

# Idaho Completion Project

## ***Clean/Close Radioactive Waste Management Complex***

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### ***Life-Cycle Baseline***

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WBS-A.1.03

**Approval/Concurrence**

RWMC Completion

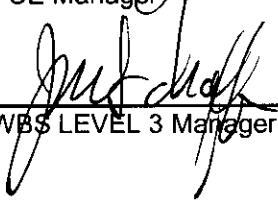
April 14, 2003

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## APPROVAL/CONCURRENCE

  
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PCE Manager

4-11-03  
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Date

  
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WBS LEVEL 3 Manager

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DOE-ID Chief Financial Officer  
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Date

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## **RWMC Completion**

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## Project Plan

## RWMC Completion

### PBS PLAN

#### 1.) Objective

The objective for this project will be the assessment, cleanup, and closure of the Radioactive Waste Management Complex (RWMC) within the Idaho National Engineering and Environmental Laboratory (INEEL), including demonstrating the retrieval of approximately 75 yd<sup>3</sup> of waste zone material with the glovebox excavator method; appropriate remediation of the Subsurface Disposal Area (SDA); deactivation, decontamination and decommissioning (D&D&D) of most of the facilities and infrastructure currently in place and those that will be built to support closure activities; and the characterization and removal of remote-handled (RH) transuranic (TRU) waste. This project breakdown schedule (PBS) will directly support the requirements of the *Federal Facility Agreement and Consent Order for the Idaho National Engineering and Environmental Laboratory*, which implements the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) at the INEEL.

#### 2.) Technical Content

**The major products and deliverables for this PBS are:**

SP0 – Project Support & Facility Authority – A.1.03.00.00

- Submit final Master Schedule to INEEL Planning and Controls by March each fiscal year (FY).
- Submit final RWMC Program Life-Cycle Baseline (LCB) planning packages by January each fiscal year.
- Submit final detailed work plan (DWP) by September each fiscal year.
- Submit the annual RWMC Safety Analysis Report (SAR) update to the U.S. Department of Energy Idaho Operations Office (DOE-ID) by August 31, 2003. The FY 2003 RWMC SAR will be an accurate description of the facility under the operational control of Management and Operations.
- Submit Class I Permit Modification to the State of Idaho, February 17, 2003.

SP1 – RH TRU to WIPP – A.1.03.00.01

- Project management and administration
- Transuranic waste disposition technical integration and support
- Retrieval of stored RH TRU waste from the Intermediate-Level Transuranic Storage Facility (ILTSF)
- Design, construction, startup, and implementation of Waste Management Facility (WMF) -628 facility modifications and nonintrusive characterization systems
- Design, construction, startup, and implementation of RH TRU waste intrusive characterization systems
- Design, construction, and startup of RH TRU waste transportation systems

- INEEL Site Certification Authorization for characterization and transportation of RH TRU waste
- Characterization and certification of RH TRU waste in accordance with Waste Isolation Pilot Plant (WIPP) requirements
- Shipment of RH TRU waste to WIPP
- Project deactivation and closeout.

SP2 – Subsurface Disposal Area – A.1.03.00.02

- Remedial investigation and baseline risk assessment (RI/BRA) report
- Feasibility study report
- Record of decision (ROD)
- Remedial design and remedial action (RD/RA) work plan
- Preliminary (Title I) remedial design
- Detailed (Title II) remedial design
- Construction and operation of remedial systems for in situ thermal desorption (ISTD); in situ grouting (ISG); excavation, retrieval, treatment, and disposal; and surface barriers, including vapor collection and treatment systems
- Operational readiness review report
- System prefinal and final inspection report
- Deactivation, decontamination, and decommissioning plan
- Snow removal and snow removal procedures to minimize SDA infiltration
- Engineering plan for drainage control to minimize SDA infiltration.

SP3 – OU 7-10 – A.1.03.00.03

- Operable Unit (OU) 7-10 Glovebox Excavator Method Project remedial action report.
- OU 7-10 Glovebox Excavator Method Project operations and maintenance report.
- OU 7-10 Glovebox Excavator Method Project closeout documentation.
- Stage III
  - Environment, Safety, Health, and Quality Assurance (ESH&QA) (environmental checklist; acceptable knowledge documentation; air emissions evaluation; waste management and minimization plan; explanation of significant differences to the OU 7-10 [Pit 9] ROD; emissions monitoring plan; applicable of relevant and appropriate requirements (ARARs) matrix; WIPP waste certification program; U.S. Department of Energy (DOE) Order 435, “Radioactive Waste Management”; compliance assessment; data quality objectives; field sampling plan; preliminary hazards analysis; source term analysis; preliminary documented

safety analysis (PDSA); preliminary criticality safety evaluation (PCSE); final documented safety analysis (FDSA); RWMC SAR revision; health and safety plan for mock-up activities; health and safety plan for construction; health and safety plan for operations; health and safety plan for D&D&D; preliminary fire hazards analysis; final fire hazards analysis; equivalency documents to support the conceptual design concept; radiological control of contamination zones engineering design file; emergency planning; preliminary emergency hazard evaluation; final emergency hazard evaluation; preliminary security plan; and final security plan).

- Design Engineering (requirements documents [i.e., mission need analysis, technical and functional requirements, system design criteria, system design descriptions], conceptual design report, preliminary drawings and outline specifications, mockup drawings and specifications, and final design drawings and specifications).
  - Procurement (acquisition plan for long-lead components and construction activities and subcontracts for design activities).
  - Construction (resource evaluation for future construction [i.e., any unique resource requirements], constructability review and evaluation, field tours and investigations, construction schedule, and construction execution [i.e., retrieval building, treatment building, and infrastructure and miscellaneous]).
  - Safe shutdown and D&D&D (safe shutdown and D&D&D plan and D&D&D operations).
  - Operations (operations schedule; operations procedures and training; retrieval, treatment, and disposal operations; integrated test plan; startup plan and report; maintenance and operation plan; and remedial action report).
  - Project management and administration (i.e., preliminary project execution plan [PEP], system engineering management plan, acquisition plan, Davis-Bacon committee case record, project files and records management, interface agreements, research and development interface management, training plan, RD/RA work plan submittal, yearly work planning estimates and schedules), Critical Decision (CD) -0 submittal (i.e., mission need documents [outline of scope definition, preliminary technical performance requirements, planning schedule and milestones, planning cost estimate for total project cost, preliminary project risk assessment, CERCLA and regulatory strategy, project technical and organizational interfaces, and preliminary life-cycle costs]), CD-1 documentation (i.e., conceptual design report, preliminary acquisition plan, risk management plan, preliminary PEP, project data sheet, and independent project review), CD-2 documentation (i.e., acquisition plan, risk management plan, PEP, and independent project review), CD-3 documentation (i.e., update PEP, independent project review, and external independent review to support CD-3), CD-4 documentation (i.e., management self-assessment closeout report and operational readiness review closeout report, and project final closeout plan, and project completion report).
- Complete Pit 9 litigation trial and post judgment motions in the United States District Court for the District of Idaho (completion is anticipated by March 2004).
  - Defend or prosecute any Pit 9 appeal arising from the judgment rendered by the United States District Court for the District of Idaho.
  - Continued support throughout the trial from the Pit 9 program office.
  - Close out the Pit 9 project files, currently being maintained at the INEEL and Oles, Morrison, Rinker, and Baker in Seattle, Washington (completion is anticipated by June 2004).

- Maintain an inactive OU 7-10 construction site in a safe configuration, compliant with the Integrated Safety Management System (ISMS).

**SP5 – RWMC Excess Facilities Disposition and D&D&D – A.1.03.00.05**

- Deactivation, decontamination, and decommissioning plans
- Final D&D&D reports.

**3.) PBS Work Statement for FY 2004 to Project End**

The Clean/Close RWMC PBS consists of five subprojects: SP0 – Project Support & Facility Authority, SP1 – RH TRU to WIPP, SP2 – Subsurface Disposal Area, SP3 – OU 7-10, and SP5 – RWMC Excess Facilities Disposition and D&D&D. SP4 was the 3,100 m<sup>3</sup> Project, which is now complete. These subprojects are described in the following sections:

**SP0 – Project Support & Facility Authority – A.1.03.00.00**

This subproject consists of the facility management and infrastructure to ensure RWMC TRU waste and SDA remediation operations are performed in a safe and environmentally responsible manner. Specifically, this subproject provides landlord functions and maintenance for RWMC base facility structures, systems, and components; implementation of institutional plans for ESH&QA; capital equipment needs and SP0 project and RWMC facility management support.

Support necessary for the management of the Clean/Close RWMC Project and Bechtel BWXT Idaho, LLC, (BBWI) technical services and interface functions for the Advanced Mixed Waste Treatment Project (AMWTP) are also provided. The projected end date for AMWTP Resource Conservation and Recovery Act (RCRA) closure and D&D&D/RCRA closure is the end of FY 2015, at which time contractual support functions provided by Management and Operations end and D&D&D operations for RWMC Base Facility commence.

The RWMC Base Facility is defined as RWMC infrastructure including the following:

Administration Area including: WMF-611, Old Guardhouse; WMF-613, Waste Management Facility Office Building; WMF-619, Communications Building; WMF-622, Office Annex; WMF-637, Operations Control Building; WMF-653, Office Annex #2; and WMF-658, DOE/RWMC Office Facility.

Operations Area including: WMF-601, Radiation Control Field Office; WMF-602, RWMC Highbay; WMF-603, Potable Water Pump-house; WMF-709, Potable Water Storage Tank; WMF-604, Change House and Lunchroom; WMF-609, Heavy Equipment Storage Shed; WMF-620, Work Control Center Trailer; WMF-621, Work Control Support Trailer; WMF-639, Fire Water Pump-house and WMF-727, Fire Water Storage Tank; WMF-645, Construction Support Trailer; WMF-646, Field Support Trailer; WMF-655, Material Handling Facility; WMF-656, RWMC Maintenance Facility; WMF-657, Construction Field Support Trailer; and WMF-661, Chemical Storage Bunker.

Transuranic Storage Area (TSA) Facilities including: WMF-628, Waste Storage Facility (WSF) Type II Storage Module; WMF-648, ILTSF Vault Monitoring Trailer; WMF-714, ILTSF Pad 1; and WMF-720, ILTSF Pad 2.

SDA Area including: WMF-605, Well House No. 87; WMF-649, Vapor Vacuum Extraction Monitoring Well; WMF-650, Vapor Vacuum Extraction Monitoring Well. (Note: These facilities are not included within the RWMC Base Facility starting after FY 2015 for the purpose of identifying them for D&D&D).

The following describe the scope of work to be performed in each of the following nine control accounts:

- A.1.03.00.00.01 RWMC Project/PBS Management:

Provides maintenance of the RWMC long-range and end-state plans (RWMC strategic plan) and RWMC subproject management and coordination. Project support functions, including control of schedules and cost accounts, planning, budgeting, and development of progress reports to DOE-ID and BBWI upper level management also are provided.
- A.1.03.00.00.02 RWMC Facility/SP0 Project Management:

Provides SP0 project and facility management and infrastructure to ensure RWMC base facility operations are performed in a safe and environmentally responsible manner. Facility project controls and scheduling support also are provided.
- A.1.03.00.00.03 ESH&QA Compliance:

Provides ESH&QA support for RWMC project support and facility authority (SP0) activities at the RWMC. Training of RWMC Base Facility personnel also is provided.
- A.1.03.00.00.04 Engineering Management:

Provides system, structure, and component (SSC) engineering management, SSC configuration management, RWMC Base Facility radiological monitoring equipment maintenance, and records management and document support services for RWMC SP0 project and facility management.
- A.1.03.00.00.05 RWMC Landlord:

Provides landlord operations services and facility maintenance charges for RWMC Base Facility.
- A.1.03.00.00.06 RWMC Capital Equipment:

Procures new and replacement capital equipment to support the RWMC SP0 subproject.
- A.1.03.00.00.07 AMWTP BBWI Technical Support:

Provides support for the BBWI level-of-effort technical support and support services for the AMWTP. The INEEL Site Treatment Plan and the 1995 Settlement Agreement with the State of Idaho require the operation of the AMWTP. This work also supports the AMWTP Tri-party Memorandum of Agreement (MOA). This Control Account also includes: 1) DOE-ID AMWTP funds for the oversight & administration of the AMWTP contract and payment for processing and loading services for the transportation of 65,000m<sup>3</sup> of transuranic and alpha contaminated mixed waste stored at the INEEL by BNFL, Inc. and, 2) FY 2004 dollars held for the AMWTP asset acquisition project (privatized).
- A.1.03.00.00.08 RWMC Waste Storage Operations:

Provides for inspection of RH TRU waste storage vaults at the ILTSF vaults at the RWMC, and receipt, inspection, and management of TRU-contaminated waste rejected by the AMWTP at the WMF-628 Type II storage module. . This Control Account also provides offsite disposal of Dry Rod Consolidation Technology (DRCT) fuel skeleton waste, currently stored at ILTSF.
- A.1.03.00.00.09 RWMC Computer and Communication Systems:

Provides computer maintenance, server administration, and data network maintenance for RWMC Base Facility structures and personnel. It also provides coordination for similar activities that support other RWMC subprojects: SP1 – RH TRU to WIPP, SP2 – SDA, SP3 – OU 7-10, and SP5 – Excess Facility Disposition and D&D&D.

## SP1 – RH TRU to WIPP – A.1.03.00.01

The INEEL is preparing to disposition stored RH TRU waste in compliance with the DOE 1995 Settlement Agreement, INEEL Site Treatment Plan, and WIPP requirements, and in accordance with the INEEL Accelerated Cleanup Plan objectives. The SP1 subproject – RH TRU to WIPP, provides for disposition of stored RH TRU waste in accordance with WIPP waste acceptance criteria (WAC) and waste analysis plan (WAP) requirements.

Major objectives for this subproject include:

- Retrieval of stored RH TRU waste from ILTSF
- Design, construction, startup, and implementation of WMF-628 facility modifications and nonintrusive characterization systems
- Design, construction, startup, and implementation of RH TRU waste intrusive characterization systems
- Design, construction, and startup of RH TRU waste transportation systems
- INEEL site certification authorization for characterization and transportation of RH TRU waste
- Characterization and certification of RH TRU waste in accordance with WIPP requirements
- Shipment of RH TRU waste to WIPP
- Project deactivation and closeout.

The technical approach for the RH TRU to WIPP subproject is described below:

The RH TRU waste disposition processing strategy was developed by the INEEL to use existing systems and infrastructure as much as practicable. Modifications to RWMC facilities will be required to incorporate process-specific unit operations, and transportation capabilities. Based on available waste characterization information and draft WIPP WAC and WAP requirements for RH TRU waste, it is expected that a portion of the inventory will not require repackaging or intrusive characterization. In addition, it is expected that the remaining inventory will require repackaging or intrusive characterization before shipment to WIPP. The RH TRU waste disposition process has been divided into two distinct phases based on expected characterization and transportation methods, which are dependent on the attributes of the waste.

Phase I includes implementation of nonintrusive characterization systems and CNS 10-160B cask loading capabilities in WMF-628. Specific unit operations include a headspace gas sampling system, nondestructive assay system, nondestructive examination system, and CNS 10-160B payload assembly and loading systems. Infrastructure upgrades include installation of shielding walls, heating, and insulation in WMF-628 to allow all-weather production operations. Implementation of Phase I capabilities will be managed as a general plant project with conceptual and detailed design activities completed in FY 2003, and construction and startup activities completed in FY 2004.

Phase II includes implementation of intrusive characterization systems and RH-72B cask loading capabilities in WMF-628. Specific unit operations include a drum venting system, repackaging system, and RH-72B payload assembly and loading systems. The repackaging system will use a shielded modular glovebox system to open, visually examine, and repack RH TRU waste. Loading the RH-72B cask will use a horizontal loading system being jointly developed at the Los Alamos National Laboratory and WIPP. Implementation of Phase II capabilities is assumed to require line item construction project funding, with preconceptual activities beginning in FY 2004.

Completion of construction and startup activities in accordance with DOE Order 413.3, "Program and Project Management for the Acquisition of Capital Assets," is planned for FY 2008.

This subproject consists of six control accounts necessary to meet *INEEL Accelerated Cleanup Plan* schedules for initiating shipments of RH TRU waste to WIPP in FY 2005 and completing shipments in FY 2011. These control accounts include RH TRU Administration and Site Project Office, RH TRU Nonintrusive Characterization Systems Implementation, RH TRU Intrusive Characterization Systems Implementation, RH TRU Waste Retrieval Systems and Operations, RH TRU Waste Characterization Systems and Operations, and RH TRU Waste Transportation Systems and Operations. The following subsections describe the scope of work to be performed in each control account:

- A.1.03.00.01.01 – RH TRU Administration and Site Project Office

Provides for project planning and administration, TRU waste disposition technical integration and support to National and local programs, quality assurance, site RH TRU waste certification authorization, RH TRU Site Project Office operations, training, RH TRU systems authorization basis modifications and implementation, and project deactivation and closeout in accordance with WIPP WAC and WAP requirements.

- A.1.03.00.01.02 – RH TRU Nonintrusive Characterization Systems Implementation

Provides for design, construction, turnover, and startup of facilities and equipment required for nonintrusive characterization and transportation of RH TRU waste using the CNS 10-160B cask.

- A.1.03.00.01.03 – RH TRU Intrusive Characterization Systems Implementation

Provides for design, construction, and turnover of facilities and equipment required for intrusive characterization and transportation of RH TRU waste using the RH-72B cask.

- A.1.03.00.01.04 – RH TRU Waste Retrieval Systems and Operations

Provides for retrieval of RH TRU waste stored in the ILTSF vaults at the RWMC, including design and procurement of shielded overpacks to support RH TRU waste retrieval operations, retrieval of stored RH TRU waste, and retrieval and transportation of specialized components called Hot Fuel Examination Facility (HFEF) inserts from ILTSF (RWMC) to Argonne National Laboratory-West (ANL-W).

- A.1.03.00.01.05 – RH TRU Waste Characterization Systems and Operations

Provides for RH TRU waste characterization in accordance with WIPP WAC and WAP requirements, including developing and maintaining acceptable knowledge (AK) documentation and developing capabilities to perform RH TRU waste intrusive and nonintrusive characterization operations.

- A.1.03.00.01.06 – RH TRU Waste Transportation Systems and Operations

Provides for RH TRU waste transportation in accordance with WIPP WAC and WAP requirements and developing capabilities to perform RH TRU waste transportation using the CNS 10-160B and RH-72B casks.

#### SP2 – Subsurface Disposal Area – A.1.03.00.02

The scope of work for the SDA subproject consists of (1) continuation of the CERCLA process in evaluating alternatives to remediate the SDA by working toward a final solution through mutual agreements, (2) conducting a strong operational awareness program, and (3) conducting self-assessments and independent evaluations to complete the OU 7-13/14 ROD.

After the OU 7-13/14 ROD is in place and set, the RD/RA phases will be conducted within the CERCLA guidelines and in compliance with the elements of applicable DOE orders and federal and state regulations.

This subproject consists of five control accounts necessary to remediate the SDA. These control accounts include: OU 7-13/14 ROD; OU 7-13/14 Remedial Design; OU 7-13/14 Remedial Action; OU 7-13/14 Management and Administration; and OU 7-13/14 Early Actions. The following describe the scope of work to be performed in each control account:

- A.1.03.00.02.01 – OU 7-13/14 ROD

This control account consists of four major work areas necessary to achieve a ROD that will define the alternative used to remediate the RWMC SDA. These major areas of work include (1) RI/BRA, (2) feasibility study, (3) decision-making activities, and (4) preremedial design studies.

- A.1.03.00.02.02 – OU 7-13/14 Remedial Design

This control account consists of four major work areas necessary to remediate the SDA. These include remedial design for ISTD; ISG; excavation, retrieval, treatment, and disposal; and surface barriers.

- A.1.03.00.02.03 – OU 7-13/14 Remedial Action

This control account consists of five major work areas necessary to remediate the SDA. These include remedial action for ISTD; ISG; excavation, retrieval, treatment, and disposal; surface barriers; and surveillance, monitoring and maintenance.

- A.1.03.00.02.04 – OU 7-13/14 Management and Administration

Work scope for OU 7-13/14 management and administration will remain consistent from FY 2004 through 2006. In FY 2006, the RI/BRA, feasibility study, proposed plan and ROD will have been finalized and submitted; therefore, management and administration activities will be directed at Stage II operations in the out years (FY 2007 and beyond). This control account supports completion of all activities associated with remediation of the SDA.

- A.1.03.00.02.05 – Early Actions

This control account will plan, develop, and implement early actions to minimize release of contaminants from the SDA to reduce risk associated with activation and fission products. Certain activation and fission products from buried waste pose an increased risk because they are highly mobile. Early actions are targeted to minimize infiltration and isolate contaminant sources to reduce mobility and produce an immediate risk reduction.

#### SP3 – OU 7-10 – A.1.03.00.03

This subproject comprises the OU 7-10 Glovebox Excavator Method Project, OU 7-10 Stage III Project, and RWMC subcontract management control accounts. Work scope performed by this subproject is required to:

- Comply with the OU 7-10 ROD as modified by the 1998 Explanation of Significant Differences document, which is referred to as the OU 7-10 Interim ROD
- Comply with the 2002 Agreement to Resolve Disputes.

Scopes of work to be performed in each control account are listed below:

- A.1.03.00.03.01 OU 7-10 Glovebox Excavator Method Project:

The OU 7-10 ROD specifies retrieval of TRU waste from OU 7-10. The OU 7-10 Glovebox Excavator Method Project is an identified, feasible approach for conducting a retrieval demonstration within OU 7-10. Project facilities were designed in FY 2002 and construction, testing, startup, and initial operations will be completed in FY 2003. Work scope for this project consists of the following:

- Demonstrate retrieval of approximately 75 yd<sup>3</sup> of waste zone material
- Provide information on contamination present in the underburden by sampling and analyzing the underburden
- Characterize waste zone material for safe and compliant storage
- Package and store waste onsite, pending final disposition
- Complete drum assay of the repacked waste and storage of the waste containers in WMF-628
- Perform preliminary decontamination of the project Retrieval Confinement Structure and Packaging Glovebox System
- Grout the excavated pit
- Place the project facility in a layup condition in preparation for decontamination and dismantlement
- Deactivate, decontaminate, and dismantle the project facility and dispose of or store the radiologically contaminated material and dispose of the nonradiologically contaminated material
- Develop and submit the remedial action report
- Closeout the project.

- A.1.03.00.03.02 OU 7-10 Stage III Project:

The OU 7-10 Interim ROD identifies a three-stage approach to remediation of OU 7-10. Stage I focused on subsurface investigation. Stage II, as modified under the 2002 Agreement to Resolve Disputes, will be accomplished by the OU 7-10 Glovebox Excavator Method Project. Stage III consists of full-scale retrieval and treatment of OU 7-10 to meet remediation goals set in the OU 7-10 ROD. In addition, the retrieval and treatment processes will be planned around a bounding hazardous and radiological waste inventory such that the design can be applied to any of the TRU pits and trenches. Treatment technologies will be based on achieving the hazardous contaminant delisting levels specified in the ROD. In addition, the contaminants of concern identified in the *Ancillary Basis for the Risk Assessment* will be evaluated for inclusion in the treatment processes, as appropriate.

Stage III is a major system project as defined by DOE Order 413.3; consequently, scope to be performed is matched to the CD process as defined by the order as follows:

- CD 0 – Approve Mission Need

To obtain approval of CD-0, two documents must be prepared: (1) a justification of mission need and (2) an acquisition strategy. These documents will be based on requirements definition, preliminary hazard and risk assessments, technology development planning, and a preconceptual retrieval and treatment alternative design trade study that will recommend the preferred design alternative.

- CD-1 – Approve Preliminary Baseline Range

Conceptual design will be performed before CD-1, resulting in a conceptual design report, acquisition plan, and preliminary execution plan that will be used to support making CD-1. Other documents developed during this stage will be the draft PDSA, the preliminary fire hazards analysis, PCSE, preliminary waste management plan, system design descriptions, data quality objectives, interface control documents, environmental checklist, preliminary risk management plan, and AK document. Proof-of-principle and mockup testing will be initiated during this period. Pilot-scale demonstrations of assay technology on a production scale, segregation processes, shredding processes, and contamination control technologies also are required in support of conceptual design.

- CD-2 – Approve Performance Baseline

Achievement of CD-1 allows development of Title I design and development of the final PEP and performance baseline that support obtaining CD-2. Process flow mass balance and state point diagrams will be finalized. The PDSA will be completed, reviewed, and approved by DOE through the safety evaluation report process. Other documents that will be further developed include the criticality safety evaluation, fire hazards analysis, preliminary emergency preparedness hazards analysis, configuration management plan, records management plan, waste management plan, waste minimization plan, air emissions evaluation, quality program plan, risk management plan. This work scope supports obtaining CD-2. Another significant activity that will be initiated is the WIPP waste certification process.

- CD-3 – Approve Start of Construction

Achievement of CD-2 allows initiation of final (Title II) design and initiation of long-lead procurement based on safety-significant components identified in the PDSA. The PEP and performance baseline will be updated and detailed lists of government-furnished procurement items for construction and operations will be developed and integrated into the construction subcontract documents as appropriate. Procurement actions will be tracked to verify coordination with construction subcontracts and operational needs. This work scope supports obtaining CD-3.

- CD-4 – Approve Start of Operations

With approval of the final design, preliminary safety analysis, and performance baseline, CD-3 will be achieved, allowing initiation of construction activities. Construction includes site preparation, utilities, office building, retrieval facility, and treatment facility. During construction, the operating and maintenance procedures will be developed. During and following construction, component and system operation testing will be completed. Operating personnel will be trained for operations and maintenance activities. Critical project documents, based on as-built conditions and emergency preparedness hazards analysis, that will be finalized during this period include the FDSA, final criticality safety evaluation, fire hazards analysis. The operational readiness review process and U.S. Environmental Protection Agency (EPA) and Idaho Department of Environmental Quality (IDEQ) prefinal inspections will be completed. This work scope supports obtaining CD-4.

With agreement from EPA and IDEQ, retrieval and treatment operations will be initiated. Retrieval and treatment operations will continue until the entire pit is remediated. Retrieved TRU waste will be treated if required and shipped to WIPP. NonTRU waste will be treated, if required, and returned to the pit. Following completion of retrieval and treatment activities, the facilities will be decontaminated and dismantled for disposal or relocation to another pit or trench as appropriate.

- A.1.03.00.03.03 RWMC Subcontract Management:

This work is designed to preserve the legal and contractual rights of DOE and BBWI in the Pit 9 Comprehensive Demonstration Project subcontract termination legal action with Lockheed Martin Advanced Environmental Systems (LMAES) and Lockheed Martin Corporation. This work will consist of three activities: (1) Pit 9 project management, (2) Pit 9 site administration, and (3) Pit 9 litigation support. The scope in this control account includes the following:

- Managing BBWI resources and working to successfully protect DOE and BBWI legal and contractual rights during litigation
- Managing and maintaining the inactive Pit 9 construction site
- Providing and managing all legal, technical, and support subcontracts necessary during the trial
- Supporting trial activities
- Closing the Pit 9 Project Litigation Office.

SP5 – RWMC Excess Facilities Disposition and D&D&D – A.1.03.00.05

The scope of work for this subproject is to D&D&D buildings at the RWMC. The buildings listed are WMF-603, 604, 611, 619, 620\*, 621\*, 622\*, 639, 648\*, 649, 650, 653\*, 658, and 661 to be characterized and D&D&D in 2016. Buildings WMF 601, 602, 609, 613, 637, and 656, are to be characterized in FY 2017 and D&D&D in FY 2018. Buildings WMF-628 and -655 are to be characterized in FY 2021 and D&D&D in FY 2022. Building WMF-605 is to be characterized and D&D&D in FY 2030. Appropriate documentation and plans will be prepared as deemed necessary. Deactivation, decontamination, and decommissioning will be performed on each facility (e.g., equipment and component removal, building razing, foundation and footing removal, site grading, and reseeding) as appropriate end-state usage determines.

Note: \* Indicates not included in rough order of magnitude estimate.

- A.1.03.00.05.01 RWMC Excess Facilities Disposition and D&D&D:

Work scope is the same as stated above for the subproject.

#### **4.) Project Key Assumptions**

Additional assumptions are included in the individual planning packages for the various control accounts.

SP0 – Project Support and Facility Authority – A.1.03.00.00

- A. The RWMC SP0 will maintain facility support functions through the end of FY 2015, provide contractual support to AMWTP through completion of shipping (FY 2012), and D&D&D and RCRA closure (FY 2015).
- B. SP0 scope for FY 2015 will be converted from ongoing operations support to RCRA Closure and D&D&D preparation during the FY 2004 Life Cycle Planning effort. It is assumed for planning purposes that there will be a dollar for dollar exchange in scope to convert facility operations activities into RCRA closure and D&D&D preparation activities.
- C. As of January 1, 2003, BBWI will manage only the ILTSF and WMF-628 within the TSA.
- D. BBWI will provide maintenance up to utility interface points with AMWTP, as defined in the Tri-Party MOA, and will perform all maintenance in operations and administrative areas of RWMC.
- E. Disposal of AMWTP-generated mixed low-level waste (MLLW), and hazardous waste is performed by others—either BNFL or DOE-ID.
- F. Amount of AMWTP low-level waste (LLW) that requires disposal by DOE will be 2,870 m<sup>3</sup>/year from FY 2004 through 2008, 2,541 m<sup>3</sup>/year from FY 2009 through 2012, and 635 m<sup>3</sup>/year from FY 2013 through 2015. The disposal of this waste will be funded by the AMWTP BBWI technical interface planning package.
- G. The AMWTP technical support work reflects the agreements between DOE, BBWI, and BNFL, Inc., for the AMWTP as contained in the Draft Revision 3C to the AMWTP MOA. Impacts to this work caused by MOA revisions and changes will be assessed when Revision 3 is approved and issued. Subsequent revisions and changes likewise will be assessed for impacts.
- H. The cost of services requested by BNFL, Inc., under the memorandum purchase order process will be fully recovered from BNFL, Inc., by the memorandum purchase order work orders.
- I. Management and operating services listed in the BNFL, Inc., contract with DOE will be fully funded by DOE.
- J. Management and operating services include the disposal of AMWTP generated LLW.
- K. The RCRA permit modification caused by the flood plain modifications, decreasing training, inspection, and reporting requirements will pertain only to hazardous waste stored in WMF-628, after calendar year 2003.
- L. Any IDEQ review of required Class 2 Permit modification requests will be conducted within 60 days of receipt of the modification by the IDEQ.
- M. No comments of a substantial nature from IDEQ will be received on the recently submitted, amended Clean Air Act Permit
- N. Argonne National Laboratory-East (ANL-E)-generated RH TRU waste stored at the ILTSF will continue to be managed as a non-mixed waste.
- O. Drum inspection operations are weather-dependent and will not be scheduled between the months of December and May.
- P. AMWTP rejects 176 containers waste and un-irradiated fuel each year during FY 2004 through FY 2009. No reject waste or un-irradiated fuel is sent by AMWTP after FY 2009.

- Q. BBWI will not perform characterization or fingerprinting of waste rejected by the AMWTP for storage purposes.
- R. Rejected AMWTP waste accepted for storage will comply with existing RWMC Safety and Regulatory Authorization requirements.
- S. Subproject SP0 activities will be performed only on a single-shift basis (4 days x 10 hours per week).
- T. Changes to regulatory and customer-driven requirements will have only minor impacts on the scope of activities performed.
- U. No major damage will occur to facilities or infrastructure because of acts of nature.
- V. Planning estimates are based on labor policies contained in the current (PACE) contract.
- W. Subproject SP0 only provides the base facility functions required to maintain RWMC in a minimal compliant status. The other subprojects contained within the Clean/Close RWMC Project, excepting SP1, RH TRU Shipped to WIPP, are responsible for and contain cost estimates and funding for all aspects of additional facility support.
- X. All projects at the RWMC (i.e., SP1, RH TRU to WIPP; SP3, OU 7-10) excepting SP2, SDA, and AMWTP complete operations before or during FY 2015. Costs for activities after FY 2015 are included in the budgets of other RWMC subprojects.
- Y. Individual projects at the RWMC (i.e., SP1, RH TRU to WIPP; SP2, SDA; SP3, OU 7-10; and SP5, Excess Facilities Disposition and D&D&D) pay for the disposal of LLW, MLLW, and hazardous waste generated by each respective project.
- Z. Only RWMC Facility RCRA Class I Permit modification requests are funded in this work package. Any RCRA Class II or III Permit modification requests will be funded by the requesting or requiring project.
- AA. The BBWI Physical Assets Maintenance and Operations Organization will provide the following as part of the RWMC Facility Maintenance Charge: (1) RWMC building and infrastructure maintenance including (a) maintenance management line supervision, (b) SSC engineering, (c) planning, (d) material requisition, handling, and excess, (e) maintenance-related standards and calibration, scheduling, work control (e.g., Computerized Maintenance And Management System, preventive maintenance, and work order administration), (f) work order performance including material and parts, (2) RWMC Facility maintenance outage scheduling, (3) maintenance personnel moves, (4) RWMC snow removal, (5) maintenance-related direct purchases (e.g., winter gear, safety supplies, personal protective equipment, laundry, and miscellaneous items), (6) RWMC cold weather inspections, (7) maintenance of existing facility signs, (8) RWMC maintenance fleet rental and repair, (9) RWMC utility purchases (e.g., electricity and propane), (10) RWMC administration and operation areas grounds maintenance, (11) SDA maintenance, (12) RWMC custodial service, (13) maintenance facility eyewash station preventive maintenance, and (14) RWMC facility excellence preparation (zone inspections in accordance with Charter 169, "Facility Evaluation Board").
- BB. The BBWI Physical Assets Maintenance and Operations organization purchases all capital equipment required to perform RWMC building and infrastructure maintenance and repairs.
- CC. This subproject does not provide maintenance for project-specific SSCs.

- DD. No newly generated contact-handled (CH) TRU waste will be accepted for storage at RWMC in WMF-628 after the completion of the SP3, OU 7-10.
  - EE. SP3 will fund the waste handling operations associated with OU7-10 Stage II operations.
  - FF. The procedures required to support the receipt, inspection, and storage of TRU-contaminated waste rejected from AMWTP will not be implemented during FY 2003.
  - GG. The SP0 Subproject takes control of a TRIPS server and a static copy of the TRIPS Database on April 21, 2003, at which time limited report and administration will be provided to provide future reporting capability.
  - HH. Nuclear Energy responsibility for maintenance of information technology infrastructure (both data and telecommunications) will end with the termination of cabling or fiber feeding the primary RWMC dial room (currently WMF-619).
- II. BBWI will not reinstitute the company-wide personal computer refresh program. Personal computers will be replaced every three years, in accordance with BBWI company guidance.
  - JJ. In FY 2004, a determination will be made to upgrade the RWMC Facility information technology infrastructure to implement the new INEEL wireless standard.
  - KK. The RWMC information technology Infrastructure upgrades will incorporate the new company wireless standard.
  - LL. Only the RWMC Computer Maintenance and Network Operations Work Package provides computer maintenance, server administration, and personal computer/printer purchases for SP0 project personnel at the RWMC.

#### SP1 – RH TRU to WIPP – A.1.03.00.01

- A. INEEL's inventory of RH-TRU waste will be characterized and certified by the INEEL for transportation to the WIPP for disposal.
- B. The RH-TRU waste inventory to be managed is 356 m<sup>3</sup> consisting of stored RH-TRU waste and suspect RH-TRU waste only. This includes 84 m<sup>3</sup> of stored RH-TRU; 52 m<sup>3</sup> of RH uranium-233; and 220 m<sup>3</sup> of suspect RH-TRU waste.
- C. A portion of INEEL's inventory of RH-TRU waste will require intrusive visual examination and repackaging, due to insufficient AK documentation for quantifying the physical, chemical, and radiological attributes in accordance with WIPP WAP requirements, and the presence of prohibited items and sealed containers (e.g., heat-sealed bags, cans) larger than four liters which must be vented prior to transportation to the WIPP.
- D. There will be no newly generated RH-TRU waste received at the RWMC.
- E. The RWMC-SP0 – Project Support and Facility Authority Project will provide for maintenance and availability of the ILTSF and WMF-628 for use by the RH-TRU Waste Disposition Project.
- F. The RWMC-SP0 – Project Support & Facility Authority Project will provide RCRA-compliant storage for RH-TRU waste.
- G. Expected inventories of suspect debris and non-debris RH-TRU waste will be managed as mixed waste under RCRA requirements.
- H. The ILTSF and WMF-628 will be sufficient for storage of stored and suspect RH-TRU waste pending disposition processing.
- I. The existing inventory of RH-TRU waste from Argonne National Laboratory-East will continue to be managed as non-mixed waste.
- J. The Advanced Mixed Waste Treatment Project (AMWTP) will complete transfer of suspect RH-TRU waste to WMF-628 during FY 2003 through 2009.

- K. The AMWTP will provide storage for suspect RH-TRU waste if storage capacity in WMF-628 is exceeded.
- L. INEEL's Management and Operating contractor will provide for disposition of INEEL's stored and suspect RH-TRU waste.
- M. The WIPP RH-TRU WAC and WAP, reflecting approval by Federal and State regulators, will be available no later than September 2004.
- N. WIPP will be open and transportation capacities will be sufficient for receipt of INEEL RH-TRU waste no later than March 2005.
- O. WIPP will modify their authorization basis to allow acceptance of RH uranium uranium-233 waste for disposal no later than October 2007.
- P. Disposition of secondary waste streams generated during RH-TRU waste processing activities will be funded by the Project.
- Q. HFEF inserts will be returned to ANL-W to be processed in the planned Remote Treatment Facility.
- R. Funding for processing and final disposition of HFEF inserts will be requested by and included in ANL-W's baseline budget.
- S. RH-TRU waste characterization and transportation systems implementation and operations will be performed at the RWMC.
- T. WMF-628 is available and adequate for RH-TRU Waste disposition activities.
- U. Storage space for Pit-9 waste is limited to 3,120 ft<sup>2</sup> in WMF-628.
- V. Pit-9 waste will be accepted for storage only. No waste characterization, certification, or transportation related activities to achieve disposition of Pit 9 waste are planned.
- W. WMF-628 modifications will provide all-weather processing capabilities for non-intrusive RH-TRU waste characterization systems.
- X. Non-intrusive RH-TRU waste characterization systems include container headspace gas sampling, non-destructive assay, non-destructive examination, and container weighing systems.
- Y. WMF-628 modifications will require GPP funding.
- Z. Intrusive characterization and RH-72B cask loading systems will be implemented at the RWMC.
- AA. Intrusive characterization systems include container venting, and repackaging systems.
- BB. Suspect RH TRU waste streams containing lead shielding will be managed as RH TRU waste, and will not require removal of the shielding prior to shipment to WIPP.
- CC. Implementation of intrusive characterization and RH-72B cask loading systems will require Line Item Construction Project Funding.
- DD. Approval of the intrusive characterization and RH-72B cask loading systems implementation Mission Need Statement, Critical Decision (CD)-0 will be received no later than September 2004.
- EE. Approval of the intrusive characterization and RH-72B cask loading systems implementation Conceptual Design, CD-1, will be received no later than September 2005.
- FF. Approval of the intrusive characterization and RH-72B cask loading systems implementation National Environmental Protection Agency documentation will be received no later than September 2005.
- GG. Approval of the intrusive characterization and RH-72B cask loading systems implementation Preliminary Design, CD-2, will be received no later than March 2006.
- HH. Approval of the intrusive characterization and RH-72B cask loading systems implementation Final Design, CD-3, will be received no later than September 2006.
- II. Modifications to safety and regulatory authorization basis documentation for implementation of intrusive characterization and RH-72B cask loading systems have been completed to initiate construction no later than September 2006.
- JJ. Completion of the intrusive characterization and RH-72B cask loading systems implementation Construction, CD-4, will be received no later than December 2007.
- KK. Equipment and procedures for retrieval of degraded drums from ILTSF vaults will not be required. Planned vault inspects in FY 2004 will provide sufficient data to determine if a system to retrieve potentially degraded drums is required.

- LL. Shielded overpacks for remote-handled waste rejected from the AMWTP will be provided by the AMWTP in accordance with design specifications provided by the Management and Operations contractor.
- MM. HFEF inserts will be loaded directly from the ILTSF into the HFEF cask, and transported to ANL-W.
- NN. Development and demonstration of RH-TRU waste non-intrusive and intrusive characterization systems will be funded by this project.
- OO. One drum of mixed low-level waste will be generated for each drum of RH-TRU waste repackaged.
- PP. The CNS 10-160B and RH 72B casks are the only transportation system authorized for shipment of RH-TRU waste to the WIPP.
- QQ. One CNS 10-160B cask and transport trailer will be provided by the project.
- RR. RH 72B casks and transport trailers will be provided by the WIPP.
- SS. CNS 10-160B and RH 72B cask transportation will be provided by the WIPP.
- TT. CNS 10-160B and RH 72B casks and transportation will be available to support INEEL shipping schedules.

SP2 – Subsurface Disposal Area – A.1.03.00.02

- A. Elements of the selected OU 7-13/14 remedy will be ISTD, ISG, excavation, retrieval, treatment, and disposal, and surface barrier construction.
- B. Only 50% of the TRU waste volume buried in the SDA will be retrieved.
- C. The OU 7-10 Stage III Project will excavate, treat and dispose of all TRU waste buried in OU 7-10. This excavation will count toward the 50% of TRU waste retrieval objective. The remaining TRU waste volume will be removed from some combination of excavation in Pits 1 through 6, Pits 10 through 12, and Trenches 1 through 10
- D. The CH2MHill cost estimate presented in Appendix D, Attachment D-5 (OU 7-13/14 Feasibility Study Cost Estimate for Retrieval, Treatment, and Disposal Alternative) of the *Preliminary Evaluation of Remedial Alternatives* (PERA) for the SDA is a reasonable basis for estimating costs associated with remediating the SDA. Scaling factors can be applied to this cost estimate to adjust it to match the 50% TRU waste retrieval assumption.
- E. The PERA cost estimate also will be used to estimate the LCB for OU 7-10 Stage III Project costs using scaling factors
- F. The PERA report provides adequate development of RA objectives, screening of technologies and technology process options, and assembled alternatives for detailed analysis for the RFP TRU pits and trenches.
- G. The analysis of short-term effectiveness in the PERA will be sufficient for the feasibility study with no additional modeling.
- H. Planning for FY 2004 through 2005 and LCB will be based on a 15-month acceleration of the OU 7-13/14 enforceable deadlines identified in the April 2002 OU 7-10 dispute resolution.
- I. Planning or implementation of early actions will not impact the contents of the RI/BRA.
- J. The EPA and IDEQ will support accelerating the RI/BRA by 15 months from the enforceable milestone. To date, IDEQ has not supported the accelerated schedule. The cost profile will change if the schedule is delayed.
- K. The IDEQ and EPA will agree to finalize the second addendum to the RI/FS work plan.

- L. The RI/FS scope will be specified in the second addendum to the RI/FS work plan. Previous addenda to the work plan will be superceded by the second addendum.
- M. All Naval Reactors Facility and ANL-W waste disposal issues will be resolved during FY 2003.
- N. No additional criticality assessments will be required to support OU 7-13/14 remedial actions.
- O. All ARARs for the SDA remediation will be identified in the OU 7-13/14 ROD and no additional ARAR development work will be required during the OU 7-13/14 remedial design development.
- P. The following will not be OU 7-13/14 ARARS: 40 CFR 191, "Environmental Radiation Protection Standards for Management and Disposal of Spent Nuclear Fuel, High-Level and Transuranic Radioactive Wastes"; 40 CFR 194, Criteria for the Certification and Re-Certification of the Waste Isolation Pilot Plant's Compliance with the 40 CFR 191 Disposal Regulations"; and 10 CFR 61, "Licensing Requirements for Land Disposal of Radioactive Waste."
- Q. The environmental data warehouse, currently under development, will be fully functional and sufficient to meet the data needs for the nature and extent reports.
- R. The Long-Term Stewardship Program is currently responsible for collecting samples, sending them to the laboratory, and developing the limitation and validation reports. It is assumed that this arrangement will continue, with OU 7-13/14 paying only the costs of data analysis and reporting.
- S. Remediation of the pits and trenches will not be completed until FY 2027.
- T. Taking early action (e.g., limiting infiltration into the SDA, limiting release of contaminants from the buried beryllium blocks, and grouting one or more of the soil vaults) will achieve a significant short-term risk reduction.
- U. Any proposed early actions to reduce risk will be conducted as non-time-critical removal actions, which will not require EPA and IDEQ concurrence.
- V. Remedial design ISTD will be applied to approximately 1 acre of the SDA (i.e., Pits 4, 6, and 9).
- W. In situ thermal desorption will be applied before any grouting or excavation activities are performed.
- X. Active disposal of waste in the SDA will be discontinued by FY 2009.
- Y. Conditions identified during completion of OU 7-10 Stage II and Stage III activities will not delay OU 7-13/14 remediation activities.

SP3 – OU 7-10 – A.1.03.00.03

**Glovebox Excavator Method Project**

**General**

- A. Stage II will be planned in accordance with the enforceable dates in the 2002 Agreement to Resolve Disputes.
- B. OU 7-10 Glovebox Excavator Method Project work scope will be completed in FY 2004 with the exception of management of the retrieved, secondary, and TRU D&D&D waste. This scope is transferred to OU 7-10 Stage III Project Operations.
- C. Agency interface and inspections will not result in additional requirements or schedule delays.

- D. Retrieval operations within OU 7-10 will be initiated before the beginning of FY 2004.
- E. Retrieval operations schedule shall be based on four crews working 24 hours/day, 7 days/week.
- F. The RWMC RCRA Permit will be modified to allow retrieved waste to be stored in WMF-628.
- G. Drums containing nonreactive TRU waste will be stored in WMF-628. Drums containing reactive TRU waste will be stored in one or more portable storage units located adjacent to OU 7-10.
- H. As a contingency measure, a limited number of Operations personnel will require a Q clearance.
- I. Operations personnel will not require an L or Q clearance.
- J. Outlier materials will not be encountered during retrieval operations.
- K. No schedule delay will be experienced from an unplanned review by the Defense Nuclear Facilities Safety Board or the Agencies (i.e., DOE-ID, EPA, and IDEQ).
- L. Waste will be retrieved and packaged for safe storage only; compliance with WIPP certification requirements is not required.
- M. No single contamination incident will occur that results in the interruption of Operations work within the Weather Enclosure Structure (WES) for a period of more than 24 continuous hours. No more than two incidents shall occur during retrieval operations.
- N. Scope associated with D&D&D of the OU 7-10 Glovebox Excavator Method Project Facility is not included in this planning package.
- O. Scope associated with dismantlement of the OU 7-10 Mock-up Facility is not included in the scope of this planning package.
- P. The Facility Evaluation Board will not conduct an evaluation of OU 7-10 Project activities during FY 2004.
- Q. Operations personnel will be required to support D&D&D during FY 2004.
- R. No schedule delays will be encountered because of equipment malfunctions.
- S. Because the majority of the equipment in the facility is commercial grade, spare parts for items that fail will be readily available.
- T. Facility operation is not delayed by factors outside the control of BBWI.
- U. The required quantity and skill mix of personnel will be available when needed to support scheduled operation tasks.
- V. Operable Unit 7-10 Project Operations will remain a part of RWMC and support services will be primarily acquired from those at RWMC.
- W. An average of 24 drums of waste will be packaged each 24-hour period during the waste retrieval period.
- X. An advanced means to detect radon in a timely and accurate method will be used so that disruptions to operations work will be minimized.
- Y. The underburden will not become contaminated because of activities performed during waste retrieval.

- Z. No work delays will be incurred to identify or as the result of having identified any classified objects.
- AA. No adverse schedule impact will result from adding into the Operations processes activities required to meet or potentially meet all or any portion of the WIPP WAC or to perform WIPP-approved procedures or processes.
- BB. No schedule delays will be encountered because of problems with transporting packaged waste to WMF-628 or, if packaged waste is stored in portable storage unit containers, because of difficulties associated with the acquisition, placement, maintenance, or use of the containers including accessing the containers during inclement weather conditions.
- CC. A contract will be let for pumping grout into the pit, but Operations personnel will perform work activities inside the WES.
- DD. If the M&O contract is awarded to a company other than BBWI, no schedule delays will be encountered because of transitioning to the new contractor or because of changes made by the new contractor that impact the BBWI schedule.
- EE. No agency, organization, or individual (e.g., DOE-ID, EPA, IDEQ, or third-party) will take actions that delay or otherwise disrupt the schedule.
- FF. Scope for sample analysis and validation will be carried over from FY03 to be completed in FY04.

*Deactivation, Decontamination and Dismantlement*

- GG. Agency (i.e., DOE-ID, EPA, and IDEQ) reviews do not result in changes to established project objectives or technical and functional requirements.
- HH. The facility will likely remain Hazard Category II throughout the project. The facility hazard category may be reduced as the hazardous and radiological releasable inventories are reduced through mitigation and decontamination actions.
- II. The WES will remain uncontaminated and will not require decontamination.
- JJ. Project equipment, including the excavator, breathing air compressor trailer, plant air compressor, standby diesel generator, skid-mounted load center and temporary power cables will be available for use during D&D&D.
- KK. The on-going LMAES litigation or INEEL activities will have no adverse effect on the post-retrieval life-cycle phases of the project.
- LL. No schedule impacts from identified rework items outside the project scope will be identified.
- MM. No additional schedule time will be allowed for repeating all or portions of the D&D&D management self-assessment or readiness review sequence of activities because of failure.
- NN. The D&D&D readiness review will be successful, involving one scheduled cycle.
- OO. Funding necessary to perform the project within the schedule will be available.
- PP. Operable Unit 7-10 Project Operations shutdown will be complete by January 1, 2004.
- QQ. Disposition paths will be available for waste streams generated during post-retrieval operations, with the exception of TRU waste. All TRU waste will be stored onsite pending disposition.

- RR. During post-retrieval project phases, fissile materials will not be present in quantities that, if accumulated, would cause the potential for a nuclear criticality to exceed the level of extremely unlikely.
- SS. No unexpected radiological conditions will be encountered during D&D&D activities.
- TT. Waste containing nitrates and potentially organic materials will not be classified as D003 (reactive) waste.
- UU. Nonreactive (D003) TRU waste drums will be stored in WMF-628.
- VV. An assay trailer will be obtained through a subcontract and operated by BBWI personnel in accordance with ISMS.
- WW. Negligible contamination will be spread outside of the confinement area boundary during retrieval operations. This includes contamination spread (1) from personnel entry and exit, (2) through the excavator hydraulic fluid from an accident or from a confinement breach (e.g., loss of a glove), (3) from breach of a bag during drumout operations or sample bag-out, (4) from heating and ventilating system failure, or (5) from an uncontained leak path. Unexpected contamination of equipment and structures has the potential to change the shutdown and D&D&D approaches as well as disposition options for materials.
- XX. Project management approval will be received (with Agency concurrence) to backfill the excavated waste zone with a clean, weak (i.e., nonmonolithic) grout in lieu of the overburden material removed from the excavation area as described in the project conceptual design report.
- YY. Final disposition paths for the removed overburden material include (1) disposal at the INEEL CERCLA Disposal Facility (ICDF) or the RWMC LLW pit or (2) reuse as OU 7-10 overburden through reinstallation over the grout backfill.
- ZZ. No cross contamination of overburden will occur during retrieval operations and no subsidence of soil will occur from behind the shoring box at any time such that the overburden behind it becomes contaminated.
- AAA. Radiological surveys in preparation for the release of the WES portions of the Facility Floor Structure (FFS) steel decking material located outside of the Retrieval Confinement Structure (RCS) boundary will detect no contamination from project operations.
- BBB. Budget for radiological control, safety, environmental, and quality assurance support needed to perform the D&D&D scope is included in the D&D&D work package. This is only for direct conduct of the work, and not for external assessments or audits.

#### Post-Shutdown Facility Conditions

- CCC. No subsidence will exist behind the pit shoring box.
- DDD. Several probes have been pulled and positioned on their sides in the pit, completely (i.e., at least 0.9 m [3 ft]) below grade.
- EEE. Several probes remain vertical in the pit (at the installed height) with the probe-pulling caps that were installed before waste excavation and retrieval began.
- FFF. Waste spilled on the RCS floor that the excavator could reach has been returned to the pit.

- GGG. The Packaging Glovebox System (PGS) gloveboxes have been cleaned of pit debris (i.e., swept and vacuumed but not yet decontaminated).
- HHH. The ICDF will be open and can receive OU 7-10 Project secondary and D&D&D waste. No schedule delay will be encountered because of problems with transporting waste to ICDF or because of ICDF acceptance of OU 7-10 Project waste.
- III. The excavator will be left operable and in place. The hydraulic system fluid has been sampled and, if determined to be radiologically contaminated, has been drained, flushed, and refilled. The fuel tank has been drained and the battery disconnected.
- JJJ. The pit has been filled with a weak grout up to 6 in. above the lower edge of the shoring box.
- KKK. Tools and other small items have been bagged out of the RCS and PGS for disposal.
- LLL. All loose soil and waste has been removed from surfaces of the RCS and PGS. Contamination levels have been reduced through decontamination such that the structures will yield almost no TRU waste upon dismantlement. The RCS and PGS have been removed and glove ports and sample ports have been covered and sealed. The windows of the RCS and PGS have been decontaminated and left uncovered. The remaining surfaces are covered in strippable paint.
- MMM. The heating and ventilating system has been left operating.
- NNN. Sacks of overburden continue to be stored outside the WES, if a decision has been made to reuse it as overburden on OU 7-10 (above the grouted waste zone). Otherwise, sacks of overburden soil have been sent to ICDF or RWMC for disposal or beneficial use and none remain at the facility.
- OOO. Other equipment has been de-energized, but is capable of restart.

*Post-D&D&D Conditions*

- PPP. All facilities have been removed and all nonTRU waste shipped to other facilities for disposal.
- QQQ. The OU 7-10 Mockup Facility has been removed.
- RRR. The shoring box will be dismantled and removed from the excavation area. The void created by the shoring box removal will be backfilled with clean soil fill material.
- SSS. Gravel from the FFS leveling course, access ramps, and temporary road on the OU 7-10 surface will be removed and the area underneath recontoured and reseeded with native grasses (hydro-seed application).
- TTT. The geotextile membrane under the FFS leveling course will be removed and the area underneath recontoured (as needed) and reseeded with native grasses (hydro-seed application).
- UUU. Trailers will be deactivated, disconnected, and sent to CFA for reuse at the INEEL.
- VVV. The fire riser structure will remain for potential use during the OU 7-10 Stage III Project. Fire water supply lines (and concrete support pads) leading from the fire riser structure to the WES will be dismantled and removed from the project area. Reusable components will be sent to CFA for reuse at the INEEL. Other materials will be processed as waste.
- WWW. Cargo containers (if used) will be cleaned, disconnected from utilities, removed from the project area, and returned to the appropriate INEEL owner.

XXX. Fencing materials will be removed, surveyed, and sent to CFA for reuse at the INEEL.

### **Stage III Project**

#### **Scope Assumptions**

- A. Scope includes the full-scale remediation of OU 7-10 in accordance with the scope and objectives defined in the OU 7-10 Interim ROD (potentially modified by future agreements documented in either new ESDs, ROD amendment, or the Stage III system requirements document) and meeting all associated milestone dates established in the 2002 Agreement to Resolve Disputes.
- B. Design for the OU 7-10 facilities and equipment shall, where practical, be transferable to other TRU pits and trenches in the SDA (i.e., Pits 1 through 6, 10 through 12, and Trenches 1 through 10).
- C. The TRU radionuclide concentration action level for triggering treatment and determining acceptability of materials to be returned to the pit is successfully changed from the 10 nCi/g TRU identified in the OU 7-10 Interim ROD to 100 nCi/g TRU (average concentration over the entire package volume and contents).
- D. For consistency with the anticipated OU 7-13/14 comprehensive ROD levels of hazardous contaminants of concern in materials to be returned to pits and trenches after treatment, Stage III preconceptual and conceptual designs and process planning will be based on meeting the EPA Region IX preliminary remediation goal values. Actual levels from the OU 7-13/14 comprehensive ROD are assumed to be available to support the OU 7-10 Stage III Project Title I (i.e., preliminary, 30%) design. Further, to address land disposal requirements relative to materials being returned to the pit, Stage III also will meet the delisting values contained in Table 4 of the OU 7-10 Interim ROD.
- E. Volume reduction is as achieved based on life-cycle costs and use of best available technology, as practicable.
- F. Changes to the project will be implemented through an ESD to the OU 7-10 Interim ROD or a ROD amendment, and design activities will not be stopped or delayed by this process.
- G. Retrieved waste zone material that is greater than 100 nCi/g TRU (average concentration over the package volume and contents) will be treated to meet WIPP WAC only.
- H. The OU 7-10 Stage III Project is not required to excavate and retrieve waste or contaminated soil outside the sheet piling driven by LMAES.
- I. The level of confinement and degree of remote operations used in the Stage III system design will be based on the assessed inventory risks rather than as prescribed by the OU 7-10 Interim ROD.
- J. The OU 7-10 Stage III Project Facility will be a Hazard Class Safety Category II nuclear facility; no additional physical security requirement will be imposed beyond those required for a Hazard Class II nuclear facility.
- K. The OU 7-10 Stage III Project will stabilize any highly radioactive waste or item using in-place encapsulation (e.g., grouting) methods, but will not retrieve these items.
- L. The OU 7-10 Stage III Project is not required to move, lift, or otherwise handle large objects specifically excluded from the project scope.
- M. Secondary waste generated that meets the ICDF WAC will be disposed of at the ICDF.

- N. The OU 7-10 Stage III Project will obtain the necessary generator and shipper certification(s) for sending TRU waste to WIPP.
- O. Blending and mixing or blending nonTRU and TRU waste forms will continue to be allowed to eliminate waste forms that otherwise have no identified disposal path.
- P. Uranium-bearing waste that is relatively free of TRU contamination and contains significant quantities of uranium isotopes will be segregated for special handling and will not be returned to the pit, but will wait disposition as part of the OU 7-13/14 comprehensive ROD.
- Q. Except for retrieved waste transferred to OU 7-13/14, the OU 7-10 Stage III Project will provide for the final disposition of all OU 7-10 Glovebox Excavator Method Project (i.e., Stage II) waste including all secondary waste generated during OU 7-10 Project operations.
- R. Treatment processes for primary consideration in the Stage III design will include (1) physical separation, (2) compaction, and (3) thermal desorption of organic contaminants of concern. This list excludes thermal destruction of polychlorinated biphenyls based on an earlier assumption that the existing limit for polychlorinated biphenyls in the WIPP WAC is removed.
- S. Acceptable Knowledge will be performed to support disposition of any Rocky Flats Plant TRU waste generated during OU 7-10 remedial activities.
- T. Approval from DOE is received to generate new waste (i.e., through excavation and retrieval of pre-1970 buried TRU waste) that potentially has no disposition path. Further, it is assumed that if no disposition path can be identified in a timely manner, the OU 7-10 Stage III Project will store the orphan waste for future disposition by OU 7-13/14.
- U. In performing the full-scale remediation of OU 7-10, the OU 7-10 Stage III Project is not required to remove or D&D the sheet piling or other underground modifications installed by LMAES.
- V. Final capping and perpetual maintenance of OU 7-10 will be by OU 7-13/14.
- W. For LCB purposes, 3,400 m<sup>3</sup> (TRU volume in OU 7-10) will go to WIPP.
- X. Stage III will be managed under EM guidelines as an ER project and will be funded through operating dollars.

Schedule Assumptions

- Y. Stage III will be planned in accordance with the enforceable dates in the 2002 Agreement to Resolve Disputes.
- Z. OU 7-10 Stage III Project is conducted under DOE Order 413.3; approvals are made at the Program Secretarial Office level and are not delegated to the field office manager.
- AA. Documentation necessary for completion of CD-0 will be prepared in FY 2003.
- BB. CD-0 will be completed within the first 30 days of FY 2004. The conceptual design will be developed and completed in FY 2004 based on one alternative down-selected from preconceptual design activities.
- CC. Pilot-scale treatment studies and retrieval studies require funding in FY 2004 to meet the proposed design schedule.

- DD. Title I design and review will be completed in FY 2005.
- EE. Long-lead procurement is initiated at the start of Title II design.
- FF. Title II design and review will be completed by March 31, 2007
- GG. Construction complete and operations initiated 36 months following March 31, 2007 (March 2010).
- HH. Technology development needs will be identified in FY 2003.
- II. Stage II (OU 7-10 Glovebox Excavator Method Project) is successfully completed as planned and information on the condition of waste containers, contamination levels during retrieval, and migration of contaminants are obtained to support the Stage III conceptual design.
- JJ. Equipment and facilities constructed by LMAES will undergo D&D&D (including the removal from the SDA of resultant waste and materials) before start of Stage III construction mobilization.
- KK. Shipping rates are consistent with 3,100 m<sup>3</sup> Project.

Cost Assumptions

- LL. The OU 7-13/14 Preliminary Evaluation for Remedial Alternatives cost estimate prepared by CH2MHill will be used as the estimating basis for Title design, construction, operations, shutdown, and D&D&D activities.
- MM. Cost for WIPP waste certification is consistent with those for the 3,100 m<sup>3</sup> Project.

Radioactive Waste Management Complex Subcontract Management

- A. The Pit 9 Project Litigation trial will be conducted in Pocatello, Idaho, and will start on August 4, 2003.
- B. The final court decision will not be appealed by any party.
- C. Jury will find in favor of BBWI and DOE.
- D. The Pit 9 Project Litigation Office will begin shutting down immediately after judgment.
- E. The Pit 9 Litigation Project will need approximately 6 months to close the project office.
- F. An appeal of the judgment will occur in the U.S. District Court for the District of Idaho; however, the case will settle before the appeal runs its natural course.
- G. LMAES will remain responsible for all facilities and equipment located at the INEEL, including D&D&D activities of the facilities.
- H. The Pit 9 Project Litigation Office will maintain the inactive Pit 9 construction site until the end of trial.
- I. The Pit 9 Site Administration work package is budgeted to correct minor, not major, deficiencies, modifications, or upgrades to the inactive construction site. No major deficiencies are expected during FY 2004.

- J. The BBWI Pit 9 Project Litigation Office will continue to pay General and Administrative costs on power used at the inactive construction site.
- K. Operable Unit 7-10 will continue to be separated from the inactive construction site by a fence and will continue to be managed by others (not the responsibility of the Pit 9 Project Litigation Office).
- L. Legal services will be retained under an engagement agreement.

**SP5 – RWMC Excess Facilities Disposition & D&D&D – A.1.03.00.05**

- A. The parametric rough order of magnitude model, unless otherwise noted, generated all estimates
- B. The dedicated site D&D&D crew will perform all utility isolations and D&D&D work
- C. All radiological waste will be shipped off-Site
- D. All industrial waste will go to the CFA Landfill
- E. The D&D&D organization will not take ownership of any facilities
- F. Surveillance and monitoring work will be performed under SP0
- G. Accomplishment of work is dependent on available funding
- H. Scope of work does not include removal of roads, sidewalks, parking lots, or underground utilities
- I. Cleanup will be in accordance with the approved RWMC ROD
- J. The D&D&D of the buildings and structures at RWMC will not be performed until after FY 2016. D&D&D for the OU 7-10 Glovebox Excavator Method Project and RH TRU are contained in SP3 and SP1, respectively.

**5.) Science and Technology Needs**

Science and Technology Need Number	Science and Technology Need Description
<b>SP0 – Project Support &amp; Facility Authority – A.1.03.00.00</b>	
N/A	None identified.
<b>SP1 – RH TRU to WIPP – A.1.03.00.01</b>	
N/A	All needs were incorporated into control account planning.
<b>SP2 – Subsurface Disposal Area – A.1.03.00.02</b>	
N/A	All needs were incorporated into control account planning.
<b>SP3 – OU 7-10 – A.1.03.00.03</b>	
N/A	In situ debris characterization for partial retrieval.
N/A	Drum and box assay capability to measure 100-nCi/g distributed contamination in heterogeneous matrices.

Science and Technology Need Number	Science and Technology Need Description
N/A	Real-time detection of contaminant using in situ sensors.
N/A	Fissile material assay system.
<b>SP5 – RWMC Excess Facilities Disposition &amp; D&amp;D&amp;D – A.1.03.00.05</b>	
N/A	None identified.



## IDAHO COMPLETION PROJECT WORK BREAKDOWN STRUCTURE INDEX

WBS#	Title	Responsible Individual
A.1	Idaho Completion Project	
A.1.03	RWMC Completion	John M Schaffer
A.1.03.00	Clean/Close RWMC	John M Schaffer
<b>A.1.03.00.00</b>	<b>WMF-SP0 Project Support &amp; Facility Authority</b>	<b>David M Bright</b>
A.1.03.00.00.01	RWMC Project/PBS Management	David E Start
A.1.03.00.00.02	Facility/Project Management	David E Start
A.1.03.00.00.03	ESH&QA Compliance	Charles G Dietz
A.1.03.00.00.04	Engineering Management	David E Start
A.1.03.00.00.05	RWMC Landlord	David E Start
A.1.03.00.00.06	Capital Equipment	David E Start
A.1.03.00.00.07	AMWTP BBWI Technical Support	James H Pletscher
A.1.03.00.00.08	Waste Storage Operations	Cindy A Fife
A.1.03.00.00.09	RWMC Computer and Communication Systems	David E Start
<b>A.1.03.00.01</b>	<b>WMF-SP1 RH-TRU to WIPP</b>	<b>Thomas H Monk</b>
A.1.03.00.01.01	RH TRU Administration & Site Project Office	Mark J Sherick
A.1.03.00.01.02	RH TRU Non-Intrusive Characterization Systems Implementation	Mark J Sherick
A.1.03.00.01.03	RH TRU Intrusive Characterization System	Mark J Sherick
A.1.03.00.01.04	RH TRU Waste Retrieval Systems and Operations	Rajiv N Bhatt
A.1.03.00.01.05	RH TRU Waste Characterization Systems and Operations	Rajiv N Bhatt
A.1.03.00.01.06	RH TRU Waste Transportation System and Operations	Rajiv N Bhatt
<b>A.1.03.00.02</b>	<b>WMF-SP2 Subsurface Disposal Area</b>	<b>Frank L Webber</b>
A.1.03.00.02.01	OU 7-13/14 Record of Decision (ROD)	Frank L Webber
A.1.03.00.02.02	OU 7-13/14 Remedial Design (RD)	Frank L Webber
A.1.03.00.02.03	OU 7-13/14 Remedial action (RA)	Frank L Webber
A.1.03.00.02.04	OU 7-13/14 Management & Administration	Frank L Webber
A.1.03.00.02.05	OU 7-13/14 Early Actions	Frank L Webber
<b>A.1.03.00.03</b>	<b>WMF-SP3 OU 7-10</b>	<b>Michael B Pratt</b>
A.1.03.00.03.01	Glovebox Excavation Method (GEM) Project	Michael B Pratt
A.1.03.00.03.02	OU 7-10 Stage III	Michael B Pratt
A.1.03.00.03.03	RWMC Subcontract Support	Gary H Longhurst
<b>A.1.03.00.04</b>	<b>WMF-SP4 3100m3 CH-TRU</b>	
<b>A.1.03.00.05</b>	<b>WMF-SP5 Excess Facilities Disposition &amp; D&amp;D</b>	<b>Alan D Grow</b>
A.1.03.00.05.01	WMF SP5 - Excess Facilities Disposition and D&D	Alan D Grow



## MILESTONE LOG

<b>WBS Element</b>	<b>Milestone Number</b>	<b>Description</b>	<b>Planned Date</b>	<b>Enforceable Date</b>	<b>Level</b>
A.1.03.00.00.03.01	0L301001	Submit Class I Permit Mods to State (Annually)	FEB-2004		E4
A.1.03.00.00.03.08	0L308001	Submit SAR Update (Annually)	AUG-2004		E2
A.1.03.00.00.07.01	0L701084	Cmplt Shpmt of all TRU Waste out of Idaho - FY18	SEP-2018	SEP-2018	E1
A.1.03.00.01.01.03	1L103128	Receive Final RH TRU Reqmnts from WIPP - FY04	SEP-2004		E4
A.1.03.00.01.01.03	1L103133	WIPP Open for Acct of RH TRU Waste - FY05	MAR-2005		E4
A.1.03.00.01.03.01	1L301004	RH TRU CD-2 Approval - FY06	MAR-2006		E2
A.1.03.00.01.03.01	1L301010	RH TRU CD-3 Approval - FY06	SEP-2006		E2
A.1.03.00.01.03.02	1L302007	RH TRU CD-0 Approval - FY04	SEP-2004		E2
A.1.03.00.01.03.02	1L302013	RH TRU CD-1 Approval - FY05	SEP-2005		E2
A.1.03.00.01.03.02	1L302073	WIPP Opens for Acct of U233 Waste - FY08	OCT-2007		E4
A.1.03.00.01.03.02	1L302070	RH TRU CD-4 Approval - FY08	DEC-2007		E2
A.1.03.00.02.01.01	2L101040	OU7-13/14 Draft RI/BRA Submitted for Review	AUG-2005	AUG-2005	E1
A.1.03.00.02.01.02	2L102060	OU7-13/14 Draft Feasability Study Submit for Rev	DEC-2005	DEC-2005	E1
A.1.03.00.02.01.03	2L103060	OU7-13/14 Draft Proposed Plan Submitted for Rev	MAR-2006	MAR-2006	E1
A.1.03.00.02.01.03	2L103070	OU7-13/14 Draft ROD Submitted for Review	DEC-2006	DEC-2006	E1
A.1.03.00.03.01.01	3L101020	OU7-10 Pit9 Stage II Commence Excavation	MAR-2004	MAR-2004	E1
A.1.03.00.03.01.01	3L101030	OU7-10 Pit9 Stage II Complete Excavation	OCT-2004	OCT-2004	E1
A.1.03.00.03.01.02	3L102070	PBI I.4.b - D,D&D the GEM facilities from Pit 9	SEP-2004		E2
A.1.03.00.03.01.03	3L103040	OU7-10 Pit9 Stage II Notif. -CD4 Submit to Agncy	FEB-2004	FEB-2004	E1
A.1.03.00.03.01.03	3L103030	PBI I.4.a-	SEP-2004		E2

		Chrctrze,smpl,analyze,store Pit9 Waste			
A.1.03.00.03.02.04	3L204050	OU7-10 Pit9 Stage III Commence Construction	MAR-2007	MAR-2007	E1
A.1.03.00.03.02.07	3L207015	OU 7-10 Stage III CD-0 Approval	OCT-2003		E2
A.1.03.00.03.02.07	3L207010	PBI I.4.c - DOE Approval of Pit 9 Stage III CD-0	SEP-2004		E2
A.1.03.00.03.02.07	3L207020	OU 7-10 Stage III CD-1 Approval	OCT-2004		E2
A.1.03.00.03.02.07	3L207025	OU 7-10 Stage III CD-2 Approval	OCT-2005		E2
A.1.03.00.03.02.07	3L207030	OU 7-10 Stage III CD-3 Approval	MAR-2007		E2
A.1.03.00.03.02.07	3L207035	OU 7-10 Stage III CD-3 Approval	MAR-2010		E2

**Corporate  
Performance Measures**

FY 2003-2035  
Corporate Performance Measures by HQ PBS and BBWI WBS (first draft)

INEEI_PBS	New PBS Field Code	Measure/Units	FY 2003			FY 2003 Total	FY 2003 4Q	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009-2012	FY 2012-2035	Life-cycle FY 2003-2035 Total	
			FY 2003 1Q	FY 2003 2Q	FY 2003 3Q											
RWMC	ID-INEEL-0013	TRU Waste shipped for disposal at WIPP (cubic meters)	0	0	269	269	269	7,615	7,854	8,994	8,994	8,994	17,688	0	60,408	
RWMC	ID-INEEL-0030C	TRU Waste shipped for disposal at WIPP (cubic meters)	0	0	0	0	0	0	0	0	0	0	0	758	0	758
RWMC	ID-INEEL-0050C	Industrial Facility Completions (# of facilities)	0	0	0	0	0	0	0	0	0	0	0	0	0	33
RWMC	ID-INEEL-0013	LLW and MLLW disposed (cubic meters)	1025	1025	1325	4450	8540	5240	5665	5145	5185	20720	0	54945		
RWMC	ID-INEEL-0030C	LLW and MLLW disposed (cubic meters)	0	0	0	0	0	0	0	0	0	0	0	0	0	21120
RWMC	ID-INEEL-0040C	Nuclear Facility Completions (# of facilities)	0	0	0	0	0	0	0	0	0	0	0	0	0	13
RWMC	ID-INEEL-0050C	Radioactive Facility Completions (# of facilities)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RWMC	ID-INEEL-0030C	Remediation Complete (# of release sites)	0	0	0	0	0	0	0	0	0	0	0	0	0	58
RWMC	ID-INEEL-0013	TRU Waste shipped for disposal at WIPP (cubic meters)	354	0	0	354	0	10	10	16	139	448	0	977		
RWMC	ID-INEEL-0014B	TRU Waste shipped for disposal at WIPP (cubic meters)	0	0	0	0	0	0	0	0	0	0	0	1130	0	1130



## Clean/Close RWM C

Breakout by Budget Element

## Breakout by Budget Element

Thousands of \$

## Clean/Close RWM/C

Breakout by Budget Element

WBS[4]	BE	Clean/Close RWM/C		FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	Cumulative
<b>A.1.01.00 Clean/Close RWM/C</b>																	
	<b>BURDENED BASE</b>																
	<b>C</b>	BCWS	46,131	45,982	46,146	46,146	46,146	45,779	45,962	45,962	45,962	45,962	45,962	45,962	45,962	0	
	<b>DOEAMWTP</b>	BCWS	23,963	0	0	0	0	0	0	0	0	0	0	0	0	0	1,426,249
	<b>L</b>	BCWS	3,443	2,286	2,295	2,295	2,295	2,277	2,286	2,286	2,286	2,286	2,286	2,286	2,286	0	719,041
	<b>M</b>	BCWS	557	0	0	0	0	0	0	0	0	0	0	0	0	0	651,781
	<b>N</b>	BCWS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	134,620
	<b>S</b>	NOG&A	BCWS	0	0	0	0	0	0	0	0	0	0	0	0	0	4,549
	<b>T</b>	BCWS	103,281	103,458	103,871	103,871	103,871	103,044	103,458	103,458	103,458	103,458	103,458	103,458	103,458	0	43,148
	<b>Results... Totals:</b>	BCWS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,551,461
	<b>ESCALATE</b>																3,312
	<b>C</b>	BCWS	16,875	18,132	19,567	20,937	22,344	23,594	25,151	26,644	28,166	29,724	0	0	0	0	409,675
	<b>L</b>	BCWS	1,309	935	1,007	1,076	1,147	1,210	1,288	1,363	1,440	1,518	0	0	0	0	108,292
	<b>M</b>	BCWS	204	0	0	0	0	0	0	0	0	0	0	0	0	0	14,149
	<b>N</b>	BCWS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	515
	<b>S</b>	NOG&A	BCWS	0	0	0	0	0	0	0	0	0	0	0	0	0	6,297
	<b>T</b>	BCWS	37,780	40,814	44,021	47,126	50,295	53,109	56,612	59,974	63,399	66,906	0	0	0	0	823,893
	<b>Results... Totals:</b>	BCWS	56,168	59,881	64,584	69,139	73,786	77,913	83,051	87,982	93,004	98,148	0	0	0	0	360
	<b>SUMMARY (Base + Escalation)</b>																
	<b>C</b>	BCWS	63,006	64,095	65,703	67,083	68,490	69,373	71,113	72,607	74,128	75,666	0	0	0	1	1,835,924
	<b>DOEAMWTP</b>	BCWS	23,963	0	0	0	0	0	0	0	0	0	0	0	0	0	719,041
	<b>L</b>	BCWS	4,752	3,221	3,302	3,371	3,442	3,486	3,574	3,649	3,726	3,804	0	0	0	2	760,073
	<b>M</b>	BCWS	761	0	0	0	0	0	0	0	0	0	0	0	0	1	148,769
	<b>N</b>	BCWS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,064
	<b>S</b>	NOG&A	BCWS	0	0	0	0	0	0	0	0	0	0	0	0	0	49,445
	<b>T</b>	BCWS	141,061	144,272	147,892	150,988	154,166	156,152	160,069	163,432	166,856	170,364	0	0	0	0	3,375,353
	<b>Results... Totals:</b>	BCWS	233,543	211,587	216,897	221,452	226,098	229,012	234,756	239,688	244,710	249,854	0	0	0	4	3,672
																6,897,341	

Thousands of \$

## Clean/Close RWMC

Breakout by Subproject

WB\$1(4)   WB\$1(5)	WB\$1(4)   WB\$1(5)	Sep-04	Sep-05	Sep-06	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
<b>A.1.03.00 Clean/Close RWMC</b>															
BURDENED BASE															
A.1.03.00.00 WMF-SP0 Project Support & Facility Authority	BCWS	152,948	70,553	75,160	93,129	107,077	83,815	75,169	71,044	72,707	14,947	14,947	14,970	14,174	23,498
A.1.03.00.01 WMF-SP1 RH-TRU to WIPP	BCWS	32,103	19,434	47,156	41,806	25,557	28,038	26,400	22,259	11,363	0	0	0	0	0
A.1.03.00.02 WMF-SP2 Subsurface Disposal Area	BCWS	10,798	17,444	25,011	78,655	104,694	102,091	237,944	213,803	214,668	214,583	184,327	152,709	151,098	151,098
A.1.03.00.03 WMF-SP3 OU 7-10	BCWS	31,096	51,343	87,361	206,411	113,683	56,285	74,046	118,960	147,559	92,896	56,078	457	0	0
A.1.03.00.05 WMF-SP5 Excess Facilities Disposition & D&D	BCWS	0	0	0	0	0	0	0	0	0	0	0	0	1,407	2,610
Results... Totals:	BCWS	253,837	131,880	234,678	429,002	351,011	272,229	277,814	450,208	445,432	322,498	285,609	199,754	163,290	177,177
<b>ESCALATE</b>															
A.1.03.00 WMF-SP0 Project Support & Facility Authority	BCWS	379	717	1,153	1,551	2,240	2,282	2,720	3,072	3,400	3,364	3,720	4,093	0	0
A.1.03.00.01 WMF-SP1 RH-TRU to WIPP	BCWS	831	980	3,238	3,818	2,956	3,877	4,142	4,149	2,425	0	0	0	0	0
A.1.03.00.02 WMF-SP2 Subsurface Disposal Area	BCWS	465	528	1,687	6,885	11,526	13,885	16,191	43,071	44,041	49,652	55,190	52,240	47,402	51,058
A.1.03.00.03 WMF-SP3 OU 7-10	BCWS	1,313	1,476	5,854	18,019	12,634	7,682	12,442	22,365	31,206	21,584	14,536	129	0	0
A.1.03.00.05 WMF-SP5 Excess Facilities Disposition & D&D	BCWS	0	0	0	0	0	0	0	0	0	0	0	0	446	900
Results... Totals:	BCWS	2,987	3,674	11,932	30,273	29,357	27,735	35,495	72,694	81,072	74,390	73,446	56,462	47,848	51,958
<b>SUMMARY (Base + Escalation)</b>															
A.1.03.00 WMF-SP0 Project Support & Facility Authority	BCWS	153,327	71,270	76,312	94,680	108,317	86,106	77,889	74,117	76,107	18,398	18,668	19,064	14,174	23,498
A.1.03.00.01 WMF-SP1 RH-TRU to WIPP	BCWS	32,933	20,384	60,304	45,624	28,513	31,915	29,542	26,409	13,768	0	0	0	0	0
A.1.03.00.02 WMF-SP2 Subsurface Disposal Area	BCWS	17,909	11,226	85,688	116,220	119,976	281,052	257,844	264,320	268,773	236,567	200,111	202,157	0	0
A.1.03.00.03 WMF-SP3 OU 7-10	BCWS	52,655	32,573	93,205	224,431	126,317	63,967	86,489	141,325	178,766	114,469	70,615	586	0	0
A.1.03.00.05 WMF-SP5 Excess Facilities Disposition & D&D	BCWS	0	0	0	0	0	0	0	0	0	0	0	0	0	3,510
Results... Totals:	BCWS	256,823	135,553	246,610	450,275	380,367	298,983	313,108	522,901	397,058	358,055	286,216	214,138	229,136	

Thousands of \$

## Clean/Close RWM/C

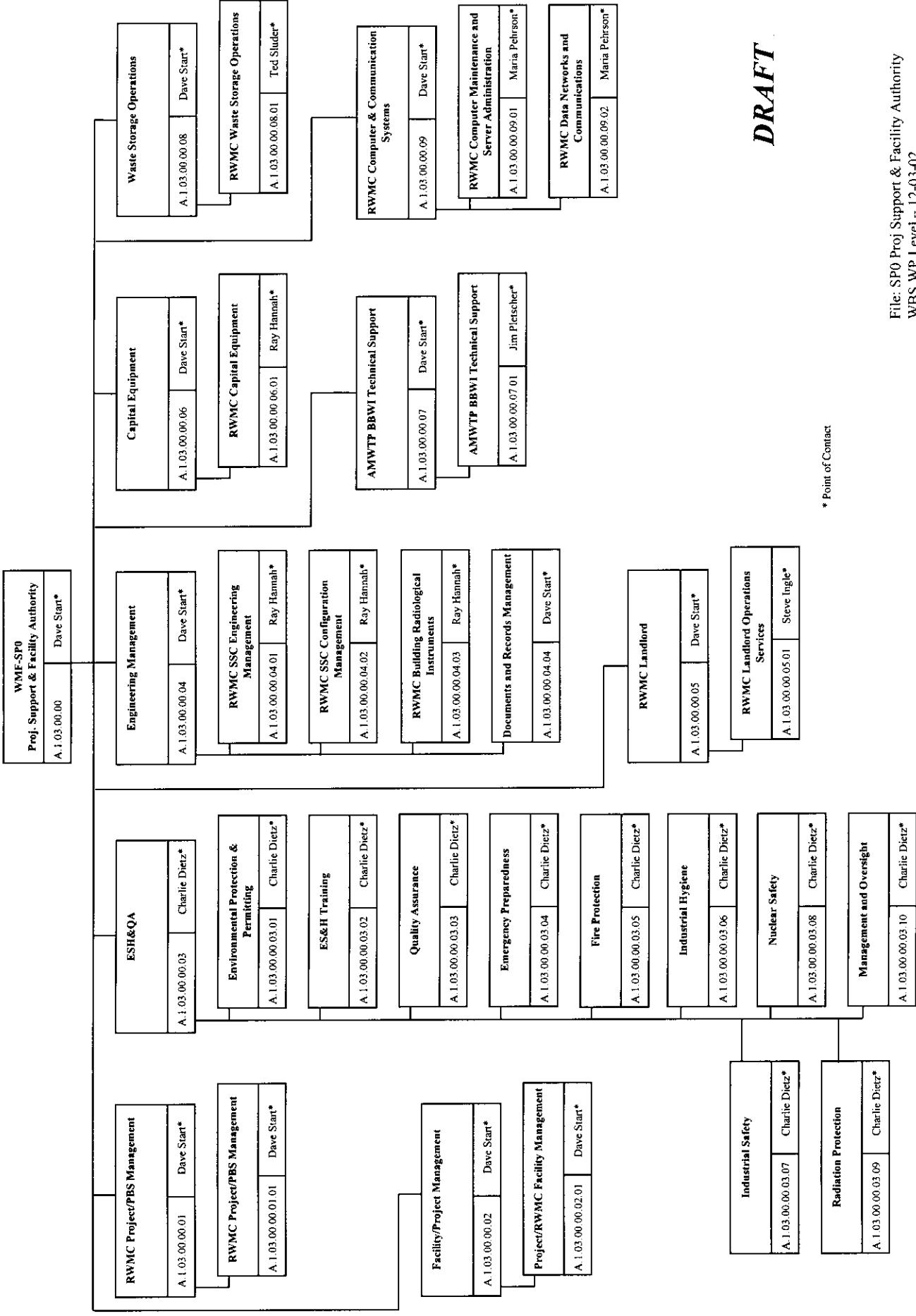
Breakout by Subproject

WBS141 [WBS15]	WBS141 Clean/Close RWM/C	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	Cumulative
<b>BURDENED BASE</b>															
A.1.03.00.08 WMF-SP0 Project Support & Facility Authority	23,963	0	0	0	0	0	0	0	0	0	0	0	0	0	908,067
A.1.03.00.01 WMF-SP1 RH-RU to WIPP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	253,115
A.1.03.00.02 WMF-SP2 Subsurface Disposal Area	151,099	151,706	152,313	152,313	152,313	151,099	151,706	151,706	151,706	151,706	151,706	151,706	151,706	0	3,330,491
A.1.03.00.03 WMF-SP3 OU 7-10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,036,155
A.1.03.00.05 WMF-SPs Excess Facilities Disposition & D&D	2,314	0	0	0	0	0	0	0	0	0	0	0	0	0	6,353
<b>Results... Totals:</b>	<b>177,376</b>	<b>151,706</b>	<b>152,313</b>	<b>152,313</b>	<b>152,313</b>	<b>151,099</b>	<b>151,706</b>	<b>0</b>	<b>5,634,161</b>						
<b>ESCAPEE</b>															
A.1.03.00.00 WMF-SP0 Project Support & Facility Authority	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A.1.03.00.01 WMF-SP1 RH-RU to WIPP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28,692
A.1.03.00.02 WMF-SP2 Subsurface Disposal Area	55,305	59,881	64,584	69,139	73,786	77,913	83,051	87,982	93,004	98,148	0	0	0	0	26,387
A.1.03.00.03 WMF-SP3 OU 7-10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,156,648
A.1.03.00.05 WMF-SPs Excess Facilities Disposition & D&D	863	0	0	0	0	0	0	0	0	0	0	0	0	0	149,243
<b>Results... Totals:</b>	<b>56,168</b>	<b>59,881</b>	<b>64,584</b>	<b>69,139</b>	<b>73,786</b>	<b>77,913</b>	<b>83,051</b>	<b>87,982</b>	<b>93,004</b>	<b>98,148</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,211</b>
<b>SUMMARY (Base + Escalation)</b>															
A.1.03.00.00 WMF-SP0 Project Support & Facility Authority	23,963	0	0	0	0	0	0	0	0	0	0	0	0	0	936,759
A.1.03.00.01 WMF-SP1 RH-RU to WIPP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	273,502
A.1.03.00.02 WMF-SP2 Subsurface Disposal Area	206,404	211,587	216,897	221,452	226,098	229,012	234,756	239,688	244,710	249,854	0	0	0	0	4,487,139
A.1.03.00.03 WMF-SP3 OU 7-10	3,176	0	0	0	0	0	0	0	0	0	0	0	0	0	1,185,397
A.1.03.00.05 WMF-SPs Excess Facilities Disposition & D&D	233,543	211,587	216,897	221,452	226,098	229,012	234,756	239,688	244,710	249,854	0	0	0	0	8,544
<b>Results... Totals:</b>	<b>233,543</b>	<b>211,587</b>	<b>216,897</b>	<b>221,452</b>	<b>226,098</b>	<b>229,012</b>	<b>234,756</b>	<b>239,688</b>	<b>244,710</b>	<b>249,854</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6,897,341</b>

Thousands of \$

A.1.03.00.00 SPO  
Project Support &  
Facility Authority

# WMF-SPO- Project Support & Facility Authority



File: SPO Proj Support & Facility Authority  
WBS WP Level - 12-03-02  
Last Update: Dec. 03, 2002

**A.1.03.00.00**  
**Subproject Plan**

## SUBPROJECT PLAN

Life-Cycle FY 2004

WBS: A.1.03.00.00

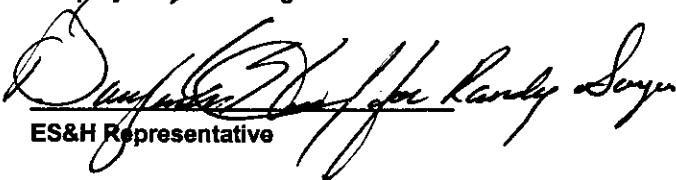
Title: WMF-SP0 Project Support & Facility Authority

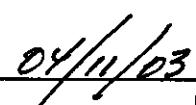
Project Manager:	David M Bright	Planning & Controls:	Douglas M Harmel
DOE-ID:	Jerry L Wells	ES&H Field Manager:	Randy D Sayer
PBS Manager:	John M Schaffer	Other:	
Project Manager for Project Support and Facility Authorization			David M Bright

APPROVED BY:

  
\_\_\_\_\_  
Subproject Plan Manager

  
\_\_\_\_\_  
Date

  
\_\_\_\_\_  
ES&H Representative

  
\_\_\_\_\_  
Date

### 1. WORK DESCRIPTION:

Provide Project Support and Facility Authority (SP0) project, and facility management and infrastructure to ensure Radioactive Waste Management Complex (RWMC) transuranic (TRU) waste and SDA remediation operations are performed in a safe and environmentally responsible manner. Work scope performed by this subproject is required to:

- Comply with the RWMC authorization basis (AB), i.e., Safety Analysis Report, Resource Conservation and Recovery Act Part B Permit, and other environmental permits,
- Support completion of the Department of Energy 1995 Settlement Agreement milestones,
- Provide infrastructure support to other RWMC Clean/Close Subprojects including: SP1 – Remote Handled Transuranic (RH-TRU) to WIPP, SP2 - SDA, and SP3 - GEM, and other EM Projects: 1 – The Advanced Mixed Waste Treatment Project (AMWTP), and 2 - continued disposal of low-level waste.

Specifically this subproject provides landlord functions and maintenance for RWMC base facility structures, systems, and components, implementation of institutional plans for environmental safety, health, and quality assurance, capital equipment needs, and SP0 project and RWMC facility management support.

Support necessary for the management of the Clean/Close RWMC Project, BBWI technical services and interface functions for the Advanced Mixed Waste Treatment Project, and DOE-ID Funds for the AMWTP contract are also provided.

The RWMC Base Facility is defined as RWMC Infrastructure including:

Administration Area including: Waste Management Facility (WMF)-611 Old Guardhouse, WMF-619 Communications Building, WMF-622 Office Annex, WMF-637 Operations Control Building, WMF-653 Office Annex #2, and WMF-658 DOE/RWMC Office Facility. NOTE: WMF-613 WMF Office Building transferred to BNFL Inc. on December 31, 2002.

Operations Area including: WMF-601 Radiation Control Field Office, WMF-602 RWMC Highbay, WMF-603 Potable Water Pump-house and WMF-709 Potable Water Storage Tank, WMF-604 Change House and Lunchroom, WMF-609 Heavy Equipment Storage Shed, WMF-620 Work Control Center Trailer, WMF-621 Work Control Support Trailer, WMF-639 Fire Water Pump-house and WMF-727 Fire Water Storage Tank, WMF-645 Construction Support Trailer, WMF-646 Field Support Trailer, WMF-655 Material Handling Facility, WMF-656 RWMC Maintenance Facility, WMF-657 Construction Field Support Trailer, and WMF-661 Chemical Storage Bunker.

## SUBPROJECT PLAN

### Life-Cycle FY 2004

WBS: A.1.03.00.00

Title: WMF-SP0 Project Support & Facility Authority

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TSA Facilities including: WMF-628 Waste Storage Facility (WSF) Type II Storage Module, WMF-648 ILTSF Vault Monitoring Trailer, WMF-714 Intermediate-Level Transuranic Storage Facility (ILTSF) Pad 1, and WMF-720 Intermediate-Level Transuranic Storage Facility (ILTSF) Pad 2.

SDA Area including: WMF-605 Well House No. 87, WMF-649 Vapor Vacuum Extraction Monitoring Well, WMF-650 Vapor Vacuum Extraction Monitoring Well. (Note: These facilities are not included within the RWMC Base Facility starting after FY 2015 for the purpose of identifying them for D&D).

The RWMC Project Support and Facility Authority subproject is comprised of the following nine (9) Control Accounts (CA).

A.1.03.00.00.01 RWMC Project/PBS Management: Provides maintenance of the RWMC long range and end state plans (RWMC Strategic Plan) and RWMC subproject management and coordination. Project support functions including control of schedules and cost accounts, planning, budgeting, and development of progress reports to DOE-ID and BBWI upper level management, Project Administration and Sub-Project Administration Coordination, Project Construction Management Coordination, Project Environmental, Safety, Health and Quality Assurance (ESH&QA) oversight and Sub-Project ESH&QA Coordination, Project Engineering Coordination, Project Public/Community Relations, Project Legal Support, Project Procurement and Sub-Project Procurement Coordination, Project Training and Sub-Project Training Coordination, and the management of emerging issues are also provided.

A.1.03.00.00.02 RWMC Facility / SP0 Project Management: Provides SP0 project and facility management and infrastructure to ensure Radioactive Waste Management Complex (RWMC) base facility operations are performed in a safe and environmentally responsible manner. Facility project controls and scheduling support are also included.

A.1.03.00.00.03 ESH&QA Compliance: Provides Environmental, Safety, Health, and Quality Assurance (ESH&QA) support for RWMC Project Support and Facility Authority (SP0) activities at the Radioactive Waste Management Complex (RWMC), RWMC Base Facility personnel training is also provided.

A.1.03.00.00.04 Engineering Management: Provides System, Structure, and Component (SSC) Engineering Management, SSC Configuration Management, RWMC Base Facility Radiological Monitoring Equipment Maintenance, and Records Management / Document Support services for RWMC SP0 Project and Facility Management.

A.1.03.00.00.05 RWMC Landlord: Provides landlord operations services and facility maintenance charges for RWMC Base Facility.

A.1.03.00.00.06 RWMC Capital Equipment: Procures new and replacement Capital Equipment to support the RWMC SP0 Subproject.

A.1.03.00.00.07 AMWTP BBWI Technical Support: Provides support for the BBWI level of effort technical support and support services for the Advanced Mixed Waste Treatment Project (AMWTP) and AMWTP Tri-party Memorandum of Agreement (MOA), DOE/ID-10520. The AMWTP performs work in accordance with the 1995 Settlement Agreement with the state of Idaho and the Idaho National Engineering and Environmental Laboratory Site Treatment Plan. This Control Account also includes: 1) DOE-ID AMWTP funds for the oversight & administration of the AMWTP contract and payment for processing and loading services for the transportation of 65,000m<sup>3</sup> of transuranic and alpha contaminated mixed waste stored at the INEEL by BNFL, Inc. and, 2) FY 2004 dollars held for the AMWTP asset acquisition project (privatized).

A.1.03.00.00.08 RWMC Waste Storage Operations: Provides for inspection of Remote-Handled (RH) Transuranic (TRU) waste storage vaults at the Intermediate-Level TRU Storage Facility (ILTSF) vaults at the Radioactive Waste Management Complex, and receipt, inspection, and management of TRU-contaminated waste and un-irradiated fuel rejected by the Advanced Mixed Waste Treatment Project (AMWTP) at the WMF-628 Type II Storage Module. This Control Account also provides offsite disposal of Dry Rod Consolidation Technology (DRCT) fuel skeleton waste, currently stored at ILTSF, at Hanford.

## SUBPROJECT PLAN

Life-Cycle FY 2004

WBS: A.1.03.00.00

Title: WMF-SP0 Project Support & Facility Authority

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A.1.03.00.00.09 RWMC Computer and Communication Systems: Provides Computer Maintenance, Server Administration, and Data Network Maintenance for RWMC Base Facility Structures and Personnel. It also provides coordination for similar activities that support other RWMC Subprojects: SP1 - RH-TRU to WIPP, SP2 - SDA, SP3 - GEM Project, and SP5 – Excess Facility Disposition and D&D.

## 2. MAJOR PRODUCTS AND DELIVERABLES:

### Milestones

#### External:

- Submit final Master Schedule to INEEL Planning & Controls by March each fiscal year.
- Submit final RWMC Program LCB planning packages by January each fiscal year.
- Submit final DWP by September each fiscal year.
- The annual RWMC SAR update will be submitted to DOE-ID by August 31, 2003. The FY-03 RWMC SAR will be an accurate description of the facility under the operational control of the Management and Operations (M&O). (E2PG)
- Class I Permit Modification to the State of Idaho, February 17, 2003. (E4)
- Complete shipment of DRCT Waste to Hanford, September 30, 2006.

## 3. ESTIMATE DEVELOPMENT BASIS:

Cost estimates for the SP0 RWMC Project Support and Facility Authority activities are based on the following:

- The cost estimates were based on the most appropriate means available, with first consideration given to a bottoms-up methodology, using known process times and/or historical data to arrive at a unit cost. Other cost estimate development methodologies were used, i.e.:
- Professional experience and judgment of Subject Matter Experts, e.g., process engineers, technicians, managers, and outside consultants, where applicable, was used to determine appropriate resources for performing new work scope activities for which no historical data was available.
- Recorded hours expended for similar work activities to accomplish similar scope performed in FY 2002/2003. In most cases, adjustments were made—up or down, as necessary—to reflect changes in operating conditions, scope of work, lessons learned, or other factors currently existing or projected going forward.
- Engineering estimates were developed for facility and system modifications utilizing standard engineering and construction methods of estimating costs from drawings and specifications.
- Other sources of reliable cost data were used, i.e., vendor quotes and estimates, FY 2002/2003 baseline cost estimates, and FY 2002/2003 estimates at completion.
- *In preparing the cost estimate, ongoing reference was made to the DWP, Section 2.5, "Cost Estimates and Basis of Estimates".*

Detailed cost estimates are provided in the individual planning packages for the various Control Accounts.

## 4. ASSUMPTIONS:

#### External:

- A. The RWMC SP0 Project Support and Facility Authority will maintain facility support functions through the end of FY 2015 in order to provide contractual support to AMWTP through completion of shipping (FY 2012) and D&D/RCRA Closure (FY 2015).

## SUBPROJECT PLAN

### Life-Cycle FY 2004

WBS: A.1.03.00.00

Title: WMF-SP0 Project Support & Facility Authority

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- B. As of January 1, 2003, the only active facilities BBWI will manage within the Transuranic Storage Area (TSA) includes only the Intermediate-Level Transuranic Storage Facility (ILTSF) and WMF-628.
- C. BBWI will provide maintenance up to utility interface points with AMWTP, as defined in the Tri-Party Memorandum of Agreement (MOA) and will perform all maintenance in operations and administrative area of RWMC.
- D. The AMWTP commences operations in FY 2003 and will complete operations during FY 2015.
- E. AMWTP Technical Support work reflects the agreements between DOE-ID, BBWI, and BNFL, Inc. for the AMWTP as contained in the current draft (draft C) of revision 3 to the AMWTP MOA . Impacts to this work due to MOA revisions and changes will be assessed when revision 3 is approved and issued. Subsequent revisions and changes will be likewise assessed for impacts.
- F. The cost of services requested by BNFL, Inc. under the Memorandum Purchase Order (MPO) process will be fully recovered from BNFL, Inc by the Memorandum Purchase Order work orders.
- G. M&O services listed in the BNFL, Inc Contract with DOE-ID will be fully funded by DOE-ID.
- H. M&O services include the disposal of AMWTP generated Low Level Waste (LLW).
- I. The amount of AMWTP LLW that requires disposal by DOE-ID is assumed to be 2,870 m<sup>3</sup>/year from FY 2004 through FY 2008, 2,541 m<sup>3</sup>/year from FY 2009 through FY 2012, and 635 m<sup>3</sup>/year from FY 2013 through FY 2015. No AMWTP LLW is generated thereafter.
- J. AMWTP rejects 176 containers waste and un-irradiated fuel each year during FY 2004 through FY 2009. No reject waste or un-irradiated fuel is sent by AMWTP after FY 2009.
- K. Reject AMWTP waste accepted for storage will comply with RWMC Safety and Regulatory Authorization requirements.
- L. BBWI will not perform characterization/fingerprinting of waste rejected by BNFL, Inc. AMWTP for storage purposes.
- M. The ANL-E generated RH-TRU waste stored at the Intermediate Level Transuranic Storage Facility continues to be managed as a non-mixed waste.
- N. The DOE-ID will not allow the disposal of Greater Than Class C (GTCC) waste at the RWMC.
- O. The DRCT waste retrieval and disposal is limited to six-86 gallon drums located in the ILTSF.
- P. The DRCT GTCC waste can be disposed of at Hanford without processing a special case Performance Assessment (PA).
- Q. Hanford procedure development, training, and disposal manpower costs are equivalent to INEEL cost for the same scope.
- R. Hanford operations will place (dispose) DRCT waste using a "hot pick" technique.
- S. The RCRA Permit Modification due to the flood plain modifications, decreasing training, inspection and reporting requirements will pertain only to hazardous waste stored in WMF-628, after calendar year 2003.
- T. Any IDEQ review of required Class 2 Permit modification requests will be conducted within 60 days of receipt of the modification by the IDEQ.
- U. Comments of a substantial nature are not expected from IDEQ on the recently submitted amended Clean Air Act Permit.
- V. Changes to regulatory and customer driven requirements will have only minor impacts on the scope of activities performed.

Internal:

## SUBPROJECT PLAN

### Life-Cycle FY 2004

WBS: A.1.03.00.00

Title: WMF-SP0 Project Support & Facility Authority

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- A. Subproject SP0 Project Support and Facility Authority only provides the base facility functions required to maintain RWMC in a minimal compliant status.

The other sub-projects contained within the Clean/Close RWMC Project, excepting SP1, RH-TRU Shipped to WIPP, are responsible for and contain cost estimates and funding for all aspects of additional facility support.
- B. All projects at the RWMC SP1 RH-TRU to WIPP, SP2 SDA, SP3 GEM, and the AMWTP complete operations before or during FY2015. Costs for activities after 2015 are included in the other RWMC subprojects' budget.
- C. The individual projects at the RWMC; SP1 RH-TRU to WIPP, SP2 SDA, SP3 GEM, and SP5 Excess Facilities Disposition and D&D, pay for the disposal of Low Level Waste (LLW), Mixed Low Level Waste (MLLW), and Hazardous Waste (HW) generated by each respective project.
- D. Only RWMC Facility RCRA Class I Permit modification requests are funded by this sub-project. Any RCRA Class II or III Permit modification requests, which must be processed during the prior fiscal year, will be funded by the requesting/requiring project.
- E. The BBWI Physical Assets Maintenance and Operations Organization will provide the following as part of the RWMC Facility Maintenance Charge: 1 – RWMC Building and Infrastructure Maintenance including; Maintenance Management Line Supervision, SSC Engineering, Planning, Material Requisition, Handling, and Excess, Maintenance related Standards and Calibration, Scheduling, Work Control (CMMS, PM, and Work Order Administration), Work Order Performance including material/parts, 2 – RWMC Facility Maintenance Outage Scheduling, 3 – Maintenance Personnel Moves, 4 – RWMC Snow Removal, 5- Maintenance Related Direct Purchases (Winter Gear, Safety Supplies/PPE, Laundry, Miscellaneous items), 6 – RWMC Cold Weather Inspections, 7 - Maintenance Related Facility Signage (Maintenance of existing signs), 8 – RWMC Maintenance Fleet Rental and Repair, 9 – RWMC Utility Purchases (Electricity and Propane), 10 – RWMC Administration and Operation Areas Grounds Maintenance, 11 – SDA Maintenance, 12 – RWMC Custodial Service, 13 – Maintenance Facility Eyewash Station PMs, and 14 – RWMC Facility Excellence Preparation (Zone Inspections per Charter 169 - Facility Evaluation Board).
- F. The BBWI Physical Assets Maintenance and Operations purchases all Capital Equipment required to perform RWMC building and infrastructure maintenance and repairs.
- G. This subproject does not provide maintenance for project specific Systems, Structures, or Components (SSCs).
- H. No major damage will occur to facilities or infrastructure due to acts of nature.
- I. No newly generated contact-handled TRU waste will be accepted for storage at RWMC in WMF-628 after the completion of the Glovebox Excavator Method (GEM) SP3 OU 7-10 Sub-Project.
- J. The SP3 OU 7-10 Sub-Project will fund the Waste Handling Operations associated with OU7-10 Stage II operations.
- K. SP3 OU 7-10 Sub-Project will remove GEM waste from WMF-628 before the end FY 2015.
- L. SP3 OU 7-10 Sub-Project will meet INEEL Reusable property, Recycle material, and Waste Acceptance Criteria (RRWAC) requirements for newly generated waste.
- M. SP3 OU 7-10 Sub-Project waste will require less than one quarter of the available floor space in WMF-628.
- N. The procedures required to support the receipt, inspection and storage of TRU-contaminated waste rejected from AMWTP are not implemented during FY 2003.
- O. The DRCT waste retrieval and disposal is limited to six-86 gallon drums located in the ILTSF.
- P. The INEEL CNS-1-13C II Cask can have its Nuclear Regulatory Commission Certificate of Compliance renewed and be used for transport of DRCT drums to Hanford.

## SUBPROJECT PLAN

Life-Cycle FY 2004

WBS: A.1.03.00.00

Title: WMF-SP0 Project Support & Facility Authority

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- Q. The results of an Unreviewed Safety Question (USQ) analysis for the retrieval of DRCT waste from ILTSF will not require a revision to the RWMC Safety Analysis Report (SAR).
- R. The existing/attached rigging will be acceptable for the retrieval of DRCT drums. No testing, modification, or replacement of that rigging will be required.
- S. The DRCT waste containers will not require placement in overpack containers.
- T. SP0 Project takes control of a Transuranic Reporting Inventory Processing System (TRIPS) server and a static copy of the TRIPS Database on April 21 2003 at which time limited report and administration will be provided in order to provide future reporting capability.
- U. Nuclear Energy (NE) responsibility for maintenance of Information Technology (IT) infrastructure (both data and telecommunications) will end with the termination of cabling/fiber feeding the primary RWMC dial room (currently WMF-619).
- V. BBWI will not reinstitute company wide PC refresh program. PCs will be replaced according to BBWI company guidance i.e. every three years.
- W. In FY 2004 a determination will be made to upgrade the RWMC Facility IT Infrastructure to implement the new INEEL wireless standard.
- X. RWMC IT Infrastructure upgrades will incorporate the new company wireless standard.
- Y. The RWMC Computer Maintenance and Network Operations Work Package only provides computer maintenance, server administration, and personal computer/printer purchases for SP0 Project Personnel at the RWMC.
- Z. Subproject SP0 activities will only be performed on a single-shift basis (4x10s).

### 5. SCIENCE AND TECHNOLOGY NEEDS:

N/A



# INNEEL

## EM Project

### RWMMC Completion PBS C

#### WMC/SPO Project Support & Facility Authority

##### RWMMC Project/PBS Management

Activity ID	Description	Early Start	Early Finish	WBS
0L101003	RWMMC Project/PBS Management Contingency - FY04	01OCT03	30SEP04	A.1.03.00.00.01.01.
0L101039	RWMMC PBS Management Contingency - FY04	01OCT03	30SEP04	A.1.03.00.00.01.01.
0L101075	Contingency - FY04 Negative Adjustment	01OCT03	30SEP04	A.1.03.00.00.01.01.
0L101006	RWMMC Project/PBS Management - FY05	01OCT04	30SEP05*	A.1.03.00.00.01.01.
0L101042	RWMMC PBS Management Contingency - FY05	01OCT04	30SEP05	A.1.03.00.00.01.01.
0L101078	Contingency - FY05 75% Negative Adjustment	01OCT04	30SEP05	A.1.03.00.00.01.01.
0L101009	RWMMC Project/PBS Management - FY06	03OCT05	29SEP06*	A.1.03.00.00.01.01.
0L101045	RWMMC PBS Management Contingency - FY06	03OCT05	29SEP06	A.1.03.00.00.01.01.
0L101012	RWMMC Project/PBS Management Contingency - FY07	02OCT06	28SEP07*	A.1.03.00.00.01.01.
0L101048	RWMMC PBS Management Contingency - FY07	02OCT06	28SEP07	A.1.03.00.00.01.01.
0L101015	RWMMC Project/PBS Management - FY08	01OCT07	30SEP08*	A.1.03.00.00.01.01.
0L101051	RWMMC PBS Management Contingency - FY08	01OCT07	30SEP08	A.1.03.00.00.01.01.
0L101081	Contingency - Respread FY04/05 Contingency - FY08	01OCT07	30SEP08	A.1.03.00.00.01.01.
0L101054	RWMMC PBS Management Contingency - FY09	01OCT08	30SEP09	A.1.03.00.00.01.01.
0L101018	RWMMC Project/PBS Management - FY09	02OCT08	01OCT09*	A.1.03.00.00.01.01.
0L101021	RWMMC Project/PBS Management - FY10	01OCT09	30SEP10*	A.1.03.00.00.01.01.
0L101057	RWMMC PBS Management Contingency - FY10	01OCT09	30SEP10	A.1.03.00.00.01.01.
0L101024	RWMMC Project/PBS Management - FY11	01OCT10	30SEP11*	A.1.03.00.00.01.01.
0L101060	RWMMC PBS Management Contingency - FY11	01OCT10	30SEP11	A.1.03.00.00.01.01.
0L101027	RWMMC Project/PBS Management Contingency - FY12	03OCT11	28SEP12*	A.1.03.00.00.01.01.
0L101063	RWMMC PBS Management Contingency - FY12	03OCT11	28SEP12	A.1.03.00.00.01.01.
0L101030	RWMMC Project/PBS Management - FY13	01OCT12	30SEP13*	A.1.03.00.00.01.01.
0L101066	RWMMC PBS Management Contingency - FY13	01OCT12	30SEP13	A.1.03.00.00.01.01.
0L101033	RWMMC Project/PBS Management Contingency - FY14	01OCT13	30SEP14*	A.1.03.00.00.01.01.
0L101069	RWMMC PBS Management Contingency - FY14	01OCT13	30SEP14	A.1.03.00.00.01.01.
0L101036	RWMMC Project/PBS Management - FY15	01OCT14	30SEP15*	A.1.03.00.00.01.01.
0L101072	RWMMC PBS Management Contingency - FY15	01OCT14	30SEP15	A.1.03.00.00.01.01.
Facility/Project Management				
0L201003	RWMMC Project/Facility Management Contingency - FY04	01OCT03	30SEP04*	A.1.03.00.00.02.01.
0L201039	RWMMC Facility Management Contingency - FY04	01OCT03	30SEP04	A.1.03.00.00.02.01.
0L201075	Contingency - FY04 Negative Adjustment	01OCT03	30SEP04	A.1.03.00.00.02.01.
0L201006	RWMMC Project/Facility Management - FY05	01OCT04	30SEP05*	A.1.03.00.00.02.01.
0L201042	RWMMC Facility Management Contingency- FY05	01OCT04	30SEP05	A.1.03.00.00.02.01.
0L201078	Contingency - FY05 75% Negative Adjustment	01OCT04	30SEP05	A.1.03.00.00.02.01.
0L201009	RWMMC Project/Facility Management - FY06	03OCT05	29SEP06	A.1.03.00.00.02.01.

Start Date 01OCT03  
Finish Date 30SEP30  
Data Date 01OCT03  
Run Date 11APR03 14:42

Early Bar 01OCT03 14:42  
Progress Bar 30SEP30 14:42  
Critical Activity 01OCT03 14:42

Sheet 1 of 15

Clean/Close RW/MC  
SPO - A.1.03.00.00  
Project Support & Facility Authority  
Lifecycle Baseline

Activity ID	Description	Start	Early Finish	WBS
01.201045	RWMC Facility Management Contingency - FY06	03OCT05	29SEP06	A.1.03.00.00.02.01.
01.201012	RWMC Project/Facility Management Contingency - FY07	02OCT06	28SEP07	A.1.03.00.00.02.01.
01.201048	RWMC Facility Management Contingency - FY07	02OCT06	28SEP07	A.1.03.00.00.02.01.
01.201015	RWMC Project/Facility Management Contingency - FY08	01OCT07	30SEP08	A.1.03.00.00.02.01.
01.201051	RWMC Facility Management Contingency - FY08	01OCT07	30SEP08	A.1.03.00.00.02.01.
01.201081	Contingency - Respread FY04/05 Cntrgncy - FY08	01OCT07	30SEP08	A.1.03.00.00.02.01.
01.201018	RWMC Project/Facility Management Contingency - FY09	01OCT08	30SEP09	A.1.03.00.00.02.01.
01.201054	RWMC Facility Management Contingency - FY09	01OCT08	30SEP09	A.1.03.00.00.02.01.
01.201021	RWMC Project/Facility Management Contingency - FY10	01OCT09	30SEP10	A.1.03.00.00.02.01.
01.201057	RWMC Facility Management Contingency - FY10	01OCT09	30SEP10	A.1.03.00.00.02.01.
01.201024	RWMC Project/Facility Management Contingency - FY11	01OCT10	30SEP11	A.1.03.00.00.02.01.
01.201060	RWMC Facility Management Contingency - FY11	01OCT10	30SEP11	A.1.03.00.00.02.01.
01.201027	RWMC Project/Facility Management Contingency - FY12	03OCT11	28SEP12	A.1.03.00.00.02.01.
01.201063	RWMC Facility Management Contingency - FY12	03OCT11	28SEP12	A.1.03.00.00.02.01.
01.201030	RWMC Project/Facility Management Contingency - FY13	01OCT12	30SEP13	A.1.03.00.00.02.01.
01.201066	RWMC Facility Management Contingency - FY13	01OCT12	30SEP13	A.1.03.00.00.02.01.
01.201033	RWMC Project/Facility Management Contingency - FY14	01OCT13	30SEP14	A.1.03.00.00.02.01.
01.201069	RWMC Facility Management Contingency - FY14	01OCT13	30SEP14	A.1.03.00.00.02.01.
01.201036	RWMC Project/Facility Management Contingency - FY15	01OCT14	30SEP15	A.1.03.00.00.02.01.
01.201072	RWMC Facility Management Contingency - FY15	01OCT14	30SEP15	A.1.03.00.00.02.01.
ESH&QA Compliance				
01.301003	RWMC Environmental Protection & Permitting	01OCT03	30SEP04	A.1.03.00.00.03.01.
01.301039	RWMC Enviro Protection Contingency - FY04	01OCT03	30SEP04	A.1.03.00.00.03.01.
01.301075	Contingency - FY04 Negative Adjustment	01OCT03	30SEP04	A.1.03.00.00.03.01.
01.301006	RWMC Environmental Protection Contingency - FY05	01OCT04	30SEP05	A.1.03.00.00.03.01.
01.301042	RWMC Enviro Protection Contingency - FY05	01OCT04	30SEP05	A.1.03.00.00.03.01.
01.301078	Contingency - FY05 75% Negative Adjustment	01OCT04	30SEP05	A.1.03.00.00.03.01.
01.301009	RWMC Environmental Protection Contingency - FY06	03OCT05	29SEP06	A.1.03.00.00.03.01.
01.301045	RWMC Enviro Protection Contingency - FY06	03OCT05	29SEP06	A.1.03.00.00.03.01.
01.301012	RWMC Environmental Protection Contingency - FY07	02OCT06	28SEP07	A.1.03.00.00.03.01.
01.301048	RWMC Enviro Protection Contingency - FY07	02OCT06	28SEP07	A.1.03.00.00.03.01.
01.301015	RWMC Environmental Protection Contingency - FY08	01OCT07	30SEP08	A.1.03.00.00.03.01.
01.301051	RWMC Enviro Protection Contingency - FY08	01OCT07	30SEP08	A.1.03.00.00.03.01.
01.301081	Contingency - Respread FY04/05 Cntrgncy - FY08	01OCT07	30SEP08	A.1.03.00.00.03.01.
01.301018	RWMC Environmental Protection Contingency - FY09	01OCT08	30SEP09	A.1.03.00.00.03.01.
01.301054	RWMC Enviro Protection Contingency - FY09	01OCT08	30SEP09	A.1.03.00.00.03.01.
01.301021	RWMC Environmental Protection Contingency - FY10	01OCT09	30SEP10	A.1.03.00.00.03.01.
01.301057	RWMC Enviro Protection Contingency - FY10	01OCT09	30SEP10	A.1.03.00.00.03.01.
01.301024	RWMC Environmental Protection Contingency - FY11	01OCT10	30SEP11	A.1.03.00.00.03.01.
01.301060	RWMC Enviro Protection Contingency - FY11	01OCT10	30SEP11	A.1.03.00.00.03.01.
01.301027	RWMC Environmental Protection Contingency - FY12	03OCT11	28SEP12	A.1.03.00.00.03.01.
01.301063	RWMC Enviro Protection Contingency - FY12	03OCT11	28SEP12	A.1.03.00.00.03.01.
ESH&QA Compliance				
Start Date	01OCT03	Early Bar	WMC2	Clean/Close RWMC
Finish Date	30SEP30	Progress Bar		SP0 - A.1.03.00.00
Data Date	01OCT03			Project Support & Facility Authority
Run Date	11APR03 14:42			Lifecycle Baseline

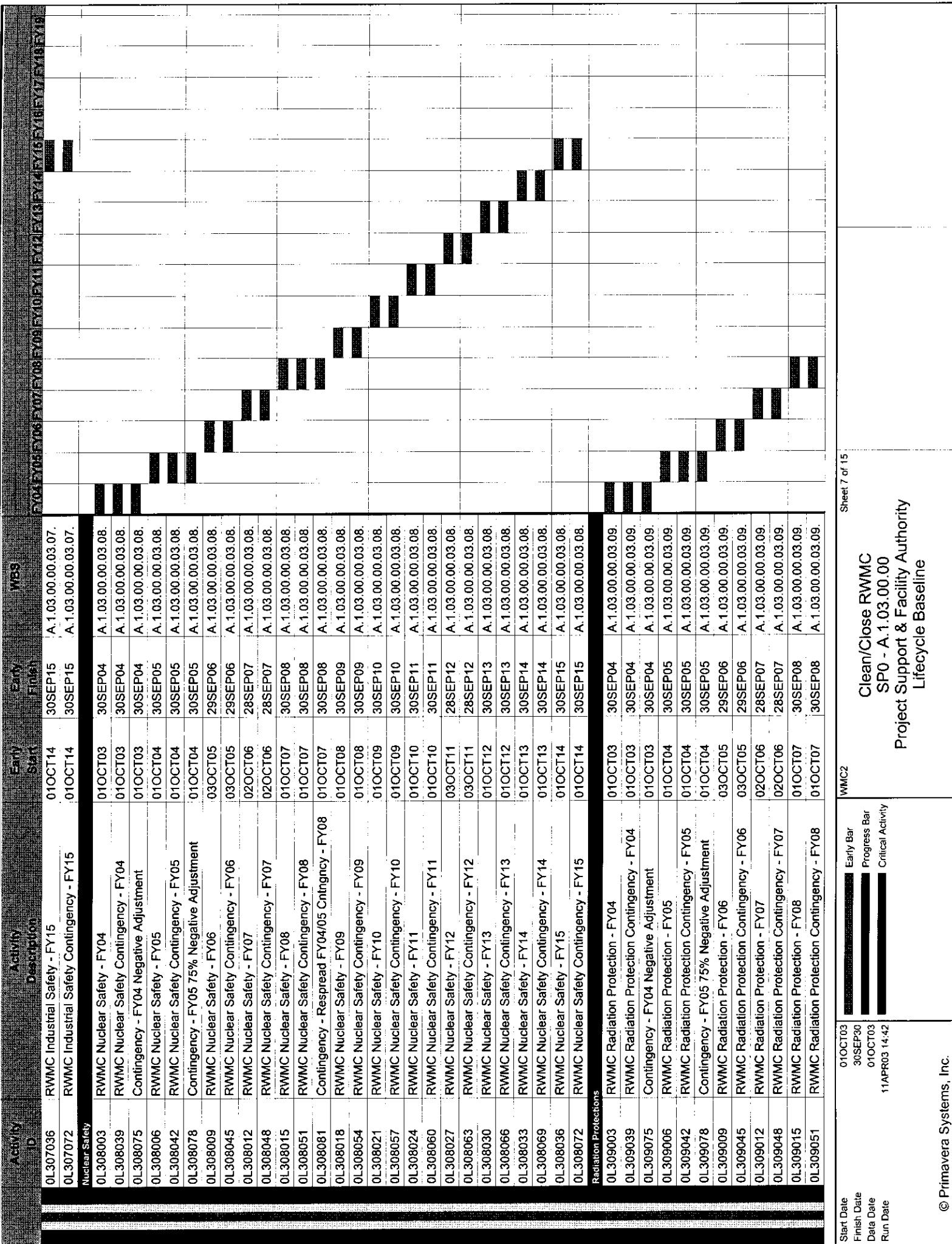
Activity ID	Activity Description	ETA Start		ETA End		WBS
		Start	End	Start	End	
01_301030	RWMC Environmental Protection Contingency - FY13	01OCT12	30SEP13	A.1.03.00.00.03.01.		
01_301066	RWMC Environmental Protection Contingency - FY13	01OCT12	30SEP13	A.1.03.00.00.03.01.		
01_301033	RWMC Environmental Protection Contingency - FY14	01OCT13	30SEP14	A.1.03.00.00.03.01.		
01_301069	RWMC Environmental Protection Contingency - FY14	01OCT13	30SEP14	A.1.03.00.00.03.01.		
01_301036	RWMC Environmental Protection Contingency - FY15	01OCT14	30SEP15	A.1.03.00.00.03.01.		
01_301072	RWMC Environmental Protection Contingency - FY15	01OCT14	30SEP15	A.1.03.00.00.03.01.		
<b>ES&amp;H Training</b>						
01_302003	RWMC Facility Training Contingency - FY04	01OCT03	30SEP04	A.1.03.00.00.03.02.		
01_302039	RWMC Facility Training Contingency - FY04	01OCT03	30SEP04	A.1.03.00.00.03.02.		
01_302053	Contingency - FY04 Negative Adjustment	01OCT03	30SEP04	A.1.03.00.00.03.02.		
01_302006	RWMC Facility Training Contingency - FY05	01OCT04	30SEP05	A.1.03.00.00.03.02.		
01_302040	RWMC Facility Training Contingency - FY05	01OCT04	30SEP05	A.1.03.00.00.03.02.		
01_302056	Contingency - FY05 75% Negative Adjustment	01OCT04	30SEP05	A.1.03.00.00.03.02.		
01_302009	RWMC Facility Training Contingency - FY06	03OCT05	29SEP06	A.1.03.00.00.03.02.		
01_302041	RWMC Facility Training Contingency - FY06	03OCT05	29SEP06	A.1.03.00.00.03.02.		
01_302012	RWMC Facility Training Contingency - FY07	02OCT06	28SEP07	A.1.03.00.00.03.02.		
01_302042	RWMC Facility Training Contingency - FY07	02OCT06	28SEP07	A.1.03.00.00.03.02.		
01_302015	RWMC Facility Training - FY08	01OCT07	30SEP08	A.1.03.00.00.03.02.		
01_302043	RWMC Facility Training Contingency - FY08	01OCT07	30SEP08	A.1.03.00.00.03.02.		
01_302059	Contingency - Respread FY04/05 Cntrngny - FY08	01OCT07	30SEP08	A.1.03.00.00.03.02.		
01_302018	RWMC Facility Training - FY09	01OCT08	30SEP09	A.1.03.00.00.03.02.		
01_302044	RWMC Facility Training Contingency - FY09	01OCT08	30SEP09	A.1.03.00.00.03.02.		
01_302021	RWMC Facility Training - FY10	01OCT09	30SEP10	A.1.03.00.00.03.02.		
01_302045	RWMC Facility Training Contingency - FY10	01OCT09	30SEP10	A.1.03.00.00.03.02.		
01_302024	RWMC Facility Training - FY11	01OCT10	30SEP11	A.1.03.00.00.03.02.		
01_302046	RWMC Facility Training Contingency - FY11	01OCT10	30SEP11	A.1.03.00.00.03.02.		
01_302027	RWMC Facility Training - FY12	03OCT11	28SEP12	A.1.03.00.00.03.02.		
01_302047	RWMC Facility Training Contingency - FY12	03OCT11	28SEP12	A.1.03.00.00.03.02.		
01_302030	RWMC Facility Training - FY13	01OCT12	30SEP13	A.1.03.00.00.03.02.		
01_302048	RWMC Facility Training Contingency - FY13	01OCT12	30SEP13	A.1.03.00.00.03.02.		
01_302033	RWMC Facility Training - FY14	01OCT13	30SEP14	A.1.03.00.00.03.02.		
01_302049	RWMC Facility Training Contingency - FY14	01OCT13	30SEP14	A.1.03.00.00.03.02.		
01_302036	RWMC Facility Training - FY15	01OCT14	30SEP15	A.1.03.00.00.03.02.		
01_302050	RWMC Facility Training Contingency - FY15	01OCT14	30SEP15	A.1.03.00.00.03.02.		
<b>Quality Assurance</b>						
01_303003	RWMC Quality - FY04	01OCT03	30SEP04	A.1.03.00.00.03.03.		
01_303039	RWMC Quality Contingency - FY04	01OCT03	30SEP04	A.1.03.00.00.03.03.		
01_303075	Contingency - FY04 Negative Adjustment	01OCT03	30SEP04	A.1.03.00.00.03.03.		
01_303006	RWMC Quality - FY05	01OCT04	30SEP05	A.1.03.00.00.03.03.		
01_303042	RWMC Quality Contingency - FY05	01OCT04	30SEP05	A.1.03.00.00.03.03.		
01_303078	Contingency - FY05 75% Negative Adjustment	01OCT04	30SEP05	A.1.03.00.00.03.03.		
01_303009	RWMC Quality - FY06	03OCT05	29SEP06	A.1.03.00.00.03.03.		
01_303045	RWMC Quality Contingency- FY06	03OCT05	29SEP06	A.1.03.00.00.03.03.		
Start Date	01OCT03	WMC2	Clean/Close RWMC	Project Support & Facility Authority Lifecycle Baseline		
Finish Date	30SEP30	Progress Bar	SP0 - A.1.03.00.00			
Data Date	01OCT03	Critical Activity				
Run Date	11APR03 14:42					
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Activity ID	Activity Description	Earn Start		Earn Finish		WBS
		Start	End	Start	End	
01_303012	RWMMC Quality - FY07	02OCT06	28SEP07	A.1.03.00.00.03.03.		
01_303048	RWMMC Quality Contingency - FY07	02OCT06	28SEP07	A.1.03.00.00.03.03.		
01_303015	RWMMC Quality - FY08	01OCT07	30SEP08	A.1.03.00.00.03.03.		
01_303051	RWMMC Quality Contingency - FY08	01OCT07	30SEP08	A.1.03.00.00.03.03.		
01_303081	Contingency - Respread FY04/05 Contingency - FY08	01OCT07	30SEP08	A.1.03.00.00.03.03.		
01_303018	RWMMC Quality - FY09	01OCT08	30SEP09	A.1.03.00.00.03.03.		
01_303054	RWMMC Quality Contingency - FY09	01OCT08	30SEP09	A.1.03.00.00.03.03.		
01_303021	RWMMC Quality - FY10	01OCT09	30SEP10	A.1.03.00.00.03.03.		
01_303057	RWMMC Quality Contingency - FY10	01OCT09	30SEP10	A.1.03.00.00.03.03.		
01_303024	RWMMC Quality - FY11	01OCT10	30SEP11	A.1.03.00.00.03.03.		
01_303060	RWMMC Quality Contingency - FY11	01OCT10	30SEP11	A.1.03.00.00.03.03.		
01_303027	RWMMC Quality - FY12	03OCT11	28SEP12	A.1.03.00.00.03.03.		
01_303063	RWMMC Quality Contingency - FY12	03OCT11	28SEP12	A.1.03.00.00.03.03.		
01_303030	RWMMC Quality - FY13	01OCT12	30SEP13	A.1.03.00.00.03.03.		
01_303066	RWMMC Quality Contingency - FY13	01OCT12	30SEP13	A.1.03.00.00.03.03.		
01_303033	RWMMC Quality - FY14	01OCT13	30SEP14	A.1.03.00.00.03.03.		
01_303069	RWMMC Quality Contingency - FY14	01OCT13	30SEP14	A.1.03.00.00.03.03.		
01_303036	RWMMC Quality - FY15	01OCT14	30SEP15	A.1.03.00.00.03.03.		
01_303072	RWMMC Quality Contingency - FY15	01OCT14	30SEP15	A.1.03.00.00.03.03.		
Emergency Preparedness						
01_304003	RWMMC Emergency Preparedness - FY04	01OCT03	30SEP04	A.1.03.00.00.03.04.		
01_304039	RWMMC Emerg Preparedness Contingency - FY04	01OCT03	30SEP04	A.1.03.00.00.03.04.		
01_304075	Contingency - FY04 Negative Adjustment	01OCT03	30SEP04	A.1.03.00.00.03.04.		
01_304006	RWMMC Emergency Preparedness - FY05	01OCT04	30SEP05	A.1.03.00.00.03.04.		
01_304042	RWMMC Emerg Preparedness Contingency - FY05	01OCT04	30SEP05	A.1.03.00.00.03.04.		
01_304078	Contingency - FY05 75% Negative Adjustment	01OCT04	30SEP05	A.1.03.00.00.03.04.		
01_304009	RWMMC Emergency Preparedness - FY06	03OCT05	29SEP06	A.1.03.00.00.03.04.		
01_304045	RWMMC Emerg Preparedness Contingency - FY06	03OCT05	29SEP06	A.1.03.00.00.03.04.		
01_304012	RWMMC Emergency Preparedness - FY07	02OCT06	28SEP07	A.1.03.00.00.03.04.		
01_304048	RWMMC Emerg Preparedness Contingency- FY07	02OCT06	28SEP07	A.1.03.00.00.03.04.		
01_304015	RWMMC Emergency Preparedness - FY08	01OCT07	30SEP08	A.1.03.00.00.03.04.		
01_304051	RWMMC Emerg Preparedness Contingency - FY08	01OCT07	30SEP08	A.1.03.00.00.03.04.		
01_304081	Contingency - Respread FY04/05 Contingency - FY08	01OCT07	30SEP08	A.1.03.00.00.03.04.		
01_304018	RWMMC Emergency Preparedness - FY09	01OCT08	30SEP09	A.1.03.00.00.03.04.		
01_304054	RWMMC Emerg Preparedness Contingency - FY09	01OCT08	30SEP09	A.1.03.00.00.03.04.		
01_304021	RWMMC Emergency Preparedness - FY10	01OCT09	30SEP10	A.1.03.00.00.03.04.		
01_304057	RWMMC Emerg Preparedness Contingency - FY10	01OCT09	30SEP10	A.1.03.00.00.03.04.		
01_304024	RWMMC Emergency Preparedness - FY11	01OCT10	30SEP11	A.1.03.00.00.03.04.		
01_304060	RWMMC Emerg Preparedness Contingency - FY11	01OCT10	30SEP11	A.1.03.00.00.03.04.		
01_304027	RWMMC Emergency Preparedness - FY12	03OCT11	28SEP12	A.1.03.00.00.03.04.		
01_304063	RWMMC Emerg Preparedness Contingency - FY12	03OCT11	28SEP12	A.1.03.00.00.03.04.		
01_304030	RWMMC Emergency Preparedness - FY13	01OCT12	30SEP13	A.1.03.00.00.03.04.		
01_304066	RWMMC Emerg Preparedness Contingency - FY13	01OCT12	30SEP13	A.1.03.00.00.03.04.		
Start Date Finish Date Data Date Run Date	01OCT03 30SEP30 01OCT03 11APR03 14:42	Early Bar Progress Bar Critical Activity	WMC2	Clean/Close RWMC SP0 - A.1.03.00.00 Project Support & Facility Authority Lifecycle Baseline		Sheet 4 of 15
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Activity ID	Description	Start	End	WBS
OL304033	RWMC Emergency Preparedness - FY14	01OCT13	30SEP14	A.1.03.00.00.03.04.
OL304069	RWMC Emergency Preparedness Contingency - FY14	01OCT13	30SEP14	A.1.03.00.00.03.04.
OL304036	RWMC Emergency Preparedness - FY15	01OCT14	30SEP15	A.1.03.00.00.03.04.
OL304072	RWMC Emergency Preparedness Contingency - FY15	01OCT14	30SEP15	A.1.03.00.00.03.04.
<b>Fire Protection</b>				
OL305003	RWMC Fire Protection - FY04	01OCT03	30SEP04	A.1.03.00.00.03.05.
OL305039	RWMC Fire Protection Contingency - FY04	01OCT03	30SEP04	A.1.03.00.00.03.05.
OL305075	Contingency - FY04 Negative Adjustment	01OCT03	30SEP04	A.1.03.00.00.03.05.
OL305006	RWMC Fire Protection - FY05	01OCT04	30SEP05	A.1.03.00.00.03.05.
OL305042	RWMC Fire Protection Contingency - FY05	01OCT04	30SEP05	A.1.03.00.00.03.05.
OL305078	Contingency - FY05 75% Negative Adjustment	01OCT04	30SEP05	A.1.03.00.00.03.05.
OL305009	RWMC Fire Protection - FY06	03OCT05	29SEP06	A.1.03.00.00.03.05.
OL305045	RWMC Fire Protection Contingency - FY06	03OCT05	29SEP06	A.1.03.00.00.03.05.
OL305012	RWMC Fire Protection - FY07	02OCT06	28SEP07	A.1.03.00.00.03.05.
OL305048	RWMC Fire Protection Contingency - FY07	02OCT06	28SEP07	A.1.03.00.00.03.05.
OL305015	RWMC Fire Protection - FY08	01OCT07	30SEP08	A.1.03.00.00.03.05.
OL305051	RWMC Fire Protection Contingency - FY08	01OCT07	30SEP08	A.1.03.00.00.03.05.
OL305081	Contingency - Respread FY04/05 Cntrgncy - FY08	01OCT07	30SEP08	A.1.03.00.00.03.05.
OL305018	RWMC Fire Protection - FY09	01OCT08	30SEP09	A.1.03.00.00.03.05.
OL305054	RWMC Fire Protection Contingency- FY09	01OCT08	30SEP09	A.1.03.00.00.03.05.
OL305021	RWMC Fire Protection - FY10	01OCT09	30SEP10	A.1.03.00.00.03.05.
OL305057	RWMC Fire Protection Contingency - FY10	01OCT09	30SEP10	A.1.03.00.00.03.05.
OL305024	RWMC Fire Protection - FY11	01OCT10	30SEP11	A.1.03.00.00.03.05.
OL305060	RWMC Fire Protection Contingency - FY11	01OCT10	30SEP11	A.1.03.00.00.03.05.
OL305027	RWMC Fire Protection - FY12	03OCT11	28SEP12	A.1.03.00.00.03.05.
OL305063	RWMC Fire Protection Contingency - FY12	03OCT11	28SEP12	A.1.03.00.00.03.05.
OL305030	RWMC Fire Protection - FY13	01OCT12	30SEP13	A.1.03.00.00.03.05.
OL305066	RWMC Fire Protection Contingency - FY13	01OCT12	30SEP13	A.1.03.00.00.03.05.
OL305033	RWMC Fire Protection - FY14	01OCT13	30SEP14	A.1.03.00.00.03.05.
OL305069	RWMC Fire Protection Contingency - FY14	01OCT13	30SEP14	A.1.03.00.00.03.05.
OL305036	RWMC Fire Protection - FY15	01OCT14	30SEP15	A.1.03.00.00.03.05.
OL305072	RWMC Fire Protection Contingency - FY15	01OCT14	30SEP15	A.1.03.00.00.03.05.
<b>Industrial Hygiene</b>				
OL306003	RWMC Industrial Hygiene - FY04	01OCT03	30SEP04	A.1.03.00.00.03.06.
OL306039	RWMC Industrial Hygiene Contingency - FY04	01OCT03	30SEP04	A.1.03.00.00.03.06.
OL306075	Contingency - FY04 Negative Adjustment	01OCT03	30SEP04	A.1.03.00.00.03.06.
OL306006	RWMC Industrial Hygiene - FY05	01OCT04	30SEP05	A.1.03.00.00.03.06.
OL306042	RWMC Industrial Hygiene Contingency - FY05	01OCT04	30SEP05	A.1.03.00.00.03.06.
OL306078	Contingency - FY05 75% Negative Adjustment	01OCT04	30SEP05	A.1.03.00.00.03.06.
OL306009	RWMC Industrial Hygiene - FY06	03OCT05	29SEP06	A.1.03.00.00.03.06.
OL306045	RWMC Industrial Hygiene Contingency - FY06	03OCT05	29SEP06	A.1.03.00.00.03.06.
OL306012	RWMC Industrial Hygiene - FY07	02OCT06	28SEP07	A.1.03.00.00.03.06.
OL306048	RWMC Industrial Hygiene Contingency - FY07	02OCT06	28SEP07	A.1.03.00.00.03.06.
Start Date	01OCT03	Early Bar	WMC2	Clean/Close RWMC
Finish Date	30SEP30	Progress Bar		SPP - A.1.03.00.00
Data Date	01OCT03			Project Support & Facility Authority
Run Date	11APR03 14:42			Lifecycle Baseline

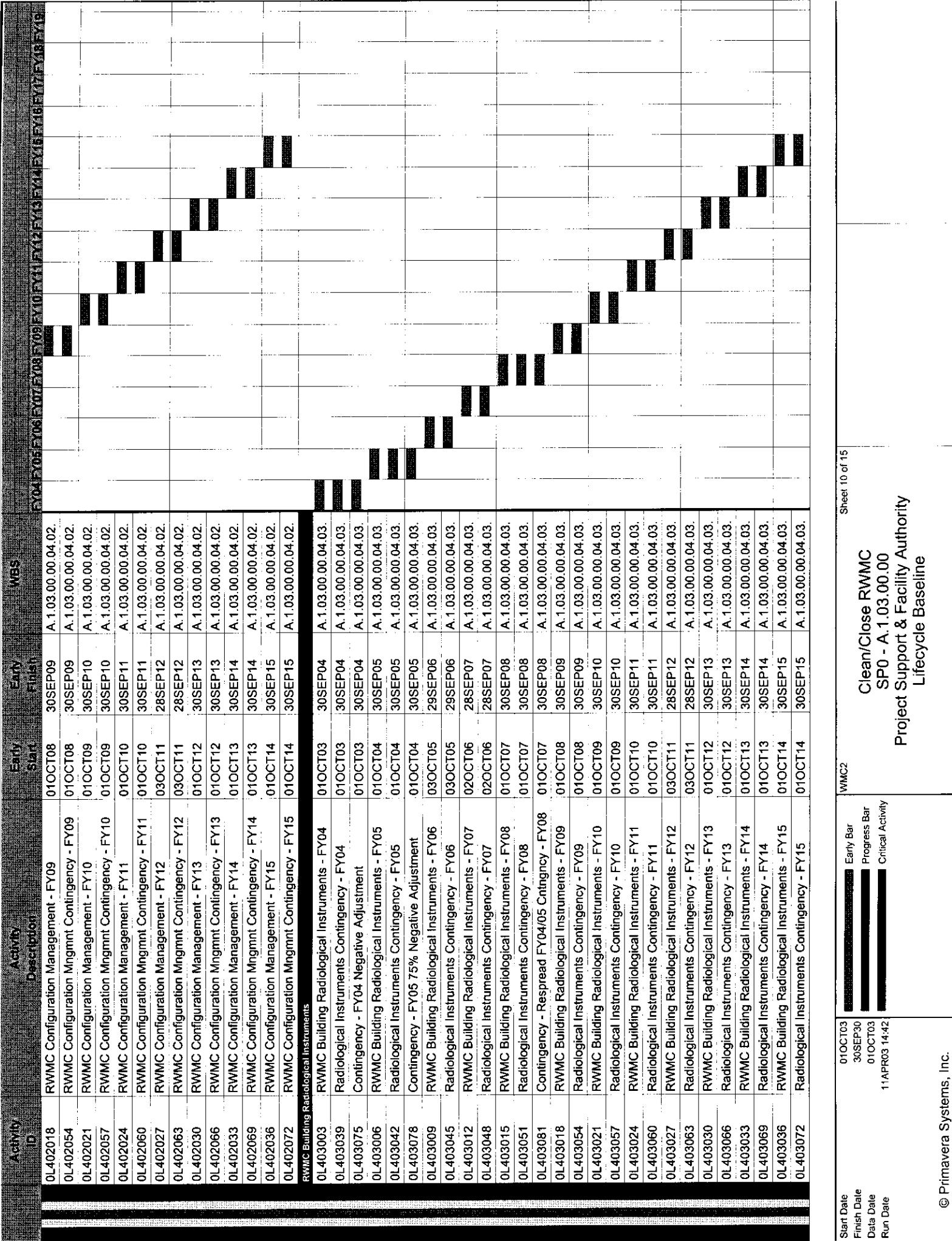
Sheet 5 of 15

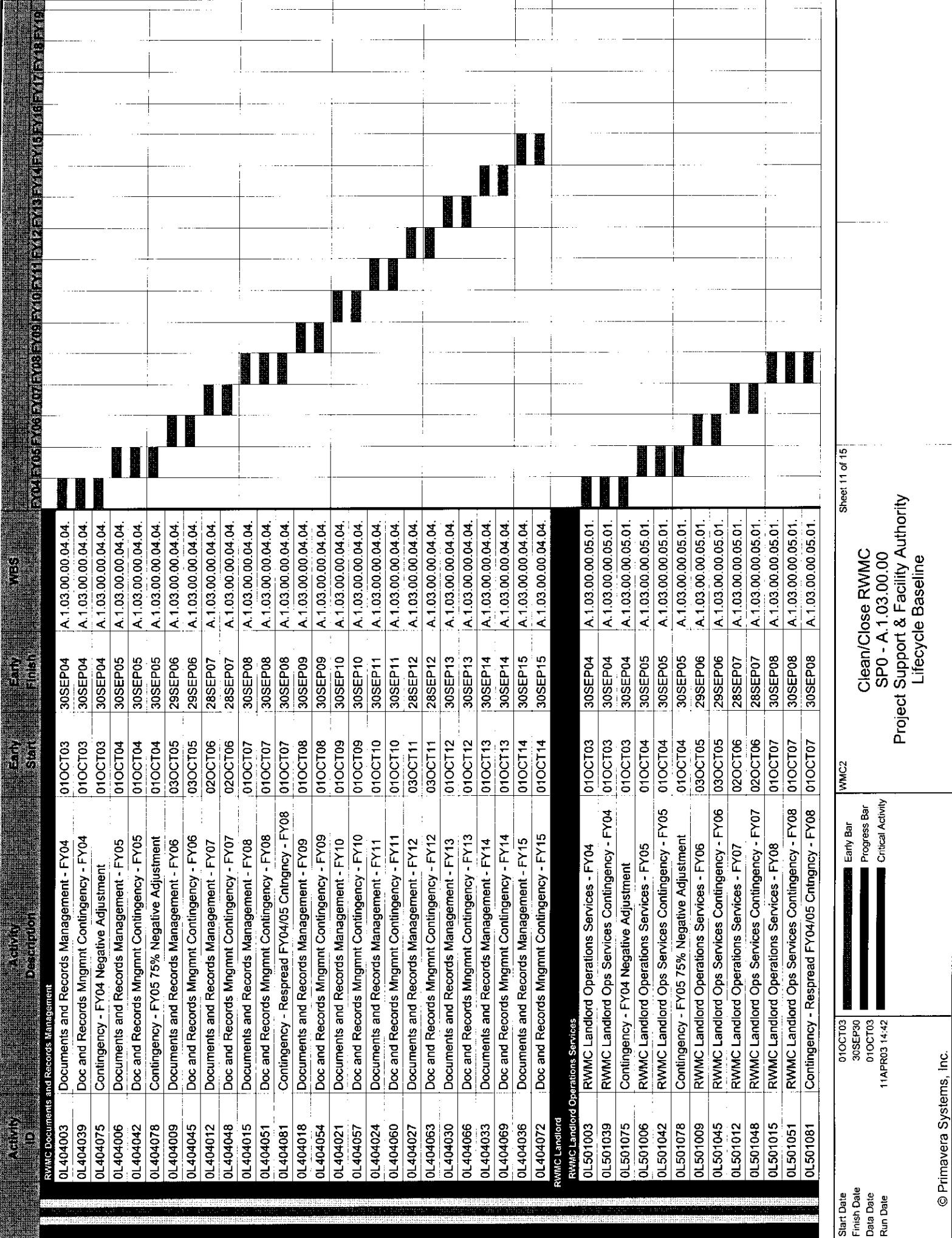
Activity ID	Activity Description	Early Start		Early Finish	
		Start	Finish	Start	Finish
01_306015	RWMMC Industrial Hygiene - FY08	01OCT07	30SEP08	A.1.03.00.00.03.06.	
01_306051	RWMMC Industrial Hygiene Contingency - FY08	01OCT07	30SEP08	A.1.03.00.00.03.06.	
01_306081	Contingency - Respread FY04/05 Crngency - FY08	01OCT07	30SEP08	A.1.03.00.00.03.06.	
01_306018	RWMMC Industrial Hygiene - FY09	01OCT08	30SEP09	A.1.03.00.00.03.06.	
01_306054	RWMMC Industrial Hygiene Contingency - FY09	01OCT08	30SEP09	A.1.03.00.00.03.06.	
01_306021	RWMMC Industrial Hygiene - FY10	01OCT09	30SEP10	A.1.03.00.00.03.06.	
01_306057	RWMMC Industrial Hygiene Contingency - FY10	01OCT09	30SEP10	A.1.03.00.00.03.06.	
01_306024	RWMMC Industrial Hygiene - FY11	01OCT10	30SEP11	A.1.03.00.00.03.06.	
01_306060	RWMMC Industrial Hygiene Contingency - FY11	01OCT10	30SEP11	A.1.03.00.00.03.06.	
01_306027	RWMMC Industrial Hygiene - FY12	03OCT11	28SEP12	A.1.03.00.00.03.06.	
01_306063	RWMMC Industrial Hygiene Contingency - FY12	03OCT11	28SEP12	A.1.03.00.00.03.06.	
01_306030	RWMMC Industrial Hygiene - FY13	01OCT12	30SEP13	A.1.03.00.00.03.06.	
01_306066	RWMMC Industrial Hygiene Contingency - FY13	01OCT12	30SEP13	A.1.03.00.00.03.06.	
01_306033	RWMMC Industrial Hygiene - FY14	01OCT13	30SEP14	A.1.03.00.00.03.06.	
01_306069	RWMMC Industrial Hygiene Contingency - FY14	01OCT13	30SEP14	A.1.03.00.00.03.06.	
01_306036	RWMMC Industrial Hygiene - FY15	01OCT14	30SEP15	A.1.03.00.00.03.06.	
01_306072	RWMMC Industrial Hygiene Contingency - FY15	01OCT14	30SEP15	A.1.03.00.00.03.06.	
<b>Industrial Safety</b>					
01_307003	RWMMC Industrial Safety - FY04	01OCT03	30SEP04	A.1.03.00.00.03.07.	
01_307039	RWMMC Industrial Safety Contingency - FY04	01OCT03	30SEP04	A.1.03.00.00.03.07.	
01_307075	Contingency - FY04 Negative Adjustment	01OCT03	30SEP04	A.1.03.00.00.03.07.	
01_307006	RWMMC Industrial Safety - FY05	01OCT04	30SEP05	A.1.03.00.00.03.07.	
01_307042	RWMMC Industrial Safety Contingency - FY05	01OCT04	30SEP05	A.1.03.00.00.03.07.	
01_307078	Contingency - FY05 75% Negative Adjustment	01OCT04	30SEP05	A.1.03.00.00.03.07.	
01_307009	RWMMC Industrial Safety - FY06	03OCT05	29SEP06	A.1.03.00.00.03.07.	
01_307045	RWMMC Industrial Safety Contingency - FY06	03OCT05	29SEP06	A.1.03.00.00.03.07.	
01_307012	RWMMC Industrial Safety - FY07	02OCT06	28SEP07	A.1.03.00.00.03.07.	
01_307048	RWMMC Industrial Safety Contingency - FY07	02OCT06	28SEP07	A.1.03.00.00.03.07.	
01_307015	RWMMC Industrial Safety - FY08	01OCT07	30SEP08	A.1.03.00.00.03.07.	
01_307051	RWMMC Industrial Safety Contingency - FY08	01OCT07	30SEP08	A.1.03.00.00.03.07.	
01_307081	Contingency - Respread FY04/05 Crngency - FY08	01OCT07	30SEP08	A.1.03.00.00.03.07.	
01_307018	RWMMC Industrial Safety - FY09	01OCT08	30SEP09	A.1.03.00.00.03.07.	
01_307054	RWMMC Industrial Safety Contingency - FY09	01OCT08	30SEP09	A.1.03.00.00.03.07.	
01_307021	RWMMC Industrial Safety - FY10	01OCT09	30SEP10	A.1.03.00.00.03.07.	
01_307057	RWMMC Industrial Safety Contingency - FY10	01OCT09	30SEP10	A.1.03.00.00.03.07.	
01_307024	RWMMC Industrial Safety - FY11	01OCT10	30SEP11	A.1.03.00.00.03.07.	
01_307060	RWMMC Industrial Safety Contingency - FY11	01OCT10	30SEP11	A.1.03.00.00.03.07.	
01_307027	RWMMC Industrial Safety - FY12	03OCT11	28SEP12	A.1.03.00.00.03.07.	
01_307063	RWMMC Industrial Safety Contingency - FY12	03OCT11	28SEP12	A.1.03.00.00.03.07.	
01_307030	RWMMC Industrial Safety - FY13	01OCT12	30SEP13	A.1.03.00.00.03.07.	
01_307066	RWMMC Industrial Safety Contingency - FY13	01OCT12	30SEP13	A.1.03.00.00.03.07.	
01_307033	RWMMC Industrial Safety - FY14	01OCT13	30SEP14	A.1.03.00.00.03.07.	
01_307069	RWMMC Industrial Safety Contingency - FY14	01OCT13	30SEP14	A.1.03.00.00.03.07.	
Start Date	01OCT03	30SEP30	4 Early Bar	WMC2	Clean/Close RWMMC
Finish Date	01OCT03	30SEP30	Progress Bar		SP0 - A.1.03.00.00
Data Date	11APR03 14:42		Critical Activity		Project Support & Facility Authority
Run Date					Lifecycle Baseline
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RWM/C SSC Engineering Management Contingency - FY04						
Activity ID	Description	Start	End	Duration	Early Finish	WBS
OL401003	RWM/C SSC Engineering Management	01OCT03	30SEP04	A.1.03.00.00.04.01.		
OL401039	SSC Engineering Management Contingency - FY04	01OCT03	30SEP04	A.1.03.00.00.04.01.		
OL401075	Contingency - FY04 Negative Adjustment	01OCT03	30SEP04	A.1.03.00.00.04.01.		
OL401006	RWM/C SSC Engineering Management Contingency - FY05	01OCT04	30SEP05	A.1.03.00.00.04.01.		
OL401042	SSC Engineering Management Contingency - FY05	01OCT04	30SEP05	A.1.03.00.00.04.01.		
OL401078	Contingency - FY05 75% Negative Adjustment	01OCT04	30SEP05	A.1.03.00.00.04.01.		
OL401009	RWM/C SSC Engineering Management - FY06	03OCT05	29SEP06	A.1.03.00.00.04.01.		
OL401045	SSC Engineering Management Contingency - FY06	03OCT05	29SEP06	A.1.03.00.00.04.01.		
OL401012	RWM/C SSC Engineering Management Contingency - FY07	02OCT06	28SEP07	A.1.03.00.00.04.01.		
OL401048	SSC Engineering Management Contingency - FY07	02OCT06	28SEP07	A.1.03.00.00.04.01.		
OL401015	RWM/C SSC Engineering Management Contingency - FY08	01OCT07	30SEP08	A.1.03.00.00.04.01.		
OL401051	SSC Engineering Management Contingency - FY08	01OCT07	30SEP08	A.1.03.00.00.04.01.		
OL401081	Contingency - Respread FY04/05 Crngency - FY08	01OCT07	30SEP08	A.1.03.00.00.04.01.		
OL401018	RWM/C SSC Engineering Management - FY09	01OCT08	30SEP09	A.1.03.00.00.04.01.		
OL401054	SSC Engineering Management Contingency - FY09	01OCT08	30SEP09	A.1.03.00.00.04.01.		
OL401021	RWM/C SSC Engineering Management - FY10	01OCT09	30SEP10	A.1.03.00.00.04.01.		
OL401057	SSC Engineering Management Contingency - FY10	01OCT09	30SEP10	A.1.03.00.00.04.01.		
OL401024	RWM/C SSC Engineering Management - FY11	01OCT10	30SEP11	A.1.03.00.00.04.01.		
OL401060	SSC Engineering Management Contingency - FY11	01OCT10	30SEP11	A.1.03.00.00.04.01.		
OL401027	RWM/C SSC Engineering Management - FY12	03OCT11	28SEP12	A.1.03.00.00.04.01.		
OL401063	SSC Engineering Management Contingency - FY12	03OCT11	28SEP12	A.1.03.00.00.04.01.		
OL401030	RWM/C SSC Engineering Management - FY13	01OCT12	30SEP13	A.1.03.00.00.04.01.		
OL401066	SSC Engineering Management Contingency - FY13	01OCT12	30SEP13	A.1.03.00.00.04.01.		
OL401033	RWM/C SSC Engineering Management - FY14	01OCT13	30SEP14	A.1.03.00.00.04.01.		
OL401069	SSC Engineering Management Contingency - FY14	01OCT13	30SEP14	A.1.03.00.00.04.01.		
OL401036	RWM/C SSC Engineering Management - FY15	01OCT14	30SEP15	A.1.03.00.00.04.01.		
OL401072	SSC Engineering Management Contingency - FY15	01OCT14	30SEP15	A.1.03.00.00.04.01.		
RWM/C Configuration Management						
OL402003	RWM/C Configuration Management - FY04	01OCT03	30SEP04	A.1.03.00.00.04.02.		
OL402039	RWM/C Configuration Mngmt Contingency - FY04	01OCT03	30SEP04	A.1.03.00.00.04.02.		
OL402075	Contingency - FY04 Negative Adjustment	01OCT03	30SEP04	A.1.03.00.00.04.02.		
OL402006	RWM/C Configuration Management - FY05	01OCT04	30SEP05	A.1.03.00.00.04.02.		
OL402042	RWM/C Configuration Mngmt Contingency - FY05	01OCT04	30SEP05	A.1.03.00.00.04.02.		
OL402078	Contingency - FY05 75% Negative Adjustment	01OCT04	30SEP05	A.1.03.00.00.04.02.		
OL402009	RWM/C Configuration Management - FY06	03OCT05	29SEP06	A.1.03.00.00.04.02.		
OL402045	RWM/C Configuration Mngmt Contingency - FY06	03OCT05	29SEP06	A.1.03.00.00.04.02.		
OL402012	RWM/C Configuration Management - FY07	02OCT06	28SEP07	A.1.03.00.00.04.02.		
OL402048	RWM/C Configuration Mngmt Contingency - FY07	02OCT06	28SEP07	A.1.03.00.00.04.02.		
OL402015	RWM/C Configuration Management - FY08	01OCT07	30SEP08	A.1.03.00.00.04.02.		
OL402051	RWM/C Configuration Mngmt Contingency - FY08	01OCT07	30SEP08	A.1.03.00.00.04.02.		
OL402081	Contingency - Respread FY04/05 Crngency - FY08	01OCT07	30SEP08	A.1.03.00.00.04.02.		
Start Date	01OCT03	30SEP30	Early Bar	WMC2	Clean/Close RWM/C	Sheet 9 of 15
Finish Date			Progress Bar		SP0 - A.1.03.00.00	
Data Date		01OCT03	Critical Activity		Project Support & Facility Authority	
Run Date		11APR03 14:42			Lifecycle Baseline	
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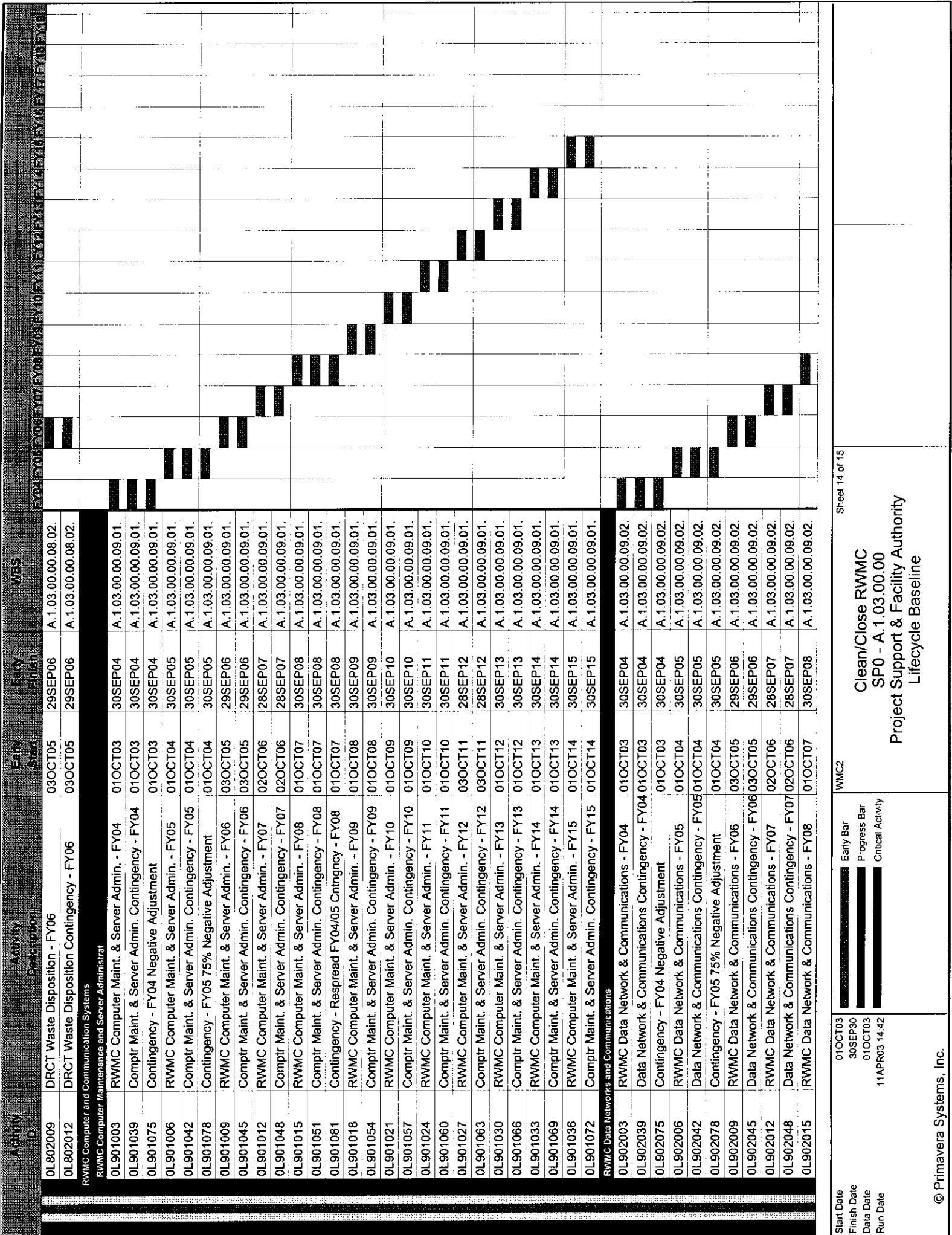




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Activity ID	Description	Start	Early Finish	WBS
OL501018	RWMC Landlord Operations Services - FY09	01OCT08	30SEP09	A.1.03.00.00.05.01.
OL501054	RWMC Landlord Ops Services Contingency - FY09	01OCT08	30SEP09	A.1.03.00.00.05.01.
OL501021	RWMC Landlord Operations Services - FY10	01OCT09	30SEP10	A.1.03.00.00.05.01.
OL501057	RWMC Landlord Ops Services Contingency - FY10	01OCT09	30SEP10	A.1.03.00.00.05.01.
OL501024	RWMC Landlord Operations Services - FY11	01OCT10	30SEP11	A.1.03.00.00.05.01.
OL501060	RWMC Landlord Ops Services Contingency - FY11	01OCT10	30SEP11	A.1.03.00.00.05.01.
OL501027	RWMC Landlord Operations Services - FY12	03OCT11	28SEP12	A.1.03.00.00.05.01.
OL501063	RWMC Landlord Ops Services Contingency - FY12	03OCT11	28SEP12	A.1.03.00.00.05.01.
OL501030	RWMC Landlord Operations Services - FY13	01OCT12	30SEP13	A.1.03.00.00.05.01.
OL501066	RWMC Landlord Ops Services Contingency - FY13	01OCT12	30SEP13	A.1.03.00.00.05.01.
OL501033	RWMC Landlord Operations Services - FY14	01OCT13	30SEP14	A.1.03.00.00.05.01.
OL501069	RWMC Landlord Ops Services Contingency - FY14	01OCT13	30SEP14	A.1.03.00.00.05.01.
OL501036	RWMC Landlord Operations Services - FY15	01OCT14	30SEP15	A.1.03.00.00.05.01.
OL501072	RWMC Landlord Ops Services Contingency - FY15	01OCT14	30SEP15	A.1.03.00.00.05.01.
Capital Equipment				
OL601003	RWMC Capital Equipment - FY07	02OCT06	28SEP07	A.1.03.00.00.06.01.
OL601009	RWMC Capital Equipment Contingency - FY07	02OCT06	28SEP07	A.1.03.00.00.06.01.
OL601006	RWMC Capital Equipment - FY08	01OCT07	30SEP08	A.1.03.00.00.06.01.
OL601012	RWMC Capital Equipment Contingency - FY08	01OCT07	30SEP08	A.1.03.00.00.06.01.
AMWTP BBWI Technical Support				
OL701003	AMWTP - BBWI Technical Support FY04	01OCT03	30SEP04	A.1.03.00.00.07.01.
OL701039	AMWTP - BBWI Tech Support Contingency - FY04	01OCT03	30SEP04	A.1.03.00.00.07.01.
OL701075	Contingency - FY04 Negative Adjustment	01OCT03	30SEP04	A.1.03.00.00.07.01.
OL701006	AMWTP - BBWI Technical Support FY05	01OCT04	30SEP05	A.1.03.00.00.07.01.
OL701042	AMWTP - BBWI Tech Support Contingency - FY05	01OCT04	30SEP05	A.1.03.00.00.07.01.
OL701078	Contingency - FY05 75% Negative Adjustment	01OCT04	30SEP05	A.1.03.00.00.07.01.
OL701009	AMWTP - BBWI Technical Support FY06	03OCT05	29SEP06	A.1.03.00.00.07.01.
OL701045	AMWTP - BBWI Tech Support Contingency - FY06	03OCT05	29SEP06	A.1.03.00.00.07.01.
OL701012	AMWTP - BBWI Technical Support FY07	02OCT06	28SEP07	A.1.03.00.00.07.01.
OL701048	AMWTP - BBWI Tech Support Contingency - FY07	02OCT06	28SEP07	A.1.03.00.00.07.01.
OL701015	AMWTP - BBWI Technical Support FY08	01OCT07	30SEP08	A.1.03.00.00.07.01.
OL701051	AMWTP - BBWI Tech Support Contingency - FY08	01OCT07	30SEP08	A.1.03.00.00.07.01.
OL701081	Contingency - Respread FY04/05 Chingrey - FY08	01OCT07	30SEP08	A.1.03.00.00.07.01.
OL701048	AMWTP - BBWI Technical Support FY09	01OCT08	30SEP09	A.1.03.00.00.07.01.
OL701054	AMWTP - BBWI Tech Support Contingency - FY09	01OCT08	30SEP09	A.1.03.00.00.07.01.
OL701021	AMWTP - BBWI Technical Support FY10	01OCT09	30SEP10	A.1.03.00.00.07.01.
OL701057	AMWTP - BBWI Tech Support Contingency - FY10	01OCT09	30SEP10	A.1.03.00.00.07.01.
OL701024	AMWTP - BBWI Technical Support FY11	01OCT10	30SEP11	A.1.03.00.00.07.01.
OL701060	AMWTP - BBWI Tech Support Contingency - FY11	01OCT10	30SEP11	A.1.03.00.00.07.01.
OL701027	AMWTP - BBWI Technical Support FY12	03OCT11	28SEP12	A.1.03.00.00.07.01.
OL701063	AMWTP - BBWI Tech Support Contingency - FY12	03OCT11	28SEP12	A.1.03.00.00.07.01.
Start Date 01OCT03 Finish Date 30SEP30 Data Date 01OCT03 Run Date 11APR03 14:42				
Early Bar Progress Bar Critical Activity				
WMC2				
Clean/Close RWMC SP0 - A.1.03.00.00 Project Support & Facility Authority Lifecycle Baseline				
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Activity ID	Activity Description	Early Start		Early Finish		WBS
		Start Date	Finish Date	Start Date	Finish Date	
0L701030	AMWTP - BBWI Technical Support FY13	01OCT12	30SEP13	A.1.03.00.00.07.01.		
0L701066	AMWTP - BBWI Tech Support Contingency - FY13	01OCT12	30SEP13	A.1.03.00.00.07.01.		
0L701033	AMWTP - BBWI Technical Support FY14	01OCT13	30SEP14	A.1.03.00.00.07.01.		
0L701069	AMWTP - BBWI Tech Support Contingency - FY14	01OCT13	30SEP14	A.1.03.00.00.07.01.		
0L701036	AMWTP - BBWI Technical Support FY15	01OCT14	30SEP15	A.1.03.00.00.07.01.		
0L701072	AMWTP - BBWI Tech Support Contingency - FY15	01OCT14	30SEP15	A.1.03.00.00.07.01.		
AMWTP DOE-ID Funds (PPS WM-105)						
0L702003	DOE-ID Funds - FY04	01OCT03	30SEP04	A.1.03.00.00.07.02.		
0L702048	DOE-ID Funds AMWTP EM Liability - FY04	01OCT03	30SEP04	A.1.03.00.00.07.02.		
0L702006	DOE-ID Funds - FY05	01OCT04	30SEP05	A.1.03.00.00.07.02.		
0L702009	DOE-ID Funds - FY06	03OCT05	29SEP06	A.1.03.00.00.07.02.		
0L702012	DOE-ID Funds - FY07	02OCT06	28SEP07	A.1.03.00.00.07.02.		
0L702015	DOE-ID Funds - FY08	01OCT07	30SEP08	A.1.03.00.00.07.02.		
0L702018	DOE-ID Funds - FY09	01OCT08	30SEP09	A.1.03.00.00.07.02.		
0L702021	DOE-ID Funds - FY10	01OCT09	30SEP10	A.1.03.00.00.07.02.		
0L702024	DOE-ID Funds - FY11	01OCT10	30SEP11	A.1.03.00.00.07.02.		
0L702027	DOE-ID Funds - FY12	03OCT11	28SEP12	A.1.03.00.00.07.02.		
0L702030	DOE-ID Funds - FY13	01OCT12	30SEP13	A.1.03.00.00.07.02.		
0L702033	DOE-ID Funds - FY14	01OCT13	30SEP14	A.1.03.00.00.07.02.		
0L702036	DOE-ID Funds - FY15	01OCT14	30SEP15	A.1.03.00.00.07.02.		
0L702039	DOE-ID Funds - FY16	01OCT15	30SEP16	A.1.03.00.00.07.02.		
0L702042	DOE-ID Funds - FY17	03OCT16	29SEP17	A.1.03.00.00.07.02.		
0L702045	DOE-ID Funds - FY18	02OCT17	28SEP18	A.1.03.00.00.07.02.		
RWMWC Waste Storage Operations						
0L801003	RWMWC Waste Storage Operations - FY04	01OCT03	30SEP04	A.1.03.00.00.08.01.		
0L801021	Waste Storage Operations Contingency - FY04	01OCT03	30SEP04	A.1.03.00.00.08.01.		
0L801075	Contingency - FY04 Negative Adjustment	01OCT03	30SEP04	A.1.03.00.00.08.01.		
0L801006	RWMWC Waste Storage Operations - FY05	01OCT04	30SEP05	A.1.03.00.00.08.01.		
0L801024	Waste Storage Operations Contingency - FY05	01OCT04	30SEP05	A.1.03.00.00.08.01.		
0L801078	Contingency - FY05 75% Negative Adjustment	01OCT04	30SEP05	A.1.03.00.00.08.01.		
0L801009	RWMWC Waste Storage Operations - FY06	03OCT05	29SEP06	A.1.03.00.00.08.01.		
0L801027	Waste Storage Operations Contingency - FY06	03OCT05	29SEP06	A.1.03.00.00.08.01.		
0L801012	RWMWC Waste Storage Operations - FY07	02OCT06	28SEP07	A.1.03.00.00.08.01.		
0L801030	Waste Storage Operations Contingency - FY07	02OCT06	28SEP07	A.1.03.00.00.08.01.		
0L801015	RWMWC Waste Storage Operations - FY08	01OCT07	30SEP08	A.1.03.00.00.08.01.		
0L801033	Waste Storage Operations Contingency - FY08	01OCT07	30SEP08	A.1.03.00.00.08.01.		
0L801081	Contingency - Respread FY04/05 Cntrgncy - FY08	01OCT07	30SEP08	A.1.03.00.00.08.01.		
0L801018	RWMWC Waste Storage Operations - FY09	01OCT08	30SEP09	A.1.03.00.00.08.01.		
0L801036	Waste Storage Operations Contingency - FY09	01OCT08	30SEP09	A.1.03.00.00.08.01.		
DRCT Waste Disposition						
0L802003	DRCT Waste Disposition -FY05	01OCT04	30SEP05	A.1.03.00.00.08.02.		
0L802006	DRCT Waste Disposition Contingency - FY05	01OCT04	30SEP05	A.1.03.00.00.08.02.		
Start Date	01OCT03	Early Bar	WMC2	Clean/Close RWMWC	Sheet 13 of 15	
Finish Date	30SEP30	Progress Bar		SP0 - A.1.03.00.00		
Data Date	01OCT03			Project Support & Facility Authority		
Run Date	11APR03 14:42	Critical Activity		Lifecycle Baseline		



Activity ID	Activity Description	Early Start		Early Finish		WBS
		Start	End	Start	End	
01_902051	Data Network & Communications Contingency - FY08 01OCT07	30SEP08	A.1.03.00.00.09.02.	30SEP08	A.1.03.00.00.09.02.	
01_902081	Contingency - Respread FY04/05 Crngency - FY08	01OCT07	30SEP08	01OCT08	30SEP09	A.1.03.00.00.09.02.
01_902018	RWMC Data Network & Communications - FY09	01OCT08	30SEP09	01OCT09	30SEP09	A.1.03.00.00.09.02.
01_902054	Data Network & Communications Contingency - FY09 01OCT08	30SEP09	A.1.03.00.00.09.02.	30SEP10	A.1.03.00.00.09.02.	
01_902021	RWMC Data Network & Communications - FY10	01OCT09	30SEP10	01OCT10	30SEP10	A.1.03.00.00.09.02.
01_902057	Data Network & Communications Contingency - FY10 01OCT09	30SEP10	A.1.03.00.00.09.02.	01OCT10	30SEP11	A.1.03.00.00.09.02.
01_902024	RWMC Data Network & Communications - FY11	01OCT10	30SEP11	01OCT11	30SEP11	A.1.03.00.00.09.02.
01_902060	Data Network & Communications Contingency - FY11 01OCT10	30SEP11	A.1.03.00.00.09.02.	01OCT11	30SEP11	A.1.03.00.00.09.02.
01_902027	RWMC Data Network & Communications - FY12	03OCT11	28SEP12	03OCT11	28SEP12	A.1.03.00.00.09.02.
01_902063	Data Network & Communications Contingency - FY12 03OCT11	28SEP12	A.1.03.00.00.09.02.	01OCT12	30SEP13	A.1.03.00.00.09.02.
01_902030	RWMC Data Network & Communications - FY13	01OCT12	30SEP13	01OCT13	30SEP13	A.1.03.00.00.09.02.
01_902066	Data Network & Communications Contingency - FY13 01OCT12	30SEP13	A.1.03.00.00.09.02.	01OCT13	30SEP14	A.1.03.00.00.09.02.
01_902033	RWMC Data Network & Communications - FY14	01OCT13	30SEP14	01OCT13	30SEP14	A.1.03.00.00.09.02.
01_902069	Data Network & Communications Contingency - FY14 01OCT13	30SEP14	A.1.03.00.00.09.02.	01OCT14	30SEP15	A.1.03.00.00.09.02.
01_902036	RWMC Data Network & Communications - FY15	01OCT14	30SEP15	01OCT14	30SEP15	A.1.03.00.00.09.02.
01_902072	Data Network & Communications Contingency - FY15 01OCT14	30SEP15	A.1.03.00.00.09.02.			

Start Date	01OCT03	Early Bar	WMC2	Clean/Close RWMC
Finish Date	30SEP30	Progress Bar		SP0 - A.1.03.00.00
Data Date	01OCT03			Project Support & Facility Authority
Run Date	11APR03 14:42	Critical Activity		Lifecycle Baseline
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**A.1.03.00.00 Budget  
Baseline**

# Clean/Close RWMC

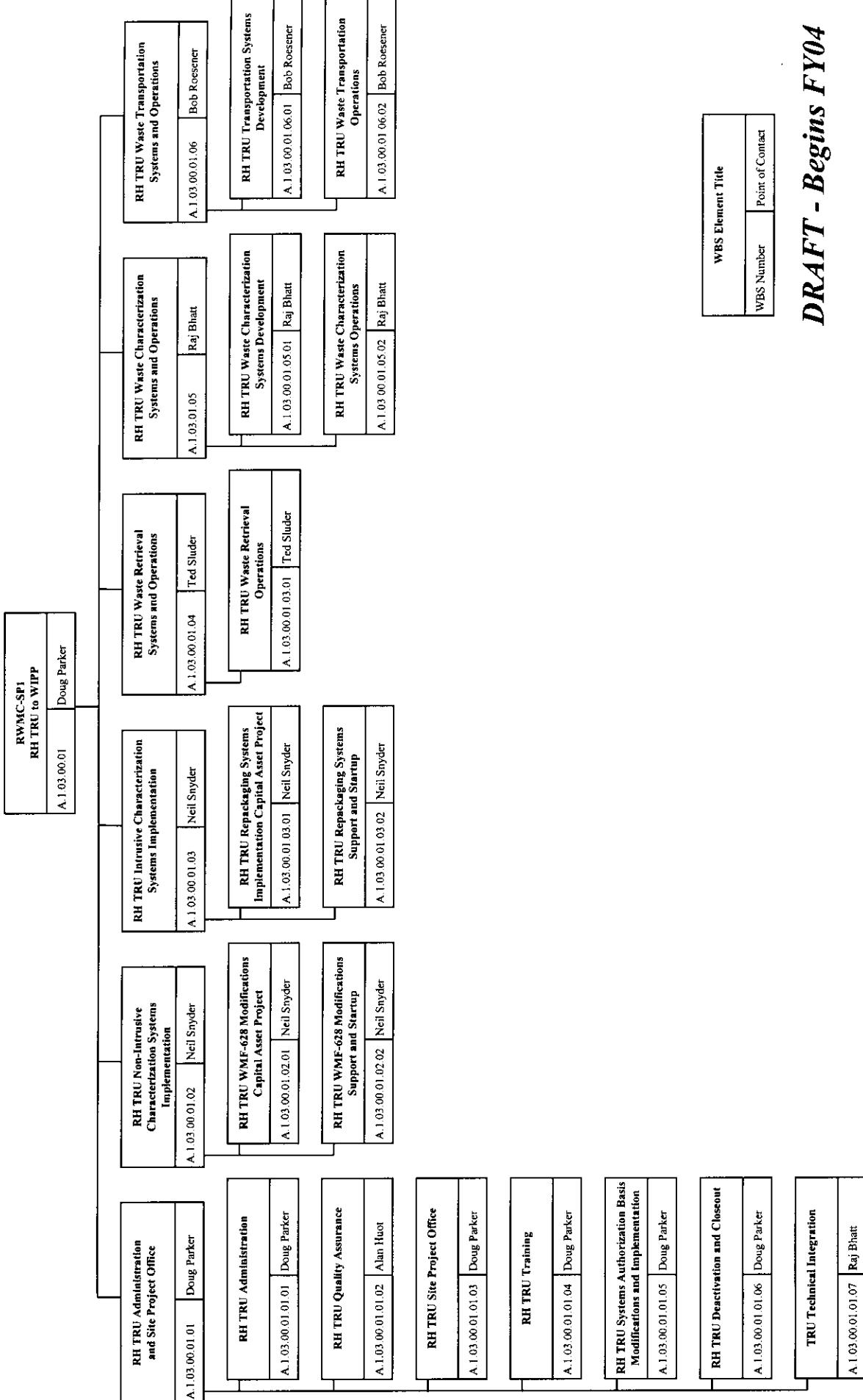
Subproject Breakout by Control Account

WBS[5]	WB[8]	WBS[8] Project Support & Facility Authority	Sep-04	Sep-05	Sep-06	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	Cumulative	
	<b>BURDENED BASE</b>																		
A.1.03.00.01 RWMIC Project/PBS Management		BCWS	1,985	1,987	2,036	2,304	-	2,532	-	2,256	2,313	-	2,203	-	2,203	-	0	26,517	
A.1.03.00.02 Facility/Project Management		BCWS	1,377	1,400	1,508	1,506	-	1,665	1,580	1,580	1,580	-	1,580	1,580	0	0	0	18,440	
A.1.03.00.03 ESH&DA Compliance		BCWS	2,822	2,866	2,905	2,985	-	3,271	2,985	2,985	2,985	-	2,985	2,985	0	0	0	35,828	
A.1.03.00.04 Engineering Management		BCWS	1,031	1,005	1,048	1,048	-	1,226	1,104	1,071	1,046	-	1,046	1,046	0	0	0	12,716	
A.1.03.00.05 RWMIC Landlord		BCWS	4,351	4,438	4,778	4,778	-	5,525	4,778	4,778	4,778	-	4,539	4,539	0	0	0	56,620	
A.1.03.00.06 Capital Equipment		BCWS	0	0	0	0	-	118	116	0	0	-	0	0	0	0	0	231	
A.1.03.00.07 ANWTP BWMI Technical Support		BCWS	140,526	57,337	60,533	78,173	-	91,168	70,182	61,304	51,482	-	59,340	0	2,017	14,174	23,983	744,981	
A.1.03.00.08 Waste Storage Operations		BCWS	378	437	1,196	390	-	488	360	0	0	-	2,620	2,043	0	0	0	3,232	
A.1.03.00.09 RWMIC Computer and Communication Systems		BCWS	518	1,053	989	931	-	1,106	574	970	574	-	1,136	0	0	0	0	9,492	
<b>Results... Totals:</b>		<b>BCWS</b>	<b>152,948</b>	<b>70,553</b>	<b>75,160</b>	<b>93,129</b>	<b>-</b>	<b>107,077</b>	<b>83,815</b>	<b>75,168</b>	<b>71,044</b>	<b>-</b>	<b>72,707</b>	<b>0</b>	<b>14,947</b>	<b>14,947</b>	<b>23,983</b>	<b>908,067</b>	
<b>ESCALATE</b>																			
A.1.03.00.01 RWMIC Project/PBS Management		BCWS	61	-	105	155	-	222	300	328	386	-	422	477	533	590	646	0	
A.1.03.00.02 Facility/Project Management		BCWS	43	74	112	145	-	198	216	284	303	-	342	383	424	466	496	0	
A.1.03.00.03 ESH&DA Compliance		BCWS	89	152	223	223	-	289	369	426	500	-	573	643	724	802	882	0	
A.1.03.00.04 Engineering Management		BCWS	31	52	77	100	-	142	157	178	200	-	226	253	280	308	328	0	
A.1.03.00.05 RWMIC Landlord		BCWS	97	195	313	420	-	611	841	755	871	-	990	1,055	1,173	1,293	1,391	0	
A.1.03.00.06 Capital Equipment		BCWS	0	0	0	10	-	13	0	0	0	-	0	0	0	0	0	23	
A.1.03.00.07 ANWTP BWMI Technical Support		BCWS	32	66	120	248	-	402	365	453	523	-	594	265	297	322	357	0	
A.1.03.00.08 Waste Storage Operations		BCWS	12	23	34	37	-	57	56	0	0	-	0	0	0	0	0	3,713	
A.1.03.00.09 RWMIC Computer and Communication Systems		BCWS	16	23	51	69	-	78	128	82	184	-	181	124	139	154	169	0	
<b>Results... Totals:</b>		<b>BCWS</b>	<b>379</b>	<b>717</b>	<b>1,153</b>	<b>1,551</b>	<b>-</b>	<b>2,240</b>	<b>2,292</b>	<b>2,720</b>	<b>3,072</b>	<b>-</b>	<b>3,400</b>	<b>3,354</b>	<b>3,720</b>	<b>4,093</b>	<b>0</b>	<b>0</b>	<b>28,602</b>
<b>SUMMARY (Base + Escalation)</b>																			
A.1.03.00.01 RWMIC Project/PBS Management		BCWS	2,025	2,102	2,250	2,526	-	2,832	2,634	2,639	2,625	-	2,690	2,763	2,852	0	0	0	30,744
A.1.03.00.02 Facility/Project Management		BCWS	1,420	1,473	1,618	1,651	-	1,862	1,721	1,844	1,883	-	1,923	2,004	2,048	0	0	0	21,409
A.1.03.00.03 ESH&DA Compliance		BCWS	2,911	3,018	3,298	3,275	-	3,660	3,414	3,486	3,559	-	3,633	3,710	3,788	3,867	0	0	41,530
A.1.03.00.04 Engineering Management		BCWS	1,041	1,087	1,123	1,146	-	1,247	1,250	1,250	1,245	-	1,272	1,298	1,326	1,353	0	0	14,718
A.1.03.00.05 RWMIC Landlord		BCWS	4,448	4,653	5,061	5,188	-	6,137	5,499	5,499	5,533	-	5,783	5,712	5,831	0	0	0	65,033
A.1.03.00.06 Capital Equipment		BCWS	0	0	0	0	-	128	128	128	128	-	0	0	0	0	0	234	
A.1.03.00.07 ANWTP BWMI Technical Support		BCWS	140,557	57,402	60,702	79,422	-	91,571	61,757	58,065	60,134	-	2,285	2,317	2,370	14,174	23,983	748,684	
A.1.03.00.08 Waste Storage Operations		BCWS	390	460	1,283	427	-	545	445	0	0	-	0	0	0	0	0	3,550	
A.1.03.00.09 RWMIC Computer and Communication Systems		BCWS	534	1,104	1,037	909	-	1,234	656	1,320	1,151	-	698	713	728	743	0	0	10,826
<b>Results... Totals:</b>		<b>BCWS</b>	<b>153,327</b>	<b>71,270</b>	<b>78,312</b>	<b>94,680</b>	<b>-</b>	<b>109,317</b>	<b>86,106</b>	<b>77,888</b>	<b>74,117</b>	<b>-</b>	<b>76,107</b>	<b>18,294</b>	<b>18,864</b>	<b>14,174</b>	<b>23,983</b>	<b>938,759</b>	

Thousands of \$

A103.00.01 SP1  
RH-TRU to WIPP

# RWMC-SP1 - RH TRU to WIPP Work Breakdown Structure



**DRAFT - Begins FY04**

File: DWP/RH TWDP WBS WP Level  
Last Update: Nov 22, 2002

**A.1.03.00.01**  
**Subproject Plan**

**SUBPROJECT PLAN  
Life-Cycle FY 2004**

**WBS: A.1.03.00.01**

**Title: RWMC-SP1 RH-TRU to WIPP**

<b>Subproject Manager:</b>	<b>Thomas H Monk</b>	<b>Planning &amp; Controls:</b>	<b>Douglas M Harmel</b>
<b>DOE-ID:</b>	<b>Christian D Natoni</b>	<b>ES&amp;H Field Manager:</b>	<b>Randy D Sayer</b>
<b>PBS Manager:</b>	<b>John M Schaffer</b>	<b>Other:</b>	
<b>Project Manager for Project Support and Facility Authorization</b>			<b>David M Bright</b>

**APPROVED BY:**

Subproject Plan Manager

Date

ES&H Representative

Date

## **1. WORK DESCRIPTION**

The Idaho National Engineering and Environmental Laboratory (INEEL) is preparing to disposition stored remote-handled transuranic (RH-TRU) waste in compliance with the Department of Energy (DOE) 1995 Settlement Agreement, Site Treatment Plan, and Waste Isolation Pilot Plant (WIPP) requirements, and in accordance with the INEEL Accelerated Cleanup Plan objectives. The RWMC-SP1 – RH-TRU to WIPP Project provides for disposition of stored RH-TRU waste in accordance with WIPP Waste Acceptance Criteria (WAC) and Waste Analysis Plan (WAP) requirements.

Specific objectives in this project include:

- RWMC-SP1 - RH-TRU to WIPP Project management and administration.
- TRU waste disposition technical integration and support.
- Retrieval of stored RH-TRU waste from the Intermediate-Level Transuranic Storage Facility (ILTSF).
- Design, construction, startup, and implementation of Waste Management Facility (WMF)-628 facility modifications and non-intrusive characterization systems.
- Design, construction, startup, and implementation of RH-TRU waste intrusive characterization systems.
- Design, construction, and startup of RH-TRU waste transportation systems.
- INEEL Site Certification Authorization for characterization and transportation of RH-TRU waste.
- Characterization and certification of RH-TRU waste in accordance with WIPP requirements.
- Shipment of RH-TRU waste to the WIPP.
- Project deactivation and closeout.

### **Technical Approach:**

INEEL's RH-TRU waste disposition processing strategy has been developed to utilize existing systems and infrastructure as much as practicable. Modifications to Radioactive Waste Management Complex (RWMC) facilities will be required to incorporate process specific unit operations, and transportation capabilities. It is expected, based on available waste characterization information and draft WIPP WAC and WAP requirements for RH-TRU waste, that a portion of the inventory will not require repackaging or intrusive characterization. It is also expected that the remaining inventory will require repackaging or intrusive characterization prior to shipment to the WIPP. The RH-TRU waste disposition process has been divided into two distinct phases based on expected characterization and transportation methods, which are dependent on the waste's attributes.

Phase I includes implementation of non-intrusive characterization systems and CNS 10-160B cask loading capabilities in WMF-628. Specific unit operations include a headspace gas sampling system, non-destructive assay system, non-destructive examination system, and CNS 10-160B payload assembly and loading systems. Infrastructure upgrades include installation of shielding walls, heating, and insulation in WMF-628 to allow all-weather production operations.

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Implementation of Phase I capabilities will be managed as a General Plant Project (GPP) along with associated capital equipment with conceptual and detailed design activities completed in FY 2003, and construction and startup activities completed in FY 2004.

Phase II includes implementation of intrusive characterization systems and RH-72B cask loading capabilities in WMF-628. Specific unit operations include a drum venting system, repackaging system, and RH-72B payload assembly and loading systems. The repackaging system will utilize a shielded modular glovebox system to open, visually examine, and repackage RH-TRU waste. Loading the RH-72B cask will utilize a horizontal loading system being jointly developed at the Los Alamos National Laboratory and the WIPP. Implementation of Phase II capabilities is assumed to require Line Item Construction Project funding, with pre-conceptual activities beginning in FY 2004. Completion of construction and startup activities in accordance with DOE Order 413.3, *Program and Project Management for the Acquisition of Capital Assets*, is planned for FY 2008.

To meet the INEEL Accelerated Cleanup Plan schedules for initiating shipments of RH-TRU waste to WIPP in FY 2005, and completing shipments in FY 2011, RH-TRU waste processing rates have been planned at 50 to 412 drums per year. These processing rates are expected to produce between five to 95 waste shipments to the WIPP per year, depending on waste type and transportation system.

The following six control accounts are components of this Subproject:

### A.1.03.00.01.01 – RH-TRU Administration and Site Project Office

Provides for project planning and administration, TRU waste disposition technical integration and support to National and local programs, quality assurance, site RH-TRU waste certification authorization, RH-TRU Site Project Office operations, training, RH-TRU systems authorization basis modifications and implementation, and project deactivation and closeout in accordance with WIPP WAC and WAP requirements. Specific objectives in this control account include:

- Plan and administer the RH-TRU Waste Disposition Project.
- Provide TRU waste disposition technical integration and support.
- Manage RH-TRU Waste Disposition Project requirements.
- Develop and maintain RH-TRU waste programmatic documentation.
- Develop, implement, and maintain the RH-TRU training program.
- Obtain and maintain disposition process operational readiness, INEEL RH-TRU Waste Site Certification and Transportation Certification Authorization.
- Perform Site Project Manager, Site Quality Assurance Officer, Waste Certification Official, and level II data validation activities in accordance with the WIPP WAC and WAP.
- Perform RH-TRU Waste Disposition Project closure activities.

### A.1.03.00.01.02 – RH-TRU Non-Intrusive Characterization Systems Implementation

Provides for design, construction, turnover, and startup of facilities and equipment required for non-intrusive characterization and transportation of RH-TRU waste using the CNS 10-160B cask. Specific objectives in this control account include:

- Perform conceptual design for non-intrusive characterization systems, the CNS 10-160B cask loading system, and associated RWMC facility modifications (FY 2003).
- Prepare equipment specifications for non-intrusive characterization systems and the CNS 10-160B cask loading system (FY 2003).
- Prepare RWMC facility modifications design to implement all-weather operations of non-intrusive characterization systems and the CNS 10-160B cask loading system (FY 2003).
- Procure equipment for non-intrusive characterization systems and the CNS 10-160B cask loading system.
- Perform construction activities to install non-intrusive characterization systems, the CNS 10-160B cask loading system, and associated RWMC facility modifications.

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- Turn over the non-intrusive characterization systems and the CNS 10-160B cask loading system to operations.
- Perform systems operations testing for non-intrusive characterization systems and the CNS 10-160B cask loading systems.
- Perform readiness evaluations and assessments for non-intrusive characterization systems and the CNS 10-160B cask loading systems.

**A.1.03.00.01.03 – RH-TRU Intrusive Characterization Systems Implementation**

Provides for design, construction, and turnover of facilities and equipment required for intrusive characterization and transportation of RH-TRU waste using the RH-72B cask. Specific objectives in this Control Account include:

- Perform pre-conceptual design for intrusive characterization systems, the RH-72B cask loading system, and associated RWMC facility modifications.
- Perform conceptual design for intrusive characterization systems, the RH-72B cask loading system, and associated RWMC facility modifications.
- Prepare equipment specifications for intrusive characterization systems and the RH-72B cask loading system.
- Prepare RWMC facility modifications design to implement all-weather operations of intrusive characterization systems and the RH-72B cask loading system.
- Procure equipment for intrusive characterization systems and the RH-72B cask loading system.
- Perform construction activities to install intrusive characterization systems, the RH-72B cask loading system, and associated RWMC facility modifications.
- Turn over the intrusive characterization systems and the RH-72B cask loading system to operations.
- Perform systems operations testing for intrusive characterization systems and the CNS 10-160B cask loading systems.
- Perform readiness evaluations and assessments for intrusive characterization systems and the CNS 10-160B cask loading systems.

**A.1.03.00.01.04 – RH-TRU Waste Retrieval Systems and Operations**

Provides for the retrieval of RH-TRU waste stored in the ILTSF vaults at the RWMC. Specific objectives in this Control Account include:

- Design and procurement of shielded overpacks to support RH-TRU waste retrieval operations.
- Retrieval of stored RH-TRU waste.
- Retrieval and transportation of specialized components called "Hot Fuel Examination Facility (HFEF) inserts" from ILTSF (RWMC) to Argonne National Laboratory-West (ANL-W).

**A.1.03.00.01.05 – RH-TRU Waste Characterization Systems and Operations**

Provides for RH-TRU waste characterization in accordance with WIPP WAC and WAP requirements. Specific objectives in this Control Account include:

- Develop and maintain Acceptable Knowledge (AK) documentation for RH-TRU waste.
- Develop capabilities to perform RH-TRU waste non-intrusive characterization operations including container headspace gas sampling, non-destructive examination, and non-destructive assay systems.
- Develop capabilities to perform RH-TRU waste intrusive characterization operations including container venting, and repackaging systems.
- Perform RH-TRU waste non-intrusive and intrusive characterization operations.
- Provide technical direction for characterization systems implementation during design, construction, operations, and maintenance activities (operations systems engineering).
- Develop and maintain characterization systems operating procedures.
- Develop and perform characterization systems operations testing after maintenance activities.
- Perform characterization data level I validation and management.

## SUBPROJECT PLAN Life-Cycle FY 2004

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Title: RWMC-SP1 RH-TRU to WIPP

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- Perform secondary waste stream disposition.

### A.1.03.00.01.06 – RH-TRU Waste Transportation Systems and Operations

Provides for RH-TRU waste transportation in accordance with WIPP WAC and WAP requirements. Specific objectives in this Control Account include:

- Develop capabilities to perform RH-TRU waste transportation using the CNS 10-160B and RH-72B casks.
- Develop and maintain the RH-TRU Waste Transportation Certification Official (TCO) in accordance with WIPP requirements.
- Perform RH-TRU waste transportation systems operations.
- Provide technical direction for RH-TRU waste transportation systems implementation during design, construction, operations, and maintenance activities (operations systems engineering).
- Develop and maintain RH-TRU waste transportation systems operating procedures.
- Develop and perform RH-TRU waste transportation systems operations testing after maintenance activities.
- Perform RH-TRU waste transportation data management.

## 2. MAJOR PRODUCTS AND DELIVERABLES:

### Milestones:

#### Internal:

None.

#### External:

- Complete GPP construction for RH-TRU waste non-intrusive characterization systems and CNS 10-160B cask transportation capabilities – September 30, 2004
- Receive Critical Decision – 0 approval for RH-TRU waste intrusive characterization/repackaging systems and RH-72B cask transportation capabilities – September 30, 2004
- Receive Critical Decision – 1 approval for RH-TRU waste intrusive characterization/repackaging systems and RH-72B cask transportation capabilities – September 30, 2005
- Receive Critical Decision – 2 approval for RH-TRU waste intrusive characterization/repackaging systems and RH-72B cask transportation capabilities – March 31, 2006
- Receive Critical Decision – 3 approval for RH-TRU waste intrusive characterization/repackaging systems and RH-72B cask transportation capabilities – September 29, 2006
- Receive Critical Decision – 4 approval for RH-TRU waste intrusive characterization/repackaging systems and RH-72B cask transportation capabilities – December 24, 2007

### Other Products and Deliverables

- RWMC-SP1 - RH-TRU to WIPP Project management and administration.
- TRU waste disposition technical integration and support.
- Retrieval of stored RH-TRU waste from the ILTSF.
- Design, construction, startup, and implementation of Waste Management Facility (WMF)-628 facility modifications and non-intrusive characterization systems.
- Design, construction, startup, and implementation of RH-TRU waste intrusive characterization systems.
- Design, construction, and startup of RH-TRU waste transportation systems.
- INEEL Site Certification Authorization for characterization and transportation of RH-TRU waste.
- Characterization and certification of RH-TRU waste in accordance with WIPP requirements.
- Shipment of RH-TRU waste to the WIPP.
- Project deactivation and closeout.

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**3. ESTIMATE DEVELOPMENT BASIS:**

The cost estimate was developed using activity-based resource loading based on combinations of experience to date, and engineering and professional judgment.

The LCB does not include a labor adjustment cost nor has it been included in the contingency analysis per DOE's direction. For RH TRU, the actual average labor rate for FY03 is approximately \$119/hr which is \$44/hr higher than the rate used in the LCB planning.

RH TRU waste annual processing rates supporting the estimate have been planned based on waste type, expected disposition process unit operations and shipment methods, a retrieval schedule that minimizes the number of shielded overpacks required, and the expected receipt rate of suspect RH TRU and RH U-233 waste from the AMWTP (see Table 1, *RH TRU Waste Disposition Process Planning Schedule*, attached).

Contingency was developed utilizing Option 3 in the LCB Contingency Guidance (LCB w/Team Assessment). The project team reviewed and discussed issues and concerns and assigned appropriate contingency dollar values. Based on the details within the scope of work, and the assumptions identified with that scope of work, along with the contingency dollars incorporated, the project team has a very high confidence level of success. The project team assessment of contingency was developed based on subject matter expert input at the Planning Package level. Generally, contingency was applied at 20% for previously performed similar activities, and at 40% for planning-level estimates in accordance with DOE/FM 50, *Cost Estimating Guide*.

**4. ASSUMPTIONS**

- A. INEEL's inventory of RH-TRU waste will be characterized and certified by the INEEL for transportation to the WIPP for disposal.
- B. The RH-TRU waste inventory to be managed is 356 m<sup>3</sup> consisting of stored RH-TRU waste and suspect RH-TRU waste only. This includes 84 m<sup>3</sup> of stored RH-TRU; 52 m<sup>3</sup> of RH uranium-233; and 220 m<sup>3</sup> of suspect RH-TRU waste.
- C. A portion of INEEL's inventory of RH-TRU waste will require intrusive visual examination and repackaging, due to insufficient AK documentation for quantifying the physical, chemical, and radiological attributes in accordance with WIPP WAP requirements, and the presence of prohibited items and sealed containers (e.g., heat-sealed bags, cans) larger than four liters which must be vented prior to transportation to the WIPP.
- D. There will be no newly generated RH-TRU waste received at the RWMC.
- E. The RWMC-SP0 – Project Support and Facility Authority Project will provide for maintenance and availability of the ILTSF and WMF-628 for use by the RH-TRU Waste Disposition Project.
- F. The RWMC-SP0 – Project Support & Facility Authority Project will provide RCRA-compliant storage for RH-TRU waste.
- G. Expected inventories of suspect debris and non-debris RH-TRU waste will be managed as mixed waste under RCRA requirements.
- H. The ILTSF and WMF-628 will be sufficient for storage of stored and suspect RH-TRU waste pending disposition processing.
- I. The existing inventory of RH-TRU waste from Argonne National Laboratory-East will continue to be managed as non-mixed waste.
- J. The Advanced Mixed Waste Treatment Project (AMWTP) will complete transfer of suspect RH-TRU waste to WMF-628 during FY 2003 through 2009.
- K. The AMWTP will provide storage for suspect RH-TRU waste if storage capacity in WMF-628 is exceeded.
- L. INEEL's Management and Operating contractor will provide for disposition of INEEL's stored and suspect RH-TRU waste.
- M. The WIPP RH-TRU WAC and WAP, reflecting approval by Federal and State regulators, will be available no later than September 2004.

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Title: RWMC-SP1 RH-TRU to WIPP**

- N. WIPP will be open and transportation capacities will be sufficient for receipt of INEEL RH-TRU waste no later than March 2005.
- O. WIPP will modify their authorization basis to allow acceptance of RH uranium uranium-233 waste for disposal no later than October 2007.
- P. Disposition of secondary waste streams generated during RH-TRU waste processing activities will be funded by the Project.
- Q. HFEF inserts will be returned to ANL-W to be processed in the planned Remote Treatment Facility.
- R. Funding for processing and final disposition of HFEF inserts will be requested by and included in ANL-W's baseline budget.
- S. RH-TRU waste characterization and transportation systems implementation and operations will be performed at the RWMC.
- T. WMF-628 is available and adequate for RH-TRU Waste disposition activities.
- U. Storage space for Pit-9 waste is limited to 3,120 ft<sup>2</sup> in WMF-628.
- V. Pit-9 waste will be accepted for storage only. No waste characterization, certification, or transportation related activities to achieve disposition of Pit 9 waste are planned.
- W. WMF-628 modifications will provide all-weather processing capabilities for non-intrusive RH-TRU waste characterization systems.
- X. Non-intrusive RH-TRU waste characterization systems include container headspace gas sampling, non-destructive assay, non-destructive examination, and container weighing systems.
- Y. WMF-628 modifications will require GPP funding.
- Z. Intrusive characterization and RH-72B cask loading systems will be implemented at the RWMC.
- AA. Intrusive characterization systems include container venting, and repackaging systems.
- BB. Suspect RH TRU waste streams containing lead shielding will be managed as RH TRU waste, and will not require removal of the shielding prior to shipment to WIPP.
- CC. Implementation of intrusive characterization and RH-72B cask loading systems will require Line Item Construction Project Funding.
- DD. Approval of the intrusive characterization and RH-72B cask loading systems implementation Mission Need Statement, Critical Decision (CD)-0 will be received no later than September 2004.
- EE. Approval of the intrusive characterization and RH-72B cask loading systems implementation Conceptual Design, CD-1, will be received no later than September 2005.
- FF. Approval of the intrusive characterization and RH-72B cask loading systems implementation National Environmental Protection Agency documentation will be received no later than September 2005.
- GG. Approval of the intrusive characterization and RH-72B cask loading systems implementation Preliminary Design, CD-2, will be received no later than March 2006.
- HH. Approval of the intrusive characterization and RH-72B cask loading systems implementation Final Design, CD-3, will be received no later than September 2006.
- II. Modifications to safety and regulatory authorization basis documentation for implementation of intrusive characterization and RH-72B cask loading systems have been completed to initiate construction no later than September 2006.
- JJ. Completion of the intrusive characterization and RH-72B cask loading systems implementation Construction, CD-4, will be received no later than December 2007.
- KK. Equipment and procedures for retrieval of degraded drums from ILTSF vaults will not be required. Planned vault inspects in FY 2004 will provide sufficient data to determine if a system to retrieve potentially degraded drums is required.
- LL. Shielded overpacks for remote-handled waste rejected from the AMWTP will be provided by the AMWTP in accordance with design specifications provided by the Management and Operations contractor.
- MM. HFEF inserts will be loaded directly from the ILTSF into the HFEF cask, and transported to ANL-W.
- NN. Development and demonstration of RH-TRU waste non-intrusive and intrusive characterization systems will be funded by this project.
- OO. One drum of mixed low-level waste will be generated for each drum of RH-TRU waste repackaged.

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Title: RWMC-SP1 RH-TRU to WIPP**

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- PP. The CNS 10-160B and RH 72B casks are the only transportation system authorized for shipment of RH-TRU waste to the WIPP.
  - QQ. One CNS 10-160B cask and transport trailer will be provided by the project.
  - RR. RH 72B casks and transport trailers will be provided by the WIPP.
  - SS. CNS 10-160B and RH 72B cask transportation will be provided by the WIPP.
  - TT. CNS 10-160B and RH 72B casks and transportation will be available to support INEEL shipping schedules.

**Exclusions:**

See assumptions.

**5. SCIENCE AND TECHNOLOGY NEEDS**

None.

**SUBPROJECT PLAN**  
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**WBS: A.1.03.00.01**  
**Title: RWMC-SP1 RH-TRU to WIPP**

Table 1. RH TRU Waste Disposition Process Planning Schedule  
Last Update: January 3, 2003

	Container Size	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12	Total Containers
<b>Waste Type</b>												
ANL-E 3-filters with video tapes	30-gal			50	22							72
ANL-E 3-filters without video tapes	30-gal				28	22						50
ANL-E 1-filter	30-gal					53						53
Balance of ANL-E	30-gal						110	110	110	115		445
RFP shielded	55-gal						200	200	200	203		803
ANL-W	55-gal									4		4
Bettis U-233	55-gal						63	63	63	61		250
INTEC	30-gal									2		2
NRF	30-gal									27		27
TRA	55-gal								25			25
<b>Total Containers Per Year</b>				50	50	75	373	373	398	412		
HFEF inserts	Insert								15	15		30
<b>Total Containers</b>												1761
<b>Estimated Shipments</b>												
CNS 10-160B Cask				5	5	8	17	17	17	18		
RH 72B Cask							67	67	75	77		
HFEF Cask									15	15		
<b>Estimated Repackaging Throughput</b>							163	163	188	201		714
<b>Estimated MLLW Generated (#drums)</b>							163	163	188	201		714
<b>Estimated Storage Requirements</b>												
RFP shielded from AMWTP		115	115	115	115	115	115	113				803
Bettis U-233 from AMWTP		36	36	36	36	36	36	34				250
Stored RH TRU from ILTSF		15	48	48	49	123	123	123	124			653
Number of shielded overpacks in use*		76	160	194	229	313	299	283	209	0		
Number of containers in WMF-628*		191	390	539	689	888	789	686	412	0		
<b>Notes:</b>												
1.	Assume uniform receipt rate of U-233 and suspect RH TRU from AMWTP during FY03-FY09											
2.	Retrieve waste from ILTSF one year in advance of shipping to allow for DAC and/or input feed surge capacity											
3.	Schedule retrieval from ILTSF to minimize the number of shielded overpacks required											
4.	Storage space requirements peak in FY07 at 888 containers - 313 of which are shielded overpacks											
5.	Need storage for a maximum of 180 shielded overpacks for U-233 waste (36 containers per year until shipments begin in FY08)											
6.	Need a maximum of 133 shielded overpacks for ILTSF waste (313-180)											
7.	Repackaging rates are based on 100% of "Balance of ANL-E", 20% RFP, 20% U-233, 100% all other											
8.	Assume ANL-E and Bettis U-233 wastes are shipped in the CNS 10-160B cask, all other in the RH-72B cask											
*At the end of the year												

**A.1.03.00.01 Schedule**

# INEEL

## EM Project

### RWMC Completion PBS/C

WMC-SP1 RH-TRU to WIPP

RH TRU Administration

RH TRU Administration & Site Project Office

Activity ID	Activity Description	Start Date	End Date	VBS	FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13
IL101081	RH TRU LCB Planning - FY04	01OCT03	31MARD04	A.1.03.00.01.01.01									
IL101001	RH TRU Project Management - FY04	01OCT03	30SEP04	A.1.03.00.01.01.01									
IL101027	RH TRU Records Mngmt & Doc Cntrl - FY04	01OCT03	30SEP04	A.1.03.00.01.01.01									
IL101054	RH TRU Project Cntrl & Reporting - FY04	01OCT03	30SEP04	A.1.03.00.01.01.01									
IL101129	RH TRU Project Mngmt Contingency - FY04	01OCT03	30SEP04	A.1.03.00.01.01.01									
IL101084	RH TRU Detailed Work Planning - FY04	01APR04	30SEP04	A.1.03.00.01.01.01									
IL101087	RH TRU LCB Planning - FY05	01OCT04	31MARD05	A.1.03.00.01.01.01									
IL101003	RH TRU Project Management - FY05	01OCT04	30SEP05	A.1.03.00.01.01.01									
IL101030	RH TRU Records Mngmt & Doc Cntrl - FY05	01OCT04	30SEP05	A.1.03.00.01.01.01									
IL101057	RH TRU Project Cntrl & Reporting - FY05	01OCT04	30SEP05	A.1.03.00.01.01.01									
IL101132	RH TRU Project Mngmt Contingency - FY05	01OCT04	30SEP05	A.1.03.00.01.01.01									
IL101090	RH TRU Detailed Work Planning - FY05	01APR05	30SEP05	A.1.03.00.01.01.01									
IL101093	RH TRU LCB Planning - FY06	03OCT05	31MARD06	A.1.03.00.01.01.01									
IL101006	RH TRU Project Management - FY06	03OCT05	29SEP06	A.1.03.00.01.01.01									
IL101033	RH TRU Records Mngmt & Doc Cntrl- FY06	03OCT05	29SEP06	A.1.03.00.01.01.01									
IL101060	RH TRU Project Cntrl & Reporting - FY06	03OCT05	29SEP06	A.1.03.00.01.01.01									
IL101135	RH TRU Project Mngmt Contingency - FY06	03OCT05	29SEP06	A.1.03.00.01.01.01									
IL101096	RH TRU Detailed Work Planning - FY06	03APR06	29SEP06	A.1.03.00.01.01.01									
IL101099	RH TRU LCB Planning - FY07	02OCT06	30MARD07	A.1.03.00.01.01.01									
IL101009	RH TRU Project Management - FY07	02OCT06	28SEP07	A.1.03.00.01.01.01									
IL101036	RH TRU Records Mngmt & Doc Cntrl- FY07	02OCT06	28SEP07	A.1.03.00.01.01.01									
IL101063	RH TRU Project Cntrl & Reporting - FY07	02OCT06	28SEP07	A.1.03.00.01.01.01									
IL101138	RH TRU Project Mngmt Contingency - FY07	02OCT06	28SEP07	A.1.03.00.01.01.01									
IL101102	RH TRU Detailed Work Planning - FY07	02APR07	28SEP07	A.1.03.00.01.01.01									
IL101105	RH TRU LCB Planning - FY08	01OCT07	31MARD08	A.1.03.00.01.01.01									
IL101012	RH TRU Project Management - FY08	01OCT07	30SEP08	A.1.03.00.01.01.01									
IL101039	RH TRU Records Mngmt & Doc Cntrl- FY08	01OCT07	30SEP08	A.1.03.00.01.01.01									
IL101066	RH TRU Project Cntrl & Reporting - FY08	01OCT07	30SEP08	A.1.03.00.01.01.01									
IL101141	RH TRU Project Mngmt Contingency - FY08	01OCT07	30SEP08	A.1.03.00.01.01.01									
IL101108	RH TRU Detailed Work Planning - FY08	01APR08	30SEP08	A.1.03.00.01.01.01									
IL101111	RH TRU LCB Planning - FY09	01OCT08	31MARD09	A.1.03.00.01.01.01									
IL101015	RH TRU Project Management - FY09	01OCT08	30SEP09	A.1.03.00.01.01.01									
IL101042	RH TRU Records Mngmt & Doc Cntrl- FY09	01OCT08	30SEP09	A.1.03.00.01.01.01									
IL101069	RH TRU Project Cntrl & Reporting - FY09	01OCT08	30SEP09	A.1.03.00.01.01.01									
IL101144	RH TRU Project Mngmt Contingency - FY09	01OCT08	30SEP09	A.1.03.00.01.01.01									

Start Date  
Finish Date  
Data Date  
Run Date

WMC2  
Early Bar  
Progress Bar  
Critical Activity

Clean/Close RWMC  
SP1 - A.1.03.00.01  
RH-TRU to WIPP  
Lifecycle Baseline

Sheet 1 of 11

Activity ID	Activity Description	Early Start		Early Finish		WBS		Early Start		Early Finish		WBS		Early Start		Early Finish		WBS		Early Start		Early Finish		WBS	
		Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date		
1L101114	RH TRU Detailed Work Planning - FY09	01APR09	30SEP09	01OCT09	31MARCH	01OCT09	31MARCH0	01OCT09	30SEP10	01OCT09	31MARCH0	01OCT09	31MARCH0	01OCT09	31MARCH0	01OCT09	30SEP09	A.1.03.00.01.01.01.							
1L101117	RH TRU LCB Planning - FY10			01OCT09		01OCT09		01OCT09		01OCT09		01OCT09		01OCT09		01OCT09		A.1.03.00.01.01.01.							
1L101018	RH TRU Project Management - FY10			01OCT09		01OCT09		01OCT09		01OCT09		01OCT09		01OCT09		01OCT09		A.1.03.00.01.01.01.							
1L101045	RH TRU Records Mngmt & Doc Cntrl - FY10			01OCT09		01OCT09		01OCT09		01OCT09		01OCT09		01OCT09		01OCT09		A.1.03.00.01.01.01.							
1L101072	RH TRU Project Cntrl & Reporting - FY10			01OCT09		01OCT09		01OCT09		01OCT09		01OCT09		01OCT09		01OCT09		A.1.03.00.01.01.01.							
1L101147	RH TRU Project Mngmt Contingency - FY10			01OCT09		01APR10		01OCT09		01APR10		01OCT09		01APR10		01OCT09		A.1.03.00.01.01.01.							
1L101120	RH TRU Detailed Work Planning - FY10			01OCT09		01OCT10		01OCT09		01OCT10		01OCT09		01OCT10		01OCT09		A.1.03.00.01.01.01.							
1L101123	RH TRU LCB Planning - FY11			01OCT09		01OCT10		01OCT09		01OCT10		01OCT09		01OCT10		01OCT09		A.1.03.00.01.01.01.							
1L101021	RH TRU Project Management - FY11			01OCT09		01OCT10		01OCT09		01OCT10		01OCT09		01OCT10		01OCT09		A.1.03.00.01.01.01.							
1L101048	RH TRU Records Mngmt & Doc Cntrl - FY11			01OCT09		01OCT10		01OCT09		01OCT10		01OCT09		01OCT10		01OCT09		A.1.03.00.01.01.01.							
1L101075	RH TRU Project Cntrl & Reporting - FY11			01OCT09		01OCT10		01OCT09		01OCT10		01OCT09		01OCT10		01OCT09		A.1.03.00.01.01.01.							
1L101150	RH TRU Project Mngmt Contingency - FY11			01OCT09		01OCT10		01OCT09		01OCT10		01OCT09		01OCT10		01OCT09		A.1.03.00.01.01.01.							
1L101126	RH TRU Detailed Work Planning - FY11			01OCT09		01APR11		01OCT09		01APR11		01OCT09		01APR11		01OCT09		A.1.03.00.01.01.01.							
1L101024	RH TRU Project Management - FY12			01OCT09		03OCT11		01OCT09		03OCT11		01OCT09		03OCT11		01OCT09		A.1.03.00.01.01.01.							
1L101051	RH TRU Records Mngmt & Doc Cntrl - FY12			01OCT09		03OCT11		01OCT09		03OCT11		01OCT09		03OCT11		01OCT09		A.1.03.00.01.01.01.							
1L101078	RH TRU Project Cntrl & Reporting - FY12			01OCT09		03OCT11		01OCT09		03OCT11		01OCT09		03OCT11		01OCT09		A.1.03.00.01.01.01.							
1L101153	RH TRU Project Mngmt Contingency - FY12			01OCT09		03OCT11		01OCT09		03OCT11		01OCT09		03OCT11		01OCT09		A.1.03.00.01.01.01.							
<b>RH TRU Quality Assurance</b>																									
1L102003	RH TRU Quality Assurance Contingency - FY04			01OCT03		30OCT03		01OCT03		30OCT03		01OCT03		30OCT03		01OCT03		A.1.03.00.01.01.02.							
1L102030	RH TRU Quality Assurance Contingency - FY04			01OCT03		30OCT04		01OCT03		30OCT04		01OCT03		30OCT04		01OCT03		A.1.03.00.01.01.02.							
1L102006	RH TRU Quality Assurance Contingency - FY05			01OCT04		30OCT05		01OCT04		30OCT05		01OCT04		30OCT05		01OCT04		A.1.03.00.01.01.02.							
1L102033	RH TRU Quality Assurance Contingency - FY05			01OCT04		30OCT05		01OCT04		30OCT05		01OCT04		30OCT05		01OCT04		A.1.03.00.01.01.02.							
1L102009	RH TRU Quality Assurance Contingency - FY06			01OCT05		29SEP06		01OCT05		29SEP06		01OCT05		29SEP06		01OCT05		A.1.03.00.01.01.02.							
1L102036	RH TRU Quality Assurance Contingency - FY06			01OCT05		29SEP06		01OCT05		29SEP06		01OCT05		29SEP06		01OCT05		A.1.03.00.01.01.02.							
1L102012	RH TRU Quality Assurance Contingency - FY07			02OCT06		28SEP07		02OCT06		28SEP07		02OCT06		28SEP07		02OCT06		A.1.03.00.01.01.02.							
1L102039	RH TRU Quality Assurance Contingency - FY07			02OCT06		28SEP07		02OCT06		28SEP07		02OCT06		28SEP07		02OCT06		A.1.03.00.01.01.02.							
1L102015	RH TRU Quality Assurance Contingency - FY08			01OCT07		30SEP08		01OCT07		30SEP08		01OCT07		30SEP08		01OCT07		A.1.03.00.01.01.02.							
1L102042	RH TRU Quality Assurance Contingency - FY08			01OCT07		30SEP08		01OCT07		30SEP08		01OCT07		30SEP08		01OCT07		A.1.03.00.01.01.02.							
1L102018	RH TRU Quality Assurance Contingency - FY09			01OCT08		30SEP09		01OCT08		30SEP09		01OCT08		30SEP09		01OCT08		A.1.03.00.01.01.02.							
1L102045	RH TRU Quality Assurance Contingency - FY09			01OCT08		30SEP09		01OCT08		30SEP09		01OCT08		30SEP09		01OCT08		A.1.03.00.01.01.02.							
1L102021	RH TRU Quality Assurance Contingency - FY10			01OCT09		30SEP10		01OCT09		30SEP10		01OCT09		30SEP10		01OCT09		A.1.03.00.01.01.02.							
1L102048	RH TRU Quality Assurance Contingency - FY10			01OCT09		30SEP10		01OCT09		30SEP10		01OCT09		30SEP10		01OCT09		A.1.03.00.01.01.02.							
1L102024	RH TRU Quality Assurance Contingency - FY11			01OCT10		30SEP11		01OCT10		30SEP11		01OCT10		30SEP11		01OCT10		A.1.03.00.01.01.02.							
1L102051	RH TRU Quality Assurance Contingency - FY11			01OCT10		30SEP11		01OCT10		30SEP11		01OCT10		30SEP11		01OCT10		A.1.03.00.01.01.02.							
1L102027	RH TRU Quality Assurance Contingency - FY12			03OCT11		28SEP12		03OCT11		28SEP12		03OCT11		28SEP12		03OCT11		A.1.03.00.01.01.02.							
1L102054	RH TRU Quality Assurance Contingency - FY12			03OCT11		28SEP12		03OCT11		28SEP12		03OCT11		28SEP12		03OCT11		A.1.03.00.01.01.02.							
<b>RH TRU Site Project Office</b>																									
1L103030	Develop RH TRU Reqmts Mgmt System - FY04			01OCT03		31MARCH04		01OCT03		31MARCH04		01OCT03		31MARCH04		01OCT03		A.1.03.00.01.01.03.							
1L103003	RH TRU Site Project Office - FY04			01OCT03		30SEP04		01OCT03		30SEP04		01OCT03		30SEP04		01OCT03		A.1.03.00.01.01.03.							
1L103159	RH TRU Site Project Office Contingency - FY04			01OCT03		30SEP04		01OCT03		30SEP04		01OCT03		30SEP04		01OCT03		A.1.03.00.01.01.03.							
1L103033	Maintain RH TRU Reqmts Mgmt System - FY04			01APR04		30SEP04		01APR04		30SEP04		01APR04		30SEP04		01APR04		A.1.03.00.01.01.03.							
1L103057	Develop RH TRU Information Mgmt System - FY04			01APR04*		30SEP04		01APR04*		30SEP04		01APR04*		30SEP04		01APR04*		A.1.03.00.01.01.03.							
1L103081	Develop Level II Validation Procedures - FY04			01APR04*		30SEP04		01APR04*		30SEP04		01APR04*		30SEP04		01APR04*		A.1.03.00.01.01.03.							
<b>RH TRU Site Project Office</b>																									
Start Date	01OCT03	30SEP03	01OCT03	30SEP03	01OCT03	30SEP03	01OCT03	30SEP03	01OCT03	30SEP03	01OCT03	30SEP03	01OCT03	30SEP03	01OCT03	30SEP03	01OCT03	30SEP03	01OCT03	30SEP03	01OCT03				
Finish Date																									
Data Date																									
Run Date																									
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Sheet 2 of 11

WMC2

Clean/Close RWMC  
SP1 - A.1.03.00.01  
RH-TRU to WIPP  
Lifecycle Baseline

Start Date

Finish Date

Data Date

Run Date

Activity ID	Activity Description	Start	Early Finish	Late Finish	WBS	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13
1L103105	Develop Waste Cert. Procedures & Plan - FY04	01APR04*	30SEP04	A.1.03.00.01.01.03.											
1L103129	Prepare for Cert. Authorization Phase 1 - FY05	01OCT04	23DEC04	A.1.03.00.01.01.03.											
1L103006	RH TRU Site Project Office - FY05	01OCT04	30SEP05	A.1.03.00.01.01.03.											
1L103036	Maintain RH TRU Reqs Mgmt System - FY05	01OCT04	30SEP05	A.1.03.00.01.01.03.											
1L103060	Maintain RH TRU Information Mgmt System - FY05	01OCT04	30SEP05	A.1.03.00.01.01.03.											
1L103162	RH TRU Site Project Office Contingency - FY05	01OCT04	30SEP05	A.1.03.00.01.01.03.											
1L103132	Certification Audit & Authority Phase 1 - FY05	03JAN05	31MAR05	A.1.03.00.01.01.03.											
1L103084	Perform Level II Validation & WSPF - FY05	01APR05*	30SEP05	A.1.03.00.01.01.03.											
1L103108	Perform Waste Certification - FY05	01APR05*	30SEP05	A.1.03.00.01.01.03.											
1L103141	Maintain Certification Authorization - FY06	03OCT05	10JAN06	A.1.03.00.01.01.03.											
1L103009	RH TRU Site Project Office - FY06	03OCT05	29SEP06	A.1.03.00.01.01.03.											
1L103039	Maintain RH TRU Reqs Mgmt System - FY06	03OCT05	29SEP06	A.1.03.00.01.01.03.											
1L103063	Maintain RH TRU Information Mgmt System - FY06	03OCT05	29SEP06	A.1.03.00.01.01.03.											
1L103087	Perform Level II Validation & WSPF - FY06	03OCT05	29SEP06	A.1.03.00.01.01.03.											
1L103111	Perform Waste Certification - FY06	03OCT05	29SEP06	A.1.03.00.01.01.03.											
1L103165	RH TRU Site Project Office Contingency - FY06	03OCT05	29SEP06	A.1.03.00.01.01.03.											
1L103012	RH TRU Site Project Office - FY07	02OCT06	28SEP07	A.1.03.00.01.01.03.											
1L103042	Maintain RH TRU Reqs Mgmt System - FY07	02OCT06	28SEP07	A.1.03.00.01.01.03.											
1L103066	Maintain RH TRU Information Mgmt System - FY07	02OCT06	28SEP07	A.1.03.00.01.01.03.											
1L103090	Perform Level II Validation & WSPF - FY07	02OCT06	28SEP07	A.1.03.00.01.01.03.											
1L103114	Perform Waste Certification - FY07	02OCT06	28SEP07	A.1.03.00.01.01.03.											
1L103168	RH TRU Site Project Office Contingency - FY07	02OCT06	28SEP07	A.1.03.00.01.01.03.											
1L103144	Maintain Certification Authorization - FY07	02JAN07*	30MAR07	A.1.03.00.01.01.03.											
1L103135	Prepare for Cert. Authorization Phase 2 - FY07	02JUL07*	28SEP07	A.1.03.00.01.01.03.											
1L103138	Certification Audit & Authority Phase 2 - FY08	01OCT07	24DEC07	A.1.03.00.01.01.03.											
1L103015	RH TRU Site Project Office - FY08	01OCT07	30SEP08	A.1.03.00.01.01.03.											
1L103045	Maintain RH TRU Reqs Mgmt System - FY08	01OCT07	30SEP08	A.1.03.00.01.01.03.											
1L103069	Maintain RH TRU Information Mgmt System - FY08	01OCT07	30SEP08	A.1.03.00.01.01.03.											
1L103093	Perform Level II Validation & WSPF - FY08	01OCT07	30SEP08	A.1.03.00.01.01.03.											
1L103118	Perform Waste Certification - FY08	01OCT07	30SEP08	A.1.03.00.01.01.03.											
1L103171	RH TRU Site Project Office Contingency - FY08	01OCT07	30SEP08	A.1.03.00.01.01.03.											
1L103147	Maintain Certification Authorization - FY08	02JAN08*	31MAR08	A.1.03.00.01.01.03.											
1L103018	RH TRU Site Project Office - FY09	01OCT08	30SEP09	A.1.03.00.01.01.03.											
1L103048	Maintain RH TRU Reqs Mgmt System - FY09	01OCT08	30SEP09	A.1.03.00.01.01.03.											
1L103072	Maintain RH TRU Information Mgmt System - FY09	01OCT08	30SEP09	A.1.03.00.01.01.03.											
1L103096	Perform Level II Validation & WSPF - FY09	01OCT08	30SEP09	A.1.03.00.01.01.03.											
1L103121	Perform Waste Certification - FY09	01OCT08	30SEP09	A.1.03.00.01.01.03.											
1L103174	RH TRU Site Project Office Contingency - FY09	01OCT08	30SEP09	A.1.03.00.01.01.03.											
1L103150	Maintain Certification Authorization - FY09	02JAN09*	31MAR09	A.1.03.00.01.01.03.											
1L103021	RH TRU Site Project Office - FY10	01OCT09	30SEP10	A.1.03.00.01.01.03.											
1L103051	Maintain RH TRU Reqs Mgmt System - FY10	01OCT09	30SEP10	A.1.03.00.01.01.03.											
1L103075	Maintain RH TRU Information Mgmt System - FY10	01OCT09	30SEP10	A.1.03.00.01.01.03.											
1L103099	Perform Level II Validation & WSPF - FY10	01OCT09	30SEP10	A.1.03.00.01.01.03.											

WMC2

Clean/Close RW/MC  
SP1 - A.1.03.00.01  
RH-TRU to WIPP  
Lifecycle Baseline

Sheet 3 of 11

Start Date  
Finish Date  
Data Date  
Run Date

01OCT03  
30SEP30  
01OCT03  
11APR03 14:45

Activity ID	Activity Description	Early Start		Early Finish		WBS					
		FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13
1L103123	Perform Waste Certification - FY10	01OCT09		30SEP10		A.1.03.00.01.01.03.					
1L103177	RH TRU Site Project Office Contingency - FY10	01OCT09		30SEP10		A.1.03.00.01.01.03.					
1L103153	Maintain Certification Authorization - FY10	04JAN10*		31MAR10		A.1.03.00.01.01.03.					
1L103024	RH TRU Site Project Office - FY11	01OCT10		30SEP11		A.1.03.00.01.01.03.					
1L103054	Maintain RH TRU Reqsnt Mgmt System - FY11	01OCT10		30SEP11		A.1.03.00.01.01.03.					
1L103078	Maintain RH TRU Information Mgmt System - FY11	01OCT10		30SEP11		A.1.03.00.01.01.03.					
1L103102	Perform Level I Validation & WSPF - FY11	01OCT10		30SEP11		A.1.03.00.01.01.03.					
1L103126	Perform Waste Certification - FY11	01OCT10		30SEP11		A.1.03.00.01.01.03.					
1L103180	RH TRU Site Project Office Contingency - FY11	01OCT10		30SEP11		A.1.03.00.01.01.03.					
1L103156	Maintain Certification Authorization - FY11	03JAN11*		31MAR11		A.1.03.00.01.01.03.					
1L103027	RH TRU Site Project Office - FY12	03OCT11		28SEP12		A.1.03.00.01.01.03.					
1L103183	RH TRU Site Project Office Contingency - FY12	03OCT11		28SEP12		A.1.03.00.01.01.03.					
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RH TRU Training											
1L104030	Fac Mods - Phase 1 Dvlp Training Program - FY04	01OCT03		24DEC03		A.1.03.00.01.01.04.					
1L104066	10-160B - Develop Training Program FY04	01OCT03		24DEC03		A.1.03.00.01.01.04.					
1L104072	10-160B - TCO Training & Qualification FY04	01OCT03		30JUN04		A.1.03.00.01.01.04.					
1L104003	Develop RH TRU Training Program - FY04	01OCT03		30SEP04		A.1.03.00.01.01.04.					
1L104084	Maintain RH TRU Training Prog Contingency - FY04	01OCT03		30SEP04		A.1.03.00.01.01.04.					
1L104033	Fac Mods - Phase 1 Train Operators - FY04	02JAN04		30JUN04		A.1.03.00.01.01.04.					
1L104069	10-160B - Train Crew FY04	02JAN04		30JUN04		A.1.03.00.01.01.04.					
1L104027	WCO Training & Qualifications - FY04	01JUL04*		30SEP04		A.1.03.00.01.01.04.					
1L104006	Maintain RH TRU Training Program - FY05	01OCT04		30SEP05		A.1.03.00.01.01.04.					
1L104087	Maintain RH TRU Training Prog Contingency - FY05	01OCT04		30SEP05		A.1.03.00.01.01.04.					
1L104009	Maintain RH TRU Training Program - FY06	03OCT05		29SEP06		A.1.03.00.01.01.04.					
1L104090	Maintain RH TRU Training Prog Contingency - FY06	03OCT05		29SEP06		A.1.03.00.01.01.04.					
1L104036	Fac Mods Phase 2 - Dvlp Training Program - FY07	02OCT06		22DEC06		A.1.03.00.01.01.04.					
1L104042	Venting - Develop Training Program - FY07	02OCT06		22DEC06		A.1.03.00.01.01.04.					
1L104060	Repack - Develop Training Program - FY07	02OCT06		22DEC06		A.1.03.00.01.01.04.					
1L104075	RH 72B - Develop Training Program - FY07	02OCT06		22DEC06		A.1.03.00.01.01.04.					
1L104081	RH 72B - TCO Training & Qualification - FY07	02OCT06		28JUN07		A.1.03.00.01.01.04.					
1L104012	Maintain RH TRU Training Program - FY07	02OCT06		28SEP07		A.1.03.00.01.01.04.					
1L104093	Maintain RH TRU Training Prog Contingency - FY07	02OCT06		28SEP07		A.1.03.00.01.01.04.					
1L104039	Fac Mods Phase 2 - Train Operators - FY07	02JAN07		29JUN07		A.1.03.00.01.01.04.					
1L104045	Venting - Train Operators - FY07	02JAN07		29JUN07		A.1.03.00.01.01.04.					
1L104063	Repack - Train Operators - FY07	02JAN07		29JUN07		A.1.03.00.01.01.04.					
1L104078	RH 72B - Train Crew - FY07	02JAN07		29JUN07		A.1.03.00.01.01.04.					
1L104015	Maintain RH TRU Training Program - FY08	01OCT07		30SEP08		A.1.03.00.01.01.04.					
1L104096	Maintain RH TRU Training Prog Contingency - FY08	01OCT07		30SEP08		A.1.03.00.01.01.04.					
1L104018	Maintain RH TRU Training Program - FY09	01OCT08		30SEP09		A.1.03.00.01.01.04.					
1L104099	Maintain RH TRU Training Prog Contingency - FY09	01OCT08		30SEP09		A.1.03.00.01.01.04.					
1L104021	Maintain RH TRU Training Program - FY10	01OCT09		30SEP10		A.1.03.00.01.01.04.					
1L104102	Maintain RH TRU Training Prog Contingency - FY10	01OCT09		30SEP10		A.1.03.00.01.01.04.					
1L104024	Maintain RH TRU Training Program - FY11	01OCT10		30SEP11		A.1.03.00.01.01.04.					
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Start Date	01OCT03	Early Bar	Progress Bar	Critical Activity	WMC2	Clean/Close RWMC	SP1 - A.1.03.00.01	RH-TRU to WIPP	Lifecycle Baseline		
Finish Date	30SEP30										
Data Date	01OCT03										
Run Date	11APR03 14:45										
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Activity ID	Activity Description	Early Start		Early Finish		WBS		FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13
		Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date										
1L104105	Maintain RH TRU Training Program Contingency - FY11	01OCT10		30SEP11		A.1.03.00.01.01.04.											
RH TRU System Authorization Basis Modifications																	
1L105003	Phase 1 Documented Safety Analysis - FY04	01OCT03		30SEP04		A.1.03.00.01.01.05.											
1L105006	Phase 1 RCRA Permit Mods - FY04	01OCT03		30SEP04		A.1.03.00.01.01.05.											
1L105030	Authorization Basis Contingency - FY04	01OCT03		30SEP04		A.1.03.00.01.01.05.											
1L105009	Phase 2 NEPA Documentation - FY05	01OCT04		30SEP05		A.1.03.00.01.01.05.											
1L105015	Phase 2 Hazard Assessment & PDSA - FY05	01OCT04		30SEP05		A.1.03.00.01.01.05.											
1L105033	Authorization Basis Contingency - FY05	01OCT04		30SEP05		A.1.03.00.01.01.05.											
1L105012	Phase 2 NEPA Documentation - FY06	03OCT05		29SEP06		A.1.03.00.01.01.05.											
1L105018	Phase 2 DSA - FY06	03OCT05		29SEP06		A.1.03.00.01.01.05.											
1L105024	Phase 2 RCRA Permits Mods - FY06	03OCT05		29SEP06		A.1.03.00.01.01.05.											
1L105036	Authorization Basis Contingency - FY06	03OCT05		29SEP06		A.1.03.00.01.01.05.											
1L105027	Phase 2 RCRA Permits Mods - FY07	02OCT06		29JUN07		A.1.03.00.01.01.05.											
1L105021	Phase 2 DSA - FY07	02OCT06		28SEP07		A.1.03.00.01.01.05.											
1L105039	Authorization Basis Contingency - FY07	02OCT06		28SEP07		A.1.03.00.01.01.05.											
RH TRU Deactivation and Closeout																	
1L106003	RH TRU D&D - FY12	03OCT11		28SEP12		A.1.03.00.01.01.06.											
1L106006	RH TRU Project Closeout - FY12	03OCT11		28SEP12		A.1.03.00.01.01.06.											
1L106009	RH TRU Project Closeout Contingency - FY12	03OCT11		28SEP12		A.1.03.00.01.01.06.											
TRU Technical Support and Integration																	
1L107003	INEEEL & NTP Program Support - FY04	01OCT03		30SEP04		A.1.03.00.01.01.07.											
1L107030	Beryllium Block Disposition Planning - FY04	01OCT03		30SEP04		A.1.03.00.01.01.07.											
1L107036	INEEEL & NTP Program Support Contingency - FY04	01OCT03		30SEP04		A.1.03.00.01.01.07.											
1L107006	INEEEL & NTP Program Support - FY05	01OCT04		30SEP05		A.1.03.00.01.01.07.											
1L107039	INEEEL & NTP Program Support Contingency - FY05	01OCT04		30SEP05		A.1.03.00.01.01.07.											
1L107009	INEEEL & NTP Program Support - FY06	03OCT05		29SEP06		A.1.03.00.01.01.07.											
1L107033	U-233 Disposition - FY06	03OCT05		29SEP06		A.1.03.00.01.01.07.											
1L107042	INEEEL & NTP Program Support Contingency - FY06	03OCT05		29SEP06		A.1.03.00.01.01.07.											
1L107012	INEEEL & NTP Program Support - FY07	02OCT06		28SEP07		A.1.03.00.01.01.07.											
1L107045	INEEEL & NTP Program Support Contingency - FY07	02OCT06		28SEP07		A.1.03.00.01.01.07.											
1L107015	INEEEL & NTP Program Support - FY08	01OCT07		30SEP08		A.1.03.00.01.01.07.											
1L107048	INEEEL & NTP Program Support Contingency - FY08	01OCT07		30SEP08		A.1.03.00.01.01.07.											
1L107018	INEEEL & NTP Program Support - FY09	01OCT08		30SEP09		A.1.03.00.01.01.07.											
1L107051	INEEEL & NTP Program Support Contingency - FY09	01OCT08		30SEP09		A.1.03.00.01.01.07.											
1L107021	INEEEL & NTP Program Support - FY10	01OCT09		30SEP10		A.1.03.00.01.01.07.											
1L107054	INEEEL & NTP Program Support Contingency - FY10	01OCT09		30SEP10		A.1.03.00.01.01.07.											
1L107024	INEEEL & NTP Program Support - FY11	01OCT10		30SEP11		A.1.03.00.01.01.07.											
1L107057	INEEEL & NTP Program Support Contingency - FY11	01OCT10		30SEP11		A.1.03.00.01.01.07.											
1L107027	INEEEL & NTP Program Support - FY12	03OCT11		28SEP12		A.1.03.00.01.01.07.											
1L107060	INEEEL & NTP Program Support Contingency - FY12	03OCT11		28SEP12		A.1.03.00.01.01.07.											
RH TRU Non-Intrusive Characterization Systems Im																	
RH TRU WMF-638 Modifications Capital Asset Proj																	
1L201003	Fac Mods- Crane Procurement - FY04	01OCT03		31MAR04		A.1.03.00.01.02.01.											
1L201006	Fac Mods- Construction Subcontract - FY04	01OCT03		30JUN04		A.1.03.00.01.02.01.											
		01OCT03		WMC2		Clean/Close RWMC											
		30SEP30				SP1 - A.1.03.00.01											
		01OCT03				RH-TRU to WIPP											
		11APR03 14:45				Lifecycle Baseline											
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Activity ID	Activity Description	Early Start		Early Finish		WBS		Early Start		Early Finish		WBS	
		Start Date	End Date	Start Date	End Date	Start Date	End Date	Start Date	End Date	Start Date	End Date	Start Date	End Date
1L203096	NDA ANL-E - Rad AK Cert - FY05	01OCT04	23DEC04	A.1.03.00.01.02.03.									
1L203123	Capital Equip. Contingency - FY05	01OCT04	30SEP05	A.1.03.00.01.02.03.									
1L203099	Gen NDE Ops- NDE Cert Preps - FY05	03JAN05	31MARS05	A.1.03.00.01.02.03.									
1L203111	Gen NDA Ops - NDA Cert Preps - FY05	03JAN05	31MARS05	A.1.03.00.01.02.03.									
1L203102	Gen NDE Ops- Perform NDE Runs - FY05	01APR05	30SEP05	A.1.03.00.01.02.03.									
1L203114	Gen NDA Ops - Perform NDA Runs - FY05	01APR05	30SEP05	A.1.03.00.01.02.03.									
1L203105	Gen NDE Ops- Perform NDE Runs - FY06	03OCT05	28SEP06	A.1.03.00.01.02.03.									
1L203117	Gen NDA Ops - Perform NDA Runs - FY06	03OCT05	29SEP06	A.1.03.00.01.02.03.									
1L203126	Capital Equip. Contingency - FY06	03OCT05	29SEP06	A.1.03.00.01.02.03.									
1L203108	Gen NDE Ops- Perform NDE Runs - FY07	02OCT06	28SEP07	A.1.03.00.01.02.03.									
1L203120	Gen NDA Ops - Perform NDA Runs - FY07	02OCT06	28SEP07	A.1.03.00.01.02.03.									
1L203129	Capital Equip. Contingency - FY07	02OCT06	28SEP07	A.1.03.00.01.02.03.									
RH TRU Intrusive Characterization System													
1L301001	Perform Title I Design - FY06	03OCT05	31JAN06	A.1.03.00.01.03.01.									
1L301027	Repack - Design/Fab/Const Contingency - FY06	03OCT05	29SEP06	A.1.03.00.01.03.01.									
1L301003	Support CD-2 Approval Process - FY06	01FEB06	31MARS06	A.1.03.00.01.03.01.									
1L301006	Perform Title II Design - FY06	03APR06	31JUL06	A.1.03.00.01.03.01.									
1L301018	Repack - Design/Fab/Construction - FY06	03APR06	29SEP06	A.1.03.00.01.03.01.									
1L301009	Support CD-3 Approval Process - FY06	01AUG06	29SEP06	A.1.03.00.01.03.01.									
1L301015	Vntng-Procure & Instl Drum Vnt Capbly - FY07	02OCT06	30MARS07	A.1.03.00.01.03.01.									
1L301024	Procure & Instl RH-72B Csk Loading Eqp - FY07	02OCT06	30MARS07	A.1.03.00.01.03.01.									
1L301012	Fac Mods Modif WMF-628 Intrusive Char - FY07	02OCT06	28JUN07	A.1.03.00.01.03.01.									
1L301021	Repack - Design/Fab/Construction - FY07	02OCT06	29JUN07	A.1.03.00.01.03.01.									
1L301030	Repack - Design/Fab/Const Contingency - FY07	02OCT06	28SEP07	A.1.03.00.01.03.01.									
1L302001	RH TRU Repackaging Systems Support and Startup	01OCT03	24DEC03	A.1.03.00.01.03.02.									
1L302076	RH TRU Repackaging Contingency - FY04	01OCT03	30SEP04	A.1.03.00.01.03.02.									
1L302003	Prepare Mission Need Document - FY04	02JAN04	30APR04	A.1.03.00.01.03.02.									
1L302006	Support the CD-0 Approval Process - FY04	03MAY04	30SEP04	A.1.03.00.01.03.02.									
1L302009	Prepare Conceptual Design Report - FY05	01OCT04	29APR05	A.1.03.00.01.03.02.									
1L302079	RH TRU Repackaging Contingency - FY05	01OCT04	30SEP05	A.1.03.00.01.03.02.									
1L302012	Support the CD-1 Approval Process - FY05	02MAY05	30SEP05	A.1.03.00.01.03.02.									
1L302027	Venting - Procedure Prep FY-07	02OCT06	28JUN07	A.1.03.00.01.03.02.									
1L302015	Fac Mods - Procedure Prep - FY07	02OCT06	29JUN07	A.1.03.00.01.03.02.									
1L302039	Repack - Procedure Prep - FY07	02OCT06	29JUN07	A.1.03.00.01.03.02.									
1L302051	RH 72B - Procedure Prep - FY07	02OCT06	29JUN07	A.1.03.00.01.03.02.									
1L302066	RH 72B - Dvlpt Payload Compliance Procdrs - FY07	02OCT06	29JUN07	A.1.03.00.01.03.02.									
1L302082	RH TRU Repackaging Contingency - FY07	02OCT06	28SEP07	A.1.03.00.01.03.02.									
1L302024	Fac Mods - SO Testing - FY07	02JUL07	28SEP07	A.1.03.00.01.03.02.									
1L302036	Venting - SO Testing Drum Vent System - FY07	02JUL07	28SEP07	A.1.03.00.01.03.02.									
1L302048	Repack - SO Testing Repackaging System - FY07	02JUL07	28SEP07	A.1.03.00.01.03.02.									
1L302060	RH 72B - Perform Dry Runs (SO Testing) - FY07	02JUL07	28SEP07	A.1.03.00.01.03.02.									
Start Date	01OCT03	Early Bar	WM42	Clean/Close RWMC									
Finish Date	30SEP30	Progress Bar		SP1 - A.1.03.00.01									
Data Date	01OCT03			RH-TRU to WIPP									
Run Date	11APR03 14:45			Lifecycle Baseline									
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Activity ID	Activity Description	Early Start		Early Finish		Late Start		Late Finish		WBS	
		Start	Finish	Start	Finish	Start	Finish	Start	Finish	Start	Finish
1L501144	RH TRU Waste Charact. Contingency - FY05	01OCT04	30SEP05	A.1.03.00.01.05.01.							
1L501036	U-233 Perform Evaluations - FY05	01APR05	30SEP05	A.1.03.00.01.05.01.							
1L501045	Pb-Lined Perform Evaluations - FY05	01APR05	30SEP05	A.1.03.00.01.05.01.							
1L501087	NDA U233 - Perform Evals - FY05	01APR05	30SEP05	A.1.03.00.01.05.01.							
1L501108	NDA Pb Lined-Perform Evals - FY05	01APR05	30SEP05	A.1.03.00.01.05.01.							
1L501003	Venting - Demonstrate Drum Vent System - FY05	04APR05	03OCT05	03OCT05	30MARR06	A.1.03.00.01.05.01.					
1L501111	NDA Pb Lined- Implement Mods - FY06	03OCT05	03OCT05	03OCT05	31MARR06	A.1.03.00.01.05.01.					
1L501039	U-233 Implement Modifications - FY06	03OCT05	03OCT05	03OCT05	31MARR06	A.1.03.00.01.05.01.					
1L501048	Pb-Lined Implement Modifications - FY06	03OCT05	03OCT05	03OCT05	31MARR06	A.1.03.00.01.05.01.					
1L501090	NDA U233 - Implement Mods - FY06	03OCT05	03OCT05	03OCT05	29SEP06	A.1.03.00.01.05.01.					
1L501120	NDA TRA/NRF - TRA/NRF AK Summary Rpt - FY06	03OCT05	03OCT05	03OCT05	29SEP06	A.1.03.00.01.05.01.					
1L501147	RH TRU Waste Charact. Contingency - FY06	03OCT05	03OCT05	03OCT05	29SEP06	A.1.03.00.01.05.01.					
1L501144	Pb Lined - Perform Total Uncertainty Eval - FY06	31MAR06	29SEP06	29SEP06	29SEP06	A.1.03.00.01.05.01.					
1L501024	VOC Diffusion Modeling Remaining Waste - FY06	03APR06*	29SEP06	29SEP06	29SEP06	A.1.03.00.01.05.01.					
1L501093	U233 - Perform Total Uncertainty Eval - FY06	03APR06	29SEP06	29SEP06	29SEP06	A.1.03.00.01.05.01.					
1L501099	Certification Activities - FY07	02OCT06	22DEC06	22DEC06	22DEC06	A.1.03.00.01.05.01.					
1L501118	Pb Lined - Certification Activity - FY07	02OCT06	22DEC06	22DEC06	22DEC06	A.1.03.00.01.05.01.					
1L501051	TRA/NRF - Prep TRA/NRF Surrogate/Source - FY07	02OCT06	30MARD07	30MARD07	30MARD07	A.1.03.00.01.05.01.					
1L501123	Prep TRA/NRF Surrogate/Source - FY07	02OCT06	30MARD07	30MARD07	30MARD07	A.1.03.00.01.05.01.					
1L501025	Final Procedures for Remaining Wastes - FY07	02OCT06	06APR07	06APR07	06APR07	A.1.03.00.01.05.01.					
1L501150	RH TRU Waste Charact. Contingency - FY07	02OCT06	28SEP07	28SEP07	28SEP07	A.1.03.00.01.05.01.					
1L501054	TRA/NRF - Perform Evals - FY07	02APR07	28SEP07	28SEP07	28SEP07	A.1.03.00.01.05.01.					
1L501126	NDA TRA/NRF - Perform Evals - FY07	02APR07	28SEP07	28SEP07	28SEP07	A.1.03.00.01.05.01.					
1L501027	HSGS - HSGS Certification Prep - FY07	09APR07	28JUN07	28JUN07	28JUN07	A.1.03.00.01.05.01.					
1L501057	TRA/NRF - Implement Mods - FY08	01OCT07	31MARD08	31MARD08	31MARD08	A.1.03.00.01.05.01.					
1L501129	NDA TRA/NRF - Implement Mods - FY08	01OCT07	31MARD08	31MARD08	31MARD08	A.1.03.00.01.05.01.					
1L501153	RH TRU Waste Charac. Contingency - FY08	01OCT07	30SEP08	30SEP08	30SEP08	A.1.03.00.01.05.01.					
1L501132	NDA TRA/NRF - Pfrom Tt! Uncertainty Eval - FY08	01APR08	30SEP08	30SEP08	30SEP08	A.1.03.00.01.05.01.					
1L501138	NDA TRA/NRF - Certification Activities - FY09	01OCT08	07APR09	07APR09	07APR09	A.1.03.00.01.05.01.					
1L501156	RH TRU Waste Charact. Contingency - FY09	01OCT08	30SEP09	30SEP09	30SEP09	A.1.03.00.01.05.01.					
RH TRU Waste Characterization Systems Operations											
1L502054	ECL OPS- Maintain Baseline ECL Operations - FY04	01OCT03	30SEP04	30SEP04	30SEP04	A.1.03.00.01.05.02.					
1L502133	Gamma Spec Procure & SO Test - FY04	01OCT03	30SEP04	30SEP04	30SEP04	A.1.03.00.01.05.02.					
1L502177	Waste Charact. Ops Contingency - FY04	01OCT03	30SEP04	30SEP04	30SEP04	A.1.03.00.01.05.02.					
1L502134	AK Measurements Cert Preps - FY05	01OCT04	23DEC04	23DEC04	23DEC04	A.1.03.00.01.05.02.					
1L502057	ECL OPS- Maintain Baseline ECL Operations - FY05	01OCT04	30SEP05	30SEP05	30SEP05	A.1.03.00.01.05.02.					
1L502180	Waste Charact. Ops Contingency - FY05	01OCT04	31MARD05	31MARD05	31MARD05	A.1.03.00.01.05.02.					
1L502030	HSGS- HSGS Certification Preparations - FY05	03JAN05	30SEP05	30SEP05	30SEP05	A.1.03.00.01.05.02.					
1L502033	HSGS- HSGS Operations - FY05	01APR05	30SEP05	30SEP05	30SEP05	A.1.03.00.01.05.02.					
1L502102	Gen NDE Ops ANL-E - Perf Video Tape Rewrs -	01APR05	30SEP05	30SEP05	30SEP05	A.1.03.00.01.05.02.					
1L502135	Gen NDA Ops ANL-E - Perf Rad AK Mstrnts - FY05	01APR05	30SEP05	30SEP05	30SEP05	A.1.03.00.01.05.02.					
1L502156	Gen NDA Ops ANL-E - Gen Rad AK Reports - FY05	01APR05*	30SEP05	30SEP05	30SEP05	A.1.03.00.01.05.02.					
1L502036	HSGS- HSGS Operations - FY06	03OCT05	29SEP06	29SEP06	29SEP06	A.1.03.00.01.05.02.					
Start Date	01OCT03	Early Bar	WMC2	Clean/Close RW/MC							
Finish Date	30SEP30	Progress Bar		SP1 - A.1.03.00.01							
Data Date	01OCT03			RH-TRU to WIPP							
Run Date	11APR03 14:45			Lifecycle Baseline							
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Activity ID	Description	Early Start	Early Finish	WBS	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13
1L502060	ECL OPS- Maintain Baseline ECL Operations - FY06	03OCT05	29SEP06	A.1.03.00.01.05.02.										
1L502105	Gen NDE Ops ANL-E - Perf Video Tape Rewrs -	03OCT05	29SEP06	A.1.03.00.01.05.02.										
1L502138	Gen NDA Ops ANL-E - Perf Rad AK Msmnts - FY06	03OCT05	29SEP06	A.1.03.00.01.05.02.										
1L502159	Gen NDA Ops ANL-E - Gen Rad AK Reports - FY06	03OCT05	29SEP06	A.1.03.00.01.05.02.										
1L502183	Waste Charact. Ops Contingency - FY06	03OCT05	29SEP06	A.1.03.00.01.05.02.										
1L502039	HSGS- HSGS Operations - FY07	02OCT06	28SEP07	A.1.03.00.01.05.02.										
1L502063	ECL OPS- Maintain Baseline ECL Operations - FY07	02OCT06	28SEP07	A.1.03.00.01.05.02.										
1L502108	Gen NDE Ops ANL-E - Perf Video Tape Rewrs -	02OCT06	28SEP07	A.1.03.00.01.05.02.										
1L502141	Gen NDA Ops ANL-E - Perf Rad AK Msmnts - FY07	02OCT06	28SEP07	A.1.03.00.01.05.02.										
1L502162	Gen NDA Ops ANL-E - Gen Rad AK Reports - FY07	02OCT06	28SEP07	A.1.03.00.01.05.02.										
1L502186	Waste Charact. Ops Contingency - FY07	02OCT06	28SEP07	A.1.03.00.01.05.02.										
1L502042	HSGS- HSGS Operations - FY08	01OCT07	30SEP08	A.1.03.00.01.05.02.										
1L502066	ECL OPS- Maintain Baseline ECL Operations - FY08	01OCT07	30SEP08	A.1.03.00.01.05.02.										
1L502090	Gen NDE Ops - Perform NDE Runs - FY08	01OCT07	30SEP08	A.1.03.00.01.05.02.										
1L502123	Gen NDA Ops - Perform NDA Runs - FY08	01OCT07	30SEP08	A.1.03.00.01.05.02.										
1L502144	Gen NDA Ops ANL-E - Perf Rad AK Msmnts - FY08	01OCT07	30SEP08	A.1.03.00.01.05.02.										
1L502165	Gen NDA Ops ANL-E - Gen Rad AK Reports - FY08	01OCT07	30SEP08	A.1.03.00.01.05.02.										
1L502189	Waste Charact. Ops Contingency - FY08	01OCT07	30SEP08	A.1.03.00.01.05.02.										
1L502015	Rewrap- Repackaging Certiftn Prep - FY08	02JAN08*	31MAR08	A.1.03.00.01.05.02.										
1L502001	Venting- Drum Vent Certification Prep - FY08	02JAN08	07APR08	A.1.03.00.01.05.02.										
1L502018	Rewrap- Repackaging Operations - FY08	01APR08	30SEP08	A.1.03.00.01.05.02.										
1L502003	Venting- Drum Vent Operations - FY08	08APR08	30SEP08	A.1.03.00.01.05.02.										
1L502006	Venting- Drum Vent Operations - FY09	01OCT08	30SEP09	A.1.03.00.01.05.02.										
1L502021	Rewrap- Repackaging Operations - FY09	01OCT08	30SEP09	A.1.03.00.01.05.02.										
1L502045	HSGS- HSGS Operations - FY09	01OCT08	30SEP09	A.1.03.00.01.05.02.										
1L502069	ECL OPS- Maintain Baseline ECL Operations - FY09	01OCT08	30SEP09	A.1.03.00.01.05.02.										
1L502093	Gen NDE Ops - Perform NDE Runs - FY09	01OCT08	30SEP09	A.1.03.00.01.05.02.										
1L502126	Gen NDA Ops - Perform NDA Runs - FY09	01OCT08	30SEP09	A.1.03.00.01.05.02.										
1L502147	Gen NDA Ops ANL-E - Perf Rad AK Msmnts - FY09	01OCT08	30SEP09	A.1.03.00.01.05.02.										
1L502168	Gen NDA Ops ANL-E - Gen Rad AK Reports - FY09	01OCT08	30SEP09	A.1.03.00.01.05.02.										
1L502192	Waste Charact. Ops Contingency - FY09	01OCT08	30SEP09	A.1.03.00.01.05.02.										
1L502009	Venting- Drum Vent Operations - FY10	01OCT09	30SEP10	A.1.03.00.01.05.02.										
1L502024	Rewrap- Repackaging Operations - FY10	01OCT09	30SEP10	A.1.03.00.01.05.02.										
1L502048	HSGS- HSGS Operations - FY10	01OCT09	30SEP10	A.1.03.00.01.05.02.										
1L502072	ECL OPS- Maintain Baseline ECL Operations - FY10	01OCT09	30SEP10	A.1.03.00.01.05.02.										
1L502096	Gen NDE Ops - Perform NDE Runs - FY10	01OCT09	30SEP10	A.1.03.00.01.05.02.										
1L502129	Gen NDA Ops - Perform NDA Runs - FY10	01OCT09	30SEP10	A.1.03.00.01.05.02.										
1L502150	Gen NDA Ops ANL-E - Perf Rad AK Msmnts - FY10	01OCT09	30SEP10	A.1.03.00.01.05.02.										
1L502171	Gen NDA Ops ANL-E - Gen Rad AK Reports - FY10	01OCT09	30SEP10	A.1.03.00.01.05.02.										
1L502195	Waste Charact. Ops Contingency - FY10	01OCT09	30SEP10	A.1.03.00.01.05.02.										
1L502012	Venting- Drum Vent Operations - FY11	01OCT10	30SEP11	A.1.03.00.01.05.02.										
1L502027	Rewrap- Repackaging Operations - FY11	01OCT10	30SEP11	A.1.03.00.01.05.02.										
1L502051	HSGS- HSGS Operations - FY11	01OCT10	30SEP11	A.1.03.00.01.05.02.										

WMC2

Clean/Close RWM/C  
SP1 - A.1.03.00.01  
RH-TRU to WIPP  
Lifecycle Baseline

Sheet 10 of 11

Start Date                      Early Bar  
Finish Date                    Progress Bar  
Data Date                    Critical Activity  
Run Date

Activity ID	Activity Description	Start	End	Early Finish	WBS
1L502075	ECL OPS- Maintain Baseline ECL Operations - FY11	01OCT10	30SEP11	A.1.03.00.01.05.02.	
1L502099	Gen NDE Ops- Perform NDE Runs - FY11	01OCT10	30SEP11	A.1.03.00.01.05.02.	
1L502132	Gen NDA Ops - Perform NDA Runs - FY11	01OCT10	30SEP11	A.1.03.00.01.05.02.	
1L502153	Gen NDA Ops ANI-E - Perf Rad AK Measurements - FY11	01OCT10	30SEP11	A.1.03.00.01.05.02.	
1L502174	Gen NDA Ops ANI-E - Gen Rad AK Reports - FY11	01OCT10	30SEP11	A.1.03.00.01.05.02.	
1L502198	Waste Charact. Ops Contingency - FY11	01OCT10	30SEP11	A.1.03.00.01.05.02.	
RH TRU Waste Transportation System and Operation					
1L601003	10-160B - Prepare Package QA Plan - FY04	01OCT03	23DEC03	A.1.03.00.01.06.01.	
1L601027	RH TRU Transprt Contingency - FY04	01OCT03	30SEP04	A.1.03.00.01.06.01.	
1L601015	10-160B - Develop Cask Maint. Program - FY04	02JAN04*	30JUN04	A.1.03.00.01.06.01.	
1L601030	RH TRU Transprt Contingency - FY05	01OCT04	30SEP05	A.1.03.00.01.06.01.	
1L601006	10-160B - Cert Preps - FY04	03JAN05	31MARCH05	A.1.03.00.01.06.01.	
1L601018	RH-72B - Prepare Package QA Plan - FY07	02OCT06	22DEC06	A.1.03.00.01.06.01.	
1L601033	RH TRU Transprt Contingency - FY07	02OCT06	28SEP07	A.1.03.00.01.06.01.	
1L601021	RH-72B - Develop Cask Maintenance Program -	02JAN07*	29JUN07	A.1.03.00.01.06.01.	
1L601024	RH-72B - RH-72B Cert Prep - FY08	01OCT07	24DEC07	A.1.03.00.01.06.01.	
1L601036	RH TRU Transprt Contingency - FY08	01OCT07	30SEP08	A.1.03.00.01.06.01.	
RH TRU Waste Transportation Operations					
1L602036	10-160B - Shipping Operations Contingency - FY05	01OCT04	30SEP05	A.1.03.00.01.06.02.	
1L602001	10-160B - Shipping Operations - FY05	01APR05	30SEP05	A.1.03.00.01.06.02.	
1L602003	10-160B - Shipping Operations - FY06	03OCT05	29SEP06	A.1.03.00.01.06.02.	
1L602039	10-160B - Shipping Operations Contingency - FY06	03OCT05	29SEP06	A.1.03.00.01.06.02.	
1L602006	10-160B - Shipping Operations - FY07	02OCT06	28SEP07	A.1.03.00.01.06.02.	
1L602021	RH-72B - Procure RH-72B Canisters - FY07	02OCT06	28SEP07	A.1.03.00.01.06.02.	
1L602042	10-160B - Shipping Operations Contingency - FY07	02OCT06	28SEP07	A.1.03.00.01.06.02.	
1L602009	10-160B - Shipping Operations - FY08	01OCT07	30SEP08	A.1.03.00.01.06.02.	
1L602045	10-160B - Shipping Operations Contingency - FY08	01OCT07	30SEP08	A.1.03.00.01.06.02.	
1L602024	RH-72B - Shipping Operations - FY08	02JAN08	30SEP08	A.1.03.00.01.06.02.	
1L602012	10-160B - Shipping Operations - FY09	01OCT08	30SEP09	A.1.03.00.01.06.02.	
1L602027	RH-72B - Shipping Operations - FY09	01OCT08	30SEP09	A.1.03.00.01.06.02.	
1L602048	10-160B - Shipping Operations Contingency - FY09	01OCT08	30SEP09	A.1.03.00.01.06.02.	
1L602015	10-160B - Shipping Operations - FY10	01OCT09	30SEP10	A.1.03.00.01.06.02.	
1L602030	RH-72B - Shipping Operations - FY10	01OCT09	30SEP10	A.1.03.00.01.06.02.	
1L602051	10-160B - Shipping Operations Contingency - FY10	01OCT09	30SEP10	A.1.03.00.01.06.02.	
1L602018	10-160B - Shipping Operations - FY11	01OCT10	30SEP11	A.1.03.00.01.06.02.	
1L602033	RH-72B - Shipping Operations - FY11	01OCT10	30SEP11	A.1.03.00.01.06.02.	
1L602054	10-160B - Shipping Operations Contingency - FY11	01OCT10	30SEP11	A.1.03.00.01.06.02.	

Start Date	01OCT03	Early Bar	WMIC2	Clean/Close RWMIC
Finish Date	30SEP30	Progress Bar		SP1 - A.1.03.00.01
Data Date	01OCT03	Critical Activity		RH-TRU to WIPP
Run Date	11APR03 14:45			Lifecycle Baseline
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**A.1.03.00.01 Budget  
Baseline**

# Clean/Close RWMIC

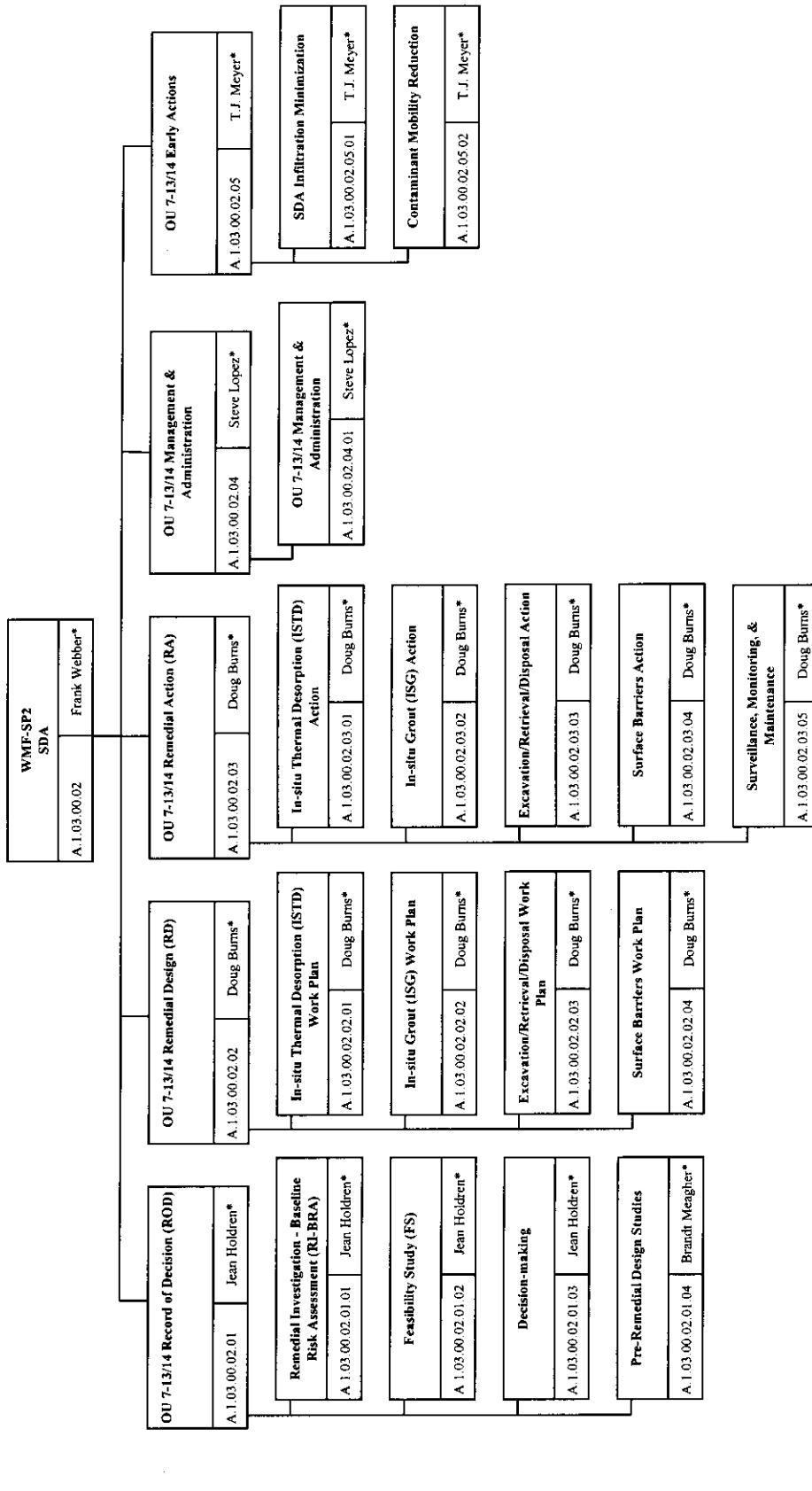
## Subproject Breakout by Control Account

WBS[5]	WBS[6]		Sep-04	Sep-05	Sep-06	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	Cumulative
A.1.03.00.01 WMF-SP1 RH-TRU to WIPP												
BURDENED BASE												
A.1.03.00.01.01 RH TRU Administration & Site Project Office	BCWS	4,869	6,115	5,708	8,395	7,250	6,863	6,863	11,363	11,363	64,291	
A.1.03.00.01.02 RH TRU Non-Intrusive Characterization System	BCWS	19,334	1,695	2,047	2,047	0	0	0	0	0	0	25,123
A.1.03.00.01.03 RH TRU Intrusive Characterization System	BCWS	537	2,849	33,352	23,119	668	0	0	0	0	0	60,525
A.1.03.00.01.04 RH TRU Waste Retrieval Systems and Operations	BCWS	1,601	1,761	1,870	3,056	3,056	3,056	3,562	340	0	18,302	
A.1.03.00.01.05 RH TRU Waste Characterization Systems and Operations	BCWS	5,663	5,691	3,504	3,677	10,409	14,516	11,269	11,323	0	0	66,052
A.1.03.00.01.06 RH TRU Waste Transportation System and Operations	BCWS	98	1,322	675	1,512	4,173	3,602	3,706	3,733	0	0	18,822
<b>Results... Totals:</b>	<b>BCWS</b>	<b>32,103</b>	<b>19,434</b>	<b>47,158</b>	<b>41,806</b>	<b>25,557</b>	<b>28,038</b>	<b>25,400</b>	<b>22,259</b>	<b>11,363</b>	<b>255,115</b>	
ESCALATE												
A.1.03.00.01.01 RH TRU Administration & Site Project Office	BCWS	151	304	406	786	843	962	1,126	1,294	2,425	2,425	8,297
A.1.03.00.01.02 RH TRU Non-Intrusive Characterization System	BCWS	474	85	145	191	0	0	0	0	0	0	895
A.1.03.00.01.03 RH TRU Intrusive Characterization System	BCWS	12	128	2,250	2,052	73	0	0	0	0	0	4,516
A.1.03.00.01.04 RH TRU Waste Retrieval Systems and Operations	BCWS	49	90	136	305	376	448	609	68	0	0	2,082
A.1.03.00.01.05 RH TRU Waste Characterization Systems and Operations	BCWS	142	278	251	342	1,180	1,966	1,804	2,088	0	0	8,053
A.1.03.00.01.06 RH TRU Waste Transportation System and Operations	BCWS	3	65	49	141	484	500	603	698	0	0	2,543
<b>Results... Totals:</b>	<b>BCWS</b>	<b>831</b>	<b>950</b>	<b>3,238</b>	<b>3,818</b>	<b>2,956</b>	<b>3,877</b>	<b>4,142</b>	<b>4,149</b>	<b>2,425</b>	<b>2,425</b>	<b>26,387</b>
SUMMARY (Base + Escalation)												
A.1.03.00.01.01 RH TRU Administration & Site Project Office	BCWS	5,020	6,419	6,115	9,181	8,094	7,825	7,990	8,157	13,788	13,788	72,588
A.1.03.00.01.02 RH TRU Non-Intrusive Characterization System	BCWS	19,808	1,780	2,192	2,238	0	0	0	0	0	0	26,019
A.1.03.00.01.03 RH TRU Intrusive Characterization System	BCWS	549	2,978	35,603	25,171	741	0	0	0	0	0	65,041
A.1.03.00.01.04 RH TRU Waste Retrieval Systems and Operations	BCWS	1,650	1,851	2,006	3,362	3,432	3,504	4,171	408	0	0	20,384
A.1.03.00.01.05 RH TRU Waste Characterization Systems and Operations	BCWS	5,805	5,969	3,755	4,020	11,588	16,483	13,073	13,411	0	0	74,105
A.1.03.00.01.06 RH TRU Waste Transportation System and Operations	BCWS	100	1,387	723	1,653	4,658	4,102	4,309	4,432	0	0	21,365
<b>Results... Totals:</b>	<b>BCWS</b>	<b>32,933</b>	<b>20,384</b>	<b>50,394</b>	<b>45,624</b>	<b>28,513</b>	<b>31,915</b>	<b>29,342</b>	<b>26,409</b>	<b>13,788</b>	<b>279,502</b>	

Thousands of \$

**A.1.03.00.02 SP2**  
**Subsurface Disposal**  
**Area**

# WMF-SP2- SDA Work Breakdown Structure



\* Point of Contact

**DRAFT - Begins FY04**

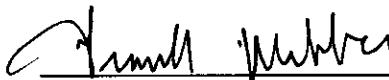
A.1.03.00.02  
**SubprojectPlan**

## SUBPROJECT PLAN

WBS: A.1.03.00.02  
Title: WMF-SP2 Subsurface Disposal Area

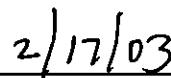
PROJ Mgr:	Frank L. Webber	Planning & Controls:	Kimberli S. Southwick
DOE-ID:	Jeffrey G. Snook	ES&H Field Manager:	Randy D. Sayer
PBS Manager:	John M. Schaffer	Other:	Donald W. Scott
Project Manager for Project Support and Facility Authorization			David M. Bright

APPROVED BY:



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Subproject Plan Manager



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Date



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ES&H Representative



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Date

### 1. WORK DESCRIPTION:

#### SDA Management Approach

The Subsurface Disposal Area (SDA) management approach will take on two distinctive properties. Through adherence to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) process, the SDA will identify clear and objective measures, work toward a final solution through mutual agreements, conduct a strong operational awareness program, and conduct self-assessments and independent evaluation to complete the OU 7-13/14 Record of Decision (ROD). Once the ROD is in place and set, the remedial action and remedial design phases will be conducted, within the CERCLA guidelines, and in compliance with the elements of DOE O 430.1A, "Life-Cycle Asset Management (LCAM)." The five phases of the LCAM that will be developed in the management approach are preconceptual, conceptual, execution, acceptance, and closeout.

The requirements of CERCLA and the LCAM will be established through the use of performance criteria and performance measures. This approach is being developed to provide requirements for the management of the SDA from planning through operations and final disposition.

#### Workscope

This subproject consists of five control accounts that are necessary to remediate the Waste Area Group 7 SDA within the Radioactive Waste Management Complex (RWMC) at the Idaho National Engineering and Environmental Laboratory. These control accounts include (1) OU 7-13/14 Record of Decision (ROD), (2) OU 7-13/14 Remedial Design (RD), (3) OU 7-13/14 Remedial Action, (4) OU 7-13/14 Management and Administration, and (5) OU 7-13/14 Early Actions. The following sections describe the scope of work to be performed in each control account:

#### A.1.03.00.02.01 - OU 7-13/14 Record of Decision (ROD)

This control account consists of the four major areas of work necessary to arrive at a ROD that will define the alternative used to remediate the SDA. These major areas of work include: remedial investigation – baseline risk assessment (RI/BRA); feasibility study (FS); decision-making activities; and preremedial design studies

#### A.1.03.00.02.02 - OU 7-13/14 Remedial Design (RD)

This control account consists of four major areas of work that are necessary to remediate the SDA. These include RD in the following areas: in situ thermal desorption (ISTD; in situ grouting (ISG); excavation, retrieval, treatment, and disposal; and surface barriers.

#### A.1.03.00.02.03 - OU 7-13/14 Remedial Action (RA)

This control account consists of five major areas of work necessary to remediate the SDA. These include remedial action in the following areas: ISTD; ISG; excavation, retrieval, treatment, and disposal; surface barriers; and surveillance, monitoring, and maintenance.

#### A.1.03.00.02.04 - OU 7-13/14 Management & Administration

The work scope for management and administration of OU 7-13/14 will remain consistent from FY 2004 through 2006. In FY 2006, the remedial investigation and baseline risk assessment (RI/BRA), FS, proposed plan, and ROD will have been finalized and submitted; therefore, management and administration activities will be directed at RD/RA activities in the out years (FY 2007 to 2027). This control account supports completion of all activities associated with managing and administering the OU 7-13/14 remediation of the SDA.

#### A.1.03.00.02.06 – Early Actions

This control account will plan, develop, and implement early actions to minimize release of contaminants from the SDA to reduce risk associated with activation and fission products. Certain activation and fission products from buried waste pose an increased risk because they are highly mobile. Early actions are targeted to minimize infiltration and isolate contaminant sources to reduce mobility and produce an immediate risk reduction.

## **2. MAJOR PRODUCTS AND DELIVERABLES:**

The following is a list of milestones, major products, and deliverables for the five control accounts in this subproject:

### **Milestones:**

- OU 7-13/14 Draft RI/BRA Submitted for Review – 08/31/05
- OU 7-13/14 Draft FS Submitted for Review – 12/31/05
- OU 7-13/14 Draft Proposed Plan Submitted for Review – 03/31/06
- OU 7-13/14 Draft ROD Submitted for Review – 12/31/06.

#### A.1.03.00.02.01 - OU 7-13/14 Record of Decision (ROD)

- Remedial investigation – baseline risk assessment report
- Feasibility study report
- Proposed plan (draft)

- OU 7-13/14 ROD
- Final results reports for ISTD, ISG, and in situ vitrification glass bench-scale studies.

A.1.03.00.02.02 - OU 7-13/14 Remedial Design (RD)

- Remedial design and remedial action scope of work
- Remedial design and remedial action work plan
- Preliminary (Title I) remedial design
- Detailed (Title II) remedial design.

A.1.03.00.02.03 - OU 7-13/14 Remedial Action (RA)

The following list of major products and deliverables consist of the same type of deliverable for each of the four major areas of work (i.e., ISTD; ISG; excavation; retrieval, treatment, and disposal; and surface barriers):

- Construction and operation of remedial system, including vapor collection and treatment systems
- Operational readiness review report
- System prefinal and final inspection report
- Deactivation, decontamination, and decommissioning plan.

The following is a list of major products and deliverables for the post-remedial action surveillance, monitoring, and maintenance within the SDA:

- Sample and analysis plans
- Health and safety plans
- Monitoring and maintenance activities and reports.

A.1.1.03.00.02.04 - OU 7-13/14 Management & Administration

- Waste Area Group 7 communications plan
- Public fact sheets and brochures
- Press briefs, and releases
- FY 2005 to 2006 detailed work plan
- Baseline planning.

#### A.1.03.00.02.06 – Early Actions

- Snow removal planning and implementation
- Drainage control planning and implementation
- Nontransuranic contaminant isolation planning and implementation
- Beryllium-block isolation planning and implementation.

### **3. ESTIMATE DEVELOPMENT BASIS:**

Cost estimates for the SP2 subproject activities are based on the following:

- Cost estimates were based on the most appropriate means available, with first consideration given to a bottoms-up methodology, using known process times or historical data to arrive at a unit cost. Other cost estimate development methodologies were used, including the following:
  - Many cost estimates for this subproject were taken from Appendix D, Attachment D-5, “OU 7-13/14 Feasibility Study Cost Estimate for Retrieval, Treatment, and Disposal Alternative,” of the *OU 7-13/14 Preliminary Evaluation of Remedial Alternatives* (PERA). The estimates were scaled appropriately where the current planning is for a reduced scope of work from the original estimate
  - Professional experience and judgment of subject matter experts (e.g., process engineers, technicians, managers, and outside consultants), where applicable, was used to determine appropriate resources for performing new work scope activities for which no historical data were available
  - Recorded hours expended for similar work activities to accomplish similar scope performed in FY 2002 and 2003. In most cases, adjustments were made—up or down, as necessary—to reflect changes in operating conditions, scope of work, lessons learned, or other factors currently existing or projected going forward
  - Engineering estimates were developed for facility and system modifications using standard engineering and construction methods of estimating costs from drawings and specifications
  - Other sources of reliable cost data were used (i.e., vendor quotes and estimates, FY 2002 and 2003 baseline cost estimates, and FY 2002 and 2003 estimates at completion).

Detailed cost estimates are provided in the individual planning packages for the various control accounts.

#### **Contingency guideline implementation:**

Contingency was developed using Option 3 in the Life-Cycle Baseline Contingency Guidance. The project team reviewed and discussed issues and concerns and assigned appropriate contingency dollar values. Based on the details within the scope of work, the assumptions identified with that scope of work, and the contingency dollars incorporated, the project team has a very high confidence level of success.

The project team assessment of contingency was developed based on parameters shown in Table 1.

Table 1. Radioactive Waste Management Complex SP2 contingency matrix.

Work Breakdown Structure	Work Package	Contingency (%)
<b>OU 7-13/14 Record of Decision (ROD)</b>		
A.1.03.00.02.01.01	Remedial Investigation/Baseline Risk Assessment (RI/BRA)	20%
A.1.03.00.02.01.02	Feasibility Study (FS)	20%
A.1.03.00.02.01.03	Decision Making	20%
A.1.03.00.02.01.04	Pre-Remedial Design Studies(based on cost estimating application of risk, 413.3 project)	46%
<b>OU 7-13/14 Remedial Design (RD)</b>		
A.1.03.00.02.02.01	In Situ Thermal Desorption (ISTD) Work Plan	50%
A.1.03.00.02.02.02	In Situ Grouting (ISG) Work Plan	35%
A.1.03.00.02.02.03	Excavation/Retrieval/Disposal Work Plan	45%
A.1.03.00.02.02.04	Surface Barrier Work Plan	25%
<b>OU 7-13/14 Remedial Action (RA)</b>		
A.1.03.00.02.03.01	In Situ Thermal Desorption (ISTD) Action	50%
A.1.03.00.02.03.02	In Situ Grouting (ISG) Action	35%
A.1.03.00.02.03.03	Excavation/Retrieval/Disposal Action	45%
A.1.03.00.02.03.04	Surface Barrier Action	25%
A.1.03.00.02.03.05	Surveillance, Monitoring & Maintenance	40%
<b>OU 7-13/14 Management &amp; Administration</b>		
A.1.03.00.02.04.01	OU 7-13/14 Management & Administration	20% (FY 2004-2006) 40% (FY 2007+)
<b>OU 7-13/14 Early Actions</b>		
A.1.03.00.02.05.01	SDA Infiltration Minimization	57%
A.1.03.00.02.05.02	Contaminant Mobility Reduction (based on cost estimating application of risk, 413.3 project)	57%

The LCB does not include a labor adjustment cost nor has it been included in the contingency analysis per DOE's direction. For SP2, the actual average labor rate for FY03 was \$95/hr, which is approximately \$20/hr higher than the rate used in the LCB planning.

#### **4. ASSUMPTIONS:**

- A. In situ thermal desorption; ISG; excavation; retrieval, treatment, and disposal; and surface barrier construction will be elements of the selected OU 7-13/14 remedy.
- B. Only 50% of the TRU waste buried in the SDA will be retrieved.
- C. The OU 7-10 Stage III Project will excavate, treat, and dispose of all TRU waste buried in OU 7-10 (Pit 9). This excavation will count toward the 50% of TRU waste retrieval objective. The remaining TRU waste volume will be removed from some combination of excavation in Pits 1 through 6, Pits 10 through 12, and Trenches 1 through 10
- D. The CH2MHill cost estimate presented in Appendix D, Attachment D-5, "OU 7-13/14 Feasibility Study Cost Estimate for Retrieval, Treatment, and Disposal Alternative," of the PERA is a reasonable basis for estimating costs associated with remediating the SDA. Scaling factors can be applied to this cost estimate to adjust it to match the 50% TRU waste retrieval assumption.
- E. The PERA cost estimate also will be used to estimate the life-cycle baseline (LCB) for Stage III costs using scaling factors.
- F. The PERA report provides adequate development of RA objectives screening of technologies and technology process options, and assembling alternatives for detailed analysis of Rocky Flats Plant TRU waste disposed of in pits and trenches.
- G. Analysis, documented in the PERA, of short-term effectiveness will be sufficient for the FS with no additional modeling.
- H. Planning or implementation of early actions will not impact the contents of the RI/BRA.
- I. The U.S. Environmental Protection Action (EPA) and the Idaho Department of Environmental Quality (IDEQ) will support accelerating the RI/BRA by 15 months from the enforceable milestone.
- J. The IDEQ and EPA will agree to finalize the "Second Addendum to the Remedial Investigation/Feasibility Study (RI/FS) Work Plan."
- K. The RI/FS scope will be specified in the "Second Addendum to the RI/FS Work Plan." Previous addenda to the work plan will be superceded by the second addendum.
- L. All Naval Reactors Facility and Argonne National Laboratory-West waste disposal issues will be resolved during FY 2003.
- M. No criticality assessments will be required to support OU 7-13/14 RAs.
- N. All applicable or relevant and appropriate requirements (ARARs) for the SDA remediation will be identified in the OU 7-13/14 comprehensive ROD and no additional ARAR development work will be required during the OU 7-13/14 RD development.
- O. Agreement will be reached with the EPA and IDEQ on the ARARs implementation approach for 40 CFR 191, "Environmental Radiation Protection Standards for Management and Disposal of Spent Nuclear Fuel, High-Level and Transuranic Radioactive Wastes"; 40 CFR 194, Criteria for

the Certification and Re-Certification of the Waste Isolation Pilot Plant's Compliance with the 40 CFR 191 Disposal Regulations"; and 10 CFR 61, "Licensing Requirements for Land Disposal of Radioactive Waste"; and DOE 435.1, "Radioactive Waste Management"; before the end of FY 2003. In the absence of this agreement, 40 CFR 191, 40 CFR 194, and 10 CFR 61 will not be OU 7-13/14 ARARs.

- P. The Environmental Data Warehouse, currently under development, will be fully functional and sufficient to meet the data needs for the nature and extent reports.
- Q. The Long-Term Stewardship Program is currently responsible for collecting samples, sending them to the laboratory, and developing the limitation and validation reports. It is assumed that this arrangement will continue, with OU 7-13/14 paying only for the costs of data analysis and reporting.
- R. Remediation of pits and trenches will not be completed until 2027.
- S. Taking early action (e.g., limiting infiltration into the SDA, limiting release of contaminants from the buried beryllium blocks, and grouting one or more of the soil vaults) will achieve a significant short-term risk reduction.
- T. Any proposed early actions to reduce risk will be conducted as non-time critical removal actions, which will not require EPA and IDEQ concurrence.
- U. In situ thermal desorption RD will be applied to approximately 1 acre of the SDA (i.e., Pits 4, 6, and 9).
- V. In situ thermal desorption will be applied before any grouting or excavation activities are performed.

## 5. SCIENCE AND TECHNOLOGY

Science and Technology Need Number	Science and Technology Need Description
N/A	All needs were incorporated into control account planning

**A.1.03.00.02 Schedule**

# INEEEL

## EM Project RWM/C Completion PBS/C

### WMC-SP2 Subsurface Disposal Area

OU 7-1314 Record of Decision (ROD)

Remedial Investigation or Baseline Risk Assessment

Activity ID	Description	Early Start	Early Finish	MES
2L101007	FY04 Identify Special Case Waste	01OCT03	01MAY04	A.1.03.00.02.01.01.
2L101009	FY04 Update INEEEL Disposal Data	01OCT03	01APR04	A.1.03.00.02.01.01.
2L101017	FY04 Draft RI/RRA	01OCT03	30AUG04	A.1.03.00.02.01.01.
2L101001	FY04 Waste-O-Scope Upgrade	01OCT03	30SEP04	A.1.03.00.02.01.01.
2L101003	FY04 CIDRA Maintenance	01OCT03	30SEP04	A.1.03.00.02.01.01.
2L101005	FY04 Nature & Extent of Contamination Evaluation	01OCT03	30SEP04	A.1.03.00.02.01.01.
2L101011	FY04 Tracer Study	01OCT03	30SEP04	A.1.03.00.02.01.01.
2L101013	FY04 Lysimeter Sampling	01OCT03	30SEP04	A.1.03.00.02.01.01.
2L101015	FY04 Analysis of Interbed Material	01OCT03	30SEP04	A.1.03.00.02.01.01.
2L101035	Contingency - FY04 Negative adjustment	01OCT03	30SEP04	A.1.03.00.02.01.01.
2L101038	Contingency for Labor Rate Risk for FY04	01OCT03	30SEP04	A.1.03.00.02.01.01.
2L101034	Contingency	01OCT03	29SEP06	A.1.03.00.02.01.01.
2L101020	FY05 Waste-O-Scope Minc	01OCT04*	30SEP05	A.1.03.00.02.01.01.
2L101022	FY05 Nature & Extent of Contamination Evaluation	01OCT04*	30SEP05	A.1.03.00.02.01.01.
2L101024	FY05 Lysimeter Review	01OCT04*	30SEP05	A.1.03.00.02.01.01.
2L101036	Contingency - FY05 75% Negative adjustment	01OCT04*	30SEP05	A.1.03.00.02.01.01.
2L101028	FY05 Final RI-RRA	01OCT04*	15DEC05	A.1.03.00.02.01.01.
2L101026	FY05 Tracer Study	18NOV04*	30SEP05	A.1.03.00.02.01.01.
2L101030	FY06 CIDRA Updates	03OCT05*	29SEP06	A.1.03.00.02.01.01.
2L101032	FY06 Nature & Extent of Contamination Evaluation	03OCT05*	29SEP06	A.1.03.00.02.01.01.
2L101037	Contingency - Respread of FY04/FY05 Contingency	02OCT06*	28SEP07	A.1.03.00.02.01.01.
Feasibility Study (FS)				
2L102001	FY04 Source Release Modelling	01OCT03	16FEB04	A.1.03.00.02.01.02.
2L102005	FY04 Biotic Modeling	01OCT03	01MAY04	A.1.03.00.02.01.02.
2L102015	FY04 Management of Pit 9 Material	01OCT03	01MAY04	A.1.03.00.02.01.02.
2L102036	FY04 Surface Barrier Evaluation	01OCT03	30MAY04	A.1.03.00.02.01.02.
2L102044	FY04 Draft FS	01OCT03	04MAY04	A.1.03.00.02.01.02.
2L102019	FY04 Alternatives for Special Case	01OCT03	14MAY04	A.1.03.00.02.01.02.
2L102003	FY04 Dual Phase Fate & Transport Modeling	01OCT03	30SEP04	A.1.03.00.02.01.02.
2L102013	FY04 Acceptable Knowledge Update	01OCT03	30SEP04	A.1.03.00.02.01.02.
2L102017	FY04 Sampling & Analysis of Pit 9 Material	01OCT03	30SEP04	A.1.03.00.02.01.02.
2L102046	FY04 Soil Gas Survey	01OCT03	30SEP04	A.1.03.00.02.01.02.
2L102048	FY04 Probe Data Mgmt & Analysis	01OCT03	30SEP04	A.1.03.00.02.01.02.
2L102053	Contingency - FY04 Negative adjustment	01OCT03	30SEP04	A.1.03.00.02.01.02.
2L102056	Contingency for Labor Rate Risk for FY04	01OCT03	30SEP04	A.1.03.00.02.01.02.

Start Date: 01OCT03  
 Finish Date: 30SEP30  
 Data Date: 01OCT03  
 Run Date: 11APR03 14:49

WMC2

Sheet 1 of 6

Clean/Close RWM/C  
 SP2 - A.1.03.00.02.  
 Subsurface Disposal Area  
 Lifecycle Baseline

Activity ID	Activity description	WBS					
		Early Start	Early Finish	Work	Early Start	Early Finish	Work
2L102052	Contingency	01OCT03	29SEP06	A.1.03.00.02.01.02.			
2L102007	FY04 Risk Modeling	01DEC03*	02FEB04	A.1.03.00.02.01.02.			
2L102111	FY04 Borrow Source Identification Analysis	26JAN04*	30SEP04	A.1.03.00.02.01.02.			
2L102009	FY04 Sensitivity & Uncertainty Dvlpmnt	01APR04*	01APR05	A.1.03.00.02.01.02.			
2L102024	FY05 Sensitivity and Uncertainty Simulation	01OCT04*	15FEB05	A.1.03.00.02.01.02.			
2L102050	FY05 Surface Barrier Evaluation	01OCT04*	31MAR05	A.1.03.00.02.01.02.			
2L102038	FY05 Final FS	01OCT04*	05MAY05	A.1.03.00.02.01.02.			
2L102020	FY05 Modeling Post - Audit	01OCT04*	30SEP05	A.1.03.00.02.01.02.			
2L102022	FY05 Acceptable Knowledge Developmt,	01OCT04*	30SEP05	A.1.03.00.02.01.02.			
2L102026	FY05 CIDRA Maintenance and Updates	01OCT04*	30SEP05	A.1.03.00.02.01.02.			
2L102028	FY05 Soil Gas Sampling	01OCT04*	30SEP05	A.1.03.00.02.01.02.			
2L102032	FY05 Sampling & Analysis of Pit 9 Material	01OCT04*	30SEP05	A.1.03.00.02.01.02.			
2L102034	FY05 Probe Data Mgmt & Analysis	01OCT04*	30SEP05	A.1.03.00.02.01.02.			
2L102054	Contingency - FY05 75% Negative adjustment	01OCT04*	30SEP05	A.1.03.00.02.01.02.			
2L102030	FY05 Pit 9 Material Management	03JAN05*	29SEP06	A.1.03.00.02.01.02.			
2L102040	FY06 Probe Data Mgmt & Analysis	03OCT05*	29SEP06	A.1.03.00.02.01.02.			
2L102042	FY06 Sampling & Analysis of Pit 9 Material	03OCT05*	29SEP06	A.1.03.00.02.01.02.			
2L102055	Contingency - Respread of FY04/FY05 Contingency	02OCT06*	28SEP07	A.1.03.00.02.01.02.			
Decision-making	FY04 Draft Proposed Plan	16AUG04	30SEP04	A.1.03.00.02.01.03.			
	Contingency - FY04 Negative adjustment	16AUG04*	30SEP04	A.1.03.00.02.01.03.			
	Contingency for Labor Rate Risk for FY04	16AUG04	16AUG05	A.1.03.00.02.01.03.			
	Contingency	16AUG04*	29SEP06	A.1.03.00.02.01.03.			
	FY05 Draft Proposed Plan	01OCT04*	14DEC04	A.1.03.00.02.01.03.			
	FY05 Preparation of Draft ROD	01OCT04*	30MAR05	A.1.03.00.02.01.03.			
	Contingency - FY05 75% Negative adjustment	01OCT04*	30SEP05	A.1.03.00.02.01.03.			
	FY05 ORB Review of Draft Proposed Plan	15DEC04	31JAN05	A.1.03.00.02.01.03.			
	FY05 Agency Review	01FEB05	31MAY05	A.1.03.00.02.01.03.			
	FY05 ORB Review of Draft ROD	31MAY05	21APR05	A.1.03.00.02.01.03.			
2L103005	FY05 Remedy Review Board	01JUN05	08AUG05	A.1.03.00.02.01.03.			
2L103011	FY05 Public Meeting Participation	01JUN05	30SEP05	A.1.03.00.02.01.03.			
2L103020	FY06 Final Proposed Plan	03OCT05*	29SEP06	A.1.03.00.02.01.03.			
2L103022	FY06 Prepare Final ROD	03OCT05*	29SEP06	A.1.03.00.02.01.03.			
2L103027	Contingency - Respread of FY04/FY05 Contingency	02OCT06*	28SEP07	A.1.03.00.02.01.03.			
Pre Remedial Design Studies	PRELIMINARY LCC COST ESTIMATE	01OCT03	02JAN04	A.1.03.00.02.01.04.			
	Preliminary Documented Safety Analyses	01OCT03	01APR04	A.1.03.00.02.01.04.			
	WORK PACKAGE DEVELOPMENT	01OCT03	07APR04	A.1.03.00.02.01.04.			
	Ability of ISV Glass	01OCT03	03MAY04	A.1.03.00.02.01.04.			
	PRELIM HAZ ANALYSIS & SAFETY ANALYSIS	01OCT03	09JUN04	A.1.03.00.02.01.04.			
	Contingency for Labor Rate Risk for FY04	01OCT03	30SEP04	A.1.03.00.02.01.04.			
	CONCEPTUAL DESIGN REPORT	01OCT03	11OCT04	A.1.03.00.02.01.04.			
2L102006	AQUISITION PLAN	01OCT03	11OCT04	A.1.03.00.02.01.04.			

Start Date  
Finish Date  
Data Date  
Run Date

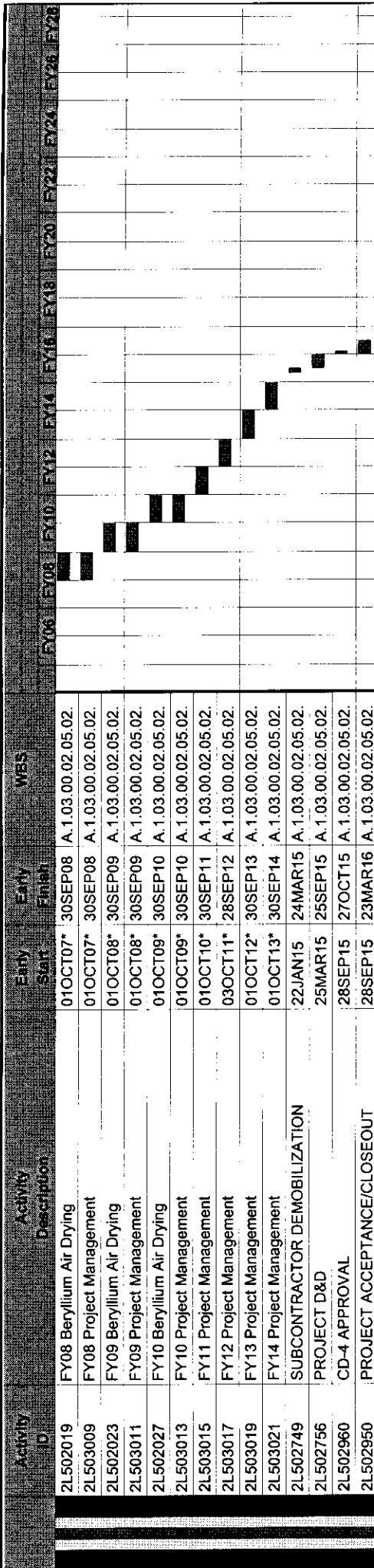
Clean/Close RVNC  
SP2 - A.1.03.00.02  
Subsurface Disposal Area  
Lifecycle Baseline





Activity	Description	Early	Start	Finish	WBS	FY06	FY08	FY10	FY12	FY14	FY16	FY18	FY20	FY22	FY24	FY26	
		Start	Finish														
Contaminant Mobility Reduction																	
2L502001	FY04 Beryllium Isolation	01OCT03	30SEP04	A.1.03.00.02.05.02.													
2L502003	FY04 Beryllium Air Drying	01OCT03	30SEP04	A.1.03.00.02.05.02.													
2L503001	FY04 Project Management	01OCT03	30SEP04	A.1.03.00.02.05.02.													
2L503030	Contingency for Labor Rate Risk for FY04	01OCT03	30SEP04	A.1.03.00.02.05.02.													
2L502901	PROJECT MANAGEMENT	01OCT03	23MAR16	A.1.03.00.02.05.02.													
2L502504	PROJECT DATA SHEET FOR CONSTRUCTION	05JAN04	05APR04	A.1.03.00.02.05.02.													
2L502007	FY05 Beryllium Air Drying	01OCT04*	30SEP05	A.1.03.00.02.05.02.													
2L503003	FY05 Project Management	01OCT04*	30SEP05	A.1.03.00.02.05.02.													
2L502301	CD-011 REVIEW, RESOLUTION, & APPROVAL	12OCT04	13JAN05	A.1.03.00.02.05.02.													
2L502502	PROJECT EXECUTION PLAN	14JAN05	14FEB05	A.1.03.00.02.05.02.													
2L502503	BASELINE RANGES FOR SCOPE, SCHEDULE,	14JAN05	14FEB05	A.1.03.00.02.05.02.													
2L502506	EXTERNAL IPR	14JAN05	07APR05	A.1.03.00.02.05.02.													
2L502505	VERIFICATION OF MISSION NEED	14JAN05	15APR05	A.1.03.00.02.05.02.													
2L502501	HAZARD ANALYSIS REPORT	14JAN05	21APR05	A.1.03.00.02.05.02.													
2L502507	PERMITTING	14JAN05	25OCT05	A.1.03.00.02.05.02.													
2L502401	BID CYCLE	22APR05	23JUN05	A.1.03.00.02.05.02.													
2L502801	CONSTRUCTION MANAGEMENT	22APR05	24MAY15	A.1.03.00.02.05.02.													
2L502402	BID EVALUATION, SELECTION, & AWARD	24JUN05	19SEP05	A.1.03.00.02.05.02.													
2L502710	DESIGN DEVELOPMENT	20SEP05	03APR06	A.1.03.00.02.05.02.													
2L502011	FY06 Beryllium Air Drying	03OCT05*	29SEP06	A.1.03.00.02.05.02.													
2L503005	FY06 Project Management	03OCT05*	29SEP06	A.1.03.00.02.05.02.													
2L502601	CD-2/3 REVIEW, RESOLUTION, & APPROVAL	26OCT05	27JAN06	A.1.03.00.02.05.02.													
2L502508	FINAL SAFETY ANALYSIS REPORT (SAR)	30JAN06	01NOV06	A.1.03.00.02.05.02.													
2L502715	DESIGN REVIEW	04APR06	05JUN06	A.1.03.00.02.05.02.													
2L502758	BBWI DESIGN REVIEW	04APR06	05JUN06	A.1.03.00.02.05.02.													
2L502720	SUBCONTRACTOR COMMENT	06JUN06	06JUL06	A.1.03.00.02.05.02.													
2L502757	PREPARATION OF COLD TEST PIT	07JUL06	09OCT06	A.1.03.00.02.05.02.													
2L502727	SUPPORT FACILITY CONSTRUCTION	07JUL06	17JAN07	A.1.03.00.02.05.02.													
2L502725	GROUTING SUBCONTRACTOR MOBILIZATION	07JUL06	19JAN07	A.1.03.00.02.05.02.													
2L502751	RADTECH SUPPORT	22JAN07	21JAN15	A.1.03.00.02.05.02.													
2L502752	ES&H SUPPORT	22JAN07	21JAN15	A.1.03.00.02.05.02.													
2L502753	QUALITY CONTROL/ASSURANCE	22JAN07	21JAN15	A.1.03.00.02.05.02.													
2L502754	CONSTRUCTION DOCUMENTATION	22JAN07	21JAN15	A.1.03.00.02.05.02.													
2L502755	CONSTRUCTION AE SUPPORT	22JAN07	21JAN15	A.1.03.00.02.05.02.													
2L502735	COLD TEST	24APR07	26JUL07	A.1.03.00.02.05.02.													
2L502759	COLD TEST SUPPORT	24APR07	26JUL07	A.1.03.00.02.05.02.													
2L502740	OPERATIONAL READINESS REVIEW	27JUL07	27SEP07	A.1.03.00.02.05.02.													
2L502760	BBWI OPERATIONAL READINESS REVIEW	27JUL07	27SEP07	A.1.03.00.02.05.02.													
2L502745	PROJECT EXECUTION-1	28SEP07	21JAN15	A.1.03.00.02.05.02.													
Start Date	01OCT03	Early Bar	Progress Bar	Clean/Close RWMC													
Finish Date	30SEP30			SP2 - A.1.03.00.02													
Data Date	01OCT03			Subsurface Disposal Area													
Run Date	11APR03 14:49			Lifecycle Baseline													

Sheet 5 of 6



Start Date  
Finish Date  
Data Date  
Run Date

01OCT03  
30SEP30  
01OCT03  
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VMC2

Sheet 6 of 6

Clean/Close RWM C  
SP2 - A.1.03.00.02  
Subsurface Disposal Area  
Lifecycle Baseline



## Clean/Close RWMIC

Subproject Breakout by Control Account

WBS[5]	WBS[6]	Sep-04	Sep-05	Sep-06	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
<b>A.1.03.00.02 WMF-SP2 Subsurface Disposal Area</b>													
<b>BURDENED BASE</b>													
A.1.03.00.02.01 OU 7-13/14 Record of Decision (ROD)	BCWS	9,363	5,579	2,533	1,975	0	0	0	0	0	0	0	0
A.1.03.00.02.02 OU 7-13/14 Remedial Design (RD)	BCWS	0	0	0	21,873	22,049	21,961	21,961	22,049	0	0	0	0
A.1.03.00.02.03 OU 7-13/14 Remedial action (RA)	BCWS	0	0	0	0	0	0	0	0	0	0	0	0
A.1.03.00.02.04 OU 7-13/14 Management & Administration	BCWS	1,592	1,563	3,491	18,537	17,962	17,891	17,891	17,962	133,350	133,280	133,815	133,815
A.1.03.00.02.05 OU 7-13/14 Early Actions	BCWS	6,488	3,656	18,987	37,170	64,683	64,239	63,147	63,583	62,704	62,963	17,891	17,891
<b>Results... Totals:</b>	<b>BCWS</b>	<b>17,444</b>	<b>10,798</b>	<b>25,011</b>	<b>78,655</b>	<b>104,694</b>	<b>102,998</b>	<b>104,091</b>	<b>102,998</b>	<b>213,944</b>	<b>213,903</b>	<b>214,668</b>	<b>214,583</b>
<b>ESCALATE</b>													
A.1.03.00.02.01 OU 7-13/14 Record of Decision (ROD)	BCWS	260	264	182	93	0	0	0	0	0	0	0	0
A.1.03.00.02.02 OU 7-13/14 Remedial Design (RD)	BCWS	0	0	0	1,896	2,414	2,916	3,439	3,439	3,989	0	0	0
A.1.03.00.02.03 OU 7-13/14 Remedial action (RA)	BCWS	0	0	0	0	0	0	0	0	24,304	27,416	30,911	34,377
A.1.03.00.02.04 OU 7-13/14 Management & Administration	BCWS	47	82	259	1,633	1,984	2,403	2,830	2,830	3,278	3,694	4,162	4,626
A.1.03.00.02.05 OU 7-13/14 Early Actions	BCWS	158	182	1,246	3,262	7,118	8,565	9,922	11,537	12,931	14,578	16,186	9,245
<b>Results... Totals:</b>	<b>BCWS</b>	<b>465</b>	<b>528</b>	<b>1,687</b>	<b>6,885</b>	<b>11,526</b>	<b>13,885</b>	<b>16,191</b>	<b>43,107</b>	<b>44,041</b>	<b>49,652</b>	<b>55,190</b>	<b>52,240</b>
<b>SUMMARY (Base + Escalation)</b>													
A.1.03.00.02.01 OU 7-13/14 Record of Decision (ROD)	BCWS	9,623	5,843	2,715	1,169	0	0	0	0	0	0	0	0
A.1.03.00.02.02 OU 7-13/14 Remedial Design (RD)	BCWS	0	0	0	23,770	24,463	24,877	25,400	26,038	0	0	0	0
A.1.03.00.02.03 OU 7-13/14 Remedial action (RA)	BCWS	0	0	0	0	0	0	0	0	158,654	160,895	164,726	168,192
A.1.03.00.02.04 OU 7-13/14 Management & Administration	BCWS	1,640	1,644	3,750	20,170	19,986	20,294	20,720	21,240	21,513	22,053	22,517	22,989
A.1.03.00.02.05 OU 7-13/14 Early Actions	BCWS	6,646	3,838	20,233	40,432	71,801	72,804	73,069	75,120	75,635	77,541	79,064	41,867
<b>Results... Totals:</b>	<b>BCWS</b>	<b>17,909</b>	<b>11,326</b>	<b>26,638</b>	<b>85,540</b>	<b>116,220</b>	<b>117,976</b>	<b>119,189</b>	<b>281,052</b>	<b>257,844</b>	<b>264,320</b>	<b>289,773</b>	<b>236,567</b>

Thousands of \$

# Clean/Close RWMIC

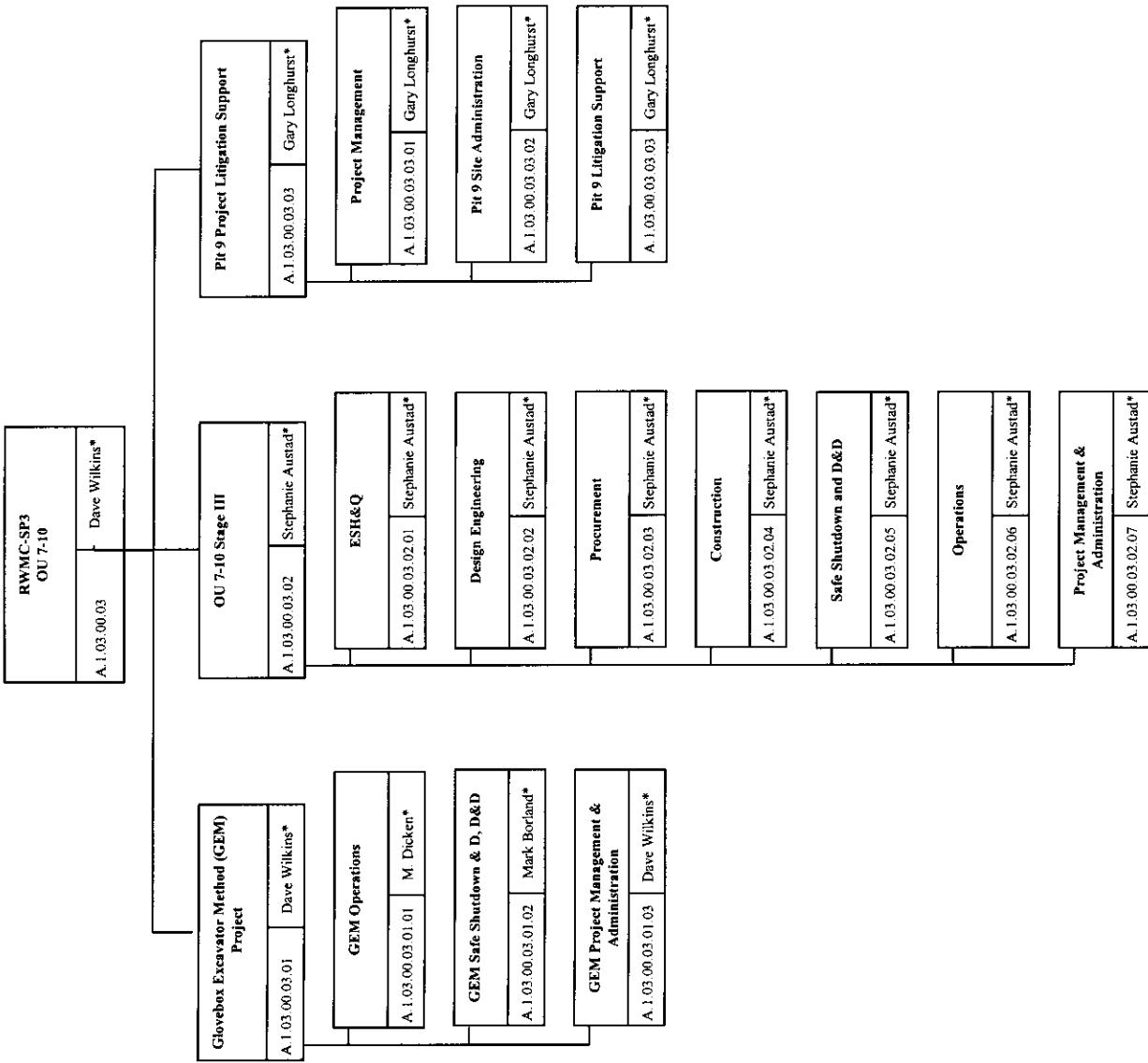
Subproject Breakout by Control Account

[WBS 5]	[WBS 6]	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Cumulative
<b>A.1.03.00.02 WMF-SP2 Subsurface Disposal Area</b>														
<b>BURDENED BASE</b>														
A.1.03.00.02.01 OU 7-13/14 Record of Decision (ROD)	BCWS	0	0	0	0	0	0	0	0	0	0	0	0	18,552
A.1.03.00.02.02 OU 7-13/14 Remedial Design (RD)	BCWS	0	0	0	0	0	0	0	0	0	0	0	0	109,893
A.1.03.00.02.03 OU 7-13/14 Remedial action (RA)	BCWS	134,350	133,280	132,280	133,815	134,350	134,350	133,280	133,815	133,815	133,815	133,815	133,815	2,275,390
A.1.03.00.02.04 OU 7-13/14 Management & Administration	BCWS	17,962	17,819	17,819	17,891	17,962	17,962	17,962	17,891	17,891	17,891	17,891	17,891	383,142
A.1.03.00.02.05 OU 7-13/14 Early Actions	BCWS	396	0	0	0	0	0	0	0	0	0	0	0	543,513
<b>Results... Totals:</b>	<b>BCWS</b>	<b>152,709</b>	<b>151,099</b>	<b>151,099</b>	<b>151,706</b>	<b>152,313</b>	<b>152,313</b>	<b>152,313</b>	<b>151,099</b>	<b>151,706</b>	<b>151,706</b>	<b>151,706</b>	<b>151,706</b>	<b>3,330,490</b>
<b>ESCALATE</b>														
A.1.03.00.02.01 OU 7-13/14 Record of Decision (ROD)	BCWS	0	0	0	0	0	0	0	0	0	0	0	0	799
A.1.03.00.02.02 OU 7-13/14 Remedial Design (RD)	BCWS	0	0	0	0	0	0	0	0	0	0	0	0	14,655
A.1.03.00.02.03 OU 7-13/14 Remedial action (RA)	BCWS	41,675	45,009	48,754	52,790	56,938	60,955	65,052	68,692	73,224	77,573	82,002	86,538	914,105
A.1.03.00.02.04 OU 7-13/14 Management & Administration	BCWS	5,603	6,050	6,551	7,091	7,647	8,185	8,733	9,220	9,827	10,409	11,002	11,610	132,035
A.1.03.00.02.05 OU 7-13/14 Early Actions	BCWS	123	0	0	0	0	0	0	0	0	0	0	0	95,055
<b>Results... Totals:</b>	<b>BCWS</b>	<b>47,402</b>	<b>51,058</b>	<b>55,305</b>	<b>59,881</b>	<b>64,384</b>	<b>69,139</b>	<b>73,786</b>	<b>77,913</b>	<b>83,051</b>	<b>87,982</b>	<b>93,004</b>	<b>98,148</b>	<b>1,156,648</b>
<b>SUMMARY (Base + Escalation)</b>														
A.1.03.00.02.01 OU 7-13/14 Record of Decision (ROD)	BCWS	0	0	0	0	0	0	0	0	0	0	0	0	19,350
A.1.03.00.02.02 OU 7-13/14 Remedial Design (RD)	BCWS	0	0	0	0	0	0	0	0	0	0	0	0	124,548
A.1.03.00.02.03 OU 7-13/14 Remedial action (RA)	BCWS	176,026	178,288	182,033	186,605	191,288	195,305	199,403	201,972	207,039	211,388	215,817	220,353	3,189,495
A.1.03.00.02.04 OU 7-13/14 Management & Administration	BCWS	23,566	23,869	24,370	24,982	25,609	26,147	26,696	27,040	27,718	28,300	28,893	29,500	515,177
A.1.03.00.02.05 OU 7-13/14 Early Actions	BCWS	519	0	0	0	0	0	0	0	0	0	0	0	638,568
<b>Results... Totals:</b>	<b>BCWS</b>	<b>200,111</b>	<b>202,157</b>	<b>206,404</b>	<b>211,587</b>	<b>216,897</b>	<b>221,452</b>	<b>226,098</b>	<b>229,012</b>	<b>234,756</b>	<b>239,888</b>	<b>244,710</b>	<b>249,854</b>	<b>4,487,139</b>

Thousands of \$

A.1.03.00.03 SP3  
OU 7-10

# WMF-SP3- GEM Project Work Breakdown Structure



\* Point of Contact

**DRAFT**

File: OU 7-10 WBS WP Level - 12-11-02  
Last Update: Dec. 11, 2002

**A.1.03.00.03**  
**Subproject Plan**

## SUBPROJECT PLAN

WBS: A.1.03.00.03  
Title: WMF-SP3 OU 7-10

PROJ Mgr:	Mike Pratt	Planning & Controls:	Grady B. Goodson
DOE-ID:	Jeffrey G. Snook	ES&H Field Manager:	Randy D. Sayer
PBS Manager:	John M. Schaffer	Other:	Donald W. Scott
Project Manager for Project Support and Facility Authorization			

APPROVED BY:



Subproject Plan Manager

4/11/03

Date



ES&H Representative

Date

### 1. WORK DESCRIPTION:

The SP3 subproject comprises the Operable Unit (OU) 7-10 Glovebox Excavator Method Project, OU 7-10 Stage III Project, and Pit 9 Project Litigation Support. Work scope performed by this subproject is required to:

- Comply with the OU 7-10 Interim Record of Decision (ROD), which comprises the *Record of Decision: Declaration of Pit 9 at the Radioactive Waste management Complex Subsurface Disposal Area at the Idaho National Engineering Laboratory, Idaho Falls Idaho* as modified by the *1998 Explanation of Significant Differences (ESD)* document
- Comply with the March 2002 Agreement to Resolve Disputes. . Enforceable milestones, imposed under the dispute resolution, identify completion or initiation of key activities that demonstrate progress toward achievement of the project objectives. Enforceable Milestones are identified by fiscal year in the following table:

Stage II Enforceable Milestone Table

FY04	FY05
Notification of Critical Decision 4 by February 28, 2004	Complete Stage II excavation by October 31, 2004
Commence Stage II excavation by March 31, 2004	

Project scope has been planned based on an accelerated schedule to achieve early completion of the enforceable milestones.

**Stage III Enforceable Milestone Table**

FY06	FY07	FY10
Complete the 10% design by October 31, 2005	Complete Stage III design and initiate construction by March 30, 2007	Stage III start of operations 36 months following start of construction

**A.1.03.00.03.01 OU 7-10 Glovebox Excavator Method Project:**

The ROD specifies retrieval of transuranic (TRU) waste from OU 7-10 (Pit 9). On October 1, 2001, the Idaho National Engineering and Environmental Laboratory (INEEL) published the *Waste Area Group 7 Analysis of the Stage III Modification*, which identifies a feasible approach for conducting a retrieval demonstration within OU 7-10. The OU 7-10 Glovebox Excavator Method Project was established to accomplish the objectives defined below:

- Demonstrate waste zone material retrieval
- Provide information on contamination present in the underburden
- Characterize waste zone material for safe and compliant storage
- Package and store waste onsite, pending final disposition.

Project facilities were designed in FY 2002 and construction, testing, start up, and initial operations will be completed in FY 2003. The scope in the Life-Cycle Baseline provides for completion of the demonstration retrieval project. Scope includes the following:

- Completion of the activities to retrieve 75 yd<sup>3</sup> of waste zone material
- Sampling the underburden to obtain six core samples, transportation to the Idaho Nuclear Technology and Engineering Center, and sample analysis
- Completing drum assay of the repacked waste and storage of the waste containers in Waste Management Facility (WMF) -628.
- Preliminary decontamination of the Retrieval Confinement Structure (RCS) and Packaging Glovebox System (PGS)
- Grouting of the excavated pit
- Placing the OU 7-10 Project Facility in a layup condition in preparation for deactivation, decontamination, and dismantlement
- Deactivation, decontamination, and dismantlement of the OU 7-10 Project Facility, disposal or storage of the radiologically contaminated material, and disposal of the nonradiologically contaminated material
- Development and submittal of the remedial action report
- Project closeout.

#### A.1.03.00.03.02 OU 7-10 Stage III Project:

The OU 7-10 Interim ROD identifies a three-stage approach to remediation of OU 7-10. Stage I focused on subsurface investigation. Stage II, as modified under the 2002 Agreement to Resolve Disputes, will be accomplished by the OU 7-10 Glovebox Excavator Method Project. Stage III consists of full-scale retrieval and treatment of OU 7-10 to meet remediation goals set in the OU 7-10 ROD. In addition, retrieval and treatment processes will be planned around a bounding hazardous and radiological waste inventory so that the design can be applied to any of the TRU pits and trenches. Treatment technologies will be based on achieving the hazardous contaminant delisting levels specified in the ROD. In addition, the contaminants of concern identified in the *Ancillary Basis for the Risk Assessment* will be evaluated for inclusion in the treatment processes as appropriate.

Stage III is a major system project as defined by U.S. Department of Energy (DOE) Order 413.3, "Program and Project Management for the Acquisition of Capital Assets"; consequently, scope identified below is matched to the critical decision (CD) process as defined by the order.

#### Critical Decision 0 – Approve Mission Need

**Scope for FY 2004:** Based on the requirement definition, preliminary hazard assessment, preliminary risk assessment, technology development planning, and preconceptual retrieval and treatment alternative designs, a trade study will be completed in FY 2003 recommending the best alternative design. This recommendation will be brought forward as a basis for CD-0 supporting documents. Specifically, a justification-of-mission-need document, acquisition strategy, and conceptual design planning based on the recommended alternative will be used to support CD-0. Approval of CD-0 will allow the conceptual design to be developed in FY 2004. Other documents developed during this stage will be the acquisition plan and preliminary project execution plan including the baseline range. The draft preliminary documented safety analysis, in addition to the preliminary hazard analysis prepared in FY 2003, will be developed to support CD-1. Scope also includes development of other documents including the preliminary fire hazards analysis, preliminary criticality safety evaluation, preliminary waste management plan, system design descriptions, data quality objectives, interface control documents, environmental checklist, preliminary risk management plan, and acceptable knowledge document. Proof-of-principle and mock-up testing will be initiated during this period.

#### Critical Decision 1 – Approve Preliminary Baseline Range

**Scope for FY 2005:** With the completion of the acquisition plan, conceptual design report, and preliminary execution plan, CD-1 will be completed in the beginning of FY 2005. Achievement of CD-1 allows development of the preliminary or Title I design and development of the final project execution plan and performance baseline. Process flow mass balance and state point diagrams will be finalized. The preliminary documented safety analysis will be completed, reviewed, and approved by the DOE through the safety evaluation report process. Other documents that will be further developed include the criticality safety evaluation, fire hazards analysis, preliminary emergency preparedness hazards analysis, configuration management plan, records management plan, waste management plan, waste minimization plan, air emissions evaluation, quality program plan, risk management plan. Another significant activity that will be initiated is the Waste Isolation Pilot Plant waste certification process. Pilot-scale demonstrations of assay technology on a production scale, segregation processes, shredding processes, and contamination control technologies also are required in support of conceptual design.

### **Critical Decision 2 – Approve Performance Baseline**

**Scope for FY 2006 and first half of FY 2007:** With the completion of the preliminary design, preliminary documented safety analysis, final project execution plan and performance baseline external review, CD-2 will be achieved. Achievement of CD-2 allows initiation of the final or Title II design and initiation of long-lead procurement based on safety-significant components identified in the preliminary documented safety analysis. The *OU 7-10 Project Execution Plan* and performance baseline will be updated. Detailed lists of government-furnished procurement items for construction and operations will be developed and integrated into the construction subcontract documents as appropriate. Procurement actions will be tracked to verify coordination with construction subcontracts and operational needs.

### **Critical Decision 3 – Approve Start of Construction**

**Scope for Second Half of FY 2007, 2008, 2009 and first half of FY 2010:** With approval of the final design, preliminary safety analysis, and performance baseline, CD-3 will be achieved, allowing initiation of construction activities. Construction includes site preparation, utilities, office building, retrieval facility, and treatment facility. During construction, the operating and maintenance procedures will be developed. Component and system operation testing will be integrated into construction and completed following construction. Operating personnel will be trained for operations and maintenance activities. Critical project documents will be finalized during this period including the final documented safety analysis, final criticality safety evaluation, fire hazards analysis based on as-built conditions, and emergency preparedness hazards analysis. The operational readiness review process and the U.S. Environmental Protection Agency (EPA) and Idaho Department of Environmental Quality (IDEQ) prefinal inspections will be completed.

### **Critical Decision 4 – Approve Start of Operations**

**Scope for second half of FY 2010 through end of project:** With approval of the final documented safety analysis and completion of the readiness review process, CD-4 will be achieved. With agreement from the EPA and IDEQ, retrieval and treatment operations will be initiated. Retrieval and treatment operations will continue until the entire pit is remediated. Retrieved TRU waste will be treated, if required, and shipped to the Waste Isolation Pilot Plant. Non-TRU waste will be treated, if required, and returned to the pit. Following completion of retrieval and treatment activities the facilities will be deactivated, decontaminated, and dismantled for disposal or relocation to another pit or trench as appropriate.

#### **A.1.03.00.03.03 Pit 9 Project Litigation Support:**

The work is designed to preserve the legal and contractual rights of the DOE and Bechtel BWXT Idaho, LLC, (BBWI) in the Pit 9 Comprehensive Demonstration Project subcontract termination legal action with Lockheed Martin Advanced Environmental Systems (LMAES) and Lockheed Martin Corporation. This work will consist of three work packages: 1) Pit 9 Project Management, (2) Pit 9 Site Administration, and (3) Pit 9 Litigation Support. This control account includes the following scope:

- Manage BBWI resources and work to successfully protect DOE and BBWI legal and contractual rights during litigation
- Manage and maintain the inactive Pit 9 construction site
- Provide and manage all legal, technical, and support subcontracts necessary during the trial
- Support trial activities

- Close the Pit 9 Project litigation office.

## 2. MAJOR PRODUCTS AND DELIVERABLES:

### **External Milestones**

#### A.1.03.00.03.01 OU 7-10 Glovebox Excavator Method Project:

- Complete CD-4, February 2004
- Start excavation, March 2004
- Complete excavation, October 2004.

#### A.1.03.00.03.02 OU 7-10 Stage III Project:

- Complete conceptual design (10% design), September 2005
- Complete remedial design and commence construction, March 2007
- Commence operations, 36 months after commencement of construction (March 2010)
- OU 7-10 Stage III CD-0, 10/03
- OU 7-10 Stage III CD-1, 10/04
- OU 7-10 Stage III CD-2, 10/05
- OU 7-10 Stage III CD-3, 03/07
- OU 7-10 Stage III CD-4, 03/10.

#### A.1.03.00.03.03 Pit 9 Project Litigation Support:

None.

### **Deliverables:**

#### A.1.03.00.03.01 OU 7-10 Glovebox Excavator Method Project:

- Remedial action report
- Operations and maintenance report
- Project closeout documentation.

#### A.1.03.00.03.02 OU 7-10 Stage III Project:

## 1. Environment, Safety, Health, and Quality Assurance

- 1.1. Environmental**
  - 1.1.1. Environmental checklist
  - 1.1.2. Acceptable knowledge documentation
  - 1.1.3. Air emissions evaluation
  - 1.1.4. Waste management and minimization plan
  - 1.1.5. Explanation of significant differences to OU 7-10 ROD
  - 1.1.6. Emissions monitoring plan
  - 1.1.7. Applicable or relevant and appropriate requirements matrix
  - 1.1.8. Waste Isolation Pilot Plant waste certification program
  - 1.1.9. DOE Order 435 compliance assessment
  - 1.1.10. Data quality objectives
  - 1.1.11. Field sampling plan
- 1.2. Safety Analysis**
  - 1.2.1. Preliminary hazards analysis
  - 1.2.2. Source term analysis
  - 1.2.3. Preliminary documented safety analysis
  - 1.2.4. Preliminary criticality safety evaluation
  - 1.2.5. Final documented safety analysis
  - 1.2.6. Radioactive Waste Management Complex safety analysis report revision
- 1.3. 1.3 Safety and Health**
  - 1.3.1. Health and safety plan for mock-up activities
  - 1.3.2. Health and safety plan for Construction
  - 1.3.3. Health and safety plan for Operations
  - 1.3.4. Health and safety plan for D&D&D
- 1.4. Fire Protection**
  - 1.4.1. Preliminary fire hazards analysis
  - 1.4.2. Final fire hazards analysis
  - 1.4.3. Equivalency documents to support the conceptual design concept
- 1.5. Radiological Control**
  - 1.5.1. Radiological control of contamination zones engineering design file
- 1.6. Emergency Planning**
  - 1.6.1. Preliminary emergency hazard evaluation
  - 1.6.2. Final emergency hazard evaluation
- 1.7. Safeguards and Security**
  - 1.7.1. Preliminary security plan
  - 1.7.2. Final security plan

## **2. Design Engineering**

- 2.1. Requirements Documents
    - 2.1.1. Mission need analysis
    - 2.1.2. Technical and functional requirements
    - 2.1.3. System design criteria
    - 2.1.4. System design descriptions
  - 2.2. Conceptual Design Report
  - 2.3. Preliminary drawings and outline specifications
  - 2.4. Mockup drawings and specifications
  - 2.5. Final Design Drawings And Specifications
- 3. Procurement**
- 3.1. Acquisition plan for long lead components and construction activities
  - 3.2. Subcontracts for design activities
- 4. Construction**
- 4.1. Resource evaluation for future construction (any unique resource requirements)
  - 4.2. Constructability review and evaluation
  - 4.3. Field tours and investigations
  - 4.4. Construction schedule
  - 4.5. Construction execution
    - 4.5.1. Retrieval building
    - 4.5.2. Treatment building
    - 4.5.3. Infrastructure and miscellaneous
- 5. Safe Shutdown and Deactivation, Decontamination, and Decommissioning**
- 5.1. Safe shutdown and D&D&D plan
  - 5.2. Deactivation, decontamination, and decommissioning operations
- 6. Operations**
- 6.1. Operations schedule
  - 6.2. Operations procedures and training
  - 6.3. Retrieval, treatment, and disposal operations
  - 6.4. Integrated test plan
  - 6.5. Startup plan and report
  - 6.6. Maintenance and operation plan
  - 6.7. Remedial action report
- 7. Project Management and Administration**
- 7.1. Preliminary project execution plan
  - 7.2. System engineering management plan
  - 7.3. Acquisition plan
  - 7.4. Davis Bacon committee case record
  - 7.5. Project files and records management
  - 7.6. Interface agreements
  - 7.7. Research and development interface management

- 7.8. Training plan
- 7.9. Remedial design/remedial action work plan submittal
- 7.10. Yearly work planning estimates and schedules
- 7.11. Critical Decision 0 Submittal
  - 7.11.1. Mission need documents
    - 7.11.1.1. Outline of scope definition
    - 7.11.1.2. Preliminary technical performance requirements
    - 7.11.1.3. Planning schedule and milestones
    - 7.11.1.4. Planning cost estimate for total project cost
    - 7.11.1.5. Preliminary project risk assessment
    - 7.11.1.6. Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)/regulatory strategy
    - 7.11.1.7. Project technical and organizational Interfaces
    - 7.11.1.8. Preliminary life cycle costs
- 7.12. Critical Decision 1 documentation
  - 7.12.1. Conceptual design report
  - 7.12.2. Preliminary acquisition plan
  - 7.12.3. Risk management plan
  - 7.12.4. Preliminary project execution plan
  - 7.12.5. Project data sheet
  - 7.12.6. Independent project review
- 7.13. Critical Decision 2 documentation
  - 7.13.1. Acquisition plan
  - 7.13.2. Risk management plan
  - 7.13.3. Project execution plan
  - 7.13.4. Independent project review
- 7.14. Critical Decision 3 documentation
  - 7.14.1. Update project execution plan
  - 7.14.2. Independent project review
  - 7.14.3. External independent review to support CD-3
- 7.15. Critical Decision 4 documentation
  - 7.15.1. Management self-assessment closeout report
  - 7.15.2. Operational readiness review closeout report
- 7.16. Project final closeout plan

A.1.03.00.03.03 Pit 9 Project Litigation Support:

- Complete trial and post judgment motions in the U.S. District Court for the District of Idaho (completion is anticipated by March 2004)
- Defend or prosecute any appeal arising from the judgment rendered by the U.S. District Court for the District of Idaho
- Continued support throughout the trial from the program office
- Close out the Pit 9 Project files, which are currently being maintained at the INEEL and Oles, Morrison, Rinker, and Baker in Seattle, Washington (completion is anticipated by June 2004)
- Maintain an inactive construction site in a safe configuration, compliant with the Integrated Safety Management System.

### **3. ESTIMATE DEVELOPMENT BASIS:**

Cost estimates for the SP3 OU 7-10 activities are based on the following:

- Cost estimates were based on the most appropriate means available, with first consideration given to a bottoms-up methodology, using actual costs and historical data to arrive at a unit cost. Other cost estimate development methodologies were used, including the following:
  - Professional experience and judgment of subject matter experts (e.g., process engineers, technicians, managers, and outside consultants, where applicable) were used to determine appropriate resources for performing new work scope activities for which no historical data were available.
  - Staffing plan for OU 7-10 Glovebox Excavator Method Project operations that is based on operations 24 hour/day, 7 days/week. Recorded hours were expended for similar work activities to accomplish similar scope performed in FY 2002 and 2003. In most cases, adjustments were made—up or down, as necessary—to reflect changes in operating conditions, scope of work, lessons learned, or other factors currently existing or projected going forward.
  - Engineering estimates were developed for facility and system designs using standard engineering and construction methods of estimating costs from drawings and specifications.
  - Previous retrieval and treatment cost estimate developed for the *Preliminary Evaluation for Risk Assessment for the Subsurface Disposal Area at the RWMC*.
- In preparing the cost estimate, ongoing reference was made to the Detailed Work Plan, Section 2.5, "Cost Estimates and Basis of Estimates."

#### **Contingency Guideline Implementation:**

Contingency was developed using the Monte Carlo @RISK tool for a total project cost estimate in September 2002. For the Operations, OU 7-10 Glovebox Excavator Method Project Safe Shutdown and D&D&D, and Project Administration work packages, contingency percentages developed by the Monte Carlo method were applied in the Life-Cycle Baseline planning.

@RISK is a contingency application tool that links with the estimating software, SUCCESS. High and low confidence parameters are established for each level of the estimate based the details within the scope of work and the assumptions identified within that scope of work. The bounding values are then run through a Latin Hypercube sampling simulation 2,000 times to arrive at the additional money required to address

risk at various levels of confidence. A confidence level of 85% was chosen for the Operations and Project Administration work packages. A confidence level of 65% was chosen for the OU 7-10 Glovebox Excavator Method Project Safe Shutdown and D&D&D work packages for the baseline submittal.

#### **4. ASSUMPTIONS:**

##### **A. A.1.03.00.03.01 OU 7-10 Glovebox Excavator Method Project:**

###### **General**

- OU 7-10 Glovebox Excavator Method Project work scope is completed in FY 2004 except for management of the retrieved, secondary, and TRU D&D&D waste. This scope is transferred to Stage III.
- Project Execution Plan assumptions also apply.
- Agency interface and inspections will not result in additional requirements or schedule delays.

###### **Operations**

- Retrieval operations within OU 7-10 will be initiated before the beginning of FY 2004.
- The retrieval operations schedule shall be based on four crews working 24 hours/day, 7 days/week.
- The Radioactive Waste Management Complex (RWMC) RCRA Permit will be modified to allow retrieved waste to be stored in WMF-628.
- Nonreactive TRU waste drums will be stored in WMF-628. Reactive TRU waste drums will be stored in one or more portable storage units located adjacent to OU 7-10.
- As a contingency measure, a limited number of Operations personnel will require a Q clearance.
- Outlier materials will not be encountered during retrieval operations.
- There will be no schedule delay from an unplanned review by the Defense Nuclear Facilities Safety Board or the Agencies (i.e., U.S. Department of Energy Idaho Operations Office, EPA, and IDEQ).
- Waste will be retrieved and packaged for safe storage only, and compliance with Waste Isolation Pilot Plant (WIPP) certification requirements is not required.
- No single contamination incident will occur that results in the interruption of Operations work within the Weather Enclosure Structure (WES) for more than 24 continuous hours. No more than two incidents shall occur during retrieval operations.
- Scope associated with D&D&D of the OU 7-10 Project Facility is not included in this planning package.
- Scope associated with dismantlement of the Mock-up Facility is not included in the scope of this planning package.
- Activities described in the scope will continue to be required and funded.
- The Facility Evaluation Board will not conduct an evaluation of OU 7-10 activities during FY 2004.

- Operations personnel will be required to support D&D&D during FY 2004.
- No schedule delays will be encountered because of equipment malfunctions.
- Because the majority of the equipment in the facility is commercial grade, spare parts for items that fail will be readily available.
- Facility operation is not delayed by factors outside the control of BBWI.
- The required quantity and skill mix of personnel will be available when needed to support Operation's scheduled tasks.
- The OU 7-10 Project Operations will remain a part of RWMC and support services will be primarily acquired from those at RWMC.
- An average of 24 drums of waste will be packaged each 24-hour period during the waste retrieval period.
- An advanced means to detect radon in a timely and accurate method will be used so that disruptions to Operations work will be minimized.
- The underburden will not become contaminated because of activities performed during waste retrieval.
- No work delays will be incurred to identify or as the result of having identified any classified objects.
- Assumptions other than those above, but included within the OU 7-10 Project Execution Plan, also apply.
- No adverse schedule impact will result from adding, into the Operations processes, activities required to meet or potentially meet all or any portion of the WIPP waste acceptance criteria (WAC) or to perform WIPP-approved procedures or processes.
- No schedule delays will be encountered because of problems with transporting packaged waste to WMF-628 or, if packaged waste is stored in portable storage unit containers, because of difficulties associated with the acquisition, placement, maintenance, or use of the containers, including accessing the containers during inclement weather conditions.
- A contract will be let for pumping grout into the pit, but Operations personnel will perform work activities inside the WES.
- If the management and operating contract is awarded to a company other than BBWI, no schedule delays will be encountered because of transitioning to the new contractor or because of changes made by the new contractor that impact the BBWI schedule.
- No organization or individual (e.g., EPA, IDEQ, or any other agency or third-party) will take actions that delay or otherwise disrupt the schedule.

## **Deactivation, Decontamination and Dismantlement**

- Agency reviews do not result in changes to established project objectives or technical and functional requirements.
- The facility will likely remain Hazard Category II throughout the project. The facility hazard category may be reduced as the hazardous and radiological releasable inventories are reduced through mitigation and decontamination actions.
- The WES will remain uncontaminated and will not require decontamination.
- Project equipment, including the excavator, breathing air compressor trailer, plant air compressor, standby diesel generator, skid-mounted load center, and temporary power cables will be available for use during D&D&D.
- On-going LMAES litigation or INEEL activities will have no adverse effect on the post-retrieval life-cycle phases of the project.
- No schedule impacts from identified rework items outside the project scope will be identified. No additional schedule time will be allowed for repeating all or portions of the D&D&D management self-assessment or readiness review sequence of activities because of failure. The D&D&D readiness review will be successful, involving one scheduled cycle.
- Funding necessary to perform the project within the schedule will be available.
- Shutdown of the OU 7-10 Project operations will be complete by January 1, 2004.
- Disposition paths will be available for waste streams generated during post-retrieval operations, with the exception of TRU waste. All TRU waste will be stored onsite pending disposition.
- During post-retrieval project phases, fissile materials will not be present in quantities that, if accumulated, would cause the potential for a nuclear criticality to exceed the level of extremely unlikely.
- No unexpected radiological conditions will be encountered during D&D&D activities.
- Negligible contamination will be spread outside of the confinement area boundary during retrieval operations. This includes contamination spread (1) from personnel entry and exit, (2) through the excavator hydraulic fluid from an accident or from a confinement breach (e.g., loss of a glove), (3) from breach of a bag during drumout operations or sample bag-out, (4) from heating and ventilating system failure, or (5) from an uncontained leak path. Unexpected contamination of equipment and structures has the potential to change the shutdown and D&D&D approaches as well as disposition options for materials.
- Project management approval will be received (with Agency concurrence) to backfill the excavated waste zone with a clean, weak (i.e., nonmonolithic) grout in place of the overburden material removed from the excavation area as described in the project Conceptual Design Report. In addition, it is assumed that final disposition paths for the removed overburden material include (1) disposal at the INEEL CERCLA Disposal Facility (ICDF) or the RWMC low-level waste pit or (2) reuse as OU 7-10 overburden through reinstallation over the grout backfill.
- No cross contamination of overburden will occur during retrieval operations. This includes the assumption that no subsidence of soil will occur from behind the shoring box at any time such that the overburden behind the shoring box becomes contaminated.

- Radiological surveys in preparation for the release of the WES portions of the Facility Floor Structure steel decking material located outside of the RCS boundary will detect no contamination from project operations.
- Budget for Radiological Control, Safety, Environmental, Health, and Quality Assurance support needed to perform the D&D&D scope is included in the D&D&D work package. This is only for direct conduct of the work and not for external assessments or audits.

### **Post-Shutdown Facility Conditions**

- No subsidence will exist behind the pit shoring box.
- Several probes have been pulled and positioned on their sides in the pit, completely (i.e., at least 0.9 m [3 ft]) below grade.
- Several probes remain vertical in the pit (at the installed height) with the probe pulling caps that were installed before waste excavation and retrieval began.
- Waste spilled on the RCS floor that the excavator could reach has been returned to the pit.
- The PGS gloveboxes have been cleaned of pit debris (i.e., swept and vacuumed but not yet decontaminated).
- The ICDF will be open and can receive OU 7-10 Project secondary and D&D&D waste. No schedule delay will be encountered because of problems with transporting waste to ICDF or because of ICDF acceptance of OU 7-10 Project waste.
- The excavator has been left operable and in place. The hydraulic system fluid has been sampled and, if determined to be radiologically contaminated, has been drained, flushed, and refilled. The fuel tank has been drained and the battery has been disconnected.
- The pit has been filled with a weak grout up to 15 cm (6 in.) above the lower edge of the shoring box.
- Tools and other small items have been bagged out of the RCS and PGS for disposal.
- All loose soil and waste has been removed from surfaces of the RCS and PGS. Contamination levels have been reduced through decontamination such that the structures will yield almost no TRU waste upon dismantlement. The RCS and PGS gloves have been removed and glove ports and sample ports have been covered and sealed. The windows of the RCS and PGS have been decontaminated and left uncovered. The remaining surfaces are covered in strippable paint.
- The heating and ventilating system has been left operating.
- Sacks of overburden continue to be stored outside the WES if a decision has been made to reuse it as overburden on OU 7-10 (above the grouted waste zone). Otherwise, the sacks of overburden soil have been sent to ICDF or RWMC for disposal or beneficial use and none remain at the facility.
- Other equipment has been de-energized, but is capable of restart.

### **Post-Deactivation, Decontamination, and Decommissioning Conditions**

- All facilities have been removed, and all non-TRU waste shipped to other facilities for disposal.
- The Mock-up Facility has been removed.
- The shoring box will be dismantled and removed from the excavation area. The void created by the shoring box removal will be backfilled with clean soil fill material.
- Gravel from the Facility Floor Structure leveling course, access ramps, and temporary road on the OU 7-10 surface will be removed and the area underneath recontoured and reseeded with native grasses (hydro-seed application).
- The geotextile membrane under the Facility Floor Structure leveling course will be removed and the area underneath recontoured (as needed) and reseeded with native grasses (hydro-seed application).
- The trailers will be deactivated, disconnected, and sent to the Central Facilities Area (CFA) for reuse at the INEEL.
- The fire riser structure will remain for potential use during Stage III. Fire water supply lines (and concrete support pads) leading from the fire riser structure to the WES will be dismantled, and removed from the project area. Reusable components will be sent to CFA for reuse at the INEEL. Other materials will be processed as waste.
- Cargo containers (if used) will be cleaned, disconnected from utilities, removed from the project area, and returned to the appropriate INEEL owner.
- Any fencing materials will be removed, surveyed, and sent to CFA for reuse at the INEEL.

#### **B. A.1.03.00.03.02 OU 7-10 Stage III Project:**

### **Scope Assumptions**

1. Scope includes the full-scale remediation of OU 7-10 (Pit 9) in accordance with the scope and objectives defined in the OU 7-10 Interim ROD as modified, potentially, by future agreements documented in either new ESDs, a ROD amendment, or the Stage III system requirements document) and meeting all associated milestone dates established in the 2002 Agreement to Resolve Disputes.
2. The design for the OU 7-10 facilities and equipment shall, where practical, will be transferable to other TRU pits and trenches in the Subsurface Disposal Area (i.e., Pits 1 through 6, Pits 10 through 12, and Trenches 1 through 10).
3. The TRU radionuclide concentration action level for triggering treatment and determining acceptability of materials to be returned to the pit is successfully changed from the 10 nCi/g TRU identified in the OU 7-10 Interim ROD to 100 nCi/g TRU (average concentration over the entire package volume and contents).
4. For consistency with the anticipated OU 7-13/14 comprehensive ROD, levels of hazardous contaminants of concern in materials to be returned to pits and trenches after treatment, Stage III preconceptual and conceptual designs and process planning will be based on meeting the EPA Region IX preliminary remedial goal values. The actual levels from the OU 7-13/14 comprehensive ROD will be available to support the OU 7-10 Stage III Project Title I

(i.e., preliminary, 30%) design. Further, to address land disposal restriction requirements relative to materials being returned to the pit, Stage III also will meet the delisting values contained in Table 4 of the OU 7-10 Interim ROD.

5. Volume reduction is as achieved, based on life-cycle costs and use of best available technology as practicable.
6. Changes to the project will be implemented through an ESD to the OU 7-10 Interim ROD or a ROD amendment, and design activities will not be stopped or delayed by this process.
7. Retrieved waste zone material greater than 100 nCi/g TRU (average concentration over the package volume and contents) will be treated to meet WIPP WAC only.
8. The OU 7-10 Stage III Project is not required to excavate and retrieve waste or contaminated soil outside the sheet piling driven by LMAES.
9. The level of confinement and degree of remote operations used in the Stage III system design will be based on the assessed inventory risks rather than as prescribed by the OU 7-10 Interim ROD.
10. The Stage III facility(ies) will be a Hazard Class Safety Category II Nuclear Facility, and no additional physical security requirement will be imposed beyond those required for a Hazard Category II nuclear facility.
11. The OU 7-10 Stage III Project will stabilize highly radioactive waste or items using in-place encapsulation (e.g., grouting) methods, but will not retrieve these items.
12. The OU 7-10 Stage III Project is not required to move, lift, or otherwise handle large objects that are specifically excluded from the project scope.
13. Secondary waste generated that meets the ICDF WAC will be disposed of at the ICDF.
14. The OU 7-10 Stage III Project will obtain the necessary generator and shipper certification(s) for sending TRU waste to WIPP.
15. Blending and mixing or blending non-TRU and TRU waste forms will continue to be allowed to eliminate waste forms that otherwise have no identified disposal path.
16. Uranium-bearing waste that is relatively free of TRU contamination and contains significant quantities of uranium isotopes will be segregated for special handling, will not be returned to the pit, and will await disposition as part of the OU 7-13/14 comprehensive ROD.
17. Except for retrieved waste transferred to OU 7-13/14, the OU 7-10 Stage III Project will provide for the final disposition of all OU 7-10 Glovebox Excavator Method Project (i.e., Stage II) waste, including all secondary waste generated during OU 7-10 Glovebox Excavator Method Project operations.
18. Treatment processes for primary consideration in the Stage III design will include (a) physical separation, (b) compaction, and (c) thermal desorption of organic contaminants of concern. This list excludes thermal destruction of polychlorinated biphenyls based on an earlier assumption that the existing limit for polychlorinated biphenyls in the WIPP WAC is removed.
19. Acceptable knowledge will be performed to support disposition of any Rocky Flats Plant TRU waste generated during OU 7-10 remedial activities.
20. Approval from DOE will be received to generate new waste (i.e., through excavation and retrieval of pre-1970 buried TRU waste) that potentially has no disposition path. Further, if no disposition path can be identified in a timely manner, the OU 7-10 Stage III Project will store the orphan waste for future disposition by OU 7-13/14.

21. In performing the full-scale remediation of OU 7-10, the OU 7-10 Stage III Project is not required to remove or D&D&D the sheet piling or other underground modifications installed by LMAES.
22. Final capping and perpetual maintenance of OU 7-10 will be performed by OU 7-13/14.
23. For Life-Cycle Baseline purposes, 3,400 m<sup>3</sup> (TRU volume in OU 7-10) is assumed to go to WIPP.
24. Stage III will be managed under EM guidelines as an ER project and will be funded through operating dollars.

### Schedule Assumptions

1. This project is conducted under DOE Order 413.3; therefore, approvals are made at the Program Secretarial Office level and are not delegated to the field office manager.
2. Documentation necessary for completion of CD-0 will be prepared in FY 2003.
3. CD-0 will be completed within the first 30 days of FY 2004. The conceptual design will be developed and completed in FY 2004 based on one alternative down-selected from preconceptual design activities.
4. Pilot-scale treatment studies and retrieval studies require funding in FY 2004 to meet the proposed design schedule.
5. Title I design and review is completed in FY 2005.
6. Long lead procurement is initiated at the start of Title II design.
7. Title II design and review is completed by March 31, 2007.
8. Construction is complete and operations are initiated 36 months after March 31, 2007 (i.e., March 2010).
9. Technology development needs will be identified in FY 2003.
10. Stage II (OU 7-10 Glovebox Excavator Method Project) is successfully completed as planned and information on the condition of waste containers, contamination levels during retrieval, and migration of contaminants are obtained to support the Stage III conceptual design.
11. Equipment and facilities constructed by LMAES will undergo D&D&D (including the removal from SDA of resultant waste and materials) before the start of Stage III construction mobilization.
12. Shipping rates are consistent with those from the 3,100 m<sup>3</sup> Project.
13. Agency agreement on Stage III requirements will be finalized by February 28, 2003.

### Cost Assumptions

1. The OU 7-13/14 *Preliminary Evaluation for Remedial Alternatives* cost estimate prepared by CH2MHill will be used as the estimating basis for Title design, construction, operations, shutdown, and D&D&D activities
2. Costs for characterization, WIPP certification, and TRU PACT loading are included in the operations costs and are based on the OU 7-13/14 *Preliminary Evaluation for Remedial Alternatives*.

C. A.1.03.00.03.03 Radioactive Waste Management Complex Subcontract Management:

- This project will need approximately 6 months to close the Pit 9 Project Litigation Office.
- The trial will be conducted in Pocatello, Idaho, and will start on August 4, 2003.
- An appeal of the judgment will occur in the U.S. District Court for the District of Idaho; however, the case will settle before the appeal runs its natural course.
- LMAES will remain responsible for all facilities and equipment located at the INEEL, including D&D&D activities of the facilities.
- The BBWI Pit 9 Project Litigation Office will maintain the inactive Pit 9 construction site until the end of trial.
- The Pit 9 Site Administration work package is budgeted to correct minor, not major, deficiencies, modifications, or upgrades to the inactive construction site. No major deficiencies are expected during FY 2004.
- The BBWI Pit 9 Project Litigation Office will continue to pay General and Administrative costs on power used at the inactive construction site.
- Operable Unit 7-10 will continue to be separated from the inactive construction site by a fence and will continue to be managed by others (not the responsibility of the Pit 9 Project Litigation Office).
- Legal services will be retained under an engagement agreement.

5. SCIENCE AND TECHNOLOGY NEEDS

Science and Technology Need Number	Science and Technology Need Description
N/A	In situ debris characterization for partial retry
N/A	Drum and box assay capability to measure 100 nCi/g-distributed contamination in heterogeneous matrices.
N/A	Real-time detection of contaminant using in situ sensors.
N/A	Fissile material assay system.

**A.1.03.00.03 Schedule**

# INEEL

## EM Project

RWMC Completion PBS/C

WMC SP3 OUT 7.10

Glovebox Excavation Method (GEM) Project

GEM Operations

Activity ID	Activity Description	Early Start	Early Finish	WES
3L101001	Waste Retrieval	01OCT03	31OCT03	A.1.03.00.03.01.01.
3L101002	Drum Assay	01OCT03	31OCT03	A.1.03.00.03.01.01.
3L101011	Operations Consummables	01OCT03	30SEP04	A.1.03.00.03.01.01.
3L101013	Contingency	01OCT03	30SEP04	A.1.03.00.03.01.01.
3L101003	Gross Decon & Grout Pit	03NOV03	24DEC03	A.1.03.00.03.01.01.
3L101005	Layup Period	02JAN04	31MAR04	A.1.03.00.03.01.01.
3L101007	D,D & D	01APR04	31AUG04	A.1.03.00.03.01.01.
3L101009	Closeout of Final Paperwork	01SEP04	30SEP04	A.1.03.00.03.01.01.
3L102050	Initial Decontamination	03NOV03*	24NOV03	A.1.03.00.03.01.02.
3L102054	Second Decon & Spray Fixant	14NOV03*	02DEC03	A.1.03.00.03.01.02.
3L102052	Backfilling of Excavation	02DEC03*	11DEC03	A.1.03.00.03.01.02.
3L102056	Secure Non-Essential Equipment in RCSIPGS	03DEC03	05DEC03	A.1.03.00.03.01.02.
3L102058	Secure Non-Essential Equipment in WES	03DEC03	08DEC03	A.1.03.00.03.01.02.
3L102060	Secure Essential Equipment in WES	09DEC03	11DEC03	A.1.03.00.03.01.02.
3L102062	Layup Systems Monitoring	12DEC03	01MAR04	A.1.03.00.03.01.02.
3L102064	Layup Systems Maintenance	12DEC03	02MAY04	A.1.03.00.03.01.02.
3L102001	Document Preparation	05JAN04*	03MAY04	A.1.03.00.03.01.02.
3L102036	Technical Support	05JAN04*	23AUG04	A.1.03.00.03.01.02.
3L102037	Waste Handling & Disposal	05JAN04*	23AUG04	A.1.03.00.03.01.02.
3L102038	Adjustment of Accelerated Schedule	05JAN04*	23AUG04	A.1.03.00.03.01.02.
3L102003	Site Mobilization	04MAR04	08MAR04	A.1.03.00.03.01.02.
3L102004	Startup Review	09MAR04	31MAR04	A.1.03.00.03.01.02.
3L102005	Reactivation of Facility & Equipment	01APR04	05APR04	A.1.03.00.03.01.02.
3L102007	PGS Dismantlement Operations	06APR04	11MAY04	A.1.03.00.03.01.02.
3L102009	RCS Dismantlement Operations	12APR04*	04MAY04	A.1.03.00.03.01.02.
3L102015	Phase I - WES Dismantlement Operations	03MAY04*	12MAY04	A.1.03.00.03.01.02.
3L102011	D&D RCS Equipment	12MAY04	24MAY04	A.1.03.00.03.01.02.
3L102017	Shoring Box Dismantlement Preparation	13MAY04	26MAY04	A.1.03.00.03.01.02.
3L102019	Remove Temporary Shoring Box Cover	27MAY04	28MAY04	A.1.03.00.03.01.02.
3L102021	Cut off Soil Probes	01JUN04	01JUN04	A.1.03.00.03.01.02.
3L102022	Shoring Box Dismantlement	02JUN04	15JUN04	A.1.03.00.03.01.02.
3L102023	Final Backfill of Waste Excavation	16JUN04	22JUN04	A.1.03.00.03.01.02.
3L102025	Decon Remote Equipment	23JUN04	13JUL04	A.1.03.00.03.01.02.
3L102026	D&D Mockup	01JUL04*	28JUL04	A.1.03.00.03.01.02.

Start Date  
Finish Date  
Data Date  
Run Date

WMC2  
WMC  
WMC30  
01OCT03  
30SEP30  
01OCT03  
11APR03 15:05

Early Bar  
Progress Bar  
Critical Activity

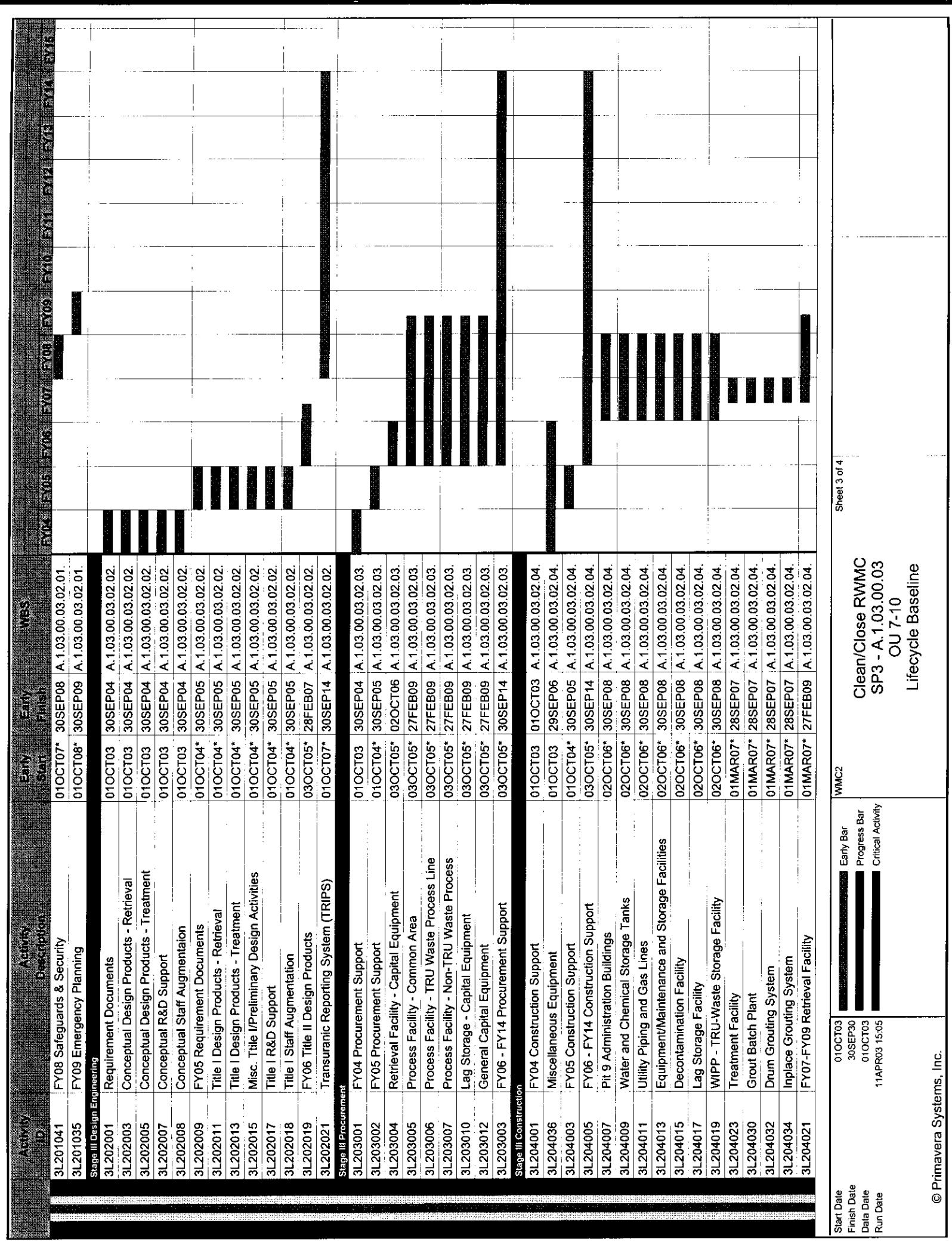
Clean/Close RWMC  
SP3 - A.1.03.00.03  
OU 7-10  
Lifecycle Baseline

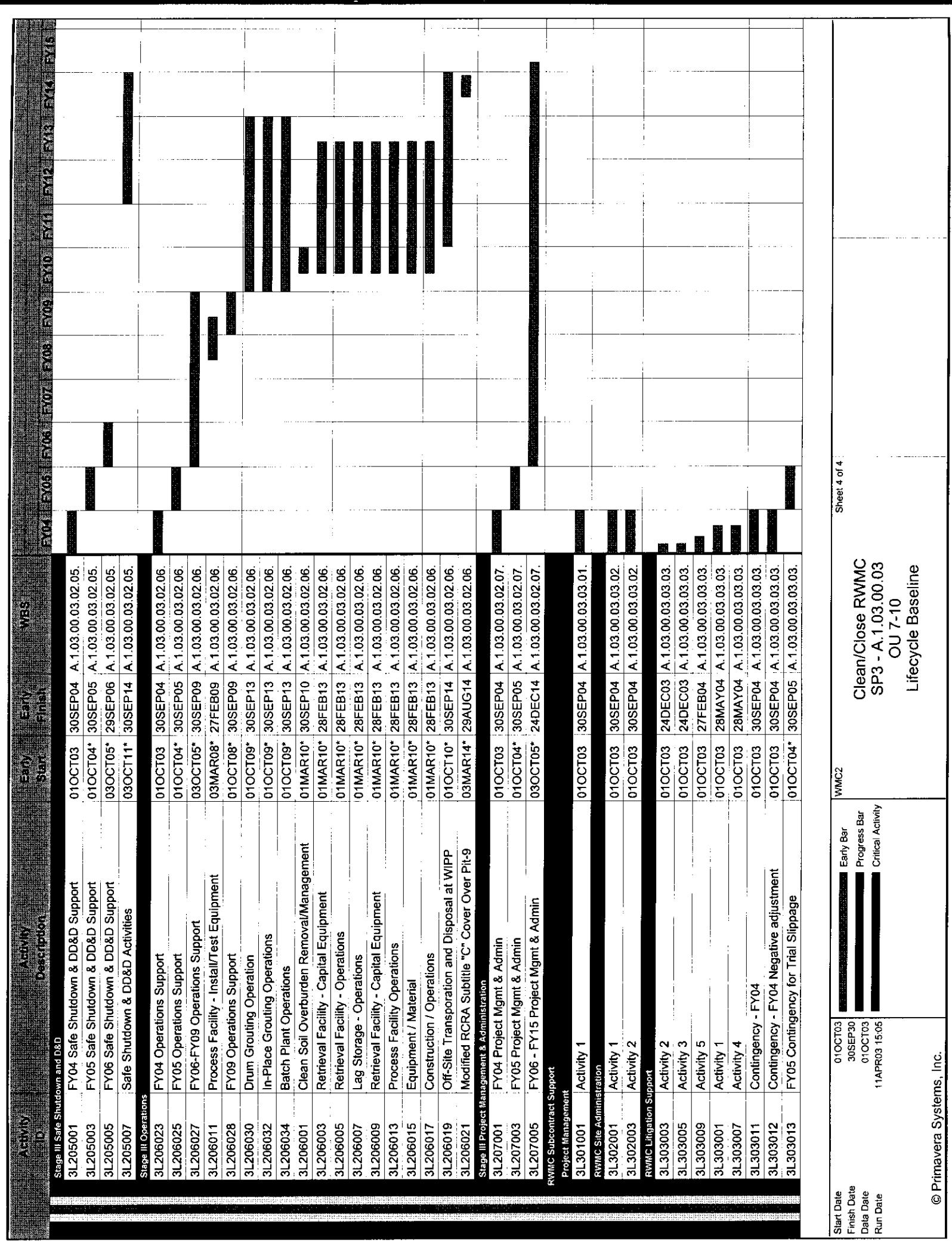
Activity ID	Description	Early Start	Early Finish	WBS
3L102029	Site Restoration Operations	12JUL04*	21JUL04	A.1.03.00.03.01.02.
3L102035	Final Documentation & Project Closeout	12JUL04*	23AUG04	A.1.03.00.03.01.02.
3L102027	Phase II - WES Dismantlement Operations	14JUL04	27JUL04	A.1.03.00.03.01.02.
3L102031	Site Cleanup	22JUL04	26JUL04	A.1.03.00.03.01.02.
3L102033	Demobilization	22JUL04	26JUL04	A.1.03.00.03.01.02.
GEM Project Management & Administration				
3L103001	Project Management	01OCT03	30SEP04	A.1.03.00.03.01.03.
3L103003	Project Controls	01OCT03	30SEP04	A.1.03.00.03.01.03.
3L103005	Emerging Issues	01OCT03	30SEP04	A.1.03.00.03.01.03.
3L103007	PEP Development & Management	01OCT03	30SEP04	A.1.03.00.03.01.03.
3L103009	Risk Management Plan	01OCT03	30SEP04	A.1.03.00.03.01.03.
3L103011	Administrative Support	01OCT03	30SEP04	A.1.03.00.03.01.03.
3L103013	Project Files/Records Management	01OCT03	30SEP04	A.1.03.00.03.01.03.
3L103015	Interface Agreements	01OCT03	30SEP04	A.1.03.00.03.01.03.
3L103017	R&D Interface	01OCT03	30SEP04	A.1.03.00.03.01.03.
3L103019	Training	01OCT03	30SEP04	A.1.03.00.03.01.03.
3L103021	RA Report Submittal	01OCT03	30SEP04	A.1.03.00.03.01.03.
3L103023	Cost Estimating Support	01OCT03	30SEP04	A.1.03.00.03.01.03.
3L103025	Contingency	01OCT03	30SEP04	A.1.03.00.03.01.03.
Out 7-10 Stage III				
Stage III ESH&Q				
3L201001	FY04 Environmental	01OCT03	30SEP04	A.1.03.00.03.02.01.
3L201007	FY04 Safety Analysis	01OCT03	30SEP04	A.1.03.00.03.02.01.
3L201013	FY04 Safety & Health	01OCT03	30SEP04	A.1.03.00.03.02.01.
3L201019	FY04 Fire Protection	01OCT03	30SEP04	A.1.03.00.03.02.01.
3L201025	FY04 Radiological Control	01OCT03	30SEP04	A.1.03.00.03.02.01.
3L201031	FY04 Emergency Planning	01OCT03	30SEP04	A.1.03.00.03.02.01.
3L201037	FY04 Safeguards & Security	01OCT03	30SEP04	A.1.03.00.03.02.01.
3L201043	FY04 Quality	01OCT03	30SEP04	A.1.03.00.03.02.01.
3L201003	FY05 Environmental	01OCT04*	30SEP05	A.1.03.00.03.02.01.
3L201009	FY05 Safety Analysis	01OCT04*	30SEP05	A.1.03.00.03.02.01.
3L201015	FY05 Safety & Health	01OCT04*	30SEP05	A.1.03.00.03.02.01.
3L201021	FY05 Fire Protection	01OCT04*	30SEP05	A.1.03.00.03.02.01.
3L201027	FY05 Radiological Control	01OCT04*	30SEP05	A.1.03.00.03.02.01.
3L201039	FY05 Safeguards & Security	01OCT04*	30SEP05	A.1.03.00.03.02.01.
3L201045	FY05 Quality	01OCT04*	30SEP05	A.1.03.00.03.02.01.
3L201033	FY06 Emergency Planning	03OCT05*	29SEP06	A.1.03.00.03.02.01.
3L201023	FY06 - FY09 Fire Protection	03OCT05*	30SEP09	A.1.03.00.03.02.01.
3L201005	FY06 - FY14 Environmental	03OCT05*	30SEP14	A.1.03.00.03.02.01.
3L201011	FY06 - FY14 Safety Analysis	03OCT05*	30SEP14	A.1.03.00.03.02.01.
3L201017	FY06 - FY14 Safety & Health	03OCT05*	30SEP14	A.1.03.00.03.02.01.
3L201029	FY06 - FY14 Radiological Control	03OCT05*	30SEP14	A.1.03.00.03.02.01.
3L201047	FY06 - FY14 Quality	03OCT05*	30SEP14	A.1.03.00.03.02.01.

Start Date  
Finish Date  
Data Date  
Run Date

Clean/Close RWM/C  
SP3 - A, 1,03,00,03

Lifecycle Baseline







## Clean/Close RWMC

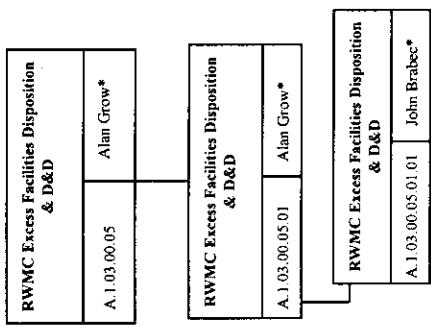
Subproject Breakout by Control Account

WBS[5]	WBS[6]	START	Sep-04	Sep-05	Sep-06	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Cumulative
A.1.03.00.03.WMF-SP3 OU 7-10															
BURDENED BASE															
A.1.03.00.03.01 Glovebox Excavation Method (GEM) Project	BCWS	0	24,711	0	0	0	0	0	0	0	0	0	0	0	24,711
A.1.03.00.03.02 OU 7-10 Stage II	BCWS	0	22,514	28,736	87,351	206,411	113,633	56,285	74,046	118,980	147,559	92,986	56,079	0	0
A.1.03.00.03.03 RWMC Subcontract Support	BCWS	0	4,117	1,359	0	0	0	0	0	0	0	0	0	0	5,476
<b>Results... Totals:</b>	<b>BCWS</b>	<b>0</b>	<b>51,343</b>	<b>31,095</b>	<b>87,351</b>	<b>206,411</b>	<b>113,633</b>	<b>56,285</b>	<b>74,046</b>	<b>118,980</b>	<b>147,559</b>	<b>92,986</b>	<b>56,079</b>	<b>457</b>	<b>1,036,155</b>
ESCALATE															
A.1.03.00.03.01 Glovebox Excavation Method (GEM) Project	BCWS	0	609	0	0	0	0	0	0	0	0	0	0	0	609
A.1.03.00.03.02 OU 7-10 Stage II	BCWS	0	612	1,421	5,854	18,019	12,634	7,682	12,442	22,385	31,206	21,584	14,536	129	148,486
A.1.03.00.03.03 RWMC Subcontract Support	BCWS	0	91	58	0	0	0	0	0	0	0	0	0	0	149
<b>Results... Totals:</b>	<b>BCWS</b>	<b>0</b>	<b>1,313</b>	<b>1,478</b>	<b>5,854</b>	<b>18,019</b>	<b>12,634</b>	<b>7,682</b>	<b>12,442</b>	<b>22,385</b>	<b>31,206</b>	<b>21,584</b>	<b>14,536</b>	<b>129</b>	<b>149,243</b>
SUMMARY (Base + Escalation)															
A.1.03.00.03.01 Glovebox Excavation Method (GEM) Project	BCWS	0	25,320	0	0	0	0	0	0	0	0	0	0	0	25,320
A.1.03.00.03.02 OU 7-10 Stage II	BCWS	0	23,127	31,157	93,206	224,431	126,317	63,987	86,469	141,325	178,766	114,469	70,615	0	0
A.1.03.00.03.03 RWMC Subcontract Support	BCWS	0	4,208	1,416	0	0	0	0	0	0	0	0	0	0	5,626
<b>Results... Totals:</b>	<b>BCWS</b>	<b>0</b>	<b>52,655</b>	<b>32,573</b>	<b>93,205</b>	<b>224,431</b>	<b>126,317</b>	<b>63,987</b>	<b>86,469</b>	<b>141,325</b>	<b>178,766</b>	<b>114,469</b>	<b>70,615</b>	<b>586</b>	<b>1,195,397</b>

Thousands of \$

A.1.03.00.02 SP5  
Excess Facilities  
Disposition & D&D

# WMF-SP5- RWMC Excess Facilities Disposition & D&D Work Breakdown Structure



\* Point of Contact

**DRAFT**

File: D D&D WBS WP Level - 12-04-02  
Last Update: Dec. 04, 2002

A.1.03.00.05  
**SubprojectPlan**

# SUBPROJECT PLAN

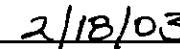
**WBS:** A.1.03.00.05

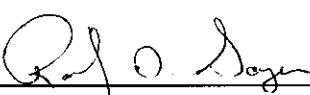
**Title:** WMF-SP5 Excess Facilities Disposition & D&D

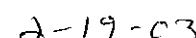
PROJ Mgr:	Alan D Grow	Planning & Controls:	John K Brabec
DOE-ID:	Jerry L Wells	ES&H Field Manager:	Randy D Sayer
PBS Manager:	John M Schaffer	Other:	Donald W Scott
Project Manager for Project Support and Facility Authorization			David M Bright

APPROVED BY:

  
\_\_\_\_\_  
Subproject Plan Manager

  
\_\_\_\_\_  
Date  
2/18/03

  
\_\_\_\_\_  
ES&H Representative

  
\_\_\_\_\_  
Date  
2-19-03

## 1. WORK DESCRIPTION:

Decontaminate and decommission (D&D) buildings at the Radioactive Waste Management Complex (RWMC). The buildings listed are WMF 603, 604, 611, 619, 620\*, 621\*, 622\*, 639, 648\*, 649, 650, 653\*, 658, and 661 to be characterized and D&D in 2016. WMF 601, 602, 609, 613, 637, and 656, are to be characterized in 2016 and D&D in 2017. WMF 628, 655 are to be characterized in 2018 and D&D in 2018. WMF 605 is to be characterized and D&D in 2030. Appropriate documentation and plans will be prepared as deemed necessary. Decontamination and decommissioning will be performed on each facility such as equipment and component removal, building razing, foundation and footing removal, site grading and reseeding as appropriate end state usage determines.

\* Indicates not included in ROM estimate.

This subproject consists of the following Control Account:

A.1.03.00.05.01 RWMC Excess Facilities Disposition & D&D:

(Work scope is the same as stated above for the subproject).

## 2. MAJOR PRODUCTS AND DELIVERABLES:

- D&D plans
- Final D&D reports

## 3. ESTIMATE DEVELOPMENT BASIS:

The estimate is from Deactivation, decontamination, and decommissioning Parametric ROM model.

Contingency Guideline Implementation:

Contingency was developed utilizing Option 3 in the LCB Contingency Guidance. The project team reviewed and discussed issues and concerns and assigned appropriate contingency dollar values. Based on the details within the scope of work, and the assumptions identified with that scope of work, along with the contingency dollars incorporated, the project team has a very high confidence level of success.

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The project team assessment of 20% contingency was developed based on the following parameters:

- D&D of facilities included in work scope is considered low risk.
- Facilities are ordinary construction. D&D methods are well known.
- D&D of facilities included in work scope is not considered a complex project.

- Facilities included in work scope contain minimal fixed radioactive contamination and hazardous contamination.
- Life cycle baseline (LCB) costs for facility D&D is based on ROM estimates.

#### **4. ASSUMPTIONS:**

- A. The parametric ROM model, unless otherwise noted, generated all estimates
- B. The dedicated site D&D crew will perform all utility isolations and D&D work
- C. All rad waste will be shipped off site
- D. All industrial waste will go to the landfill
- E. D&D will not take ownership of any facilities
- F. Surveillance and monitoring work will be performed under SP0
- G. Accomplishment of work is dependent on available funding
- H. Scope of work does not include removal of roads, sidewalks, parking lots, or underground utilities
- I. Cleanup will be in accordance with the approved RWMC ROD

#### **5. SCIENCE AND TECHNOLOGY NEEDS**

S&T Need Number	S&T Need Description
N/A	



# INEEL

## EM Project

RWMC Completion PBS C

### WMF SP5 - Excess Facilities Disposition & D&D

RWMC Excess Facilities Disposition & D&D

Action ID	Activity Description	Early Start	Early Finish	WBS
5L1001	FY 16 Excess Fac. Disp and D&D	01OCT15	30SEP16	A.1.03.00.05.01.01.
5L1002	FY 17 Excess Fac. Disp and D&D	03OCT16*	29SEP17	A.1.03.00.05.01.01.
5L1003	FY 18 Excess Fac. Disp and D&D	02OCT17*	27SEP18	A.1.03.00.05.01.01.
5L1004	FY 30 Excess Fac. Disp and D&D	01OCT29*	30SEP30	A.1.03.00.05.01.01.

Start Date	01OCT03	Early Bar	WMC2	Clean/Close RWMC
Finish Date	30SEP30	Progress Bar		SP5 - A.1.03.00.05
Data Date	01OCT03			Excess Facilities Disposition & D&D
Run Date	11APR03 15:07	Critical Activity		Lifecycle Baseline
© Primavera Systems, Inc.				Sheet 1 of 1

A.1.03.00.05 Budget  
Baseline

**Clean/Close RWMC**  
Subproject Breakout by Control Account

WBS[5]	WBS[6]	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	Cumulative
A.1.03.00.05 WMF-SPS Excess Facilities Disposition & D&D																	
BURDENED BASE																	
A.1.03.00.05.01 WMF SPS - Excess Facilities Disposition and D&D	BCWNS	1,407	2,610	2,314	0	0	0	0	0	0	0	0	0	0	0	0	2
Results... Totals:	BCWNS	1,407	2,610	2,314	0	0	0	0	0	0	0	0	0	0	0	0	2
ESCALATE																	-
A.1.03.00.05.01 WMF SPS - Excess Facilities Disposition and D&D	BCWNS	446	900	0	0	0	0	0	0	0	0	0	0	0	0	0	2,211
Results... Totals:	BCWNS	446	900	0	0	0	0	0	0	0	0	0	0	0	0	0	2,211
SUMMARY (Base + Escalation)																	-
A.1.03.00.05.01 WMF SPS - Excess Facilities Disposition and D&D	BCWNS	1,853	3,510	3,176	0	0	0	0	0	0	0	0	0	0	0	0	8,564
Results... Totals:	BCWNS	1,853	3,510	3,176	0	0	0	0	0	0	0	0	0	0	0	0	8,564

Thousands of \$

**Appendix A**  
**PBS Crosswalk**

## LIFECYCLE-OLD PBS CROSSWALK

FY03 PBS ID

<b>A.1.01.00 INTEC Completion PBS A</b>	
<b>A.1.01.00.00 CPP-SP0 Project Support &amp; Facility Authority</b>	
	A.1.01.00.00.01.LC CPP-SP0 Project Management
	A.1.01.00.00.02.LC CPP-SP0 Operations
	A.1.01.00.00.03.LC CPP-SP0 Facility Maintenance
	A.1.01.00.00.04.LC CPP-SP0 Process Maintenance
	A.1.01.00.00.05.LC CPP-SP0 Technical Services Support
	A.1.01.00.00.06.LC CPP-SP0 Core Services Support
	A.1.01.00.00.07.LC CPP-SP0 Capital Projects
	A.1.01.00.00.08.LC CPP-CP0 Facility Inactivation
	A.1.01.00.00.09.LC CPP-SP0 DOE-ID FUNDS
<b>A.1.01.00.01 CPP-SP1 Wet SNF to Dry &amp; SNF Consolidation</b>	
	A.1.01.00.01.01.LC CPP-666 On-Site Receipts
	A.1.01.00.01.02.LC CPP-666 Transferred DOE Fuel
	A.1.01.00.01.03.LC CPP-666 Transferred Navy Fuel
	A.1.01.00.01.04.LC IFSF Receipts
	A.1.01.00.01.05.LC Foreign Reactor Receipts (FRR)
	A.1.01.00.01.06.LC Domestic Receipts & Shipments (DR&S)
	A.1.01.00.01.07.LC PBF Transferred Fuel
	A.1.01.00.01.08.LC CPP-016 VCO
	A.1.01.00.01.09.LC CPP-603 Basin D&D&D
	A.1.01.00.01.10.LC Project Management & Administration
<b>A.1.01.00.02 CPP-SP2 SNM Consolidation</b>	
	A.1.01.00.02.01.LC CPP-SP2 Project Management
	A.1.01.00.02.02.LC U-238 & ULWBR Fuel Transfers
	A.1.01.00.02.04.LC Rover Parka Fuel Inventories and Offsite Shipment
	A.1.01.00.02.05.LC Miscellaneous SNM Shipments from CPP-651
	A.1.01.00.02.06.LC CPP-651 Maintained Facilities
<b>A.1.01.00.03 CPP-SP3 SNF and Calcine Disposition</b>	
	A.1.01.00.03.00.LC SP-3 Project Management
	A.1.01.00.03.01.LC NSNFP Execution & Information Management
	A.1.01.00.03.02.LC CPP-SP3 SNFDSP M&O Support
	A.1.01.00.03.03.LC CPP-SP3 SNF Disposition Data
	A.1.01.00.03.04.LC CPP-SP3 DOE-ID Managed SNF Activities
	A.1.01.00.03.05.LC CPP-SP3 Treatment of Spent Nuclear Fuel
	A.1.01.00.03.06.LC CPP-SP3 Technology Direction & Integration
	A.1.01.00.03.07.LC CPP-SP3 FSV Transferred Fuel
	A.1.01.00.03.08.LC CPP-SP3 CPP-749 Fuel Transfers
	A.1.01.00.03.09.LC CPP-SP3 CPP-1774 Fuel Transfers to SNFDSP
	A.1.01.00.03.0A.LC CPP-SP3 SNFDSP Facility Activities
	A.1.01.00.03.0B.LC CPP-SP3 Repository Analysis
	A.1.01.00.03.0C.LC CPP-SP3 Transportation & Packaging
	A.1.01.00.03.0D.LC CPP-SP3 Materials & Technology
	A.1.01.00.03.0E.LC CPP-SP3 Quality Assurance
	A.1.01.00.03.0F.LC CPP-SP3 IFSF Transferred Fuel
	A.1.01.00.03.0H.LC SNF Project Management (SNF-102/103)
	A.1.01.00.03.0I.L1 Calcine Disposition Project Management
	A.1.01.00.03.10.L1 RCRA Regulatory Strategy Direct Disposal
	A.1.01.00.03.10.L2 RCRA Regulatory Strategy Alternate Treatment
	A.1.01.00.03.10.L3 NEPA
	A.1.01.00.03.10.L5 RCRA Permitting
	A.1.01.00.03.11.L1 Alternate Treatment
	A.1.01.00.03.11.L2 Remote Characterization
	A.1.01.00.03.12.L1 Retrieval
	A.1.01.00.03.13.L1 Canister Development
	A.1.01.00.03.13.L3 Modeling- TSPA
	A.1.01.00.03.15.L1 Calcine Engineering Support
	A.1.01.00.03.16.L1 Conceptual Design
	A.1.01.00.03.16.L2 Title I Design

## LIFECYCLE-OLD PBS CROSSWALK

FY03 PBS ID

	A.1.01.00.03.16.L3 Title II Design	HLW-103
	A.1.01.00.03.17.L1 Construction	HLW-103
	A.1.01.00.03.17.L2 Facility Acceptance & Turnover	HLW-103
	A.1.01.00.03.18.L1 Retrieval & Packaging	HLW-103
	A.1.01.00.03.18.L2 Shipping	HLW-103
<b>A.1.01.00.04 CPP-SP4 SBW to WIPP</b>		
	A.1.01.00.04.01.LC SBW Project Management - LC	HLW-102
	A.1.01.00.04.02.LC SBW Engineering & Design - LC	HLW-102
	A.1.01.00.04.03.LC SBW Technology Development - LC	HLW-102
	A.1.01.00.04.04.LC SBW Project Controls - LC	HLW-102
	A.1.01.00.04.07.LC SBW Permitting - ES&HQA - LC	HLW-102
	A.1.01.00.04.08.LC SBW Construction - LC	HLW-102
	A.1.01.00.04.09.LC SBW Operations - LC	HLW-102
<b>A.1.01.00.05 CPP-SP5 Integrated Tank Farm Closure</b>		
	A.1.01.00.05.01.L1 OU 3-14 Tank Farm Soils Remediation	ER-103
	A.1.01.00.05.02.L1 Tank Closure Project Management	HLW-105
	A.1.01.00.05.03.L1 Closure of Tanks WM-184 WM-185 & WM-186	HLW-105
	A.1.01.00.05.04.L1 Closure of Tanks WM-103 WM-104 WM-105 & WM-106	HLW-105
	A.1.01.00.05.05.L1 Closure of Tanks WM-180 & WM-181	HLW-105
	A.1.01.00.05.06.L1 Closure of Tanks WM-187 WM-188 WM-189 & WM-190	HLW-105
<b>A.1.01.00.06 CPP-SP6 Excess Facilities Disposition &amp; D&amp;D</b>		
	A.1.01.00.06.01.L1 VCO SITE-TANK-005 INTEC	VCO-101
	A.1.01.00.06.02.L1 Group 2 CPP-601/602 D&D/CERCLA Remediation	ER-103 ER-109
	A.1.01.00.06.02.L2 Group 2 CPP-604/605/649 D&D/CERCLA Remediation	ER-103 ER-109
	A.1.01.00.06.02.L3 Group 2 CPP-603 D&D/CERCLA Remediation	ER-103 ER-109
	A.1.01.00.06.02.L4 Group 2 Pre-Remediation CERCLA Activities	ER-103 ER-109
	A.1.01.00.06.03.L1 Group 3 Set 1 Sites CERCLA Remediation	ER-103 ER-109
	A.1.01.00.06.03.L2 Group 3 Set 2 Sites CERCLA Remediation	ER-103 ER-109
	A.1.01.00.06.03.L3 Group 3 Set 3 Sites CERCLA Remediation	ER-103 ER-109
	A.1.01.00.06.03.L4 Group 3 Set 4 Sites CERCLA Remediation	ER-103 ER-109
	A.1.01.00.06.03.L5 Group 3 Set 5 Sites CERCLA Remediation	ER-103 ER-109
	A.1.01.00.06.03.L6 Group 3 Set 6 Sites CERCLA Remediation	ER-103 ER-109
	A.1.01.00.06.03.L7 Group 3 CERCLA Documentation and Integration	ER-103 ER-109
	A.1.01.00.06.04.L1 Group 4 Perched Water CERCLA Remediation	ER-103 ER-109
	A.1.01.00.06.04.L5 Group 5 Snake River Plain Aquifer CERCLA Remedy	ER-103 ER-109
	A.1.01.00.06.06.L1 Group 6 Gas Cylinder Sites CERCLA Remediation	ER-103 ER-109
	A.1.01.00.06.07.L1 Group 7 SFE-20 Hot Waste Tank CERCLA Remediation	ER-103 ER-109
	A.1.01.00.06.08.L1 INTEC Monitoring	ER-103 ER-109
	A.1.01.00.06.09.L1 FSV D&D	SNF-103
	A.1.01.00.06.10.L1 INTEC SP6 Integration & Compliance	ER-103 ER-109
	A.1.01.00.06.DD.L0 D&D Tank Farm Buildings	OIM-110
	A.1.01.00.06.DD.L1 INTEC D&D CPP-601 Area	OIM-110
	A.1.01.00.06.DD.L2 INTEC D&D CPP-637 Area	OIM-110
	A.1.01.00.06.DD.L3 INTEC D&D Coal Fired Boiler Facilities	OIM-110
	A.1.01.00.06.DD.L4 INTEC D&D CPP Misc. Facilities	OIM-110
	A.1.01.00.06.DD.L5 INTEC D&D Facilities End State	OIM-110
	A.1.01.00.06.DD.L6 INTEC D&D Facilities 2020-32	OIM-110
	A.1.01.00.06.DD.L7 INTEC D&D 2004-20 PMP Compliance	OIM-110
	A.1.01.00.06.DD.L8 INTEC D&D Future Facilities	OIM-110
	A.1.01.00.06.DD.L9 INTEC DD&D Bin Sets	OIM-110
<b>A.1.02.00 TAN Completion PBS B</b>		
<b>A.1.02.00.00 TAN-SP0 Project Support &amp; Facility Authority</b>		
	A.1.02.00.00.01 TAN Area Consolidation	New
	A.1.02.00.00.02 TAN Management and Support	New
	A.1.02.00.00.02.01 VCO Integration & Characterization Documents	VCO-101
	A.1.02.00.00.03 TAN Minimum Safe and Minimum Compliance	SNF-103
<b>A.1.02.00.01 TAN-SP1 TAN 607 Facilities</b>		
	A.1.02.00.01.01 TAN 607 - North Area Structures and Buildings	OIM-111 OIM-110
	A.1.02.00.01.02 TAN 607 - Central Area Structures and Buildings	OIM-110 OIM-111
	A.1.02.00.01.02.01 VCO TAN-031 Demineralized Water System RCRA Closure	VCO-101
	A.1.02.00.01.03 TAN 607 - South Area Structures and Buildings	OIM-111 OIM-110
	A.1.02.00.01.04 TAN 616 - Liquid Waste Treatment System	ER-101
	A.1.02.00.01.04.01 VCO New TAN-008	VCO-101

## LIFECYCLE-OLD PBS CROSSWALK

FY03 PBS ID

	A.1.02.00.01.05.01 WP-1 V-Tanks Project Management and Support	ER-101
	A.1.02.00.01.05.03 WP-3 V-Tanks Volume Monitoring and Waste Management	ER-101
	A.1.02.00.01.05.04 WP-4 V-Tanks Tech Evaluation and ROD Amendment	ER-101
	A.1.02.00.01.05.05 PP-5 New Group 2 V-Tanks RD/RAWP	ER-101
	A.1.02.00.01.05.06 PP-6 V-Tanks Remedial Action	ER-101
	A.1.02.00.01.05.07 PP-7 OU 1-10 Remedial Action Report	ER-101
	A.1.02.00.01.06.01 PP-1 TSF-46 TAN 616 Soils	ER-101
	A.1.02.00.01.06.02 PP-2 TDSF-47 TAN 615 Sewer Line Soils	ER-101
	A.1.02.00.01.06.03 PP-3 TSF-48 TAN 615 Sump Soils	ER-101
<b>A.1.02.00.02 TAN-SP2 WRRTF Facilities</b>		
	A.1.02.00.02.01 WRRTF Structures and Buildings	OIM-111 OIM-110
<b>A.1.02.00.03 TAN-SP3 LOFT Facilities</b>		
	A.1.02.00.03.01.01 VCO TAN-010 Boiler Fuel Oil System RCRA Closure	VCO-101
	A.1.02.00.03.01.02 VCO TAN-020 HTRE Mercury Contamination Sump System	VCO-101
	A.1.02.00.03.01.03 VCO TAN System Isolations	VCO-101
	A.1.02.00.03.02 LOFT Utility Disconnect and Reconfiguration	New
	A.1.02.00.03.03 LOFT D&D&D	New
<b>A.1.02.00.04 TAN-SP4 TSF/Balance of TAN</b>		
	A.1.02.00.04.01 SNF Pads and Material	New
	A.1.02.00.04.02 TSF DD&D/VCO	OIM-111 OIM-110
	A.1.02.00.04.02.01 VCO Simple System Closure	VCO-101
	A.1.02.00.04.03 TAN 607 Operational Dependent	OIM-111 OIM-110
	A.1.02.00.04.04.01 WP-8 Project Management and Support	ER-101
	A.1.02.00.04.04.02 WP-4 TSF-06 and TSF-26 Soil Remedial Action	ER-101
	A.1.02.00.04.04.03 WP-13 Group 3 Sites Remedial Design/Remedial Action	ER-101
	A.1.02.00.04.04.04 PP-7 PM-2A Tanks Remedial Action	ER-101
	A.1.02.00.04.04.05 PP-11 Burn Pits Remedial Action	ER-101
	A.1.02.00.04.04.06 PP-6 OU 1-10 First Five Review	ER-101
	A.1.02.00.04.05.01 WP-1 WAG 1 PM and Cleanup Support	ER-101
	A.1.02.00.04.05.02 PP-2 New Site Disposition and Transfer to WAG 10	ER-101
<b>A.1.03.00 Clean/Close RWMC PBS C</b>		
<b>A.1.03.00.00 WMF-SP1 Project Support &amp; Facility Authority</b>		
	A.1.03.00.00.01.01 RWMC Project/PBS Management	ER-107, WM-108
	A.1.03.00.00.02.01 Project/RWMC Facility Management	WM-103
	A.1.03.00.00.03.01 Environmental Protection & Permitting	WM-103
	A.1.03.00.00.03.02 ES&H Training	WM-103
	A.1.03.00.00.03.03 Quality Assurance	WM-103
	A.1.03.00.00.03.04 Emergency Preparedness	WM-103
	A.1.03.00.00.03.05 Fire Protection	WM-103
	A.1.03.00.00.03.06 Industrial Hygiene	WM-103
	A.1.03.00.00.03.07 Industrial Safety	WM-103
	A.1.03.00.00.03.08 Nuclear Safety	WM-103
	A.1.03.00.00.03.09 Radiation Protections	WM-103
	A.1.03.00.00.03.10 Management and Oversight	WM-103
	A.1.03.00.00.04.01 RWMC SSC Engineering Management	WM-103
	A.1.03.00.00.04.02 RWMC SSC Configuration Management	WM-103
	A.1.03.00.00.04.03 RWMC Building Radiological Instruments	WM-103
	A.1.03.00.00.04.04 RWMC Documents and Records Management	WM-103
	A.1.03.00.00.05.01 RWMC Landlord Operations Services	WM-103, WM-101
	A.1.03.00.00.06.01 RWMC Capital Equipment	WM-103
	A.1.03.00.00.07.01 AMWTP BBWI Technical Support	WM-105, WM-101
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