Civilian Radioactive Waste Management System
Management and Operating Contractor

Monitored Retrievable Storage Project Plan

(REVISION 0)

FOREWORD

The Office of Civilian Radioactive Waste Management (OCRWM) is responsible for development of a waste management system to permanently dispose of spent nuclear fuel and high level waste in a manner that protects the health and safety of the public and the quality of the environment. The elements of the system include a geologic repository; a Monitored Retrievable Storage (MRS) facility for receipt, interim storage and staging of spent nuclear fuel shipments to the repository; a system to ensure accountability and to manage and control the acceptance of spent nuclear fuel at reactor sites and high level waste at defense sites; and a transportation system to deliver the accepted spent nuclear fuel to the MRS facility, and spent nuclear fuel and high level waste to the geologic repository.

The mission is currently being pursued by OCRWM under two active Major System Acquisitions (MSAs): the Yucca Mountain Site Characterization Project (to be followed upon site acceptance by a First Repository Project); and the MRS Project which includes the MRS facility, the Transportation System, and Waste Acceptance. The Key Decision-0 Energy Systems Acquisition Advisory Board (ESAAB) review of the MRS Project was accomplished by Secretarial Action Request to the Under Secretary that was approved 28 March 1991 prior to starting conceptual design.

This Project Plan addresses the MRS Project work scope required to implement the Nuclear Waste Policy Amendments Act of 1987 and covers the period from January 1988 through the completion of the final construction phase including start-up activities required to qualify the MRS facility for the receipt of radioactive waste. The Plan is written to meet the requirements of Department of Energy (DOE) Order 4700.1, as revised by DOE Notice 4700.4, Secretary of Energy Notice (SEN) 27-90, and PR-23 memorandum dated August 30, 1990, "Baseline Change Control Process at the Executive Level."

The MRS Project technical, cost, and schedule baselines and change control thresholds are summarized in Appendix D. ESAAB (Level 0) baseline changes that exceed the Level 0 change control thresholds will be submitted to the ESAAB Baseline Change Control Board for approval.

Submitted by:

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Ronald A. Milner, MRS Project Manager Date

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John W. Bartlett, Director, Office of Civilian Date
Radioactive Waste Management/
Chairman, Program Change Control Board

Approved by:

_____

Acquisition Executive/Chairman, Energy Date
Systems Acquisition Advisory Board

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1. INTRODUCTION

The purpose of this document is to describe the Monitored Retrievable Storage (MRS) Project and to establish approved cost and schedule baselines against which overall progress and management effectiveness shall be measured. For the sake of brevity, this Project Plan will be referred to as the Plan throughout this document.

The Office of Civilian Radioactive Waste Management (OCRWM) Program Management System (PMS) Manual defines the Plan as a Program-level controlled document that is submitted through the Director, OCRWM, to the Acquisition Executive/Energy Systems Acquisition Advisory Board (ESAAB) Chairman for approval. Initial issuance and changes to this plan shall be controlled by the Program Change Control Board with copies of all page changes forwarded to the ESAAB Secretariat for information purposes. The Plan complies with Department of Energy (DOE) Order 4700.1, as revised by DOE Notice 4700.4A and Secretary of Energy Notice (SEN)-27-90.

This Plan addresses activities through the completion of the final MRS Facility construction phase, including startup activities required to qualify the facility for the receipt of spent nuclear fuel. The Project Charter (Appendix A) delineates management responsibility, authority, and accountability of the project office along with operational management relationships with the OCRWM, other department elements, and external organizations.

2. MISSION NEED AND OBJECTIVES

2.1 MISSION

The policy framework for the ultimate disposal of the nation's spent nuclear fuel (SNF) and high level waste (HLW) was defined by Congress in the Nuclear Waste Policy Act of 1982 (NWPA), and reaffirmed by the Nuclear Waste Policy Amendments Act of 1987 (NWPAA). The OCRWM was established by the NWPA with the mission to dispose of this nation's SNF and HLW in a manner that protects the health and safety of workers and the public and protects the quality of the environment. The elements of the Civilian Radioactive Waste Management System (CRWMS) include a geologic repository; a Monitored Retrievable Storage Facility for receipt, interim storage, and shipments of SNF in stages to the repository; a system to ensure accountability and to manage and control acceptance of SNF at reactor sites and HLW at defense sites; and a transportation system to deliver the SNF to the MRS and SNF and HLW to the geologic repository.

The mission is currently being pursued by OCRWM under two active Major System Acquisitions (MSAs). One is the Yucca Mountain Site Characterization Project (to be followed upon site acceptance by a First Repository Project). The other active MSA is the MRS Project which includes the MRS Facility, Transportation, and Waste Acceptance. Together, these MSAs will establish the waste management system.

2.2 MRS PROJECT OBJECTIVES

The Project satisfies the following Program objectives cited in the Draft Mission Plan Amendment of September 1991.

- Timely and adequate waste acceptance: To begin the operation of the waste-management system as soon as practicable, obtaining the system development and operational benefits that have been identified for the MRS facility.

- Schedule confidence: To establish confidence in the schedule for waste acceptance and disposal such that the management of radioactive waste is not an obstacle to the nuclear energy option.

- System flexibility: To ensure that the program has the flexibility necessary for adapting to future circumstances while fulfilling established commitments.

As further stated in the Draft Mission Plan Amendment, the basic policies under which the CRWM Program (CRWMP) (and therefore the MRS Project) is conducted are as follows:

- The protection of the health and safety of the public and of workers, and the quality of the environment are of paramount importance.

- The Program must be conducted such that public confidence is warranted, with opportunities and means provided for meaningful participation by affected and interested parties.

- The Program must be distinguished by its technical integrity and excellence and directed at reaching scientific consensus and public understanding.

- The Program must be managed and conducted in an efficient and cost effective manner.

2.2.1 Technical Objectives

Technical Objectives include compliance with applicable Federal, State, and local regulations and provision of facilities and capabilities described in the Physical System Requirements documents for the Overall System, Store Waste, Transport Waste, and Accept Waste.

The technical baseline is outlined in the document hierarchies presented in the PMS Manual for the OCRWM and in the Project Management Plan (PMP) for the MRS Project. This technical baseline hierarchy is also described in Appendix D.

Specific Nuclear Regulatory Commission (NRC) regulations governing licensing for the MRS and the Transportation systems are delineated in Code of Federal Regulations (CFR), 10 CFR Part 72, and 10 CFR 71 and 73, respectively. Department of Transportation (DOT) regulations are provided in 49 CFR 171-189. 10 CFR Part 961, Standard Contract for Disposal of Spent Fuel and/or High Level Radioactive Waste, establishes terms and conditions under which DOE will accept waste.

2.2.2 Schedule Objectives

The Project schedule baseline is referenced in Section 7. This schedule baseline includes Acquisition Executive (Level 0), Program (Level 1), and Project (Level 2) milestones, as well as key decision points requiring ESAAB approval and annual Energy Systems Acquisition Reviews (ESARs). The major phases of the Project are described in Section 3.0 of this plan.

2.2.3 Quality Objectives

The overall objective of compliance with the OCRWM Quality Assurance (QA) Program in MRS activities is to design and construct an MRS Facility in a manner that protects the health and safety of the public and of the workers. The CRWM QA program documents consist of the CRWM QA Requirements Document (QARD), participant QA Program Descriptions (QAPDs), and participant QA procedures.

2.2.4 Cost Objectives

Funding for the MRS Project is provided by the Nuclear Waste Fund, which was established by the NWPA. The cost baseline hierarchy is identified in Appendix D.

3. TECHNICAL PLAN

An integrated set of MRS MSA design requirements has been derived from the NWPAA, NRC and DOT regulatory requirements, Environmental Protection Agency (EPA) standards, relevant DOE orders, major program policy decisions, International Atomic Energy Agency (IAEA) safeguards requirements and other relevant documents affecting design or operation. These documents have been used, in turn, to develop project-level baseline documents that will ensure the flow-down of programmatic and physical requirements in much greater detail at the project level.

3.1 MRS FACILITY

3.1.1 Technical Objectives in Quantitative Terms

Current plans for waste acceptance are based on the maximum statutory storage-capacity specified in the NWPAA and 10 CFR Part 72: 10,000 metric tons of uranium (MTU) before the commencement of operations at the repository, and 15,000 MTU at any time thereafter.

3.1.2 Status of Technology

DOE can identify a number of design approaches to the MRS facility and can select from a number of spent fuel transfer and storage methods that are based on licensable technologies.

The OCRWM has actively supported cooperative demonstration programs to further advance and prove various concepts for dry spent fuel storage. These activities include demonstration of dry storage in metal and concrete casks, dry storage in horizontal concrete modules, and spent fuel consolidation tests. The spent fuel consolidation project is being phased out. At the present time, there are no plans to consolidate spent fuel within the Federal Waste Management System. OCRWM is also funding generic research and development to establish technical bases for spent fuel management. These activities consist of 1) establishing bounding parameters for safe dry storage of spent nuclear fuel, and 2) conducting tests and analyses necessary to establish confidence in thermal and radiation prediction techniques relevant to dry storage of spent nuclear fuel. The results of these analyses will be considered in selecting technology for the MRS facility and will be subsequently incorporated into the design.

3.1.3 Alternate Designs And Technical Approaches

Because of operational considerations, more than one transfer and storage technology may be chosen. The design may also be affected by the terms and conditions of a negotiated agreement with the host of the site.

Technologies under consideration include:

- Concrete storage casks/modules
- Modular vault dry storage
- Metal storage casks

- Transportable storage casks
- Conventional pool storage.

During conceptual design, technologies were evaluated. A technology or combination of technologies will be selected for use in subsequent design phases. Depending upon the technology(ies) selected, and upon the specifics of the negotiated agreement between the host and the DOE, additional features could be incorporated into the design. Potential features include:

- A concrete storage concepts fabrication facility (if technology utilizes concrete casks)
- An add-on facility for preparation of SNF prior to shipment to the repository
- An Operations Control Center
- A Security Training Facility.

In order to support the cask fleet used for transporting waste, a cask maintenance facility (CMF) will be collocated at the MRS, subject to the host agreement. The CMF will provide a place to perform inspection, testing, and maintenance of casks and other transportation equipment.

3.1.4 Project Phases

The following description generally follows conventions used in DOE Order 4700.1: namely, conceptual, Title I and Title II design, and construction (which includes Title III design). Title I and II design have been replaced with Safety Analysis Report (SAR) Design and Final Procurement and Construction (FPC) Design to accommodate the requirement for detailed design in the earlier SAR design phase. The SAR Design phase shall include detailed design of systems, structures, and components important to safety, and preliminary design of the remaining portions of the facility. This design effort goes beyond a Title I level, providing SAR-level design in order to facilitate the licensing process. The FPC Design phase will complete the detailed design necessary for procurement and/or construction of the structures, systems and components which comprise the MRS facility. Figure 1 identifies the principal Project activities in a summary logic diagram.

3.1.4.1 Conceptual Design Phase

Conceptual design covers those activities necessary to develop project criteria and design parameters for engineering disciplines, identification of applicable codes and standards, quality assurance requirements, environmental studies, materials of construction, space allowances, energy conservation features, health and safety, safeguards, and security requirements and any other features or requirements necessary to describe the project. Conceptual design was used to evaluate the alternate designs previously identified. Conceptual design was not site specific as a site had not been identified during this phase. Subsequent to the completion of conceptual design a presentation will be made to the ESAAB for review of work, and authorization to proceed to SAR Design (Key Decision (KD) -1).

Site selection will be accomplished through the Office of the Nuclear Waste Negotiator whose duties are to find a state or Indian tribe willing to host a MRS facility at a technically qualified site and to negotiate an agreement with the potential host. The proposed agreement will be submitted to the Congress for enactment into Federal law.

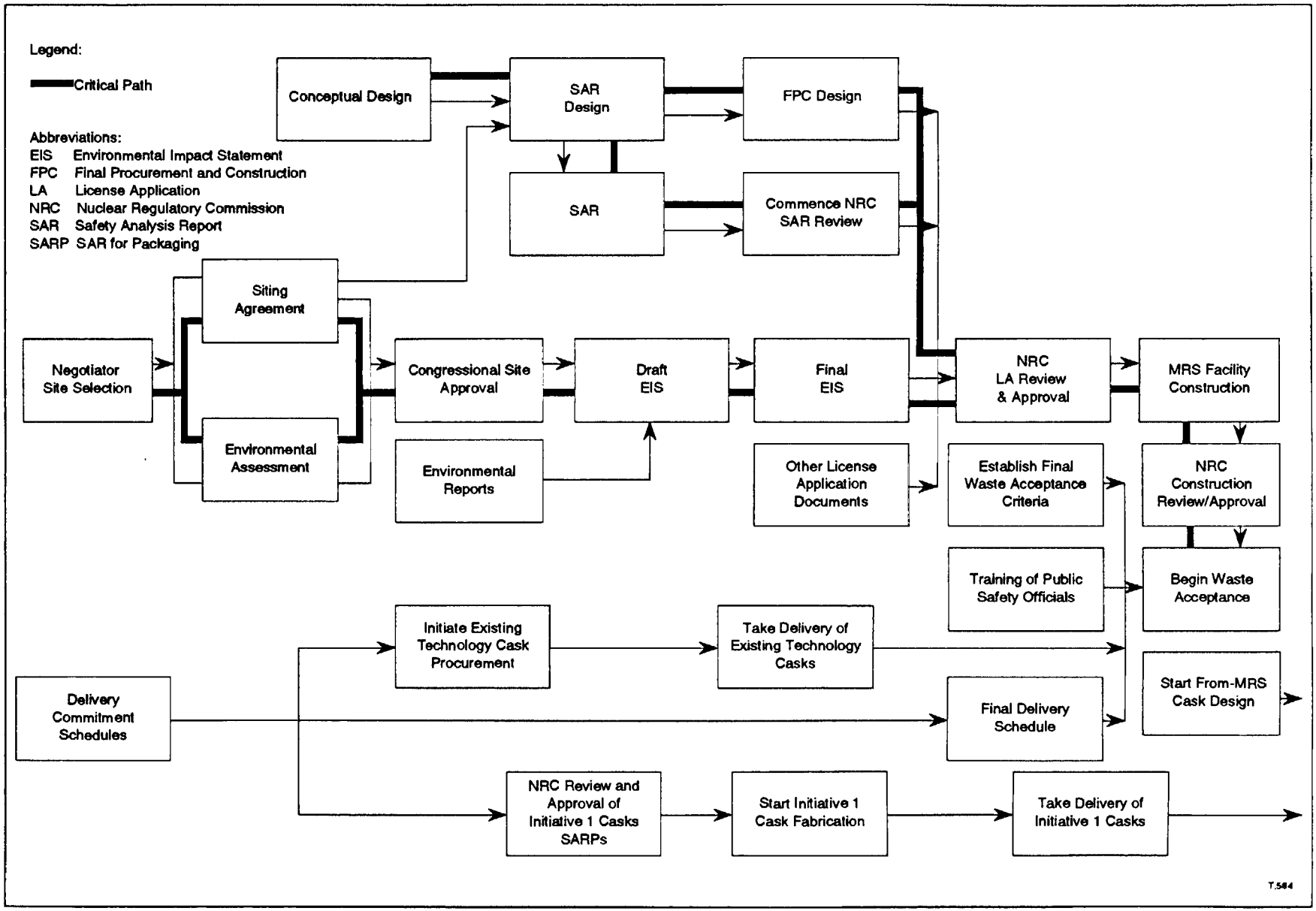

Figure 1. MRS Project Summary Logic Diagram

Environmental assessment (EA) activities during this phase consist of developing an EA Management Plan and site-independent studies for the EA.

Work will be initiated on several Licensing-related activities during this phase to include 1) the License Application Implementation Plan, 2) the Pre-licensing Implementation Plan, 3) the MRS License Application Annotated Outline, and 4) procedural agreements with the NRC.

3.1.4.2 Safety Analysis Report (SAR) Design Phase

SAR design shall be site-specific and continue the design effort with the selected storage technology or technologies and produce more definitive cost and schedule information. Input from a potential host concerning design or technology selection will be considered during this phase. SAR design will require 24 months for completion. Upon completion of this phase, a presentation will be made to the ESAAB for review of work and for authorization to proceed with Final Procurement and Construction design (Key Decision-2).

The EA will be completed during this phase and will be available to the Negotiator for submission to Congress along with the proposed agreement with a host government.

EA activities required to be completed during this time frame include:

- Conduct EA public (scoping) hearings to provide affected parties with the opportunity to present comments and to recommend issues that should be addressed in the EA
- Assemble available geophysical, geological, geochemical, and hydrological data, as well as additional data on the environment, and socioeconomic conditions
- Prepare the EA, including a brief discussion of alternative design technologies and environmental impacts of the proposed action.

Work will be initiated on the site investigation plan for the environmental impact statement (EIS) during SAR design. After the proposed agreement has been approved by Congress, an MRS Site Office will be established.

The OCRWM will submit the SAR documentation to the NRC for review in the pre-license application stage. The NRC review of such pre-license application submittals will facilitate the expeditious review of the license application. Interactions with the NRC will continue during SAR design to identify and resolve licensing issues.

Initiation of detailed design as currently scheduled represents an exception for DOE Order 4700.1 (which indicates that the ESAAB approval for the initiation of detailed design should normally take place after the completion of the EIS process). The MRS schedule calls for initiation of SAR design about one year prior to completion of the EIS process. The rationale for this strategy is that concurrent development of the MRS facility EIS and detailed design may proceed so that the intended waste acceptance date is achieved. In addition, through the negotiation process, Congress will be involved in approving the proposed OCRWM schedule of EIS and design activities. National Environmental Policy Act (NEPA) compliance is also ensured because

the NRC will be fulfilling its NEPA responsibilities in licensing the MRS facility by either preparing its own EIS or adopting DOE's EIS.

3.1.4.3 Final Procurement and Construction Design Phase

FPC design includes any revisions required of the SAR Design effort; preparation of final working drawings, specification, bidding documents, cost estimates, and coordination with parties which might affect the project; development of firm construction and procurement schedules; and assistance in analyzing construction proposals or bids. Upon completion of FPC design and NRC approval of the License Application, a presentation will be made to the ESAAB for review of work, and authorization to proceed with construction (Key Decision-3).

Major activities in the EIS process during this phase include issuance of Notice of Intent, preparation of an EIS Implementation Plan, data collection, and preparation and review of the EIS.

3.1.4.4 Construction Phase (Title III)

The Project Office will use a construction manager, such as the M&O, to supervise other subcontractors and trade organizations. Construction will be accomplished in two phases to permit early operations followed by completion of the full capacity MRS facility. A presentation will be made to the ESAAB for approval to start operation (Key Decision-4). The as-built final design of the MRS facility will be incorporated into the system configuration baseline.

3.2 TRANSPORTATION

3.2.1 Technical Objectives in Quantitative Terms

The key objective of the Transportation system in this Project is to accept waste at the waste owners' sites and to deliver it to the MRS facility at the projected rates of 400 MTU in year 1, 600 MTU in year 2, and 900 MTU per year thereafter until the capacity limit of 10,000 MTU, established in the NWPA et seq., is reached. Once a repository is operational, the Transportation system shall support the transfer of SNF from the MRS facility and reactors to the repository and HLW from defense sites to the repository at the rate of 400 MTU of SNF for the first three years, 900 MTU in the fourth year, 1800 MTU in the fifth year, and 3000 MTU each year thereafter, and at the yearly rate of 400 MTU of HLW commencing in the sixth year. A small amount of commercial high-level radioactive waste resulting from spent fuel reprocessing at the Nuclear Fuel Services plant near West Valley, New York is also subject to disposal by OCRWM under the NWPA.

3.2.2 Status of Technology

Existing technology fully supports the transportation of SNF as evidenced by the various truck and rail casks currently employed. While somewhat limited in capacity, sixteen transportation casks are currently available for lease.

The OCRWM has undertaken a major effort in developing a new generation of NRC-certifiable transportation casks systems. At present, the OCRWM is concentrating on developing from-reactor casks systems suitable for shipping most of the spent fuel to either an MRS facility or a repository. Two truck cask system designs and a rail/barge system design have been under development since 1988. In the event these cask systems experience design, certification, or fabrication delays, a program to assure cask fleet availability to support MRS startup was initiated in 1991. This program will seek to purchase or lease new design casks using proven technology and/or the existing certified cask fleet of 10 legal-weight truck casks, 4 overweight truck casks, and 2 rail casks.

The OCRWM is sponsoring research efforts, the results of which will be factored into cask development. Five activities currently under way are: use of credit for fissile material burnup in cask design, use of the source-term approach in demonstrating cask containment capability, benchmarking of computer codes for certain structural and thermal calculations, evaluation of innovative materials and components, and the development of methods for controlling radioactive contamination on the surfaces of casks.

3.2.3 Alternate Designs and Technical Approaches

The from-reactor casks are being procured in a two phase program. The first phase covers the design, certification, and fabrication of proven technology casks to assure capability upon MRS start of operations. The second phase covers the continued development of the higher capacity, innovative technology casks to provide more cost effective capability in later years. The cask systems being developed under the second phase (also called Initiative 1) are discussed in Section 3.2.4.

The from-MRS casks, which will be developed in Initiative 2, will provide large, high capacity rail casks to move the fuel in storage at the MRS to the repository. The designs of these casks systems will be coordinated with the designs of the MRS and the repository.

The development of cask systems for shipment of nonstandard spent fuel and non-fuel-assembly hardware will be covered in Initiative 3.

Cask systems to transport both civilian and defense high level waste directly to the repository will be developed in Initiative 4.

3.2.4 Transportation System Development

The transportation system consists of the cask system and the transportation support system. The cask system includes the unloaded casks, the transporter for the cask, and the necessary ancillary equipment and special tools. The transportation support system consists of facilities and services, such as an operations control center, transporter service facility, carrier services, training services, operations services, and security services.

The OCRWM has contracted with private industry to develop from-reactor cask systems under Phase 2 and has selected a design for each type of cask. The cask designer is responsible for obtaining a certificate of compliance (CoC) from the NRC and for delivering a prototype cask

system after the CoC is obtained. The legal-weight truck cask systems being designed by General Atomics are the GA-4, with a capacity of four Pressurized Water Reactor (PWR) assemblies and the GA-9 with a capacity of nine Boiling Water Reactor (BWR) fuel assemblies (without fuel assembly channels). The rail/barge cask system being designed by Babcock and Wilcox is designated as the BR-100 and has a capacity of 21 PWR or 52 BWR (without channels) spent fuel assemblies.

Transportation equipment, including trailers and rail cars, will be tested to demonstrate structural adequacy for handling and transporting fuel casks. Rail car designs will be approved by the Association of American Railroads. A general objective for developing this equipment is to standardize whenever possible and to avoid designs that require unique tools.

The design and development of the support system will proceed in parallel with the cask systems development. System requirements and specifications will be developed based on cask system support needs, regulatory requirements, and operational needs including utility, MRS, and repository support requirements. The system design will proceed in compliance with systems engineering and quality assurance requirements.

3.2.5 Acquisition of the Transportation System

Appropriate documents will be revised at the completion of the development to fully define requirements and specifications for the casks to be procured and for the support system to be constructed or acquired. Authorization to initiate acquisition will be preceded by a readiness review and an ESAAB review, followed by ESAAB approval of KD-3 (major procurement). The objective of the readiness review is to ensure that procurement specifications are correct and fully reflect system requirements.

Private industry will be used in procurement of transportation casks, support facilities, equipment, and services. The contracts with the two vendors currently developing Phase 2 casks require delivery of prototype systems after certification. Procurement of a fleet of these casks will be the subject of a competitive bid process.

There are several options for the acquisition of support facilities, equipment, and services. These include, but are not limited to, procurement of an existing facility or construction by a prime contractor, and issuance of specific service contracts or overall operation by a management and operating contractor (M&O). In addition to the various service facilities and carrier operating services, the Transportation system will require the acquisition of security, training, and operations support services. Once service requirements have been determined, plans will be developed to guide the procurement process and the acquisition, management, and performance of the support services during transportation system operations.

3.3 WASTE ACCEPTANCE

3.3.1 Technical Objectives in Quantitative Terms

Projected system waste acceptance rates were identified in section 3.2.1. The priority accorded to the owners for delivery of their SNF was established in the 1991 Acceptance Priority Ranking

(APR). This ranking, coupled with the projected acceptance rate in the 1991 Annual Capacity Report (ACR), forms the basis for allocating the system capacity. The allocation of the system capacity is also communicated in the ACR.

3.3.2 Acceptance Process Readiness

The waste acceptance process begins with Purchasers providing OCRWM with information concerning the quantities and characteristics of the waste currently in inventory. These characteristics include the data on which the SNF was permanently discharged. Purchasers also provide OCRWM with projections of the waste which will be generated during future operations.

In accordance with 10 CFR Part 961, an annual Acceptance Priority Ranking (APR) report and an Annual Capacity Report (ACR) are issued. The APR establishes the order in which the projected SNF acceptance capacity is allocated. As required by the Standard Contract, the priority ranking is based on the date the SNF was permanently discharged, with the owners of the oldest SNF, on an industry-wide basis, given the highest priority.

The 1991 APR is the basis for allocating SNF acceptance capacity to each owner in the 1991 ACR. The ACR applies a ten-year projected waste acceptance rate to the APR, resulting in individual capacity allocations. An allocation is a specified acceptance capacity (measured in metric tons of uranium) in a particular year for an individual Purchaser. Projected system waste acceptance rates were identified in section 3.2.1.

The allocations in the 1991 ACR are the basis for Delivery Commitment Schedule (DCS) submittals, which represent the next step in the SNF acceptance process outlined in the Standard Contract. The DCS provides the Purchasers with the opportunity to inform the Department of Energy of their plans for utilizing their allocations of projected SNF acceptance capacity. This information will assist OCRWM in meeting its contractual waste acceptance responsibilities and in developing the waste management system.

The Standard Contract states that, beginning January 1, 1992, Purchasers may begin submitting DCSs, for DOE approval, that identify all SNF the Purchasers plan to deliver to DOE beginning 63 months thereafter. A DCS is submitted for only one designated delivery site and only one fuel type (BWR, PWR, or Other). Both the Purchaser's and Department's ability to commit to a specific delivery date over 63 months in the future is limited. Therefore, only the year of delivery is designated on the DCS. The DCS also includes information concerning the proposed transport mode and the range of permanent discharge dates for the fuel to be delivered.

After a DCS has been approved, Purchasers may either use the DCS as the reference document for submittal of the Final Delivery Schedule (FDS), which is required 12 months prior to delivery, or use the DCS as the basis for exchanges with other Purchasers. The FDS provides further specificity with regard to the SNF to be delivered. The actual date of delivery will be proposed by the Purchasers in their FDS submittal.

As the waste management system matures, changes in the system capacity and waste acceptance rate will be communicated to Purchasers.

3.3.3 Contract/Waste Acceptance Issue Resolution Process

A comprehensive review of the Standard Contract conducted in 1986 in preparation for issuing the first ACR, indicated that although the Standard Contract included considerable information regarding waste acceptance criteria and procedures, it did not provide sufficient detail and guidance to enable either OCRWM or the Purchasers to carry out their respective contractual responsibilities and plan for the orderly transfer of spent fuel to the Federal waste management system. Since 1987, OCRWM has been working cooperatively with utility representatives (EEI/UWASTE and USCEA) on many of the issues that must be resolved in order to implement the terms and conditions of the Standard Contract. This process has been referred to as the ACR issue resolution process.

Thirty-four issues have been identified which cover a wide variety of topics and range from a need to make minor word changes in the Standard Contract to enhance clarity or resolve inconsistencies, to the development of formal waste acceptance criteria and procedures including DCS exchanges among Purchasers.

Since 1989, the ACR issue resolution process has focused on priority issues that need resolution for OCRWM and the Purchasers to implement their near-term contractual responsibilities. The Purchasers have formally submitted consensus positions on 18 of these issues. OCRWM is developing official positions on as many of the 18 issues as possible. Utility consensus positions and the results of RW-sponsored contractor analyses are being considered by OCRWM in developing its positions.

3.4 PROJECT WORK BREAKDOWN STRUCTURE

The Work Breakdown Structure (WBS) provides an orderly framework for planning and controlling the work to be performed in achieving the objectives of the Project, and for summarizing cost and schedule data. The Program WBS is contained in the Program Work Breakdown Structure Dictionary (DOE/RW-0325P). Level 0 represents the overall Program, Level 1 identifies the Project, Level 2 identifies the elements (MRS, Transportation, and Waste Acceptance), and Level 3 is a breakdown of the elements. Figure 2 presents the approved WBS.

3.5 ELEMENT INTERDEPENDENCIES

The elements have the following interdependencies:

3.5.1 Waste Acceptance-Transportation

- The Transportation system must provide an unloaded cask system for Waste Acceptance before DOE can take title to and accept the waste. The unloaded cask system is provided directly to the waste owner and includes the unloaded cask, the transporter for the cask, and the necessary ancillary equipment and special tools.

- Waste Acceptance must provide verification of the SNF description and issue an Authorization-to-Ship to the Transportation system before it can ship the waste from the owner's site to the DOE facility.

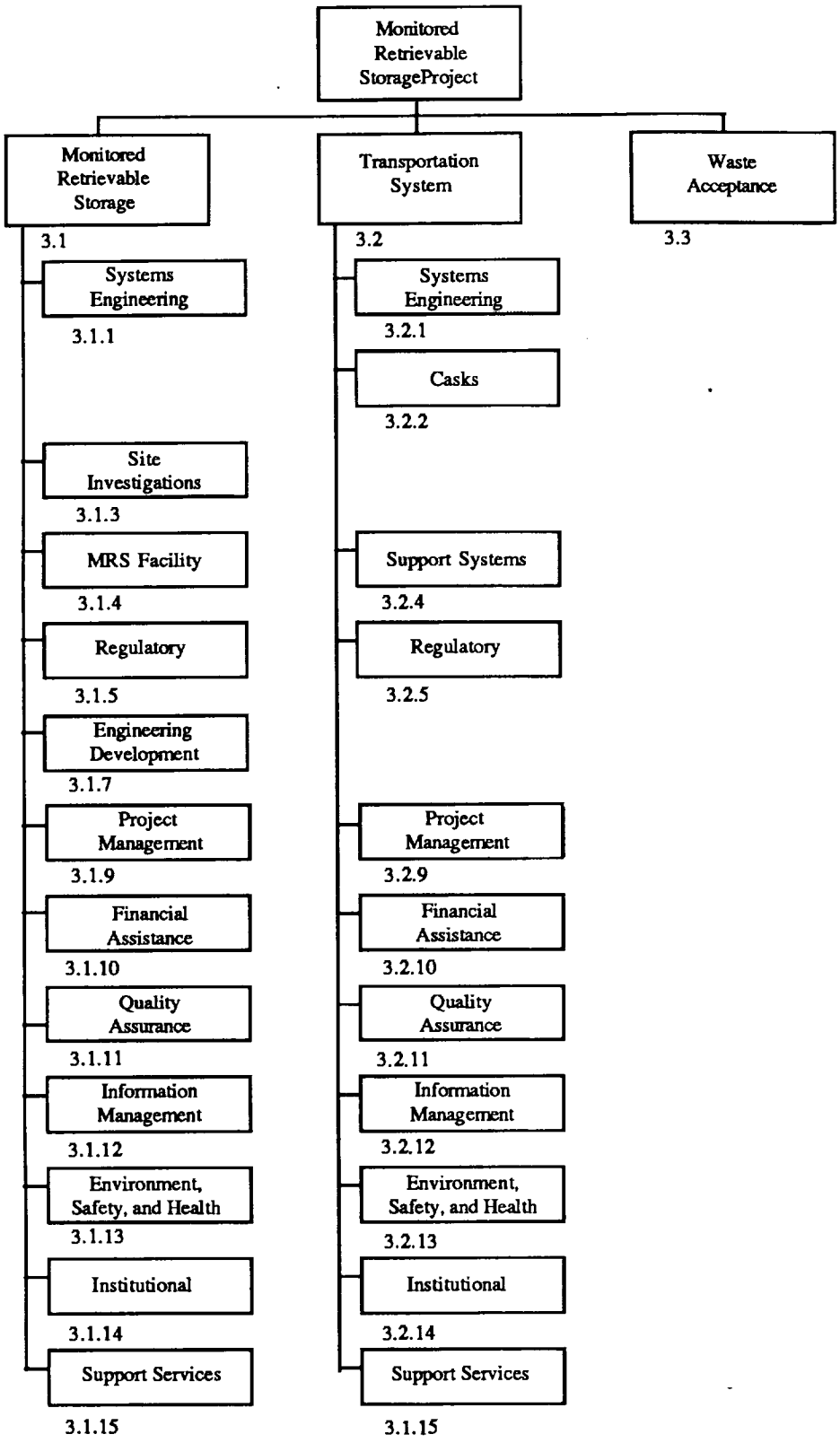

Figure 2. Work Breakdown Structure

- Waste Acceptance must provide the Acceptance Priority Ranking and the Annual Capacity Report and process Delivery Commitment Schedules, DCS Exchange Requests, and Final Delivery Schedules before proper and accurate near and long-term operations of Waste Acceptance, the Transportation system, and the MRS facility can be planned.

4. RISK ASSESSMENT

This section identifies technical, cost, and schedule risks, assessed levels of risks (high,moderate, low), a basis for the assessment, the identification of critical elements contributing to the risks, implications of the risks, activities planned to minimize the risks, and the stage at which the risks exists.

From a project management perspective, the MRS Project entails large uncertainties. These arise from contingent circumstances, including some introduced by the enabling legislation itself. External parties, such as the NRC and affected governments, have statutory rights and responsibilities that will have an impact on the success of the project. These rights and responsibilities have the potential for significantly impacting cost, schedule, and design. Other risks and uncertainties may become evident as the project matures. On a continuing basis, the Program and Project Managers will identify risks and develop corresponding contingency plans

4.1 TECHNICAL RISKS

4.1.1 MRS Facility

The designs being considered for the MRS are based largely on existing technology. For example, dry transfer of spent fuel has been done successfully at DOE facilities, is licensed at Ft. St. Vrain, and is currently used in the unloading facility at La Hague, France. The storage method(s) selected for the MRS will rely on previously licensed technology to the maximum extent practicable. By complying with the technical requirements and criteria provided by the NRC, the OCRWM will assure that the MRS is properly designed.

The interface between the transport casks and the MRS unloading port will require exchange of information to assure that the cask and the MRS facility mate properly. Cask vendors have the obligation to obtain both the 10 CFR 71 and 10 CFR 72 licenses for a transportable-storage cask, and the 10 CFR 71 license for a transportation cask, thus minimizing risk to the CRWMP. Cask certification is addressed in Section 4.1.4.

Risk Level. Low: MRS technologies under consideration are well developed. If the MRS facility incorporates use of robotics for fuel unloading, the technical risk will increase due to additional design complexity. If transportable storage casks are used, the risk will increase to moderate because of cask licensing issues.

4.1.2 Environmental

Environmental issues will be addressed in the EA and EIS for the MRS. An Environmental Monitoring and Mitigation Plan will be developed to formulate how the OCRWM will monitor potential impacts and implement mitigation should monitoring indicate that a potential, significant, adverse environmental impact might occur. Interrelated transportation topics include consideration of environmental impact from the transport of spent nuclear fuel within the MRS site region. These transportation environmental issues will be evaluated from a generic and route specific perspective and will be included as an integral part of the MRS EIS.

Risk Level. Low to moderate: The environmental consequences of operating an MRS facility which uses existing technology are expected to be small. Transportation of SNF has been accomplished with no danger to the environment to date. However, development and approval of the transportation portion of the EIS may become complicated by concerns of States adjacent to, or along the route to, the MRS.

4.1.3 Worker Safety and Health

A health and safety program will be implemented to assure that activities are carried out in accordance with Federal, State, and local laws and regulations, agreements, executive directives, consent decrees, and DOE Orders. A comprehensive safety and health self-assessment of operations, facilities, equipment, and personnel will be performed.

Risk Level. Low: The risk of a serious industrial accident to personnel during construction and operations is low. Nevertheless, safety and health require significant and continuing attention of management.

4.1.4 Transportation Cask Certification

The OCRWM has undertaken a major effort in developing a new generation of transportation casks. Up to the present time the from-reactor Phase 2 transportation cask systems have been the primary focus in the Cask Systems Development Program. The designs and fabricability of these transportation cask systems depend on technological developments and advances such as the utilization of credit for fissile material burn-up to achieve maximum capacity, and the fabrication of a polypropylene neutron shield and a copper-finned borated-concrete neutron/thermal shield. Since these types of design features have not been previously licensed by the NRC for transportation casks nor fabricated for use in transportation casks, the certification process may be long and rigorous and the fabricability uncertain.

Risk Level. Moderate: This long rigorous cask certification process significantly reduces the probability of cask availability for currently scheduled waste acceptance. Therefore, the OCRWM has implemented a complementary plan to acquire proven technology from-reactor transportation casks. The implementation of this complementary plan reduces the risk level to moderate. The risk level only reduces to moderate since these proven technology casks (1) have not been designed and also have to be certified by the NRC, or (2) currently existing cask systems may not be operable or available for use when required.

4.2 COST RISK

4.2.1 MRS Facility

The proposed facility interim cost baseline using a non-site specific design is provided in Appendix E. Any incorporation of robotics, multi-shift operations, or use of transportable storage casks will increase uncertainties in the cost.

OCRWM will use fixed price contracts with vendors for delivery of any dry storage systems to the MRS. The unknown costs associated with the Project, which include impact mitigation fees, consultation-and-cooperation agreements, and payments equal-to-taxes carry large uncertainties since they depend on circumstances outside control of DOE. Such costs will be determined when the negotiated agreement is approved by Congress. Costs could vary significantly depending upon the requirements stipulated by the host State or Indian Tribe. However, as these requirements can be negotiated, the likelihood of significant variations is expected to be moderate.

Risk Level. Moderate: The overall cost and schedule risks are considered moderate.

4.3 SCHEDULE RISKS

4.3.1 MRS Siting

The DOE prefers that the MRS facility be located at a host site under an agreement developed between the volunteer host and the Negotiator (on behalf of the U.S. Government), and approved by Congress. However, because there is no assurance that the Negotiator will be successful and because of the importance of an integrated MRS facility to the waste-management system, the DOE must be prepared to proceed with MRS siting. The OCRWM has prepared an MRS Facility contingency siting plan.

Risk Level. High: The Negotiator may fail to find a State or Indian Tribe willing to host the MRS facility. The OCRWM will monitor the actions of the Negotiator and, if necessary, recommend implementation of the contingency siting plan. The delays caused by implementation of this plan, and the more stringent requirements of the NWPAA will preclude start of scheduled operations.

4.3.2 MRS Facility - NRC Licensing/Regulatory

NRC review of the License Application and completion of the adjudicatory process is planned to take 12 months. The actual time required will depend upon the adequacy of the license application, the parties participating in the license process, and the time required to resolve issues raised by intervenors. The NRC, under the NWPA, as amended, has a three-year limitation to complete review of the license application.

Risk Level. Moderate: There is fairly good certainty that the licensing process will only take 12 months, based on preliminary discussions with the NRC staff, a review of previous licensing actions and durations for other Part 72 licenses, and on the DOE approach of utilizing pre-license submittals (to include an early SAR) that will allow early review of issues by the NRC.

4.3.3 MRS Outreach Efforts

Since State, Indian Tribe, and local governments, and the public are active participants in the program, there are risks that failure to maintain reasonable and meaningful public interactions will result in action, such as litigation, which will cause significant delays and increased costs.

OCRWM is committed to establishing public confidence in the program, and is taking steps to address a number of items in an effort to improve public interactions. The MRS Project funds socioeconomic monitoring, environmental monitoring, and institutional and outreach programs (MRS facility and Transportation) and will hold State, Tribal, and local government information exchanges to mitigate this risk and increase public confidence.

Risk Level. Moderate: The risks associated with unsatisfactory public interactions can be high, as has been demonstrated in DOE's efforts to site the MRS in Tennessee in 1987. The program will continue to work to improve the relations and reduce the risk of confrontations. Presently, the risks of significant delay due to this factor are considered moderate if DOE's reliance on the Negotiator to site the MRS results in a volunteer site. The degree of outreach schedule risk associated with the transport of SNF and/or HLW cannot be assessed at this time as the location of the MRS facility is unknown.

5. MANAGEMENT APPROACH

The management approach and structure for the MRS Project finds its basis in the Secretary's November 1989 "Report to Congress on Reassessment of the Civilian Radioactive Waste Management Program." In this report, the Secretary stressed the following items: direct line reporting of the Project Office to Headquarters; independent review by OCRWM management; consolidation of work performed by numerous contractors under the direction of an M&O; use of the Management Systems Improvement Strategy (MSIS); improvement of the Program Management System (PMS) Manual to incorporate quality assurance activities, systems engineering, functional analysis and configuration management; establishment of a QA program that meets NRC requirements; and establishment of technical, cost, and schedule baselines, and effective change control procedures.

In compliance with the Secretary's Report to Congress, the managerial responsibilities at the program level are outlined in both the PMS Manual and the OCRWM QAPD. At the project level the managerial functions are established by the Project Charter (attached as Appendix A), outlined in this Project Plan, and delineated in the Project Management Plan (PMP).

5.1 MRS PROJECT MANAGEMENT

The management structure of the current OCRWM organization is presented in Figure 3. The organization of the Office of Storage and Transportation is presented in Figure 4. Mr. R. A. Milner, the Associate Director for Storage and Transportation (ADST), is charged with the responsibility as the Project Manager for the MRS Project. The Project Manager reports directly to the Director, OCRWM. The Project Manager reviews, monitors and evaluates MRS project management and implementation. The Project Manager will approve or concur on licensing documents, the PMP, technical documents, agreements, and other major MRS project documents. Some documents will be approved by the OCRWM Director, or at a higher level. The selection of documents to be approved at each level will be based on the level assigned to documents by the official hierarchies in the PMS Manual and the PMP.

The Directors, Storage Division and Transportation and Logistics Division, are responsible to the Project Manager for management within the Project of the MRS facility and the Transportation and Waste Acceptance elements, respectively. A candidate organizational structure for the management of this Project following site selection is portrayed in Figure 5. Active participants and their roles are portrayed in Figure 6. Current contracts in support of this effort are identified in Appendix B.

5.2 MRS FACILITY SITE MANAGEMENT

The MRS Facility Site Office will be responsible for conducting the management activities and technical investigations necessary to complete facility design, construction, testing and operation of the MRS; managing the institutional program locally; providing the data for regulatory compliance; establishing and implementing QA activities on a project level; and assuring operation of the MRS in accordance with NRC, EPA, and other applicable regulations.

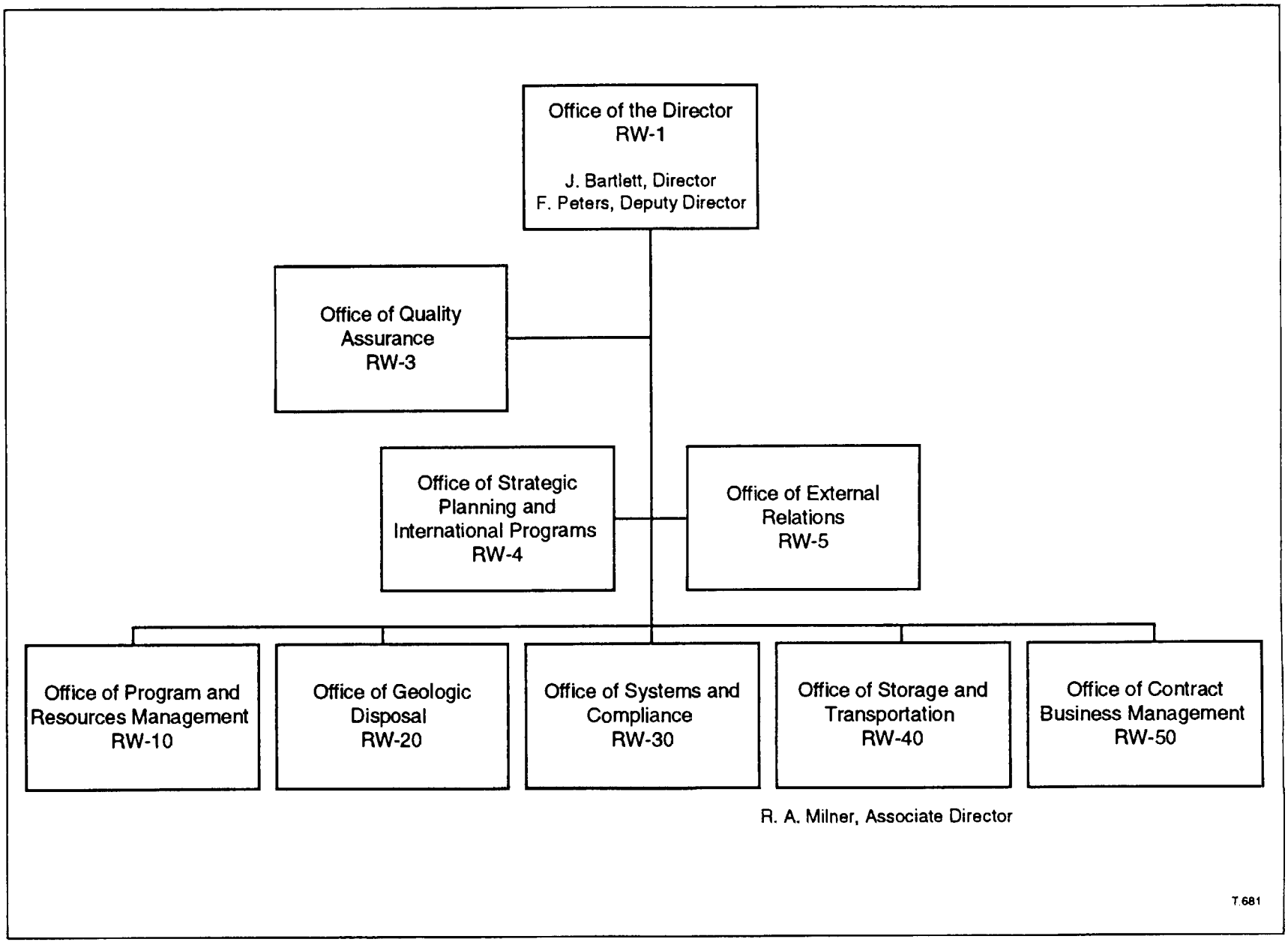

Figure 3. Office of Civilian Radioactive Waste Management Organization

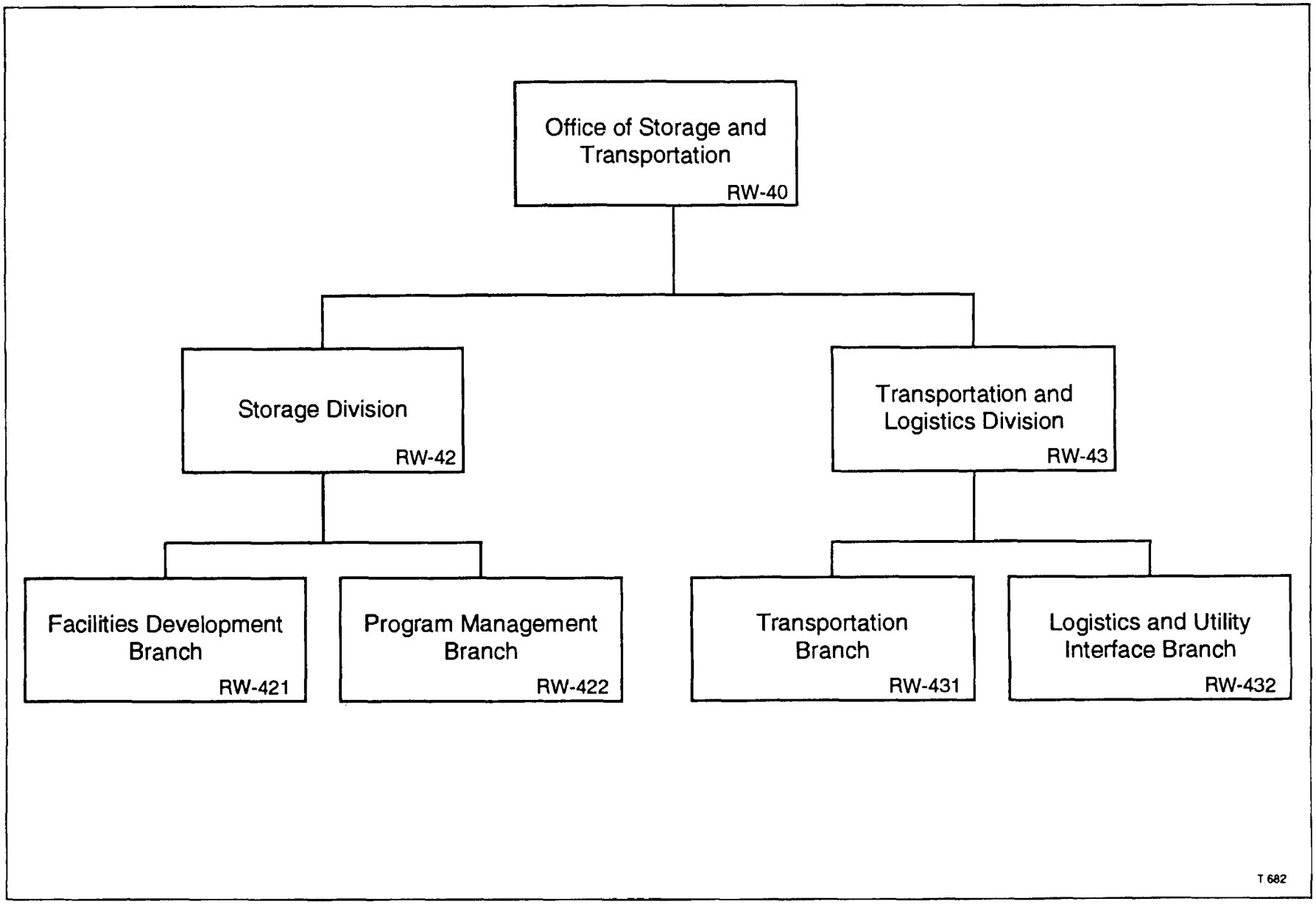

Figure 4. Organization at the Office of Storage and Transportation

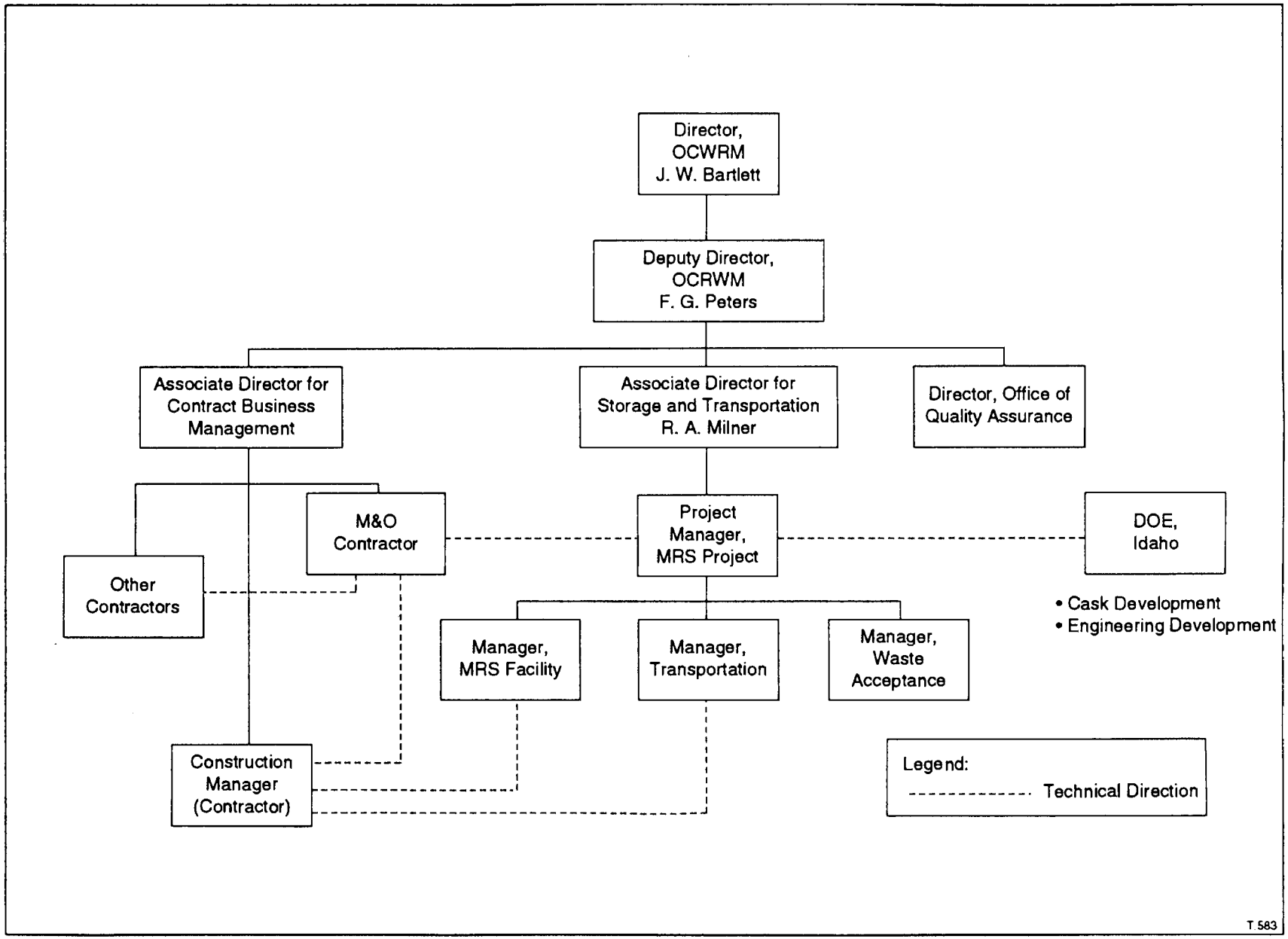

Figure 5. MRS Project Management Structure

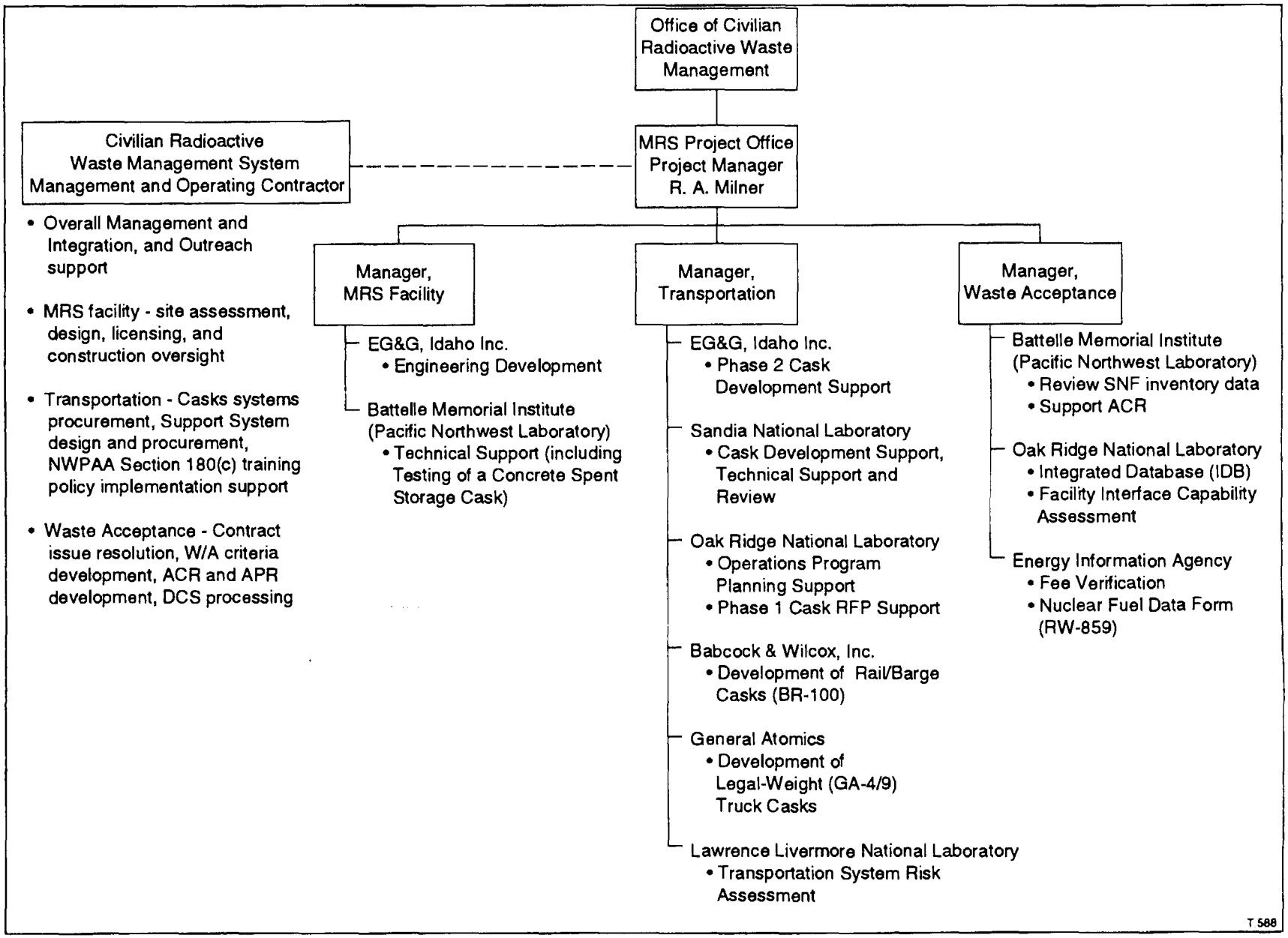

Figure 6. Roles of MRS Project Participants

An MRS Facility Site Manager will be appointed and the site office management structure will be implemented after the Negotiator submits the proposed agreement to Congress for approval. The site office will be established after the host agreement has been approved by Congress.

5.3 TRANSPORTATION MANAGEMENT

The Transportation manager will be responsible for the cask systems technology development and procurement, support system development, institutional activities, operational planning, and operations. The cask system development and procurement include developing and procuring transportation cask systems including cask-handling equipment, test equipment and associated hardware. Support system activities include planning the design and acquisition of support facilities and an operations control center. The operations responsibilities focus on the planning and conduct of activities necessary for operating the transportation system. The institutional activities include public information, outreach to the general public, policy and regulatory analysis, and interaction with local, regional, Tribal, and Federal government organizations.. Certification of new transportation cask system designs is the responsibility of the private industry contractors.

5.4 WASTE ACCEPTANCE MANAGEMENT

The Waste Acceptance manager will be responsible for conducting the management activities associated with the development and implementation of contracts with the owners and generators of commercial SNF and HLW (for future transfer of waste from defense sites and West Valley to the repository); collection of RW-859 data; assessment of the adequacy of the ongoing fee; the development of the Annual Capacity Report; the Acceptance Priority Ranking required by the Standard Contract; waste verification, inspection, and accountability; and logistics (operation and dispatching function between waste owners/waste acceptance/transportation).

5.5 RELATIONSHIP WITH THE M&O CONTRACTOR

TRW Inc. has been awarded a contract for the management and operation of the CRWMP. TRW is supported by nine subcontractors. Collectively, TRW and its teammates are identified as the CRWMS Management and Operating (M&O) contractor (CRWMS M&O). Specific duties associated with the M&O are delineated in the contract governing this relationship.

The M&O will be responsible for system design and analysis to ensure system optimization by defining and controlling the system elements and conducting work in a structured and systematic manner. As the integrating element, the M&O will coordinate and consolidate the effort of the various contractors involved as specifically directed by OCRWM. The M&O will assure that its efforts and the efforts of the subcontractors are supportive of the mission; manage the day-to-day operations to assure compatibility with the Project objectives; ensure that the design and development of system segments meet the technical, schedule, cost, safety, environmental, quality and interface requirements; meet the regulatory requirements of the NRC and EPA and any other applicable codes and regulations; ensure compliance with applicable Federal, State, Tribal and local regulations and laws; and remain consistent with DOE Orders. An important aspect of the M&O's activities is supporting OCRWM in its interaction with affected States and other affected parties to ensure that the required consultation and cooperation is achieved.

Once the MRS Facility Site Office has been established, it will assume the direction and oversight duties now performed by the Program Office in regard to the M&O. This will be similar to the management structure that now exists between the M&O and the Yucca Mountain Project Office. Contractual matters concerning the M&O will continue to be handled through Headquarters.

5.6 RELATIONSHIP WITH THE UTILITY INDUSTRY

In coordinating Waste Acceptance and Transportation, OCRWM representatives meet regularly with numerous organizations such as the Edison Electric Institute/Utility Nuclear Waste and Transportation program (EEI/UWASTE), the Nuclear Waste Technical Review Board (NWTRB), and other interested parties. These interactions include discussions of contractual related issues, frequent information exchanges, and periodic program reviews. Ensuring physical compatibility between MRS design and utilities' spent fuel storage systems, and evaluating criteria and priorities for waste acceptance are of central concern. Waste Acceptance has as its primary goal the coordination of spent fuel delivery from the utilities. As such, representatives are continually in association with the industry to develop procedures and establish schedules for acceptance at the utility sites.

5.7 PROJECT MANAGEMENT CONTROL SYSTEMS

The ADST will develop and implement an integrated project control system in accordance with the requirements and guidance provided in the PMS Manual. Monthly progress/status reports from contractors to the subproject managers and from these managers to the ADST are required.

Project management control will be achieved through detailed planning, regular reporting, performance evaluation, information management, and timely and appropriate management actions. The framework for these activities will be the MRS Project WBS. Reporting against the cost and schedule (including milestones) baselines will be at WBS Level 3.

The technical, cost, and schedule baselines delineated in Appendix D are established to define criteria and objectives against which Project performance and progress can be measured. Reporting and performance measurements will be tied to baselines. When potential impacts on the baselines are detected, a corrective action process will be initiated to remove or mitigate the problem. Alternatively, if the problem cannot be removed, the baseline may be modified to the extent necessary. Any changes in the baselines can be affected only through a formal change control procedure that involves a systematic review by the appropriate level of management to ensure that primary and secondary effects of proposed changes are identified and weighed in the decision making process.

To carry out the program of baseline control, OCRWM has established change control boards (CCBs) at the Program and Project levels, with a system of interlocking memberships to control the initial issuance and changes to technical, cost and schedule baselines and other controlled documents. The OCRWM Program Change Control Procedure (PCCP) and the MRS Project Configuration Management Plan, provide criteria for establishment and operation of the Program CCB and the MRS Project CCB and the M&O contractor CCB, respectively. Reference should

be made to Appendix D for a listing of the baselines at Levels 0, 1, and 2, and for a listing of the change control thresholds established for these baselines.

Configuration control is maintained at both the Program and Project level through the establishment of configuration change control procedures. The OCRWM Configuration Management Policy is found in the OCRWM Baseline Management Plan. Project level configuration management shall be initiated when the SAR design is started and shall be in compliance with Chapter III, Part C, of DOE Order 4700.1.

5.7.1 Management Information

Project information and documentation associated with QA processes will be managed within the DOE in accordance with QAAP 6.1 "Document Control," QAAP 17.1 "QA Records Management," and ILP 12.17.01 "Quality Records Center." The Regulatory Tracking System will be used to track commitments and resolutions between the DOE and the NRC. The OCRWM will follow applicable DOE Order 4700.1 requirements for reporting, including but not limited to: Project Status Reports, Cost Status Reports, Construction Completion Reports, Quarterly Summary Reports, and Management and Construction Manpower Reports. Routine Energy Systems Acquisition Advisory Board (ESAAB) reporting will be initiated once the KD-1 milestone has been completed. Annual Energy Systems Acquisition Reviews (ESARs) will be required in those years when a KD ESAAB presentation does not occur. Each annual ESAR will focus on the detailed plans for the coming year and will be preceded by a pre-ESAR staff review.

5.7.2 Baseline and Other Document Control

The MRS Project has been designated as an MSA. MRS Project management will establish and follow controls that are consistent with MSA reporting requirements as identified in DOE Order 4700.1. These controls include the establishment of technical, cost, and schedule baselines at the Acquisition Executive (AE) level, establishment of predetermined thresholds for AE involvement if variances are exceeded, identification of ESAAB Key Decision points, and plans for routine reporting to the ESAAB. These baselines and thresholds are contained in Appendix D.

6. ACQUISITION STRATEGY

The Advance Acquisition or Assistance Plan prepared by the Project Manager as an annex to the PMP will describe the contractual means by which the MRS acquisition will be accomplished. Acquisition policy will encourage competition; procure services, equipments, and facilities commercially; delegate coordination to a single (M&O) contractor; and use multi-phase contracts where advantageous. Existing contracts are identified in Appendix B. All acquisition will be in compliance with DOE procurement regulations.

The ADST will prepare an annual procurement plan to provide input to the OCRWM annual procurement plan prepared by the Director of the Contract Management Division. Most procurement will be subcontracted through prime contractors who will conduct work under the direction of the MRS Project Manager. Subcontractor management is carried out in accordance with procurement regulations and will be described in the PMP. Field procurement will be conducted under the joint cognizance of the Site Manager and the contracting officer. Field procurement whose total estimated value exceeds $10 million (Source Evaluation Board level) will be concurred in by the cognizant OCRWM Associate Director and, in all cases, the Associate Director (AD) for Contract and Business Management.

The acquisition strategy for the MRS facility involves solicitation of bids from qualified vendors to provide modular storage units at a fixed price. Any land acquisition or financial assistance provided under this project will be dependent upon the agreement worked out between the host government and the Negotiator. The DOE will request appropriate congressional funding to support any financial commitments agreed to in the negotiated agreement. The M&O will be responsible for management of any subcontractors that might be used during construction and for procurement of long lead items and construction-related materials.

Acquisition of the Transportation System is addressed in Section 3.2.5. No acquisition requirement is presently identified for Waste Acceptance.

7. PROJECT SCHEDULE

The Project schedule baseline is included in MRS Project Cost and Schedule Baseline (TBD). The Project Level 2 schedule baseline is included in Appendix D.

8. RESOURCES PLAN

The resources plan for the MRS Project through FY 1999 is shown in Appendix E. FY 1988 through FY 1991 data reflect actual costs from the enactment of the amendments to the NWPA. The FY 1992 data reflect the congressional appropriation. The FY 1993 data reflect the Congressional request. The FY 1994 through FY 1998 data reflect the FY 1994 IRB request. The FY 1999 data reflect the funds required in that year through July when construction of the MRS facility should be complete. Operating expense, construction and capital equipment funds are integrated into the WBS element breakout as well as shown separately. The Total Project Cost (TPC) and Total Estimated Cost (TEC) are shown in Table D-1 in Appendix D.

9. CONTROLLED ITEMS

The controlled items are the hierarchy of technical, cost, and schedule baselines summarized in the Summary of Baseline Information table in Appendix D. The baseline change control thresholds related to this hierarchy of baselines are included in the Summary of Change Control Thresholds table in Appendix D. These baselines are controlled by the Project, Program, and ESAAB Change Control Boards.

10. SCHEDULED DECISION POINTS

ESAAB approval is required for the MRS Project key decisions shown in the Summary of Cost and Schedule Baseline Information table in Appendix D.

REFERENCES

DOE (U.S. Department of Energy) Order 4700.1, Project Management System, Washington, D.C., March 1987.

DOE (U.S. Department of Energy), Secretary of Energy Notice (SEN) 27-90, Strengthening the DOE Project Management System, Washington, D.C., August 1990.

DOE (U.S. Department of Energy) Notice 4700.4A, Baseline Change Control Process at the Executive Level, Washington, D.C., October 1991

DOE/RW (U.S. Department of Energy/Office of Civilian Radioactive Waste Management), Program Management System Manual, DOE/RW-0043, Revision 4, Washington, D.C., July 1991.

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DOE/RW (U.S. Department of Energy/Office of Civilian Radioactive Waste Management), Program Work Breakdown Structure Dictionary, Revision 0, DOE/RW-0325P, Washington, D.C., February 1992.

DOE/RW (U.S. Department of Energy/Office of Civilian Radioactive Waste Management), Physical System Requirements - Transport Waste, DOE/RW-0352, Washington, D.C., April 1992.

Code of Federal Regulations, Title 10, Energy, Part 71 (10 CFR 71), Packaging and Transportation of Radioactive Material, Office of the Federal Register, National Archives and Records Administration, Washington, D.C., January 1991.

Code of Federal Regulations, Title 10, Energy, Part 72 (10 CFR 72), Licensing Requirements for the Independent Storage of Spent Nuclear Fuel and High-Level Radioactive Waste, Office of the Federal Register, National Archives and Records Administration, Washington, D.C., January 1991.

Code of Federal Regulations, Title 10, Energy, Part 73 (10 CFR 73), Physical Protection of Plants and Materials, Office of the Federal Register, National Archives and Records Administration, Washington, D.C., January 1991.

Code of Federal Regulations, Title 10, Energy, Part 961 (10 CFR 961), Standard Contract for Disposal of Spent Nuclear Fuel and/or High-Level Radioactive Waste, Office of the Federal Register, National Archives and Records Administration, Washington, D.C., January 1988.

Nuclear Waste Policy Act of 1982, Public Law 97-425, 42 USC 10101-10226, Washington, D.C., January 1983.

Nuclear Waste Policy Amendments Act of 1987, Public Law 100-203, Washington, D.C., December 1987.

APPENDIX A

CHARTER FOR THE

MONITORED RETRIEVABLE STORAGE PROJECT

CHARTER FOR THE MONITORED RETRIEVABLE STORAGE PROJECT

INTRODUCTION

The purpose of the Project Charter is to clearly delineate management responsibility, authority, and accountability for the Project Office. It establishes the operational management relationships between the Office of Civilian Radioactive Waste Management (OCRWM) and the Monitored Retrievable Storage (MRS) Project Office. The Project Charter is based upon the requirements and guidance provided in DOE Order 4700.1.

MANAGING ORGANIZATION

Mr. R. Milner, the Associate Director for Storage and Transportation (ADST), is designated as the Project Manager for the MRS Project. The Project Manager reports directly to the Director, OCRWM. The Project Manager reviews, monitors and evaluates MRS Project management and implementation. The Project Manager will approve or concur on licensing documents, the Project Management Plan (PMP), technical documents, agreements, and other major MRS Project documents. Some documents will be approved by the OCRWM Director, or at a higher level. The selection of documents to be approved at each level will be based on the level assigned to documents by the official hierarchies in the Program Management System (PMS) Manual and the PMP.

The Directors, Storage Division, and Transportation and Logistics Division, are responsible to the Project Manager for management within the Project of the MRS facility and the Transportation and Waste Acceptance elements, respectively.

Once a site for the MRS is designated, the Director, Storage Division will become the MRS Facility Site Manager.

LOCATION OF THE PROJECT OFFICE

The MRS Project Office will be located at OCRWM Headquarters, Forrestal Building, Washington, D.C. An MRS Facility Site Office will be opened in the vicinity of the proposed site after the host agreement has been approved by Congress.

PARTICIPATING ORGANIZATIONS

Organizations that will participate in the MRS Project activities include:

- OCRWM, which provides program planning, direction and control, and interagency interface
- Other DOE offices supporting OCRWM
- MRS Project Office
- Select DOE Field Offices and national laboratories
- Host State, Indian Tribe and local governments
- Contractors (including the M&O) under the direction and control of OCRWM
- Contractors under the direction and control of the Project Office
- Federal agencies external to DOE.

The Project Office manages some of the major project participants and other participants, including subcontractors, suppliers, and consultants, as identified in Figure 4. Major project participants include scientific and technical organizations, e.g., national laboratories, cooperating government agencies, and engineering, design and construction contractors. The organizations, roles, and responsibilities of the MRS Project participants shall be described in the PMP.

The host government for the MRS facility will be involved in the management structure in a pre-decisional manner. They will be involved in the selection of the storage technology(ies) utilized at the MRS facility, for oversight during construction, in management during operation of the facility, and finally in determining how the facility will be decommissioned and how the land is reclaimed.

The Project Office has defined interface responsibilities with other Departmental elements and interacts with several external organizations. Departmental interfaces exist with the Offices of the Inspector General, General Counsel, Environmental Restoration and Waste Management, and Environment, Safety, and Health concerning matters related respectively to siting, accountability, legal positions, defense waste, and environmental concerns.

The primary external organizations with which the Project Office interacts are the Office of the Nuclear Waste Negotiator, NRC, the Nuclear Waste Technical Review Board (NWTRB), and the Department of Transportation. Interactions with the Negotiator will be for the purposes of assistance in the process of site identification and preparation of an environmental assessment of any site at the negotiator's request. NRC interactions deal with issues relevant to MRS facility licensing and are governed by an Interagency Agreement. NWTRB interactions involve providing the Board with such records, files, etc., that may be necessary to respond to any

inquiry of the Board. Department of Transportation interactions deal with issues relevant to the transportation of nuclear waste.

Interactions with external organizations such as the National Academy of Sciences, EPA, General Accounting Office, Edison Electric Institute, Electric Power Research Institute, Department of the Interior, Fish and Wildlife Service, National Park Service, Bureau of Land Management, and governing bodies of affected States, Indian Tribes, and counties generally involve furnishing procedures. MRS Project interactions with these organizations are informal and will not establish policy or make program commitments without the concurrence of the cognizant OCRWM Associate Director/Office Director. All interactions will be documented as appropriate through meeting minutes or memos and notification provided to the affected cognizant OCRWM Associate Director/Office Director. The OCRWM Director is the point of contact for any organization not identified herein.

Additional organizations, including non-federal entities and their roles in relation to the program and project, are presented in the PMS Manual.

AUTHORITY AND RESPONSIBILITIES OF THE PROJECT MANAGER

The responsibility for managing the acceptance, transportation, and storage of spent nuclear fuel and high-level radioactive waste is assigned to the OCRWM by the Nuclear Waste Policy Act, as amended. The MRS Project Manager has the authority to carry out the responsibilities contained in this Project Charter and the associated MRS Project Plan.

The Project Manager directs the day-to-day management of the MRS project through his two element managers in accordance with the direction and guidance provided by the Director, OCRWM. Additional direction and guidance is provided by the PMS Manual; subtier project-level documents; DOE Orders; and regulations, codes and other requirements referenced in the PMS Manual.

The Project Manager is authorized to direct project participants to perform work in accordance with the approved Project Plan; project budget; program milestones; program technical and quality objectives; program requirements; and program-level contractual type documents, e.g., Memoranda of Understanding, and letters of agreement. The Project Manager is authorized to manage the work of the project in accordance with approved plans, requirement documents, and baselines which are to be prepared by the Project Manager and approved by the Director, OCRWM.

In carrying out these general responsibilities, in accordance with his designated authority, the Project Manager shall manage the MRS Project in accordance with DOE Order 4700.1 and will:

- Prepare and approve key project documents including the PMP; MRS Systems Engineering Management Plan (SEMP); documents listed in the MRS PMP document hierarchy; and other management documents as specified in the PMS Manual, Appendix F.

- Establish quality assurance, environmental, and safety programs in accordance with requirements and guidelines provided by OCRWM and in compliance with Federal, State and local laws; Federal regulation; and DOE Orders.

- Develop and execute the MRS Project Budget in accordance with DOE and OCRWM guidance.

- Institute project-level controls for quality, cost, schedule, and technical activities which comply with Program requirements.

- Develop procedures for conducting MRS Project activities and ensure that MRS participants have satisfactory documents to control MRS Project-related work.

- Oversee work being performed by the M&O within the Project Manager's functional area of responsibility.

- Direct, manage and measure the performance of the MRS Project and participant organizations in the creation of designs and implementation of the MRS Project plans.

- Provide for corrective action to correct deficiencies and improve performance when required.

- Provide for technical and management reviews and furnish progress reports and other required reports to OCRWM in support of document preparation and interagency requests. Communicate with other OCRWM on all changes to schedule, budget, and planning scope.

- Represent the OCRWM and the project in communications at the State and local levels with governmental representatives, the public, and representatives of affected Indian Tribes.

- Initiate actions to award grants to eligible State, Tribal, and local jurisdictions, as prescribed by the Nuclear Waste Policy Act (NWPA), in accordance with DOE regulations and Program Office guidance.

- Initiate procurement actions, in accordance with Federal and DOE procurement regulation, for contracts and subcontracts required to support MRS Project activities. These include contracts for consulting services, as well as for materials, equipment, and engineering/consulting work.

- Participate within OCRWM, as required, in the establishment of policy and guidelines for the management of the MRS Project. Interact with the NRC, the EPA, and other government agencies under direction of the OCRWM.

- Provide for land acquisition and the required permits.

- Prepare the license application (LA) and environmental impact statement (EIS) for the MRS facility.

- Develop, issue, and implement institutional and outreach plans as directed and approved by the Program Office.

- Provide configuration management system to establish, document, and control the MRS baseline. Institute a configuration control system and program of configuration audits to ensure compliance with the system.

- Oversee design review, construction review, and construction management activities for the MRS facility and the transportation support system facilities.

- Prepare and execute test plans to assure full technical performance capabilities of the MRS facility and the transportation casks. Design verification testing of transportation casks will be performed in an OCRWM-approved independent testing laboratory.

- Initiate acceptance testing (nondestructive test) on prototype transportation casks after fabrication.

PROJECT REPORTING

The direct-line reporting of the Project Manager to the Director, OCRWM is established. Direct-line reporting is designed to bring together authority and responsibility and facilitate coordination and communication.

The Project Manager shall submit written quarterly progress reports to the Director, OCRWM, which include cost and schedule performance data. These reports shall be consistent with the requirements and guidelines for project reporting contained in DOE Order 4700.1

SPECIAL INSTRUCTIONS, DELEGATION OF AUTHORITY

The Project Manager is instructed to manage the activities of the project which are to be performed by the contractors, and cooperating government agencies, in accordance with policies and procedures established in Memoranda of Agreement (MOA) or other contractual documents which have been approved by participating agencies. These documents shall be maintained by the MRS Project Office as the basis for the working arrangements among the parties.

Specific assignment of responsibilities and delegation of authority to the two element managers will be delineated in the Project Management Plan.

MOAs will be negotiated to describe the working relationship between the Project and any area DOE Field Office. The MOAs will include the Project Manager's specific responsibility for concurrence and coordination of activities with the regional Field Offices.

Specific duties associated with the M&O are delineated in the contract governing this relationship. The M&O will be responsible for management of any subcontractors that may be used during construction, and for procurement of long lead items and construction-related materials. The M&O will receive direction and oversight on MRS Project related activities from the Project Office. The M&O will provide technical direction to other project participants in accordance with the contract and MOA between the M&O and the participating organization.

A Memorandum of Understanding (MOU) will be negotiated to cover the interactions between the DOE and the NRC.

Authority for the direction and approval of project activities is granted to the Project Manager within the limits and guidelines provided in the PMS Manual and in accordance with the approved budget.

REQUIREMENTS FOR MRS FACILITY TRANSITION PLAN

The NWPA, as amended, addresses site identification, development, licensing, construction, operation, and ultimately, the closure and decommissioning of an MRS facility. The DOE has overall program responsibility and will assign to the Project Office those activities associated with development of the transitional plan to identify and assign actions necessary to commence operations.

APPENDIX B

CONTRACTOR MATRIX

Contractor Matrix

	Organization	Function	Responsible Manager	Contract Number Type/Period
OCRWM WIDE PROGRAM MANAGEMENT CONTRACTS				
1.	TRW (M&O Contractor)	Overall Contractor for Management and Operating	T. Wood	DE-AC01-91RW00134 CPFF/30 Sep 92 CPAF/30 Sep 01
2.	Martin Marietta Energy Systems, Inc. (Oak Ridge National Laboratory)	• Waste Systems Data & Development Program • Transportation Operations Program Support • Operations Planning • Integrated Data Base (IDB) • Facility Interface Capability Assessment	R. Hultgren	DE-AC05-84OR21400 CPAF/31 Mar 96
3.	Battelle Memorial Institute (Pacific Northwest Laboratories)	• Waste System Integration Support (including Performance Testing of a Concrete Spent Storage Cask) • Review Data of Spent Nuclear Fuel Inventory • Support the Annual Capacity Report	D. Langstaff	DE-AC06-76RL01830 CPFF/30 Sep 92

Contractor Matrix (Continued)

	Organization	Function	Responsible Manager	Contract Number Type/Period
TRANSPORTATION-SPECIFIC CONTRACTS				
1.	EG&G, Idaho, Inc. (Idaho National Engineering Laboratories)	Cask Development Support	M. Fisher	DE-AC07-76ID01570 CPAF/30 Sep 94
2.	AT&T Technologies, Inc. (Sandia National Labs)	Cask Development Support, Technical Support, & Review	G. Phillips/M. Fisher	DE-AC04-76DP00789 No profit, no loss/30 Sep 93
3.	General Atomics	Development of Legal-Weight Truck Casks (GA-4 & GA-9)	M. Fisher	DE-AC07-88ID12698 CPFF/31 Dec 96
4.	Babcock & Wilcox	Development of Rail/Barge Casks (BR-100)	M. Fisher	DE-AC07-88ID12701 CPFF/01 Jul 95
ENGINEERING DEVELOPMENT CONTRACTS				
1.	Halliburton NUS	Prototypical Fuel Rod Consolidation Demonstration	M. Fisher	DE-AC07-86ID12651 FFP/23 Jun 92
2.	EG&G, Idaho, Inc. (Idaho National Engineering Laboratories)	• Monitoring of Phase III Dry Rod Consolidation • Provide Mockup Fuel Assemblies for System Test • Storage & Monitoring of Fuel, Dry Storage Casks	M. Bonkoski	DE-AC07-76ID1570 CPAF/30 Sep 94

APPENDIX C

ACRONYMS

ACRONYMS

ACR	Annual Capacity Report
AD	Associate Director
ADST	Associate Director for Storage and Transportation
AE	Acquisition Executive
APR	Acceptance Priority Ranking
BWR	Boiling Water Reactor
CCB	Change Control Board
CDR	Conceptual Design Report
CFR	Code of Federal Regulations
CMF	Cask Maintenance Facility
CoC	Certificate of Compliance
CRWM	Civilian Radioactive Waste Management
CRWMS	Civilian Radioactive Waste Management System
CRWMP	Civilian Radioactive Waste Management Program
DCS	Delivery Commitment Schedule
DOE	Department of Energy
DOT	Department of Transportation
EA	Environmental Assessment
EEI/UWASTE	Edison Electric Institute/Utility Nuclear Waste and Transportation
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
ESAAB	Energy Systems Acquisition Advisory Board
FDS	Final Delivery Schedule
FPC	Final Procurement and Construction
HLW	High-Level Waste
IAEA	International Atomic Energy Agency
KD	Key Decision
LA	License Application
M&O	Management and Operating Contractor
MRS	Monitored Retrievable Storage
MSA	Major System Acquisition
MSIS	Management Systems Improvement Strategy
MTU	Metric Tons of Uranium
NRC	Nuclear Regulatory Commission
NEPA	National Environmental Policy Act of 1969
NWF	Nuclear Waste Fund
NWPA	Nuclear Waste Policy Act of 1982
NWPAA	Nuclear Waste Policy Amendments Act of 1987
NWTRB	Nuclear Waste Technical Review Board
OCRWM	Office of Civilian Radioactive Waste Management
PCCP	Program Change Control Procedure
PCSB	Program Cost and Schedule Baseline

ACRONYMS (Continued)

PMP	Project Management Plan
PMS	Program Management System
PWR	Pressurized Water Reactor
QA	Quality Assurance
QAAP	QA Administrative Procedures
QAPD	QA Program Description
QARD	QA Requirements Document
SAR	Safety Analysis Report
SARP	Safety Analysis Report for Packaging
SEN	Secretary of Energy Notice
SNF	Spent Nuclear Fuel
TEC	Total Estimated Costs
TPC	Total Project Costs
USCEA	U.S. Council on Energy Awareness
WBS	Work Breakdown Structure

APPENDIX D

TECHNICAL, COST, AND SCHEDULE BASELINE AND CHANGE CONTROL THRESHOLDS

Table D-1. Summary of Baseline Information

Baseline	Acquisition Executive (Level 0)	Program Secretarial (Level 1)	Project (Level 2)
Technical	• Accept spent fuel only • Limit storage to 10,000 MTU prior to repository start • Limit storage to 15,000 MTU after repository start • Substantially reduce need for additional at reactor storage • Operate at 3,000 MTU maximum throughput • Procure From-Reactor transportation casks • Establish contracts with owners and generators • Technology (TBD) • Site Location (TBD) • Construct MRS Facility	• Physical System Requirements - Overall System, DOE/RW-0334P Rev. 0, 01/92 • Physical System Requirements - Store Waste, DOE/RW-0319 Rev. 0, 01/92 • Physical System Requirements - Transport Waste, DOE/RW-0352 Rev. 0, 04/92 • Physical System Requirements - Accept Waste, Rev. 0 (to be issued)	• Civilian Radioactive Waste Management System Requirements (Preliminary Draft) • Monitored Retrievable Storage System Requirements (Preliminary Draft) • Transportation System Requirements (TBD) • Waste Acceptance System Requirements (TBD) • Monitored Retrievable Storage - Transportation Interface Specification (Preliminary Draft) • Waste Acceptance - Monitored Retrieval Storage Interface Specification (Preliminary Draft) • Waste Acceptance - Transportation Interface Specification (TBD) • Mined Geologic Disposal System - Transportation Interface Specification (TBD) • Mined Geologic Disposal System - MRS Interface Specification (Preliminary Draft) • Waste Acceptance - Mined Geologic Disposal System Interface Specification (TBD)

Table D-1. Summary of Baseline Information (Continued)

Baseline	Acquisition Executive (Level 0)		Program Secretarial (Level 1)	Project (Level 2)
Schedule	Milestone	Schedule Date	Reference: Program Cost and Schedule Baseline, DOE/RW 0253 Rev.3, XX/92	Reference MRS Project Cost and Schedule Baseline (TBD)
	• Start MRS Facility Safety Analysis Report (SAR) Design (KD-1A)	10/30/92		
	• Complete Environmental Assessments for Site(s)	06/30/93		
	• Award contracts for Existing Technology Cask Acquisition (KD-1B)	06/30/93		
	• Congress Enacts Agreement	09/10/93		
	• Start MRS Facility Final Procurement & Construction (FP&C) Design (KD-2)	09/30/94		
	• Energy System Acquisition Review (ESAR)	06/30/95		
	• Submit MRS License Application to the NRC	09/29/95		
	• Start MRS Facility Site Preparation (KD-3A)	07/31/96		
	• Start Fabrication of GA-4/GA-9 Legal Weight Truck (LWT) Casks for Fleet (KD-3B)	09/30/96		
	• Start Fabrication of BR-100 Rail/Barge casks for Fleet (KD-3C)	03/31/97		
	• Start Spent Fuel receipt at MRS Facility (KD-4A)	01/30/98		
	• Start Operations at Completed MRS Facility (KD-4B)	07/30/99		
Cost	TPC = $1,009M TECC = $627M		See Cost Baseline, Table D-4	Cost Baseline, Table D-4

Table D-2. Summary of Change Control Thresholds

Baseline	Acquisition Executive (Level 0)	Program Secretarial (Level 1)	Project (Level 2)
Technical	All changes impacting Level 0 scope	All changes impacting Level 1 scope	All changes impacting Level 2 scope
Schedule	≥ 6 months	≥ 3 months	≥ 3 months
Cost	• ≥ $50 M but no impact on TPC or scope • Change proposal submitted to PR-1 for approval	≥ $25 M (WBS Level 2)	≥ $15 M (WBS Level 3)
	• ≥ $50 M with impact on TPC or scope • Change proposal submitted to ESAAB BCCB for approval		≥ $1 M (WBS Level 4, FY baseline)

REFERENCE

Level 0: DOE Notice 4700.4A
Level 1: Program Cost and Schedule Baseline, DOE/RW-0253, Rev. 3, xx/92
Level 2: MRS Project Cost and Schedule Baseline TBD

Table D-3. MRS Project Level-2 Schedule Baseline

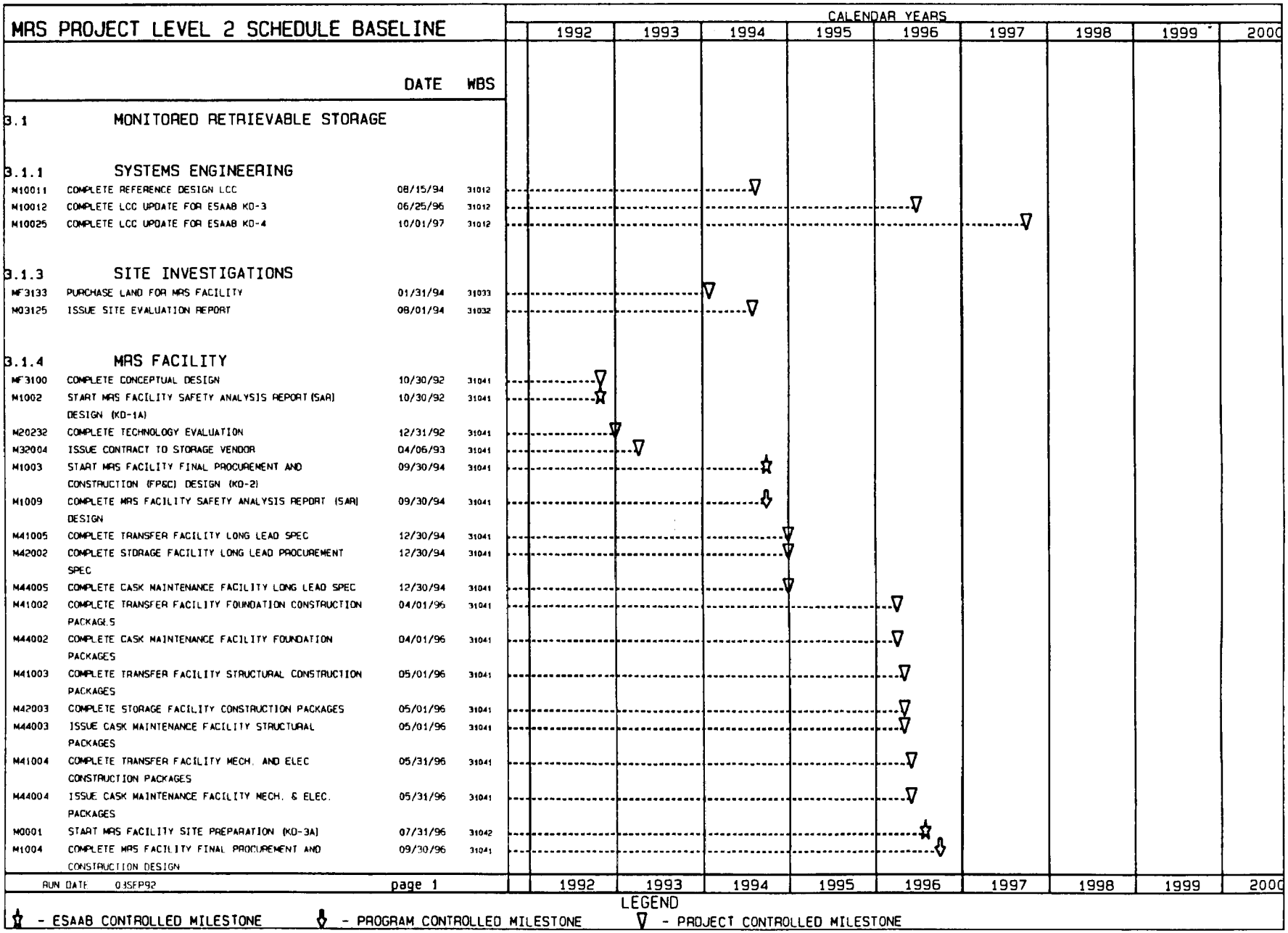

Table D-3. MRS Project Level-2 Schedule Baseline (Continued)

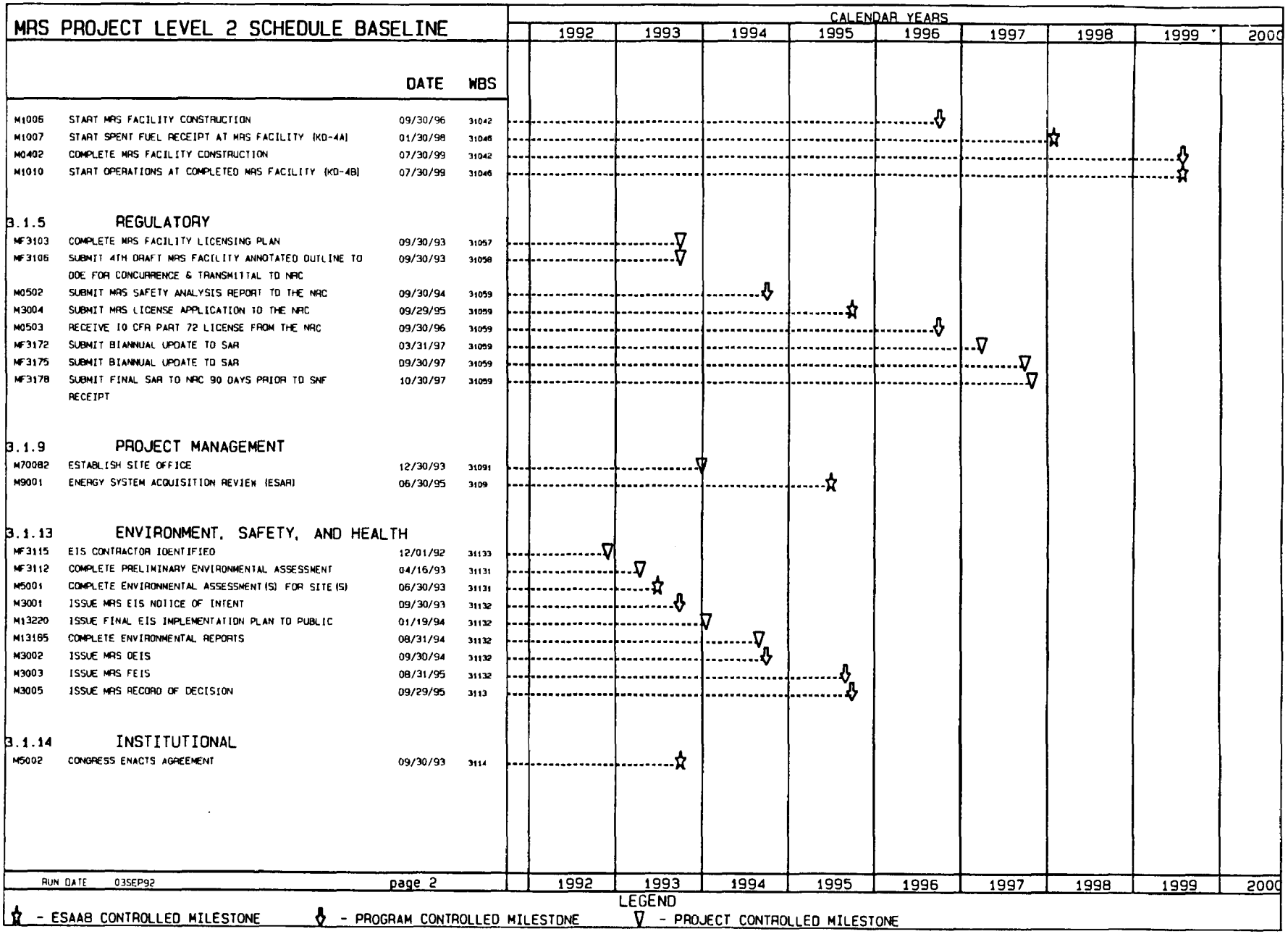

Table D-3. MRS Project Level-2 Schedule Baseline (Continued)

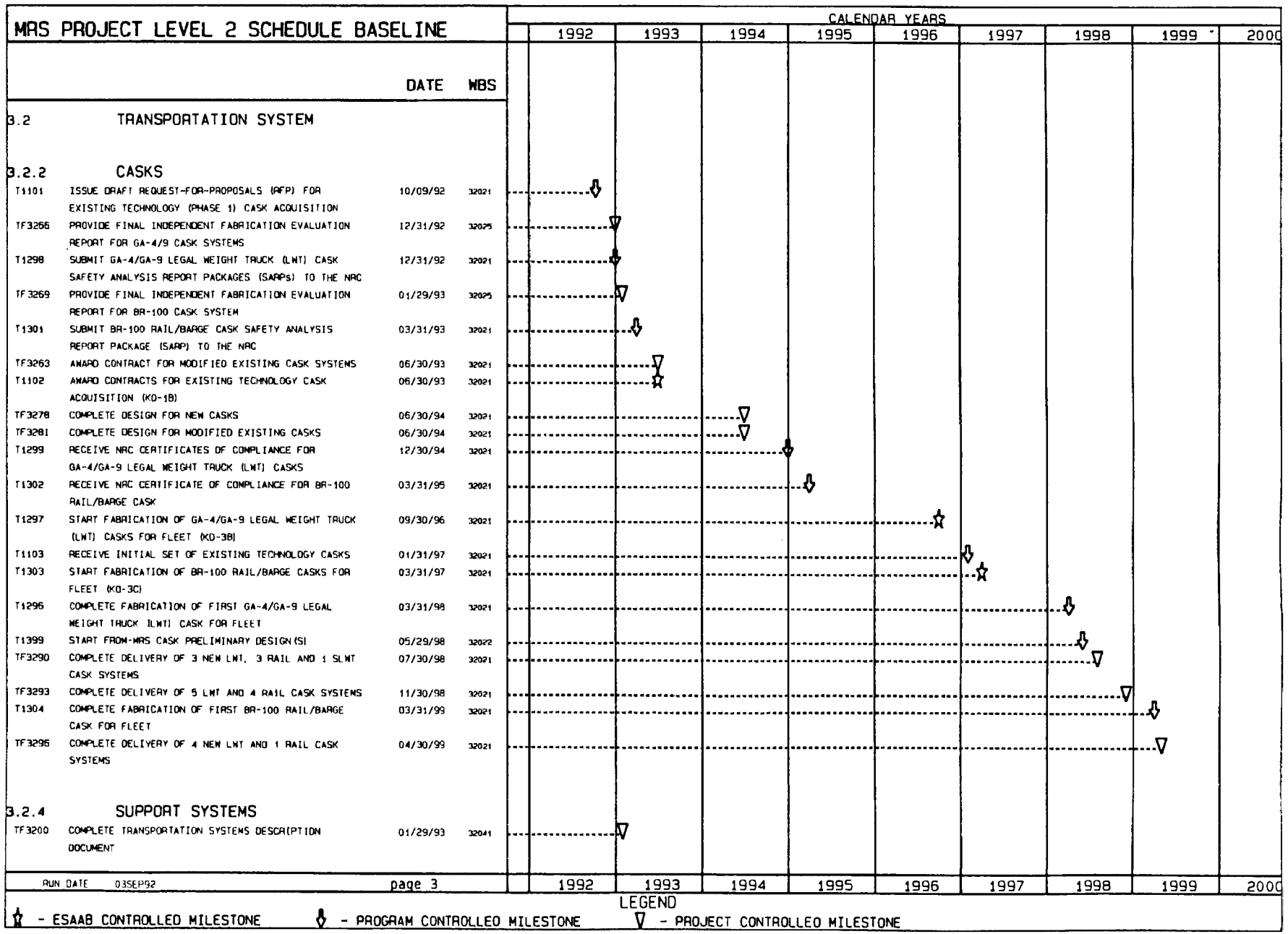

Table D-3. MRS Project Level-2 Schedule Baseline (Continued)

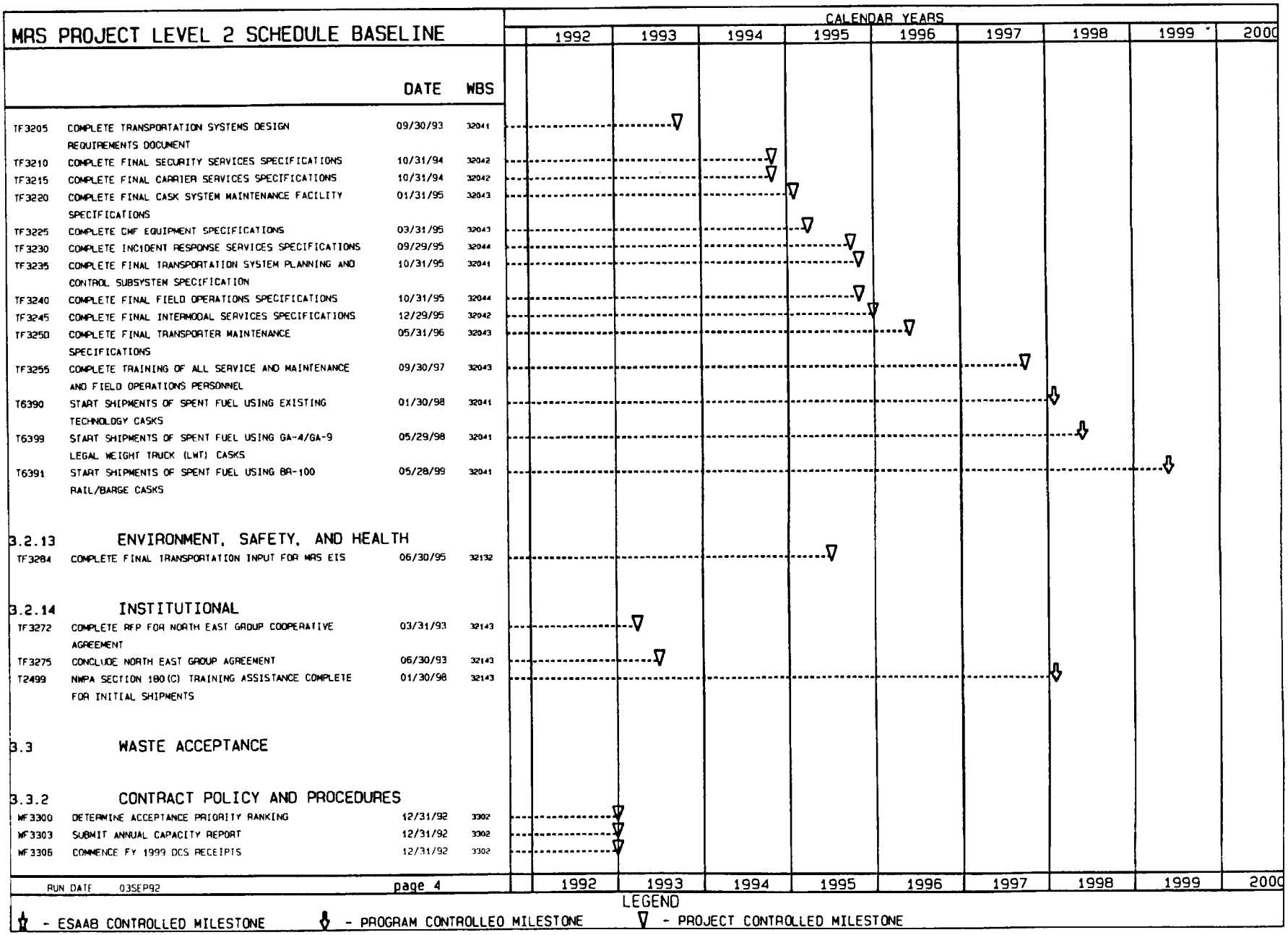

Table D-3. MRS Project Level-2 Schedule Baseline (Continued)

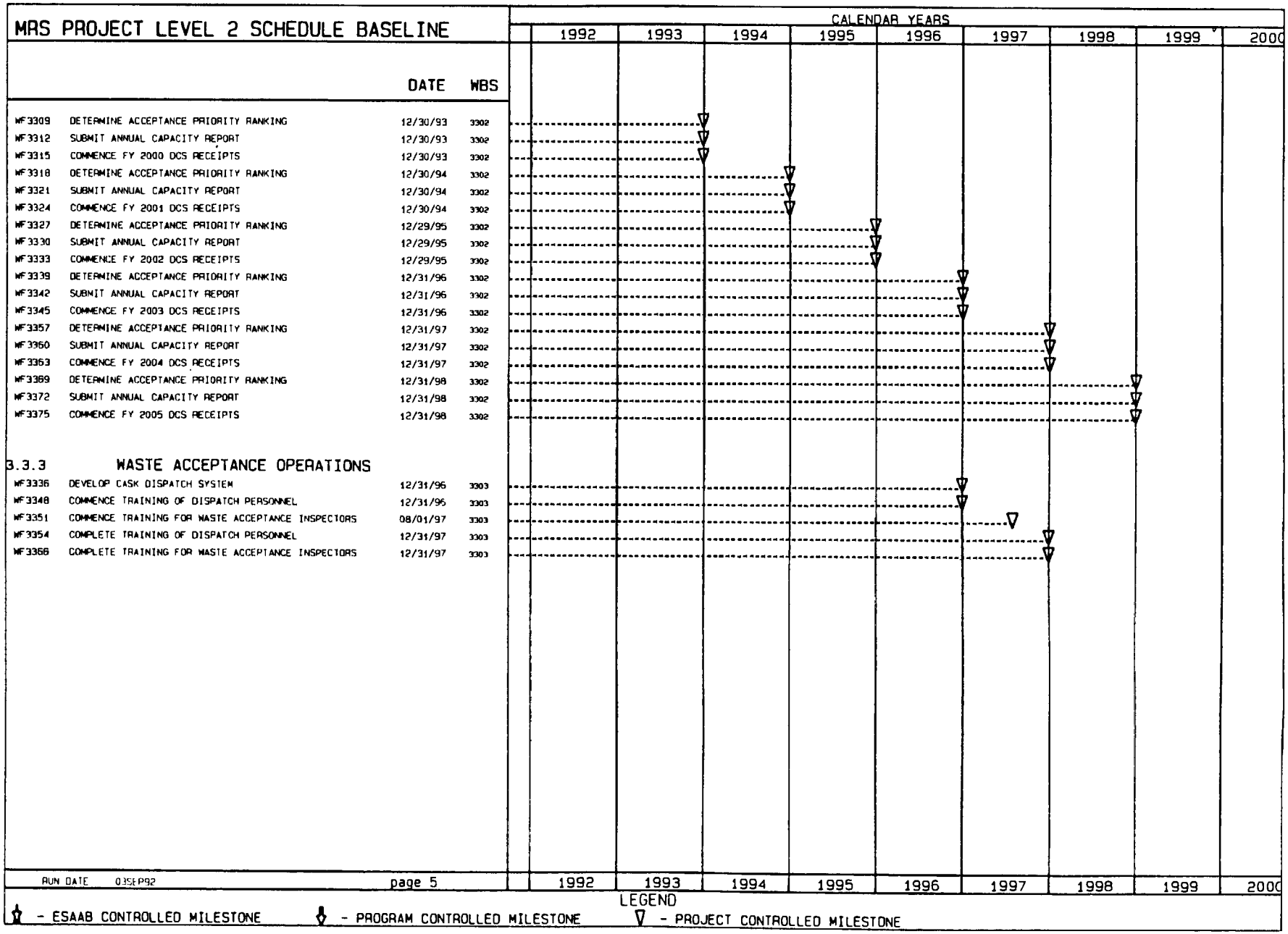

Table D-4. MRS Project Cost Baseline
(Year of Expenditure Dollars in Thousands)

Work Breakdown Structure	FY 1991 & Prior (1)	FY 1992 (2)	FY 1993	FY 1994	FY1995	FY 1996	FY 1997	FY 1998	FY 1999	Total
Total Estimated Construction Costs (TECC)										
Total Estimated Costs (TEC)										
3.1 Monitored Retrievable Storage										
3.1.3 Site Investigations	1,737	2,085	3,429	6,092						13,343
3.1.4 Monitored Retrievable Storage Facility			16,957	31,132	27,934	58,267	241,640	94,795	49,194	519,919
3.1.9 Project Management	6,830	2,130	1,227	3,142	3,318	3,364	3,199	3,168	251	26,629
Contingency Costs										67,029
TEC	8,567	4,215	21,613	40,366	31,252	61,631	244,839	97,963	49,445	626,920
Other Project Costs										
3.1 Monitored Retrievable Storage										
3.1.1 System Engineering	75	52	1,000	4,546	2,299	2,281	2,006	2,068	36	14,363
3.1.4 Monitored Retrievable Storage Facility	442	11,150	622			6	16,887	18,275	262	47,644
3.1.5 Regulatory	645	2,790	2,862	5,832	6,059	6,250	5,474	5,637	-0-	35,549
3.1.7 Engineering Development	32,625	2,568	2,613	7,146	19,429	18,147	15,231	5,766	726	104,251

Table D-4. MRS Project Cost Baseline (Continued)
(Year of Expenditure Dollars in Thousands)

Work Breakdown Stucture	FY 1991 &Prior (1)	FY 1992 (2)	FY 1993	FY 1994	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	Total
3.1.10 Financial Assisstance		1,097	5,000	10,000	10,000	10,000	10,000	15,000	-0-	61,097
3.1.11 Quality Assurance		355	319	751	1,112	1,515	1,563	1,613	113	7,341
3.1.12 Information Management		355	319	907	964	1,000	1,027	967	46	5,585
3.1.13 Environment, Safety, and Health	872	3,943	3,356	8,198	9,976	6,840	6,524	4,467		44,176
3.1.14 Institutional		1,042	1,714	6,808	7,956	7,364	8,244	8,562		41,690
3.1.15 Support Services		710	638	1,300	2,222	2,292	2,368	2,440	48	12,018
Total Other Project Costs	34,659	24,062	18,443	45,488	60,017	55,695	69,324	64,795	1,231	373,714
Other Contingency Costs	-	-	-	-	-	-	-	-	-	8,479
Total 3.1 Costs	43,226	28,277	40,056	85,854	91,269	117,326	314,163	162,758	50,676	1,009,113
3.2 Transportation System										
3.2.1 Systems Engineering		615	1,650	3,000	3,000	2,000	2,500	2,500	1,900	17,165
3.2.2 Casks		13,000	14,500	26,000	20,000	17,571	31,000	44,000	34,900	200,971
3.2.4 Support Systems		1,100	3,805	3,000	4,000	8,000	13,893	20,000	21,900	75,698
3.2.5 Regulatory		100	150	175	200	200	250	300	300	1,675

Table D-4. MRS Project Cost Baseline (Continued)
(Year of Expenditure Dollars in Thousands)

Work Breakdown Stucture	FY 1991 &Prior (1)	FY 1992 (2)	FY 1993	FY 1994	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	Total
3.2.9 Project Management	+	2,000	1,000	1,500	1,500	1,500	1,500	2,000	1,700	12,700
3.2.10 Financial Assistance					4,000	4,000	4,000	4,000	3,800	19,800
3.2.11 Quality Assurance		55	100	100	100	100	100	100	100	755
3.2.12 Information Management		50	50	50	50	50	75	100	-0-	425
3.2.13 Environment, Safety, and Health		500	1,000	5,000	5,000	2,000	2,600	2,300	1,000	19,400
3.2.14 Institutional		2,090	3,000	4,000	4,000	4,000	4,000	4,000	100	25,190
3.2.15 Support Services		50	50	50	50	50	50	50	-0-	350
Total 3.2 Costs	82,903	19,560	25,305	42,875	41,900	39,471	59,968	79,350	65,700	457,032
3.3 Waste Acceptance	12,785	2,982	3,660	4,850	5,160	5,620	8,190	9,250	11,320	63,817
Total 3.3 Costs	12,785	2,982	3,660	4,850	5,160	5,620	8,190	9,250	11,320	63,817
Total Project	138,914	50,819	69,021	133,579	138,329	162,417	382,321	251,358	127,696	1,529,962

1- Costs for FY 1983 through December 1987 for MRS (including Engineering Development), Transportation System, and Waste Acceptance of $79 million have not been included in prior year costs.
2- FY 1992 costs include FY 1992 appropriation and unobligated carry over from previous years.

APPENDIX E

FUNDING REQUIREMENTS

Table E-1. Funding Requirements

	ACTUAL COSTS						Program Planning Level						
	FY1988 (1)	FY1989	FY1990	FY1991	FY1992 Approp	FY1993 Request	FY 1994	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	
Monitored Retrievable Storage													
Systems Engineering	75	-	-	-	52	1,000	4,546	2,299	2,281	2,006	2,068	36	
Site Investigations	286	801	650	-	500	3,429	6,092	-	-	-	-	-	
MRS Facility	-	266	97	79	10,473	17,579	31,132	27,964	67,285	309,236	126,418	51,873	
Regulatory	-	-	432	213	1,000	2,862	5,832	6,059	6,250	5,474	5,637	-	
Engineering Development	7,792	5,323	10,255	9,055	2,268	2,613	7,146	19,429	18,147	15,231	5,766	726	
Project Management	1,076	499	255	5,000	1,200	1,227	3,142	3,318	3,364	3,199	3,168	251	
Financial Assistance	-	-	-	-	200	5,000	10,000	10,000	10,000	10,000	15,000	-	
Quality Assurance	-	-	-	-	200	319	751	1,112	1,515	1,563	1,613	113	
Information Management	-	-	-	-	200	319	907	964	1,000	1,027	967	46	
Environment Safety & Health	-	-	705	167	1,750	3,356	8,198	9,976	6,840	6,524	4,467	-	
Institutional	-	-	-	-	250	1,714	6,808	7,956	7,364	8,244	8,562	-	
Support Services	-	-	-	-	400	638	1,300	2,222	2,292	2,368	2,440	48	
Total MRS	9,429	6,889	12,394	14,514	18,493	40,056	85,854	91,299	126,338	364,872	204,339	102,549	1,077,026
Operating Expenses	9,429	6,889	12,394	14,514	18,493	40,056	81,962	86,752	81,331	82,430	95,063	55,982	
Capital Purchase							-	-	1,860	91,500	35,541	4,069	
Construction							3,892	4,547	43,147	190,942	73,735	42,498	
Transportation System													
Systems Engineering					500	1,650	3,000	3,000	2,000	2,500	2,500	1,900	
Casks					13,000	14,500	26,000	20,000	17,751	31,000	44,000	34,900	
Support Systems					1,100	3,805	3,000	4,000	8,000	13,893	20,000	21,900	
Regulatory					100	150	175	200	200	250	300	300	
Project Management					2,000	1,000	1,500	1,500	1,500	1,500	2,000	1,700	
Financial Assistance					-	-	4,000	4,000	4,000	4,000	4,000	3,800	
Quality Assurance					55	100	100	100	100	100	100	100	
Information Management					50	50	50	50	50	75	100	-	
Environment, Safety & Health					500	1,000	5,000	5,000	2,000	2,600	2,300	1,000	
Institutional					2,000	3,000	4,000	4,000	4,000	4,000	4,000	100	
Support Services					50	50	50	50	50	50	50	50	
Total Transportation	15,582	25,901	21,628	19,792	19,355	25,305	42,875	41,900	39,471	59,968	79,350	65,700	456,827
Operating Expenses	15,582	25,901	21,628	19,792	19,355	25,305	32,625	35,900	38,671	31,918	50,550	45,700	
Capital Purchase							10,250	6,000	10,800	28,050	28,800	20,000	
Construction							-	-	-	-	-	-	
Waste Acceptance	2,755	3,542	3,622	2,866	2,479	3,660	4,850	5,160	5,620	8,190	9,250	11,320	63,314
Total MRS Project	27,766	36,332	37,644	37,172	40,327	69,021	133,579	138,359	171,429	433,030	292,939	174,569	1,597,167

(1) Costs for FY1983 through December 1987 for MRS (including Engineering Document), Transportation System, and Waste Acceptance of $79 million have not been included in prior-year costs.

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT
PROGRAM CHANGE CONTROL BOARD
DOCUMENT CHANGE PROPOSAL EVALUATION

(1) DCP NUMBER: 61 (2) DCP TITLE: Initial Issuance of Monitored Retrievable Storage Project Plan PAGE OF

(3) DOCUMENT NUMBER:
REVISION:
DOCUMENT TITLE: Monitored Retrievable Storage Project Plan

(4) COGNIZANT ORGANIZATION: RW-40

(5) RECOMMENDED ACTIONS:

	INITIAL RECOMMENDED ACTION		FINAL RECOMMENDED ACTION	
	INITIALS	DATE	INITIALS	DATE
APPROVE				
APPROVE WITH CONDITIONS EXPLAIN IN (6)	[illegible]	6/24/92		
DISAPPROVE EXPLAIN IN (6)				
DEFER ACTION EXPLAIN IN (6)				
NO RECOMMENDATION EXPLAIN IN (6)				
CANCEL/WITHDRAW EXPLAIN IN (6)				

(6) EVALUATION/RATIONALE:

See attached Comment/Response Record

(7) PCCB MEMBER:

D. Horton
PRINTED NAME

[signature]
SIGNATURE

RW-3
ORGANIZATION

6/24/92
DATE

Revision 4
(Previous editions ar

9 1 2 9 8 1 8 3 4

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT
PROGRAM CHANGE CONTROL BOARD
COMMENT/RESPONSE RECORD

(1) DCP NUMBER: 61	(2) DCP TITLE: Init. Iss. of Monitored Retrievable Storage Proj. Plan	(3) COMMENTATOR (NAME/ROUTING SYMBOL: D. Horton, RW-3

(4) DOCUMENT NUMBER: DOCUMENT TITLE: Monitored Retrievable Storage Project Plan

(5) COGNIZANT ORGANIZATION: RW-40

(6) COMMENT NO.	(7) REFERENCE PAGE/LINE	(8) COMMENT	(10) RESPONSE	(12) ACCEPT REJECT INITIAL AND D.
1.			1. ACCEPTED.	RWC 8/3/92
2.		Comments	2. ACCEPTED	RWC 8/3/92
3.			3. ACCEPTED WITH MODIFICATION TO TEXT, "PROJECT INFORMATION AND DOCUMENTATION ASSOCIATED WITH QA PROCESSES WILL BE MANAGED WITHIN THE DOE IN ACCORDANCE ..."	RWC 8/3/92

PCCB MEMBER (9) SIGNATURE: R.W. Card for DH

DATE: 6/24/92

PCCB MEMBER (11) SIGNATURE: R. Miller

DATE: 7-29-92

RW-3 Comments on MRS Project Plan

1. Page 3: Revise lines 27-31 with the following: "The overall objective of compliance with the OCRWM Quality Assurance (QA) Program in MRS activities is to design and construct a MRS facility in a manner that will protect the health and safety of the public and of workers. The OCRWM QA Program documents consists of the OCRWM QA Requirements Document (QARD), participant QA Program Descriptions (QAPDs) and participant quality assurance procedures." Delete reference to the PMS; it's not part of the QA Program. Delete reference to the program being approved by the NRC; it was not "approved" it was "accepted", further, it's inappropriate to include in a program document.

2. Page 21, Figure 3: Clarify that the construction manager is a contractor; add "contractor".

3. Page 25, lines 5-7 read: "Project information and documentation will be managed in accordance with QAAP 6.1 Document Control, QAAP 17.1 QA Records Management and ILP 12.17.01 Quality Records Center." We recommend reference to these QA documents be deleted for the following reasons: 1) All project information <u>will not</u> be managed in accordance with these documents, only QA processes will be; and 2) These documents are only applicable to DOE not the M&O.

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT
PROGRAM CHANGE CONTROL BOARD
DOCUMENT CHANGE PROPOSAL EVALUATION

(1) DCP NUMBER: 61 (2) DCP TITLE: Initial Issuance of Monitored Retrievable Storage Project Plan PAGE OF

(3) DOCUMENT NUMBER:
REVISION:
DOCUMENT TITLE: Monitored Retrievable Storage Project Plan

(4) COGNIZANT ORGANIZATION: RW-40

(5) RECOMMENDED ACTIONS:

	INITIAL RECOMMENDED ACTION		FINAL RECOMMENDED ACTION	
	INITIALS	DATE	INITIALS	DATE
APPROVE				
APPROVE WITH CONDITIONS EXPLAIN IN (6)	CAC for T.I.	6/15/92		
DISAPPROVE EXPLAIN IN (6)				
DEFER ACTION EXPLAIN IN (6)				
NO RECOMMENDATION EXPLAIN IN (6)				
CANCEL/WITHDRAW EXPLAIN IN (6)				

(6) EVALUATION RATIONALE:

Accept with incorporation of attached comments

(7) PCCB MEMBER:
for T. Isaacs — C.A. Kouts
PRINTED NAME SIGNATURE

RW-4
ORGANIZATION DATE 6/15/92

Revision 4
(Previous editions are obsolete)

9129818837

DOE/RW

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT
PROGRAM CHANGE CONTROL BOARD
IMPACT ANALYSIS RECORD

(1) DCP NUMBER: 61 (2) DCP TITLE: Initial Issue of MRS Project Plan

(3) DOCUMENT NUMBER:
REVISION: 0
DOCUMENT TITLE: MRS Project Plan

(4) COGNIZANT ORGANIZATION: RW-40

(5) IMPACT:	ESTIMATED IMPACT	RESPONSIBLE ORGANIZATION	(6) ATTACHMENT	ACCEP REJEC INITIALS DATE
TECHNICAL (SCOPE) BASELINE	Initial Issue of MRS Project Plan	RW-20 RW-30 RW-40		
REGULATORY & ENVIRONMENTAL	None	RW-30		
COST	None	RW-10		
SCHEDULE	None	RW-10		
INSTITUTIONAL	None	RW-5		
TRAINING AND PROCEDURES	None	COGNIZANT ORGANIZATION		
PROGRAMMATIC	None	RW-4	Concurred	
HEALTH AND SAFETY	None	RW-30		

(7) OTHER DOCUMENTS AFFECTED

None

(8) DOES COST, SCHEDULE, OR TECHNICAL IMPACT EXCEED A LEVEL 0 THRESHOLD?

X YES NO ____

IMPACTS ON COST:

TPC ____
CONTINGENCY ____
FUNDING PROFILE ____
OTHER ____
TOTAL COST ____

	IMPACTS ON SCHEDULE:	IMPACTS ON SCOPE:
LEVEL 0	X	X
LEVEL 1	____	____
LEVEL 2	____	____

(9) MITIGATING OR CORRECTIVE ACTIONS:

None

(10) SUBMITTED BY (ORIGINATING ORGANIZATION:

SIGNATURE DATE

TITLE: General Engineer, RW-[illegible]

Revision 4
(Previous editions are ob

9129818388

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT
PROGRAM CHANGE CONTROL BOARD
COMMENT/RESPONSE RECORD

(1) DCP NUMBER: 61	(2) DCP TITLE: Init. Iss. of Monitored Retrievable Storage Proj. Plan	(3) COMMENTATOR (NAME/ROUTING SYMBOL T. Isaacs, RW-4

(4) DOCUMENT NUMBER: DOCUMENT TITLE: Monitored Retrievable Storage Project Plan

(5) COGNIZANT ORGANIZATION: RW-40

(6) COMMENT NO.	(7) REFERENCE PAGE/LINE	(8) COMMENT	(10) RESPONSE	(12) ACCE REJE INIT AND D
(1)	Pg 2, Line 20, +21	"DRAFT" & "FINAL" CONFLICT... SUGGEST DELETE "FINAL" on Line 21.	LAST SENTENCE IN L21 DELETED	CAK 8/3/
(2)	Pg 2, Line 32	DELETE "(& : THE PROJECT)", OR DEFINE "THE PROJECT"... LINES 15-17 DRIVES 3 PROJECTS.	CHANGED TO READ "the MRS Project"	CAK 8/3
(3)	Pg 5, Line 9	NO REQ'T TO EXPLAIN WHY THE MRS IS NEEDED AND WHAT IT DOES (e.g., DEFINE "STAGE")	CHANGED TO READ "SHIPMENTS OF SNF IN STAGES TO THE REPOSITORY."	CAK 8/3
(4)	Pg 6, Line 10	"CMF will be collocated at the MRS"... WHAT IF HOST SEZ "NO"?	INSERTED "..., subject to the host agreement."	CAK 8/3
(5)	Pg 7, Fig. 1	NEED WAT BOX TO "BEGIN WASTE ACCEPTANCE" WITH HEADING "ESTABLISH FINAL W.A. CRITERIA".	Box inserted.	CAK 8/3
(6)	Pg 13, Line 9	"3 ELEMENTS HAVE FOLLOWING INTERDEPENDENCIES"... YET ONLY 3.5.1 (W.A.-Team) FOLLOWS.	"Three" Deleted	CAK 8/3

PCCB MEMBER (9) SIGNATURE: C.A. Carlo for T. Isaacs

DATE: 6/18/92

PCCB MEMBER (11) SIGNATURE: R. Milner

DATE: 7-29-92

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT
PROGRAM CHANGE CONTROL BOARD
COMMENT/RESPONSE RECORD

(1) DCP NUMBER: 61	(2) DCP TITLE: Init. Iss. of Monitored Retrievable Storage Proj. Plan	(3) COMMENTATOR (NAME/ROUTING SYMBC T. Isaacs, RW-4

(4) DOCUMENT NUMBER: DOCUMENT TITLE: Monitored Retrievable Storage Project Plan

(5) COGNIZANT ORGANIZATION: RW-40

(6) COMMENT NO.	(7) REFERENCE PAGE/LINE	(8) COMMENT	(10) RESPONSE	(12) ACC REJ INT AND
7	Cover Page	This is a "DOE" document. Reference to the M&O/ Contract # should be deleted.	Final cover sheet will be Revision 0 and have no reference to the M+O.	CA 8/3
5	Page 2 Line 2.1	Reference to Final Mission Plan Amendment should be deleted, since it is not issued	Same as comment 1	CA 8/31
9	Page 22 Figure 4	Figure indicates that the M&O is responsible for Section 180(c) training. Section 180(c) requires the Secretary of Energy to provide funding for training to States and Tribes. Final strategy has not been issued. Final mechanisms for provision of training have not been determined. Suggest that this be rethought and represented differently. Suggest also EG&G is only active in Initiative 1. Case development 2.	Changed to read "180(c) training ~~and~~ siting implementation support" Changed to read "~~phase 2~~ / Initiative phase 1".	CA 8/3

PCCB MEMBER (9) SIGNATURE: C. A. Hunt for T. Isaacs DATE: 6/15/92

PCCB MEMBER (11) SIGNATURE: R. Miller DATE: 7-29-92

Revision 4
(Previous editions are

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT
PROGRAM CHANGE CONTROL BOARD
COMMENT/RESPONSE RECORD

(1) DCP NUMBER: 61	(2) DCP TITLE: Init. Iss. of Monitored Retrievable Storage Proj. Plan	(3) COMMENTATOR (NAME/ROUTING SYMBOL: T. Isaacs, RW-4

(4) DOCUMENT NUMBER: DOCUMENT TITLE: Monitored Retrievable Storage Project Plan

(5) COGNIZANT ORGANIZATION: RW-40

(6) COMMENT NO.	(7) REFERENCE PAGE/LINE	(8) COMMENT	(10) RESPONSE	(12) ACCEPT REJECT INITL AND DA
1C	P. 3-	Draft Mission Plan Amendment and 10CFR Parts 71 and 72 should be added to list of references.	ACCEPTED	8/3/9

PCCB MEMBER (9) SIGNATURE: C. A. Kouts for T Isaacs

DATE: 6/15/92

PCCB MEMBER (11) SIGNATURE: R. Mulkey

DATE: 7-29-92

Revision 4
(Previous editions are ob

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT
PROGRAM CHANGE CONTROL BOARD
IMPACT ANALYSIS RECORD

(1) DCP NUMBER: 61 (2) DCP TITLE: Initial Issue of MRS Project Plan

(3) DOCUMENT NUMBER:
REVISION: 0
DOCUMENT TITLE: MRS Project Plan

(4)COGNIZANT ORGANIZATION: RW-40

(5) IMPACT:	ESTIMATED IMPACT	RESPONSIBLE ORGANIZATION	(6) ATTACHMENT	ACCEPT/ REJECT, INITIALS AND DATE
TECHNICAL (SCOPE) BASELINE	Initial Issue of MRS Project Plan	RW-20 RW-30 RW-40		
REGULATORY & ENVIRONMENTAL	None	RW-30		
COST	None	RW-10		
SCHEDULE	None	RW-10		
INSTITUTIONAL	None	RW-5		6/17
TRAINING AND PROCEDURES	None	COGNIZANT ORGANIZATION		
PROGRAMMATIC	None	RW-4		
HEALTH AND SAFETY	None	RW-30		

(7) OTHER DOCUMENTS AFFECTED

None

(8) DOES COST, SCHEDULE, OR TECHNICAL IMPACT EXCEED A LEVEL 0 THRESHOLD?

X YES NO ____

IMPACTS ON COST:		IMPACTS ON SCHEDULE:	IMPACTS ON SCOPE:
TPC	____	LEVEL 0	X	X
CONTINGENCY	____	LEVEL 1	____	____
FUNDING PROFILE	____	LEVEL 2	____	____
OTHER	____			
TOTAL COST	____			

(9) MITIGATING OR CORRECTIVE ACTIONS:

None

(10) SUBMITTED BY (ORIGINATING ORGANIZATION):

John Rico 6/10/92
SIGNATURE DATE

TITLE: General Engineer, RW-422

Revision 4
(Previous editions are obsolet

9129818422

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT
PROGRAM CHANGE CONTROL BOARD
DOCUMENT CHANGE PROPOSAL EVALUATION

(1) DCP NUMBER: 61 (2) DCP TITLE: Initial Issuance of Monitored Retrievable Storage Project Plan PAGE OF

(3) DOCUMENT NUMBER:
REVISION:
DOCUMENT TITLE: Monitored Retrievable Storage Project Plan

(4) COGNIZANT ORGANIZATION: RW-40

(5) RECOMMENDED ACTIONS:

	INITIAL RECOMMENDED ACTION		FINAL RECOMMENDED ACTION	
	INITIALS	DATE	INITIALS	DATE
APPROVE				
APPROVE WITH CONDITIONS EXPLAIN IN (6)	JS	6/17/92		
DISAPPROVE EXPLAIN IN (6)				
DEFER ACTION EXPLAIN IN (6)				
NO RECOMMENDATION EXPLAIN IN (6)				
CANCEL/WITHDRAW EXPLAIN IN (6)				

(6) EVALUATION/RATIONALE:

In lieu of Schedule Risk (4.3) there is a Moderate Schedule Risk related to Transportation Outreach Efforts comparable to that for MRS Outlook. 4.3.3 should be broadened to include transportation, or a new 4.3.4 should be added for Transportation Outreach Efforts.

(7) PCCB MEMBER:
J. Saltzman
PRINTED NAME

SIGNATURE

RW-5
ORGANIZATION

6/17/92
DATE

Revision 4
(Previous editions are obsolet

9129818843

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT
PROGRAM CHANGE CONTROL BOARD
DOCUMENT CHANGE PROPOSAL EVALUATION

(1) DCP NUMBER: [illegible] (2) DCP TITLE: Initial Issuance of Monitored Retrievable Storage Project Plan PAGE OF

(3) DOCUMENT NUMBER:
REVISION:
DOCUMENT TITLE: Monitored Retrievable Storage Project Plan

(4) COGNIZANT ORGANIZATION: RW-[illegible]

(5) RECOMMENDED ACTIONS:

	INITIAL RECOMMENDED ACTION		FINAL RECOMMENDED ACTION	
	INITIALS	DATE	INITIALS	DATE
APPROVE				
APPROVE WITH CONDITIONS EXPLAIN IN (6)	✓	7/9/2		
DISAPPROVE EXPLAIN IN (6)				
DEFER ACTION EXPLAIN IN (6)				
NO RECOMMENDATION EXPLAIN IN (6)				
CANCEL/WITHDRAW EXPLAIN IN (6)				

(6) EVALUATION/RATIONALE:
Approved subject to satisfactory resolution of comments on attached Comment/Response Record.

(7) PCCB MEMBER:
S. Rousso
PRINTED NAME

SIGNATURE

RW-10
ORGANIZATION

7/9/2
DATE

Revision 4
(Previous editions are obsolete)

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT
PROGRAM CHANGE CONTROL BOARD
IMPACT ANALYSIS RECORD

(1) DCP NUMBER: 61 (2) DCP TITLE: Initial Issue of MRS Project Plan

(3) DOCUMENT NUMBER:
REVISION: 0
DOCUMENT TITLE: MRS Project Plan

(4)COGNIZANT ORGANIZATION: RW-40

(5) IMPACT:	ESTIMATED IMPACT	RESPONSIBLE ORGANIZATION	(6) ATTACHMENT	ACCEPT/ REJECT, INITIALS AND DATE
TECHNICAL (SCOPE) BASELINE	Initial Issue of MRS Project Plan	RW-20 RW-30 RW-40		
REGULATORY & ENVIRONMENTAL	None	RW-30		
COST	$186 M / $371 M increase	RW-10		9/3/92
SCHEDULE	None	RW-10		9/8/92
INSTITUTIONAL	None	RW-5		
TRAINING AND PROCEDURES	None	COGNIZANT ORGANIZATION		
PROGRAMMATIC	None	RW-4		
HEALTH AND SAFETY	None	RW-30		

(7) OTHER DOCUMENTS AFFECTED

None

(8) DOES COST, SCHEDULE, OR TECHNICAL IMPACT EXCEED A LEVEL 0 THRESHOLD?

____ YES NO X

IMPACTS ON COST:		IMPACTS ON SCHEDULE:	IMPACTS ON SCOPE:
TPC	____		
CONTINGENCY	____	LEVEL 0 ____	____
FUNDING PROFILE	____	LEVEL 1 ____	____
OTHER	____	LEVEL 2 ____	____
TOTAL COST	____		

(9) MITIGATING OR CORRECTIVE ACTIONS:

None

(10) SUBMITTED BY (ORIGINATING ORGANIZATION):

[signature] 9/26/92
SIGNATURE DATE

TITLE: General Engineer, RW-422

Revision 4
(Previous editions are obsolete)

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT
PROGRAM CHANGE CONTROL BOARD
COMMENT/RESPONSE RECORD

(1) DCP NUMBER: 61	(2) DCP TITLE: Init. Iss. of Monitored Retrievable Storage Proj. Plan	(3) COMMENTATOR (NAME/ROUTING SYMBOL): S. Rousso, RW-10
(4) DOCUMENT NUMBER:	DOCUMENT TITLE: Monitored Retrievable Storage Project Plan	
(5) COGNIZANT ORGANIZATION: RW-40		

(6) COMMENT NO.	(7) REFERENCE PAGE/LINE	(8) COMMENT	(10) RESPONSE	(12) ACCEPT/ REJECT, INITIAL AND DATE
1	p. 8, line 20	Add discussion on the exemption to DOE Order 4700.1 that is required because detailed design will start prior to the completion of the EIS process. This revision requested by F. Peters and M. Scarborough.	Accepted	accept 9/3
2	p. 18, line 10	Delete Section 4.2.2, Fee Adequacy, because fee adequacy activities are not included in the MRS Project scope of work.	Accepted. This is a Program Risk	Accept 9/3/92
		PCCB MEMBER (9) SIGNATURE: [signature] DATE: 7/9/92	PCCB MEMBER (11) SIGNATURE: R. Miller DATE: 8-27-92	

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT
PROGRAM CHANGE CONTROL BOARD
COMMENT/RESPONSE RECORD

(1) DCP NUMBER: 61	(2) DCP TITLE: Init. Iss. of Monitored Retrievable Storage Proj. Plan	(3) COMMENTATOR (NAME/ROUTING SYMBOL): S. Rousso, RW-10
(4) DOCUMENT NUMBER:	DOCUMENT TITLE: Monitored Retrievable Storage Project Plan	
(5) COGNIZANT ORGANIZATION: RW-40		

(6) COMMENT NO.	(7) REFERENCE PAGE/LINE	(8) COMMENT	(10) RESPONSE	(12) ACCEPT/ REJECT, INITIAL AND DATE
3	p.21, Fig.3	Replace this figure with the OCRWM organization chart shown in Fig. 5-1a of the Yucca Mtn. Project Plan.	Accepted New Figure (OCRWM org. chart) will be added.	Accept 9/3
4	p.21, Fig.3	Add new figure showing the organization of the Office of Storage and Transportation similar to Fig. 5-1c in the Yucca Mtn. Project Plan.	Accepted Existing Figure 3 will be modified to show existing Storage and Transportation Organization	Accept 9/3
5	p.22, Fig.4	Revise figure to show participants reporting through the M&O (as the integrator) to the project manager.	Rejected: Figure 4 is correct and will not be revised. Text added to line 24 — "as specifically directed by OCRWM." — this is per M&O contract.	Accept 9/3

PCCB MEMBER (9) SIGNATURE: [signature] DATE: 7/5/2

PCCB MEMBER (11) SIGNATURE: R. Miller DATE: 8-27-92

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT
PROGRAM CHANGE CONTROL BOARD
COMMENT/RESPONSE RECORD

(1) DCP NUMBER: 61	(2) DCP TITLE: Init. Iss. of Monitored Retrievable Storage Proj. Plan	(3) COMMENTATOR (NAME/ROUTING SYMBOL): S. Rousso, RW-10
(4) DOCUMENT NUMBER:	DOCUMENT TITLE: Monitored Retrievable Storage Project Plan	
(5) COGNIZANT ORGANIZATION: RW-40		

(6) COMMENT NO.	(7) REFERENCE PAGE/LINE	(8) COMMENT	(10) RESPONSE	(12) ACCEPT/ REJECT, INITIAL AND DATE
6	p. 22, Fig. 4	Delete Weston from project participants. Weston provides support to OCRWM.	Accepted	Accept MT 9/3/92
7	p. 22, Fig. 4	Delete Energy Information Agency from project participants. EIA provides support to fee adequacy activities which are not included in MRS Project scope.	Rejected: Current WBS Contains this scope of work	Accept MT 9/3/92
8	p. 23, line 17	Delete "--collection of RW-859 data; assessment of the adequacy of the ongoing fee;" (see comments #2 & 7).	Rejected: Current WBS contains this scope of work	Accept MT 9/3/92

PCCB MEMBER (9) SIGNATURE: [signature] DATE: 7/5/92

PCCB MEMBER (11) SIGNATURE: R. Miller DATE: 8-27-92

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT
PROGRAM CHANGE CONTROL BOARD
COMMENT/RESPONSE RECORD

(1) DCP NUMBER: 61	(2) DCP TITLE: Init. Iss. of Monitored Retrievable Storage Proj. Plan	(3) COMMENTATOR (NAME/ROUTING SYMBOL): S. Rousso, RW-10
(4) DOCUMENT NUMBER:	DOCUMENT TITLE: Monitored Retrievable Storage Project Plan	
(5) COGNIZANT ORGANIZATION: RW-40		

(6) COMMENT NO.	(7) REFERENCE PAGE/LINE	(8) COMMENT	(10) RESPONSE	(12) ACCEPT/ REJECT, INITIAL AND DATE
9	p. 24, line 35	Refer to the MRS Project change control procedure and the M&O change control board.	Accepted: Line 35 will read as follows: — " and the MRS Project Configuration Management Plan provide criteria for establishment and operation of the Program CCB, and the MRS Project CCB and the M&O Contractor CCB, respectively."	Accept NA 9/3
10	p. 24, line 38	~~Revise sentence to~~ indicate that configuration control is maintained at the project-level only.		

PCCB MEMBER (9) SIGNATURE: _____ DATE: 7/9/92

PCCB MEMBER (11) SIGNATURE: R. Mulvihill DATE: 8-27-92

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT
PROGRAM CHANGE CONTROL BOARD
COMMENT/RESPONSE RECORD

(1) DCP NUMBER: 61	(2) DCP TITLE: Init. Iss. of Monitored Retrievable Storage Proj. Plan	(3) COMMENTATOR (NAME/ROUTING SYMBOL): S. Rousso, RW-10
(4) DOCUMENT NUMBER:	DOCUMENT TITLE: Monitored Retrievable Storage Project Plan	
(5) COGNIZANT ORGANIZATION: RW-40		

(6) COMMENT NO.	(7) REFERENCE PAGE/LINE	(8) COMMENT	(10) RESPONSE	(12) ACCEPT/ REJECT, INITIAL AND DATE
11	p. 25, line 1	Revise sentence to read: "Project-level configuration management shall be initiated when SAR design is started and shall be in compliance with Chapter III, Part C, of DOE Order 4700.1."	accepted	Accept mf 9/3
12	p. 27, line 2	Revise sentence to read: "The Project Level-2 schedule baseline is included in Appendix D."	accepted	Accept mf 9/3

PCCB MEMBER (9) SIGNATURE: _____ DATE: 7/31/2

PCCB MEMBER (11) SIGNATURE: R. Mather DATE: 8-27-92

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT
PROGRAM CHANGE CONTROL BOARD
COMMENT/RESPONSE RECORD

(1) DCP NUMBER:	(2) DCP TITLE: Init. Iss. of Monitored Retrievable Storage Proj. Plan	(3) COMMENTATOR (NAME/ROUTING SYMBOL): S. Rousso, RW-1[illegible]
(4) DOCUMENT NUMBER:	DOCUMENT TITLE: Monitored Retrievable Storage Project Plan	
(5) COGNIZANT ORGANIZATION: RW-40		

(6) COMMENT NO.	(7) REFERENCE PAGE/LINE	(8) COMMENT	(10) RESPONSE	(12) ACCEPT/ REJECT, INITIAL AND DATE
13	p. 28, line 2	Revise paragraph to read: "The resources plan for the MRS Project through FY 1998 is shown in Appendix E. FY 1988 through FY 1991 data reflect actual costs from the enactment of the amendments to the NWPA. The FY 1992	accepted: Also, Appendix E column for 1983 through 1987 have been deleted and a footnote added. ~~added:~~ ~~"~~ * Costs prior to January 1988 amounting to $ 36.8 M for MRS, $ 20. M for Transportation, $ 13.8 M for Engineering Development, and $ 4.62 M for Waste Acceptance ~~have not been fully included.~~" Also, Letter Forwards has been revised to incorporate comment. added Footnote: "Costs for FY 1983 through December 1987 for MRS (including Eng. Development), Transportation deployment, and Waste Acceptance of $79 million have not been included in previous years."	lhd 9/3

PCCB MEMBER (9) SIGNATURE: _____ DATE: 7/9/92

PCCB MEMBER (11) SIGNATURE: _____ DATE: 8-27-92

9 1 2 9 8 1 8 5 1

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT
PROGRAM CHANGE CONTROL BOARD
COMMENT/RESPONSE RECORD

(1) DCP NUMBER:	(2) DCP TITLE: Init. Iss. of Monitored Retrievable Storage Proj. Plan	(3) COMMENTATOR (NAME/ROUTING SYMBOL): S. Rousso, RW-10
(4) DOCUMENT NUMBER:	DOCUMENT TITLE: Monitored Retrievable Storage Project Plan	
(5) COGNIZANT ORGANIZATION: RW-40		

(6) COMMENT NO.	(7) REFERENCE PAGE/LINE	(8) COMMENT	(10) RESPONSE	(12) ACCEPT/ REJECT, INITIAL AND DATE
13	p.28, line 2 (continued)	data reflect the Congressional appropriation. The FY 1993 data reflect the Congressional request. The FY 1994 through FY 1998 data reflect the FY 1994 IRB request. Operating, construction and capital equipment funds are integrated into the WBS element breakout as well as shown separately along with manpower. The Total Project Cost (TPC) and Total Estimated Cost (TEC) are shown in Table D-1 in Appendix D.		

PCCB MEMBER (9) SIGNATURE: _____ DATE: 7/5/2

PCCB MEMBER (11) SIGNATURE: R. Miller DATE: 8-27-92

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT
PROGRAM CHANGE CONTROL BOARD
COMMENT/RESPONSE RECORD

(1) DCP NUMBER: 61	(2) DCP TITLE: Init. Iss. of Monitored Retrievable Storage Proj. Plan	(3) COMMENTATOR (NAME/ROUTING SYMBOL): S. Rousso, RW-10
(4) DOCUMENT NUMBER:	DOCUMENT TITLE: Monitored Retrievable Storage Project Plan	
(5) COGNIZANT ORGANIZATION: RW-40		

(6) COMMENT NO.	(7) REFERENCE PAGE/LINE	(8) COMMENT	(10) RESPONSE	(12) ACCEPT/ REJECT, INITIAL AND DATE
14	p. 30, line 3	Delete sentence: "Annual ESARs are scheduled in years when no key decisions is required." An ESAR is not a decision point.	accepted	accepted 9/3
15	p. 41, line 5	Delete Weston from contractor matrix (see comment # 6).	accepted	Accept 9/3/92
		PCCB MEMBER (9) SIGNATURE: [signature] DATE: 7/15/92	PCCB MEMBER (11) SIGNATURE: R. Miller DATE: 8-27-92	

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT
PROGRAM CHANGE CONTROL BOARD
COMMENT/RESPONSE RECORD

(1) DCP NUMBER: 51	(2) DCP TITLE: Init. Iss. of Monitored Retrievable Storage Proj. Plan	(3) COMMENTATOR (NAME/ROUTING SYMBOL): S. Rousso, RW-1
(4) DOCUMENT NUMBER:	DOCUMENT TITLE: Monitored Retrievable Storage Project Plan	
(5) COGNIZANT ORGANIZATION: RW-40		

(6) COMMENT NO.	(7) REFERENCE PAGE/LINE	(8) COMMENT	(10) RESPONSE	(12) ACCEPT/ REJECT, INITIAL AND DATE
16	Appen. D, Table D-1, Technical Baseline	Revise Level 0 baseline: Add "Construct MRS facility"	Accepted	Accept MT 9/3/92
		Delete "substantially reduce need for additional at reactor storage"	Rejected: This is considered an important goal.	Accept MT 9/3/92
		Revise item six to read: "Procure NRC-certified transportation casks to deliver SNF from the owners and generators to the MRS facility"	Accepted: Table revised to read "Procure From Reactor Transportation Casks."	Accept MT 9/3/92
		Revise Level 2 reference by including titles of project-level technical baseline documents.	Accepted. Will be listed as Preliminary Drafts	Accept MT 9/3/92
		PCCB MEMBER (9) SIGNATURE: [signature] DATE: 7/5/92	PCCB MEMBER (11) SIGNATURE: [signature] DATE: 8-27-92	

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT
PROGRAM CHANGE CONTROL BOARD
COMMENT/RESPONSE RECORD

(1) DCP NUMBER:	(2) DCP TITLE:	(3) COMMENTATOR (NAME/ROUTING SYMBOL):
61	Init. Iss. of Monitored Retrievable Storage Proj. Plan	S. Rousso, RW-1

(4) DOCUMENT NUMBER:

DOCUMENT TITLE: Monitored Retrievable Storage Project Plan

(5) COGNIZANT ORGANIZATION: RW-40

(6) COMMENT NO.	(7) REFERENCE PAGE/LINE	(8) COMMENT	(10) RESPONSE	(12) ACCEPT/ REJECT, INITIAL AND DATE
17	Appen. D, Table D-1, Schedule Baseline	Revise Level 0 baseline to be consistent with DCP-58.	Accepted: will be done as soon as DCP 58 is approved.	Accept MA 9/3/92
		Revise Level 1 reference to reflect approved PCSB, Rev. 3.	Accepted: Currently in-t PCCB Approved.	Accept MA 9/3/92
		Revise Level 2 reference by including title of project-level schedule baseline document.	Accepted: will be listed as Preliminary Draft.	Accept MA 9/3/92
18	Appen. D, Table D-1, Cost Baseline	Revise Level 1 and 2 references by including new cost baseline table in Appendix D.	Accepted	Accept MA 9/3/92
19	Appen. D, Table D-2, line 8	Update PCSB, Rev. 3 reference.	Accepted: Currently in-t PCCB Approved	Accept MA 9/3/92

PCCB MEMBER (9) SIGNATURE: [signature] DATE: 7/6/92

PCCB MEMBER (11) SIGNATURE: R. Malin DATE: 8-27-92

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT
PROGRAM CHANGE CONTROL BOARD
COMMENT/RESPONSE RECORD

(1) DCP NUMBER: 21	(2) DCP TITLE: Init. Iss. of Monitored Retrievable Storage Proj. Plan	(3) COMMENTATOR (NAME/ROUTING SYMBOL): S. Rousso, RW-11
(4) DOCUMENT NUMBER:	DOCUMENT TITLE: Monitored Retrievable Storage Project Plan	
(5) COGNIZANT ORGANIZATION: RW-40		

(6) COMMENT NO.	(7) REFERENCE PAGE/LINE	(8) COMMENT	(10) RESPONSE	(12) ACCEPT/ REJECT, INITIAL AND DATE
20	Appen. D, Table D-2, line 9	Add reference for project change control procedures.	accepted: listed as Preliminary Draft.	Accept MT 9/3/92
21	Appen. D, General	Include Level-2 schedule baseline in barchart format.	Accepted	Accept MT 9/3/92
22	Appen. D, General	Include Level-2 cost baseline using attached format. Do not include Weston or fee adequacy costs.	accepted: Format will be as commented. Also added footnote from resolution to Comment #13.	Accept MT 9/3/92
23	Appen. E, General	Delete funding requirements table and replace with data described in comment # 13 using attached format from YMP Plan.	accepted: also added footnote "* Funds available in 1992 including carryover from Prior years is $ 51.934M"	Accept MT 9/3/92

PCCB MEMBER (9) SIGNATURE: _____ DATE: 7/6/92

PCCB MEMBER (11) SIGNATURE: R. Miller DATE: 8-27-92

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT
PROGRAM CHANGE CONTROL BOARD
DOCUMENT CHANGE PROPOSAL EVALUATION

(1) DCP NUMBER: 61 (2) DCP TITLE: Initial Issuance of Monitored Retrievable Storage Project Plan PAGE OF

(3) DOCUMENT NUMBER:
REVISION:
DOCUMENT TITLE: Monitored Retrievable Storage Project Plan

(4) COGNIZANT ORGANIZATION: RW-40

(5) RECOMMENDED ACTIONS:

	INITIAL RECOMMENDED ACTION		FINAL RECOMMENDED ACTION	
	INITIALS	DATE	INITIALS	DATE
APPROVE				
APPROVE WITH CONDITIONS EXPLAIN IN (6) X	[illegible] CG	5/11/92		
DISAPPROVE EXPLAIN IN (6)				
DEFER ACTION EXPLAIN IN (6)				
NO RECOMMENDATION EXPLAIN IN (6)				
CANCEL/WITHDRAW EXPLAIN IN (6)				

(6) EVALUATION RATIONALE:

Section 5.7.1 - Regulatory Committment Tracking System" .....need to clarify whether this is RW-30 Regulatory Tracking System. There should not be a second tracking system.

Section 2.3.3 should also reference QAP's and ILP's.

See attachment for additional comments

(7) PCCB MEMBER:
C. Gertz
PRINTED NAME

[signature]
SIGNATURE

RW-20
ORGANIZATION

7/2/92
DATE

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OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT
PROGRAM CHANGE CONTROL BOARD
COMMENT/RESPONSE RECORD

(1) DCP NUMBER: 61	(2) DCP TITLE: Init. Iss. of Monitored Retrievable Storage Proj. Plan	(3) COMMENTATOR (NAME/ROUTING SYMBOL): C. Gertz, RW-20

(4) DOCUMENT NUMBER: DOCUMENT TITLE: Monitored Retrievable Storage Project Plan

(5) COGNIZANT ORGANIZATION: RW-40

(6) COMMENT NO.	(7) REFERENCE PAGE/LINE	(8) COMMENT	(10) RESPONSE	(12) ACCEPT REJECT INITIAL AND DAT
		See attachment.		

PCCB MEMBER (9) SIGNATURE: _____

DATE: 7/2/92

PCCB MEMBER (11) SIGNATURE: _____

DATE: _____

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DCP-61 EVALUATION RATIONALE

The evaluation needs to acknowledge and address the Reference page 48, Table D-1. Summary of Baseline information. The listing of Milestones, Milestone Schedules and Total Project Cost are inconsistent with the Draft Program Cost and Schedule Baseline, Rev. 3. Conformation as to which document is correct is required.

Page 5. 3.1 MRS Facility. The is an interface between consolidation and/or canisterization at the MRS and the MGDS waste package. Configuration of the consolidated fuel and the selection of canister material could have a major impact on performance of the waste package in the repository. This important interface needs to be addressed during MRS design evaluations and development.

Page 9. 3.2 TRANSFORMATION. There is an interface between the transportation casks and the Repository Surface Facility Receiving area. The cask and the Repository facility port must mate properly. This important interface needs to be addressed.

Page 12. 3.3.2 ACCEPTANCE PROCESS READINESS. This section needs to include acceptance of HLW from HLW Producers.

Page 13. 3.3.3 CONTRACT/WASTE ACCEPTANCE ISSUE RESOLUTION PROCESS. The MOA for acceptance of waste needs to be included in this section.

Page 13. 5.3.1 WASTE ACCEPTANCE-TRANSPORTATION. 2nd bullet only addresses SNL and should include verification of the HLW description.

Page 16. 4.1 TECHNICAL RISKS. The interface between the transport casks and the repository receiving port will require exchange of information to assure that the cask and the repository facility mate properly. This should be included as a technical risk.

Page 23. 5.4 WASTE ACCEPTANCE MANAGEMENT. There will be Waste Acceptance Specifications that detail the repository requirements for waste form prior to receipt at the repository. The management of the WAS needs to be discussed here.

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT
PROGRAM CHANGE CONTROL BOARD
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(1) DCP NUMBER: 61	(2) DCP TITLE: Init. Iss. of Monitored Retrievable Storage Proj. Plan	(3) COMMENTATOR (NAME/ROUTING SYMBOL): C. Gertz, RW-20

(4) DOCUMENT NUMBER: DOCUMENT TITLE: Monitored Retrievable Storage Project Plan

(5) COGNIZANT ORGANIZATION: RW-40

(6) COMMENT NO.	(7) REFERENCE PAGE/LINE	(8) COMMENT	(10) RESPONSE	(12) ACCEPT/REJECT INITIAL AND DA
		See attachment.	DOCUMENT HAS BEEN CHANGED TO BE CONSISTENT W/ASB REV 2.	Project Scenario 8/12
			SECTION 5.7.1 CHANGED TO READ [redacted] REGULATORY [redacted] TRACKING SYSTEM. (RTS)	8/12
			SECTION 2.5.3 WAS REQUIREMENT BY RW-3	8/12
			UNCERTAINTY ON SECTIONS 3.3.2, 3.3.3, 3.5.1, and 5.4 NOT INCORPORATED AS NEGOTIATIONS ON THESE ISSUES ARE STILL UNDERWAY. DISCUSSION IN THIS PLAN IS NOT DESIRED AT THE TIME	Accept 8/
			SECTION 3.2 CRITERION ON USER INTERFACE WITH MGDS IS ADDRESSED IN SECTION 3.7.3 "THE DESIGN OF THESE (MGDS-MRS) CASKS WILL BE COORDINATED WITH THE DESIGN OF THE MRS AND THE REPOSITORY"	Accept 8/11
			SECTION 4.1 TERMINAL INTERFACE REQ SHOULD BE MAINTAINED BY THE MGDS - TRANSPORTATION INTERFACE SPECIFICATION TO BE DEVELOPED BY THE M&O. NO CHANGE TO ADDRESS PLAN IS CONSIDERED NECESSARY AT THIS TIME.	Accept 8/
			SECTION 3.1 CRITERIA FOR CANISTERIZATION NO LONGER VIABLE AS THE CANISTERIZATION PROJECT IS BEING PHASED OUT. TEXT HAS BEEN ADDED TO ADDRESS THIS FACT.	Accept 8/

PCCB MEMBER (9) SIGNATURE: [signature] DATE: 7/2/92

PCCB MEMBER (11) SIGNATURE: [signature] DATE: 7-29-92

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OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT
PROGRAM CHANGE CONTROL BOARD
DOCUMENT CHANGE PROPOSAL EVALUATION

(1) DCP NUMBER: 61 (2) DCP TITLE: Initial Issuance of Monitored Retrievable Storage Project Plan PAGE OF

(3) DOCUMENT NUMBER:
REVISION:
DOCUMENT TITLE: Monitored Retrievable Storage Project Plan

(4) COGNIZANT ORGANIZATION: RW-40

(5) RECOMMENDED ACTIONS:

	INITIAL RECOMMENDED ACTION		FINAL RECOMMENDED ACTION	
	INITIALS	DATE	INITIALS	DATE
APPROVE	JAR	6/22/92		
APPROVE WITH CONDITIONS EXPLAIN IN (6)				
DISAPPROVE EXPLAIN IN (6)				
DEFER ACTION EXPLAIN IN (6)				
NO RECOMMENDATION EXPLAIN IN (6)				
CANCEL/WITHDRAW EXPLAIN IN (6)				

(6) EVALUATION/RATIONALE:

(7) PCCB MEMBER:
J. Roberts — PRINTED NAME
J. R. Roberts — SIGNATURE
RW-30 — ORGANIZATION
6/22/92 — DATE

Revision 4
(Previous editions are obsolete)

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT
PROGRAM CHANGE CONTROL BOARD
IMPACT ANALYSIS RECORD

(1) DCP NUMBER: 61 (2) DCP TITLE: Initial Issue of MRS Project Plan

(3) DOCUMENT NUMBER:
REVISION: 0
DOCUMENT TITLE: MRS Project Plan

(4) COGNIZANT ORGANIZATION: RW-40

(5) IMPACT:	ESTIMATED IMPACT	RESPONSIBLE ORGANIZATION	(6) ATTACHMENT	ACCEPT/ ~~REJECT~~, INITIALS AND DATE
TECHNICAL (SCOPE) BASELINE	Initial Issue of MRS Project Plan	RW-20 RW-30 RW-40		JDR Accept 6/22/92
REGULATORY & ENVIRONMENTAL	None	RW-30		Accept JDR 6/22/92
COST	None	RW-10		
SCHEDULE	None	RW-10		
INSTITUTIONAL	None	RW-5		
TRAINING AND PROCEDURES	None	COGNIZANT ORGANIZATION		
PROGRAMMATIC	None	RW-4		
HEALTH AND SAFETY	None	RW-30		Accept JDR 6/22/

(7) OTHER DOCUMENTS AFFECTED

None

(8) DOES COST, SCHEDULE, OR TECHNICAL IMPACT EXCEED A LEVEL 0 THRESHOLD?

X YES NO ____

IMPACTS ON COST:		IMPACTS ON SCHEDULE:	IMPACTS ON SCOPE:
TPC	____	LEVEL 0	X ____ X
CONTINGENCY	____	LEVEL 1	____ ____
FUNDING PROFILE	____	LEVEL 2	____ ____
OTHER	____		
TOTAL COST	____		

(9) MITIGATING OR CORRECTIVE ACTIONS:

None

(10) SUBMITTED BY (ORIGINATING ORGANIZATION):

John Pitts 6/10/92
SIGNATURE DATE

TITLE: General Engineer, RW-422

Revision 4
(Previous editions are obsolete

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT
PROGRAM CHANGE CONTROL BOARD
DOCUMENT CHANGE PROPOSAL EVALUATION

(1) DCP NUMBER: 61 (2) DCP TITLE: Initial Issuance of Monitored Retrievable Storage Project Plan PAGE OF

(3) DOCUMENT NUMBER:
REVISION:
DOCUMENT TITLE: Monitored Retrievable Storage Project Plan

(4) COGNIZANT ORGANIZATION: RW-40

(5) RECOMMENDED ACTIONS:

	INITIAL RECOMMENDED ACTION		FINAL RECOMMENDED ACTION	
	INITIALS	DATE	INITIALS	DATE
APPROVE	RGM	6-18-92		
APPROVE WITH CONDITIONS EXPLAIN IN (6)				
DISAPPROVE EXPLAIN IN (6)				
DEFER ACTION EXPLAIN IN (6)				
NO RECOMMENDATION EXPLAIN IN (6)				
CANCEL/WITHDRAW EXPLAIN IN (6)				

(6) EVALUATION/RATIONALE:

(7) PCCB MEMBER:
R. Milner — PRINTED NAME
R. Milner — SIGNATURE
RW-40 — ORGANIZATION
6-18-92 — DATE

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT
PROGRAM CHANGE CONTROL BOARD
IMPACT ANALYSIS RECORD

(1) DCP NUMBER: 61 (2) DCP TITLE: Initial Issue of MRS Project Plan

(3) DOCUMENT NUMBER:
REVISION: 0
DOCUMENT TITLE: MRS Project Plan

(4)COGNIZANT ORGANIZATION: RW-40

(5) IMPACT:	ESTIMATED IMPACT	RESPONSIBLE ORGANIZATION	(6) ATTACHMENT	ACCEPT/ REJECT, INITIALS AND DATE
TECHNICAL (SCOPE) BASELINE	Initial Issue of MRS Project Plan	RW-20 RW-30 RW-40		Accept RAM 6/12
REGULATORY & ENVIRONMENTAL	None	RW-30		
COST	None	RW-10		
SCHEDULE	None	RW-10		
INSTITUTIONAL	None	RW-5		
TRAINING AND PROCEDURES	None	COGNIZANT ORGANIZATION		
PROGRAMMATIC	None	RW-4		
HEALTH AND SAFETY	None	RW-30		

(7) OTHER DOCUMENTS AFFECTED

None

(8) DOES COST, SCHEDULE, OR TECHNICAL IMPACT EXCEED A LEVEL 0 THRESHOLD?

X YES NO ____

IMPACTS ON COST:

TPC ____
CONTINGENCY ____
FUNDING PROFILE ____
OTHER ____
TOTAL COST ____

	IMPACTS ON SCHEDULE:	IMPACTS ON SCOPE:
LEVEL 0	X	X
LEVEL 1	____	____
LEVEL 2	____	____

(9) MITIGATING OR CORRECTIVE ACTIONS:

None

(10) SUBMITTED BY (ORIGINATING ORGANIZATION):

Hui Pico 6/10/92
SIGNATURE DATE

TITLE: General Engineer, RW-422

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OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT
PROGRAM CHANGE CONTROL BOARD
COMMENT/RESPONSE RECORD

RW-40

(1) DCP NUMBER:	(2) DCP TITLE:	(3) COMMENTATOR (NAME/ROUTING SYMBOL):
	Initial Issue of MRS Project Plan	M. Conroy / RW-431

(4) DOCUMENT NUMBER: DOCUMENT TITLE: Monitored Retrievable Storage Project Plan

(5) COGNIZANT ORGANIZATION: RW-40

(6) COMMENT NO.	(7) REFERENCE PAGE/LINE	(8) COMMENT	(10) RESPONSE	(12) ACCEPT/ REJECT, INITIAL AND DATE
1	10/Sec 3.2.3 Gr 1	Delete this paragraph we are not investigating universal or dual purpose casks as part of the transportation program.	ACCEPTED.	OK MJC 8/3/92
2	10/Sec 3.2.3 Gr 2, sentence 1	Initiative 1 is NOT a two phase program; Initiative 1 is ≡ Phase 2, phase 1 will precede initiative 1 casks.	ACCEPTED. CHANGE MADE TO INDICATE THAT INIT 1 ≡ PHASE 2	OK MJC 8/3/92
3	10/3.2.3, Gr 5	Delete "Rail" as HLW casks may also be truck.	ACCEPTED	OK MJC 8/3/92
4	10/Sec 3.2.4 Gr 2, 1st sentence	delete "Initiative 1" from "Phase 2 - Initiative 1" for clarity.	ACCEPTED	OK MJC 8/3/92
5	10/Sec. 3.2.4 Gr 2, last sentence	Delete last sentence on p.10, this is more appropriately discussed on p.17 in section 4.1.4 on technical risks.	ACCEPTED	OK MJC 8/3/92

PCCB MEMBER (9) SIGNATURE: _____ DATE: _____

PCCB MEMBER (11) SIGNATURE: R. Miller DATE: 7-29-92

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT
PROGRAM CHANGE CONTROL BOARD
COMMENT/RESPONSE RECORD

(1) DCP NUMBER:	(2) DCP TITLE:	(3) COMMENTATOR (NAME/ROUTING SYMBOL):
	Initial Issue of MRS Project Plan	M. Conroy / RW-431

(4) DOCUMENT NUMBER: DOCUMENT TITLE: MRS Project Plan

(5) COGNIZANT ORGANIZATION: RW-40

(6) COMMENT NO.	(7) REFERENCE PAGE/LINE	(8) COMMENT	(10) RESPONSE	(12) ACCEPT/ REJECT, INITIAL AND DATE
6	11 / sec. 3.2.5, ¶2, 2nd sentence	Delete "Initiative I" from "Phase 2 - Initiative I" for clarity	ACCEPTED	OK MJC 8/3/92
7	17/sec. 4.1.4 ¶1, 2nd sentence	same as comment #6	ACCEPTED	OK MJC 8/3/92
8	22/Fig. 4	Delete EG&G, ID, they support DOE-ID (who does not show here) but have NO involvement with Phase I casks. Also, delete MMES as ORNL support is being phased out to only support through the MEO. Also, delete LLNL for the same reason & since they are a minor participant Correct spelling of Milner.	REMAIN EG&G, but change to read "development support" in & from "Phase I" to "Phase 2" MMES and LLNL retained as contract is still in existence. Spelling of "Milner" corrected.	OK MJC 8/3/92
9	41	Delete MMES: TOPOD Operations Planning (See comment 8)	Change entry to read Operations Program Planning Support.	OK MJC 8/3/92

PCCB MEMBER (9) SIGNATURE: _____ DATE: _____

PCCB MEMBER (11) SIGNATURE: R. Miller DATE: 7-29-92

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT
PROGRAM CHANGE CONTROL BOARD
. COMMENT/RESPONSE RECORD

(1) DCP NUMBER:	(2) DCP TITLE:	(3) COMMENTATOR (NAME/ROUTING SYMBOL):
	Initial Issue of MRS Proj. Plan	M. Conroy / RW-431

(4) DOCUMENT NUMBER: DOCUMENT TITLE: MRS Project Plan

(5) COGNIZANT ORGANIZATION: RW-40

(6) COMMENT NO.	(7) REFERENCE PAGE/LINE	(8) COMMENT	(10) RESPONSE	(12) ACCEPT/ REJECT, INITIAL AND DATE
10	42	Delete EG&G, or change their function to cask development support.	ACCEPTED. FUNCTION CHANGED TO "SUPPORT"	OK MJC 8/3/92
		Delete "and Overweight Truck" from GA function.	ACCEPTED	OK MJC 8/3/92
H	48	Change "Large Weight Truck" to "Legal Weight Truck"	ACCEPTED	OK MJC 8/3/92

PCCB MEMBER (9) SIGNATURE: _____ DATE: _____

PCCB MEMBER (11) SIGNATURE: R. Mahn DATE: 7-29-92

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT
PROGRAM CHANGE CONTROL BOARD
DOCUMENT CHANGE PROPOSAL EVALUATION

(1) DCP NUMBER: 61 (2) DCP TITLE: Initial Issuance of Monitored Retrievable Storage Project Plan PAGE OF

(3) DOCUMENT NUMBER:
REVISION:
DOCUMENT TITLE: Monitored Retrievable Storage Project Plan

(4) COGNIZANT ORGANIZATION: RW-40

(5) RECOMMENDED ACTIONS:

	INITIAL RECOMMENDED ACTION		FINAL RECOMMENDED ACTION	
	INITIALS	DATE	INITIALS	DATE
APPROVE	[illegible]	7/6/2		
APPROVE WITH CONDITIONS EXPLAIN IN (6)				
DISAPPROVE EXPLAIN IN (6)				
DEFER ACTION EXPLAIN IN (6)				
NO RECOMMENDATION EXPLAIN IN (6)				
CANCEL/WITHDRAW EXPLAIN IN (6)				

(6) EVALUATION/RATIONALE:

(7) PCCB MEMBER:
S. Rousso
PRINTED NAME

[signature]
SIGNATURE

RW-50
ORGANIZATION

7/6/2
DATE

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT
PROGRAM CHANGE CONTROL BOARD
DCP EVALUATION SUMMARY/RECOMMENDATIONS

(1) DCP NUMBER: 61 (2) DCP TITLE: INITIAL ISSUANCE OF MONITORED RETRIEVABLE STORAGE PROJECT PLAN PAGE OF

(3) DOCUMENT NUMBER: N/A (4) COGNIZANT ORGANIZATION: RW-40
REVISION: N/A
DOCUMENT TITLE: MONITORED RETRIEVABLE STORAGE PROJECT PLAN

(5) OVERALL RECOMMENDATION:

- [X] APPROVE
- [ ] APPROVE WITH CONDITIONS (EXPLAIN IN BLOCK 8)
- [ ] DISAPPROVE
- [ ] DEFER ACTION
- [ ] NO RECOMMENDATION
- [ ] CANCEL/WITHDRAW

(6) FINAL RECOMMENDED ACTION FROM DCP EVALUATIONS:

	RW-3	RW-4	RW-5	RW-10	RW-20	RW-30	RW-40	RW-50
APPROVE	X	X	X	X	X	X	X	X
APPROVE WITH CONDITIONS								
DISAPPROVE								
DEFER ACTION								
NO RECOMMENDATION								
CANCEL/WITHDRAW								

(7) PCCB MEETING DATE:

(8) COMMENT RESOLUTION SUMMARY:

RW-3 SUBMITTED 3 COMMENTS. ALL WERE ACCEPTED AND INCORPORATED.

RW-4 SUBMITTED 10 COMMENTS. ALL WERE ACCEPTED.

RW-5 SUBMITTED 1 COMMENT. IT WAS ACCEPTED.

RW-10 SUBMITTED 23 COMMENTS, FOUR OF WHICH WERE REJECTED. RW-10 INITIALED OFF ON ALL COMMENT RESPONSES.

RW-20 SUBMITTED 8 COMMENTS. ALL WERE ACCEPTED.

RW-30 APPROVED WITHOUT COMMENT.

RW-40 SUBMITTED 11 COMMENTS. ALSO MENTIONED A TYPO ON P. 22. ALL WERE ACCEPTED.

RW-50 APPROVED WITHOUT COMMENT.

(9)

PCCB EXECUTIVE SECRETARY DATE

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT
PROGRAM CHANGE CONTROL BOARD
DIRECTIVE

(1) DCP NUMBER: 61

(2) DCP TITLE: INITIAL ISSUANCE OF MONITORED RETRIEVABLE STORAGE PROJECT PLAN

(3) DOCUMENT NUMBER: N/A
REVISION: N/A
DOCUMENT TITLE: MONITORED RETRIEVABLE STORAGE PROJECT PLAN

(4) COGNIZANT ORGANIZATION: RW-10

(5) DCP DISPOSITION:

- [x] APPROVE
- [ ] APPROVE WITH CONDITIONS
- [ ] DISAPPROVE
- [ ] ACTION DEFERRED
- [ ] CANCELLED/WITHDRAWN

(6) CONDITIONS/RATIONALE:

(7) IMPLEMENTATION DIRECTION:

1. FOLLOWING CONCURRENCE BY ESAAB PRINCIPALS, THE PCCB EXECUTIVE SECRETARY SHALL FINALIZE THE DOCUMENT FOR SIGNATURE BY THE DIRECTOR, OCRWM (RW-1), WHO SHALL PRESENT IT TO THE ACQUISITION EXECUTIVE THROUGH PR-24, FOR FINAL APPROVAL.

2. PRINTING AND DISTRIBUTION OF THE FINAL DOCUMENT SHALL FOLLOW ACQUISITION EXECUTIVE APPROVAL.

(8) CONCURRENCE: _____ (IF REQUIRED)
DIRECTOR, OQA

DATE: _____

(9) SIGNATURE: _____
PCCB CHAIRMAN

DATE: _____

(10) SIGNATURE: _____
PCCB EXECUTIVE SECRETARY

DATE: _____

Revision 4
(Previous editions are obsolete)