RF | Stabilize high risk combustibles (11,000 kgs) | Nov 1998 | | | On schedule. (JUN 96 RPT) | |
| IP-ES-025 | 102 | * | Pu Res | 4, 63 | RF | Repackage all Pu inorganic oxides and wet/miscellaneous residues (1,113 drums) | May 2002 | | | | |
| 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 | CC |

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| IP-3 1-020A | 156 | * | Pu Soln | | RF | START draining B771 hydroxide tanks and begin processing | | Nov 1996 | | Implementaion Plan change approved August 20, 1996 | |
| IP-3 1-020B | 157 | * | Pu Soln | | RF | COMPLETE draining four (4) B771 hydroxide tanks | | Jan 1997 | | Implementaion Plan change approved August 20, 1996. | |
| IP-3 1-020C | 158 | * | Pu Soln | | RF | COMPLETE B771 hydroxide precipitation process | | Mar 1997 | | Implementaion Plan change approved August 20, 1996 | |
| IP-3 1-020D | 159 | * | Pu Soln | | RF | START draining five (5) B771 high level tanks and begin oxalate processing | | Nov 1997 | | Implementaion Plan change approved August 20, 1996 | |
| IP-3 1-020E | 160 | * | Pu Soln | | RF | COMPLETE processing liquids from B771 high level tank & bottles. | | May 1998 | | Implementaion Plan change approved August 20, 1996 | |
| IP-3 1-020F | 161 | * | Pu Soln | | RF | COMPLETE processing all liquids in B771 | | Sep 1998 | | Implementaion Plan change approved August 20, 1996 | |
| IP-3 1-020G | 162 | * | Pu Soln | | RF | START draining B371 tanks and begin processing | | Dec 1996 | | Implementaion Plan change approved August 20, 1996 | |
| IP-3 1-020H | 163 | * | Pu Soln | | RF | COMPLETE draining six (6) B371 Cat B tanks | | Feb 1997 | | Implementaion Plan change approved August 20, 1996. | |
| IP-3 1-020I | 164 | * | Pu Soln | | RF | COMPLETE draining two (2) B371 criticality tanks. | | Jun 1997 | | Implementaion Plan change approved August 20, 1996. | |
| IP-3 1-020J | 165 | * | Pu Soln | | RF | COMPLETE processing liquids from eight (8) B371 tanks | | Jun 1997 | | Implementaion Plan change approved August 20, 1996. | |
| IP-3 1-020K | 166 | * | Pu Soln | | RF | COMPLETE processing all liquids in B371 | | Jun 1999 | | Implementaion Plan change approved August 20, 1996. | |
| IP-3 1-005 | 105 | * | Pu Soln | 34, 37 | RF | All solutions in Building 771 (12,000 l.) stabilized. | Dec 1997 | Sep 1998 | | Implementaion Plan change approved August 20, 1996. | |
| IP-3 1-006 | 106 | * | Pu Soln | 3, 34, 37 | RF | 18,000 l. of solutions in Building 371 stabilized. | Jun 1999 | | | On schedule (JUN 96 RPT) | |
| IP-3 1-003 | 107 | * | Pu Soln | 31 | RF | Place plutonium metal and oxide generated from stabilizing solutions at RF in a form suitable for safe storage. | May 2002 | | | | |

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| 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 | | | On schedule. (JUN 96 RPT) | WW |
| IP-ES-018 | 110 | * | General | 4 | RF, SR, Mound | All Pu Metal in direct contact with plastic repackaged | Sep 1996 | | | RF completed on November 14, 1995 SR completed November 1995 | |
| IP-3 2-100 | 111 | | General | 101 | SR | Final IMNM EIS issued. | May 1995 | | May 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 | | | Installation scheduled to begin ahead of schedule in June 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 | | | Site has restated milestone to "Startup new APSF/Vault and scheduled for July 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 | | | | |
| IP-3 3-021 | 117 | * | Pu Res | 65 | SR | Processing in F-Area begins. | Sep 1996 | | May 1996 | Completed early in May 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 | | | Digital radiography installation delay will delay completion of milestone until July 1998 (JUL RPT) | WW |

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| IP-3 3-022 | 119 | * | Pu Res | 4, 65, 74 | SR | Processing of existing inventories of SS&C material completed | Dec 1997 | | | 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 F-canyon requirements. | WW |
| 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 F-canyon requirements. | |
| 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 | 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 | CC |
| 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 | CL |
| IP-3 1-011 | 124 | * | Pu Soln | 35, 37 | SR | Begin H-Canyon stabilization operations. | Feb 1999 | | | H-Canyon restart is uncertain. There are seismic, budget and staffing concerns. | |
| IP-3 1-013 | 125 | | Pu Soln | 35 | SR | SR's HB-Line Phase II start-up | Feb 1999 | | | H-Canyon restart is uncertain. There are seismic, budget and staffing concerns. | |
| 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 | | | Stabilization decision may be dependent upon facility utilization decision. ROD to be issued will specify final strategy. | |
| 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 | | | Past Due. SR preparing milestone change request to read, "Repackage SNF in RBOF to provide 900 MTRE additional capacity by December 31, 1996 (JUN 96 RPT) | PP |
| 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 on February 12, 1996. | CL |
| 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 | CC |
| 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 | | | At Risk. Processing (15% complete) has been suspended due to seismic issue. Basis for recommended new January 1997 due date is receiving authorization to transfer Mk 31s for processing August 1, 1996. Slippage is day-for-day thereafter (JUL 96 RPT) | RR |

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| IP-3 6-040 | 134 | * | SNF | 110 | SR | Complete vacuum consolidation of SR's K-Reactor Disassembly Basin sludge. | Sep 1996 | | | At Risk. Interference has been caused by restowing MK31s in the basin. (JUL 96 RPT) | RR |
| IP-3 6-033 | 135 | * | SNF | 108, 110, 112 | SR | Begin stabilization of SR's Mk16 and Mk22 HEU SNF | Nov 1996 | | | At Risk. See IP-3 6-040. Additionally, inclusion of failed TRR/EBR-II material in F-Canyon schedule and concentration of resources on Phase II F-Canyon restart further delays dissolver availability (JUL 96 RPT) | RR |
| IP-3 6-036 | 136 | * | SNF | 109 | SR | Reorient fuel in SR's K-Reactor Disassembly Basin to a horizontal configuration. | Feb 1997 | | | Rack fabrication and installation completed 3/95. Fuel reorientation scheduled to begin 8/95 and to be completed by 12/95. | |
| IP-3 6-041 | 137 | * | SNF | 110 | SR | Remove consolidated basin sludge from SR's K-Reactor Disassembly Basins | Sep 1997 | | | Completing sludge removal on time is considered to be at risk by site. Recommended due date is September 1997. (JUL 96 RPT) | WW |
| IP-3 6-042 | 138 | * | SNF | 110 | SR | Remove consolidated basin sludge from SR's L-Reactor Disassembly Basins. | Sep 1997 | | | Completing sludge removal on time is considered to be at risk by site. Recommended due date is March 1997. (JUL 96 RPT) | WW |
| 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 of this milestone. (JUL 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 of this milestone. (JUL 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, 81 | 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 | | | Ahead of schedule. Stabilization scheduled to begin in July 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 | | | Ahead of schedule. Stabilization scheduled to be completed in December 1996. | |
| IP-3 4-015 | 146 | * | Spec Iso | 84 | SR | Start vitrification of Am/Cm Solutions | Mar 1998 | | | Completion will be delayed due to melter problem. (JUL 96 RPT) | 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. (JUL 96 RPT) | WW |
| IP-3 4-019 | 148 | * | Spec Iso | 84 | SR | Begin stabilization of Np-237 Solutions HB-Line, Phase II. | Jul 2001 | | | | |

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165 Milestones
(172 proposed)

| <i>NMSTG Milestone Number</i> | <i>SIMS Cmt #</i> | <i>Key Milestones</i> | <i>Mat'l Group</i> | <i>IP Page #</i> | <i>DOE Site</i> | <i>Milestone</i> | <i>Due Date</i> | <i>Revised Due Date</i> | <i>Completion Date</i> | <i>Status</i> | <i>C o d e</i> |
|-------------------------------|-------------------|-----------------------|--------------------|------------------|-----------------|---|-----------------|-------------------------|------------------------|---|----------------|
| IP-3.4-020 | 149 | * | Spec Iso | 3, 77, 84 | SR | Complete stabilization of Np-237 Solutions at HB-Line, Phase II | Dec 2002 | | | Site is projecting completion in September 2003 . Stabilization decision may be dependent upon facility utilization decision. ROD to be issued will specify final strategy (JUN & JUL 96 RPTS) | 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 | | | Potential sale negotiations to TVA may impact | WW |