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Radioactive Waste Management System



**Project Decision
Schedule**

January 1985

**U.S. Department of Energy
Office of Civilian Radioactive Waste Management
Office of Policy, Integration and Outreach**

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TABLE OF CONTENTS

<u>Section</u>		<u>Page</u>
A	DISCUSSION	
	1. Introduction	1
	2. Overview of the Radioactive Waste Management System.	8
	a. First Repository	8
	b. Monitored Retrievable Storage	18
	c. Second Repository	18
	3. Actions Required of Federal Agencies	24
B	TABLES	
	1. NWPA Activities Required to Site, Construct, and Operate the First Geologic Repository.	34
	2. NWPA Activities Required to Site, Construct, and Operate the Second Geologic Repository	47
	3. Federal Technical Activities Required to Site, Construct, and Operate the First and Second Geologic Repositories	55
	4. Federal Environmental Activities Required to Site, Construct, and Operate the First and Second Geologic Repositories	63
	5. Activities Required to Site, Construct, and Operate a Geologic Repository by Agency.	69
	5.1 U.S. Department of Agriculture	70
	U.S. Department of Defense	
	5.2 Air Force	71
	5.3 Army Corps of Engineers	72
	5.4 U.S. Department of the Interior	73
	5.5 Bureau of Land Management	74
	5.6 U.S. Geological Survey.	75
	5.7 U.S. Department of Justice	76
	5.8 U.S. Department of Transportation	77
	5.9 Council on Environmental Quality	78
	5.10 Environmental Protection Agency	79
	5.11 Nuclear Regulatory Commission	80
	6. State and Indian Tribe Activities Associated with the Siting, Construction, and Operation of a Geologic Repository	84
APPENDIX A	List of Acronyms and Definitions	A-1

LIST OF FIGURES

<u>Number</u>	<u>Title</u>	<u>Page</u>
1	Geologic Repository Site Selection Process.	4
2	Reference Schedule for First Geologic Repository.	9
3	First Geologic Repository: Site Recommendation, Characterization, and Selection Phases.	14
4	First Geologic Repository: Licensing and Construction Phases.	17
5	Reference Schedule for Second Geologic Repository	19
6	Second Geologic Repository: Site Recommendation, Characterization, and Selection Phases.	22
7	Second Geologic Repository: Licensing and Construction Phases.	23
8	PDS Milestones During Site Recommendation Phase	25
9	PDS Milestones During Site Characterization and Selection Phases.	26
10	PDS Milestones During Licensing and Construction Phases .	27

A. Discussion

DISCUSSION

1. INTRODUCTION

The Nuclear Waste Policy Act of 1982 (Public Law 97-425, the Act) states, in Section 111(b)(1), that one of the purposes of the Act is:

...to establish a schedule for the siting, construction, and operation of repositories that will provide a reasonable assurance that the public and the environment will be adequately protected from the hazards posed by high-level radioactive waste and such spent nuclear fuel as may be disposed of in a repository...

In accordance with this purpose, Section 114(e) of the Act requires the Secretary of the Department of Energy to prepare a Project Decision Schedule.

This section reads as follows:

- (1) The Secretary shall prepare and update, as appropriate, in cooperation with all affected Federal agencies, a project decision schedule that portrays the optimum way to attain the operation of the repository involved, within the time periods specified in this subtitle. Such schedule shall include a description of objectives and a sequence of deadlines for all Federal agencies required to take action, including an identification of the activities in which a delay in the start, or completion, of such activities will cause a delay in beginning repository operation.*
- (2) Any Federal agency that determines that it cannot comply with any deadline in the project decision schedule, or fails to so comply, shall submit to the Secretary and to the Congress a written report explaining the reason for its failure or expected failure to meet such deadline, the reason why such agency could not reach an agreement with the Secretary, the estimated time for completion of the activity or activities involved, the associated effect on its other deadlines in the project decision schedule, and any recommendations it may have or actions it intends to take regarding any improvements in its operation or organization, or changes to its statutory directives or authority, so that it will be able to mitigate the delay involved. The Secretary shall, within 30 days after receiving any such report, file with the Congress his response to such*

report, including the reasons why the Secretary could not amend the project decision schedule to accommodate the Federal agency involved.

This document and its subsequent updates are intended to fulfill the requirement under Section 114(e)(1) above for the preparation of a Project Decision Schedule by the Secretary of Energy.

In addition, the role of Federal agencies during site characterization and repository construction/operation is discussed in Section 120 of the Act:

(a) ISSUANCE OF AUTHORIZATIONS.

(1) To the extent that the taking of any action related to the site characterization of a site or the construction or initial operation of a repository under this subtitle requires a certificate, right-of-way, permit, lease, or other authorization from a Federal agency or officer, such agency or officer shall issue or grant any such authorization at the earliest practicable date, to the extent permitted by the applicable provisions of law administered by such agency or officer. All actions of a Federal agency or officer with respect to consideration of applications or requests for the issuance or grant of any such authorization shall be expedited, and any such application or request shall take precedence over any similar applications or requests not related to such repositories.

(2) The provisions of paragraph (1) shall not apply to any certificate, right-of-way, permit, lease, or other authorization issued or granted by, or requested from, the Commission.

(b) TERMS OF AUTHORIZATIONS.

Any authorization issued or granted pursuant to subsection (a) shall include such terms and conditions as may be required by law, and may include terms and conditions permitted by law.

The Department identified reference schedules for the Radioactive Waste Management System in the Draft Mission Plan for the Civilian Radioactive Waste Management Program, April 1984 (DOE/RW-0005). The reference schedules, which are discussed in Sections 2 and 3 of this document, portray the optimum way to

achieve the operation of the Radioactive Waste Management System. They also provide the basis for the Project Decision Schedule. As indicated by the reference schedule, the Department intends to accept high-level radioactive waste or spent fuel for disposal by 1998.

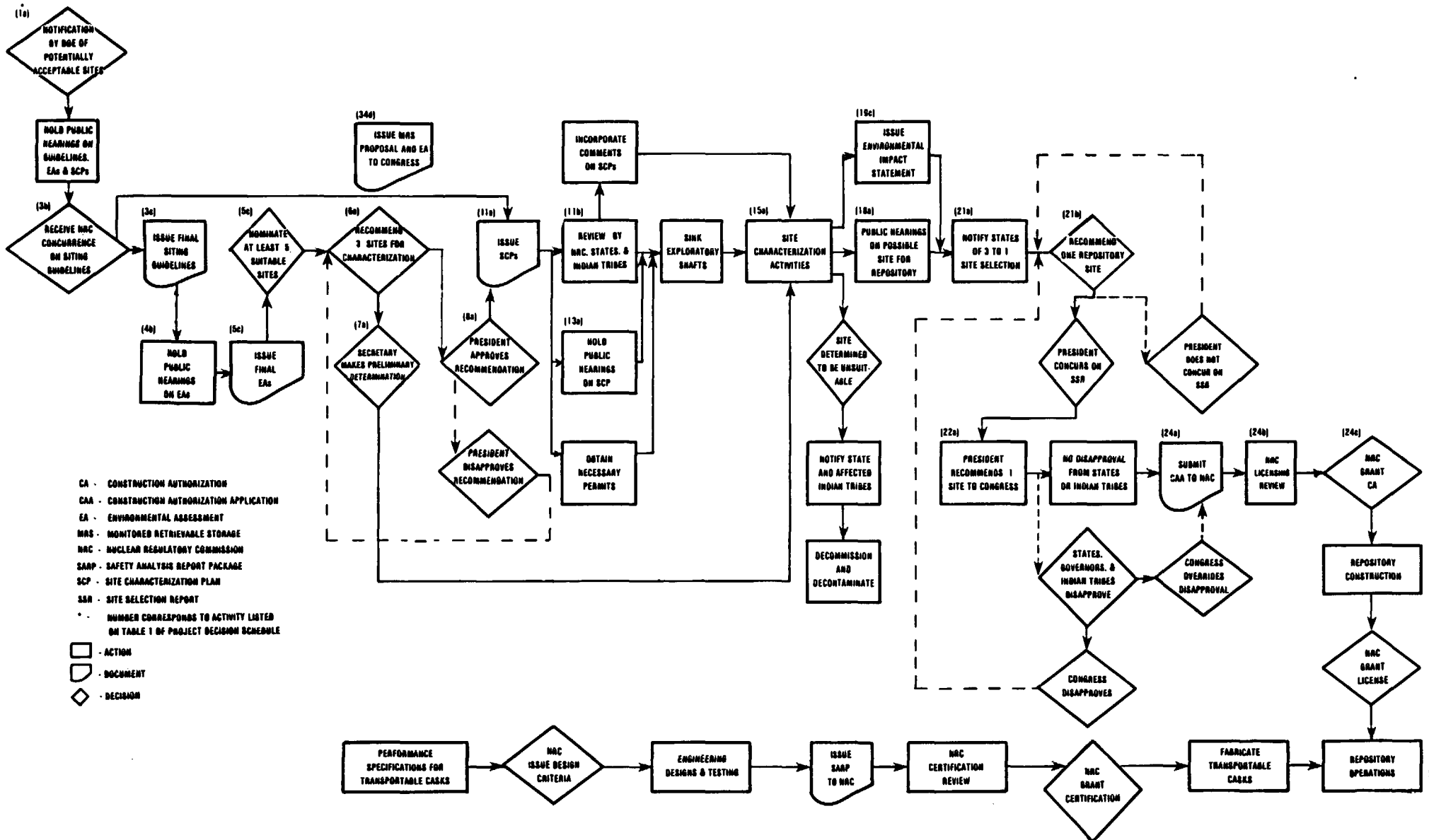
The Project Decision Schedule presents the key activities and decision points that are integral to the initiation of operations by 1998 of a radioactive waste management system.

The radioactive waste management system incorporates a number of components in addition to the geologic repository. While the role of the geologic repository remains central to the program, it is equally important to include in this Project Decision Schedule, consideration of other components of the system which, if not addressed at this time, might preclude the optimum initiation of operations of the repository. The radioactive waste management system, as discussed in the Project Decision Schedule incorporates those elements necessary to package, transport, store, and ultimately permanently dispose of high-level radioactive waste and spent fuel.

The key activities and decision points for the Office of Civilian Radioactive Waste Management (OCRWM) program are shown in Figure 1. In accordance with the Act, the following actions are required to be taken by the Secretary of Energy, the President, and the Nuclear Regulatory Commission (NRC):

- Identification of potentially acceptable repository sites by the Secretary.

**FIGURE 1
RADIOACTIVE WASTE MANAGEMENT SYSTEM - KEY ACTIVITIES AND DECISION POINTS**



- Concurrence of the NRC in the siting guidelines, to be followed by issuance of the guidelines by the Secretary.
- Determination by the President on the use of the repositories for disposal of high-level radioactive waste resulting from atomic energy defense activities.
- Nomination by the Secretary of at least five candidate sites for site characterization.
- Submission to Congress by the Secretary of the Monitored Retrievable Storage (MRS) proposal and Environmental Assessment.
- Recommendation by the Secretary of three of the nominated sites for site characterization.
- Approval by the President of the recommended sites for characterization.
- Preliminary determination by the Secretary on site suitability in accordance with Section 114(f) of the Act.
- Recommendation by the Secretary of one site for the development of a repository.
- Recommendation by the President to Congress of the repository site.

- Issuance by the NRC of a repository construction authorization.
- Issuance by the NRC of a license to receive and emplace high-level waste.

Section 114(e) of the Act imposes schedule responsibilities on all participating Federal agencies. Accordingly, the Department has identified those milestones which require interactions with other Federal agencies and are needed to support program decisions. A schedule has been developed for all necessary Federal agency actions associated with the accomplishment of each of those milestones. This schedule is presented in detail in Section B. As appropriate, the schedule of agency actions also reflects the requirements of Section 120 regarding expedited Federal authorizations. Section B also contains those consultation and cooperation milestones between the States and the Department, the accomplishment of which are key components of their own program. These milestones are not required by Section 114(e) of the Act but are included in this document for the purpose of completeness and continuity.

In accordance with the Act, the Project Decision Schedule has been developed in consultation with the participating Federal agencies. All updates of the Project Decision Schedule will also be developed in consultation with these Federal agencies. The Department has under consideration two types of updates. The first type of update would be undertaken when a Federal agency believes that it cannot comply with any deadline identified in the Project Decision Schedule. In this case, the Federal agency has an obligation to notify the Department in order to discuss the reasons for its inability to comply with the schedule. If the Department

and the Federal agency then agree that the milestone date(s) should be changed, an amendment to the Project Decision Schedule will be issued by the Department. This update will be done on an as-required basis. If the Department and the agency cannot agree on the proposed changes to any of the critical path activities, then, as required by Section 114(e)(2) of the Act, the Federal agency must submit to Congress and the Secretary a report discussing the agency's proposed change in milestones. The Secretary is required to file a response to the agency's report with Congress. If any agency proposes a change to any non-critical path activity and the change will not put that activity on the critical path, then a report to Congress and the Secretary is not necessary. Situations such as these will be resolved between the Department and the affected Federal agency. The second type of update will be undertaken when the Secretary believes that a key activity or decision point date for the program should be revised. This update will include any amendments previously issued, as discussed above. The Department will evaluate the need for such an update periodically, and update the Project Decision Schedule as required.

2. OVERVIEW OF THE RADIOACTIVE WASTE MANAGEMENT SYSTEM

a. First Repository

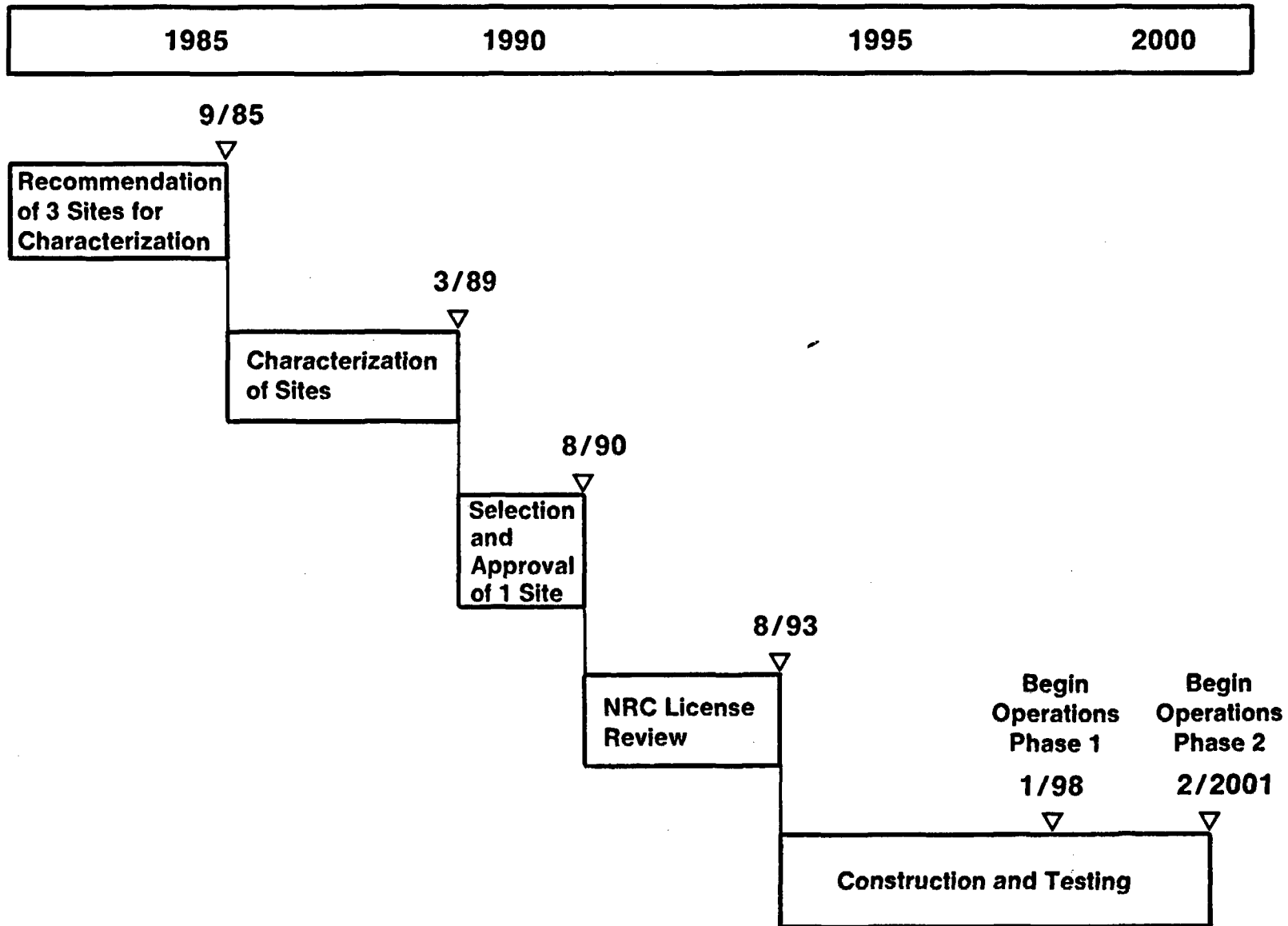
Before issuing the OCRWM Draft Mission Plan, the Department examined the steps which lead to the beginning of repository operations and analyzed various alternative schedules for accomplishing those steps. Based on this analysis, a reference schedule was selected for the first repository and is shown in Figure 2. Further details on the other schedule options which were evaluated but not selected by the Department can be found in the Draft Mission Plan.

As shown in Figure 2, the Department has divided the repository program into five major phases:

1. Recommendation of sites for characterization;
2. Site characterization;
3. Site selection;
4. NRC licensing review;
5. Repository construction.

Each phase and the schedule assumptions associated with each phase are summarized below. It should be noted that the milestones presented for Phase I

**FIGURE 2
REFERENCE SCHEDULE FOR
FIRST GEOLOGIC REPOSITORY**



are different than those shown in the Draft Mission Plan. The Department is currently evaluating the effect of these changes on other program milestones. The Department remains committed to the 1998 date required by the Act for the waste disposal system startup. The final Mission Plan will contain the Department's updated repository schedule.

During phase 1, the Department will issue final siting guidelines. The Act requires that these siting guidelines be utilized in developing the environmental assessments (EAs) which will address site specific issues. It is anticipated that EAs will be issued in draft form for public comment in December 1984. In preparing final EA's, the Department will review and consider all comments received during the public comment period.

Using the EAs, the Secretary will then nominate at least five sites for site characterization. Subsequent to such nomination, the Secretary will recommend three of the nominated sites for characterization as candidate sites for the first repository. Phase 1 ends when the President approves the sites for characterization. The specific milestones for phase 1 are as follows:

- The final siting guidelines are issued by the Department in December 1984.
- The draft EAs are issued in December 1984.
- The final EAs are issued in June 1985.

- The Secretary nominates and recommends sites to the President in July 1985.
- The President approves the recommended sites by September 1985.

The reference schedule for phase 1 assumes that neither extensive modifications to the draft EAs nor judicial review of the EAs will cause delays. It is assumed that the President will approve the recommended sites within the 60-day period provided by the Act without exercising his option to delay the decision.

Site Characterization Plans describing the testing program for each site will be issued during phase 2. After obtaining the required permits and following the procedures contained in Section 113 of the Act related to public comment, the Department will begin construction of the exploratory shafts. The work on the shafts includes drilling or mining followed by lining and outfitting of the shafts with utilities and service lines. Then, subsurface drifts would be excavated, and, finally, test equipment would be installed.

Both surface testing and in-situ testing will be conducted at each of the three sites approved for characterization to determine the suitability of the sites. This information will be used in the Construction Authorization Application along with any additional data that are gathered while the draft environmental impact statement (EIS) is being prepared and issued. Phase 2 is completed when sufficient testing has been performed to support the draft EIS. The specific milestones for phase 2 are as follows:

- Site Characterization Plans are issued in September 1985 for basalt, September 1985 for tuff, and October 1986 for salt.
- The permitting process for any salt site selected is completed by March 1987 by concurrently seeking permits for drilling boreholes and constructing exploratory shafts.
- Construction of the initial exploratory shaft begins in January 1986 for basalt, March 1986 for tuff, and March 1987 for salt.
- Testing to support the draft EIS is completed in March 1989.

During Phase 3 the Department will prepare and issue a draft EIS based on the data developed during the in-situ testing period. Upon the close of the public comment period, the Department will review and consider all comments received from Federal agencies, States, and Indian tribes and other interested parties and members of the public. A final EIS will then be issued along with a Site Selection Report as required by the Act. After the final EIS is issued, the department will, no sooner than 30 days after the issuance of the final EIA, issue a Record of Decision (ROD) as required by 40 CFR Part 1505. Subsequent to the issuance of the ROD, the department will recommend one repository site to the President. The President will then recommend the first repository site to Congress.

The Act allows an affected State and/or Indian tribe on whose reservation the recommended site is located, to file with Congress a notice of disapproval of the site recommended for repository development. If no notice of

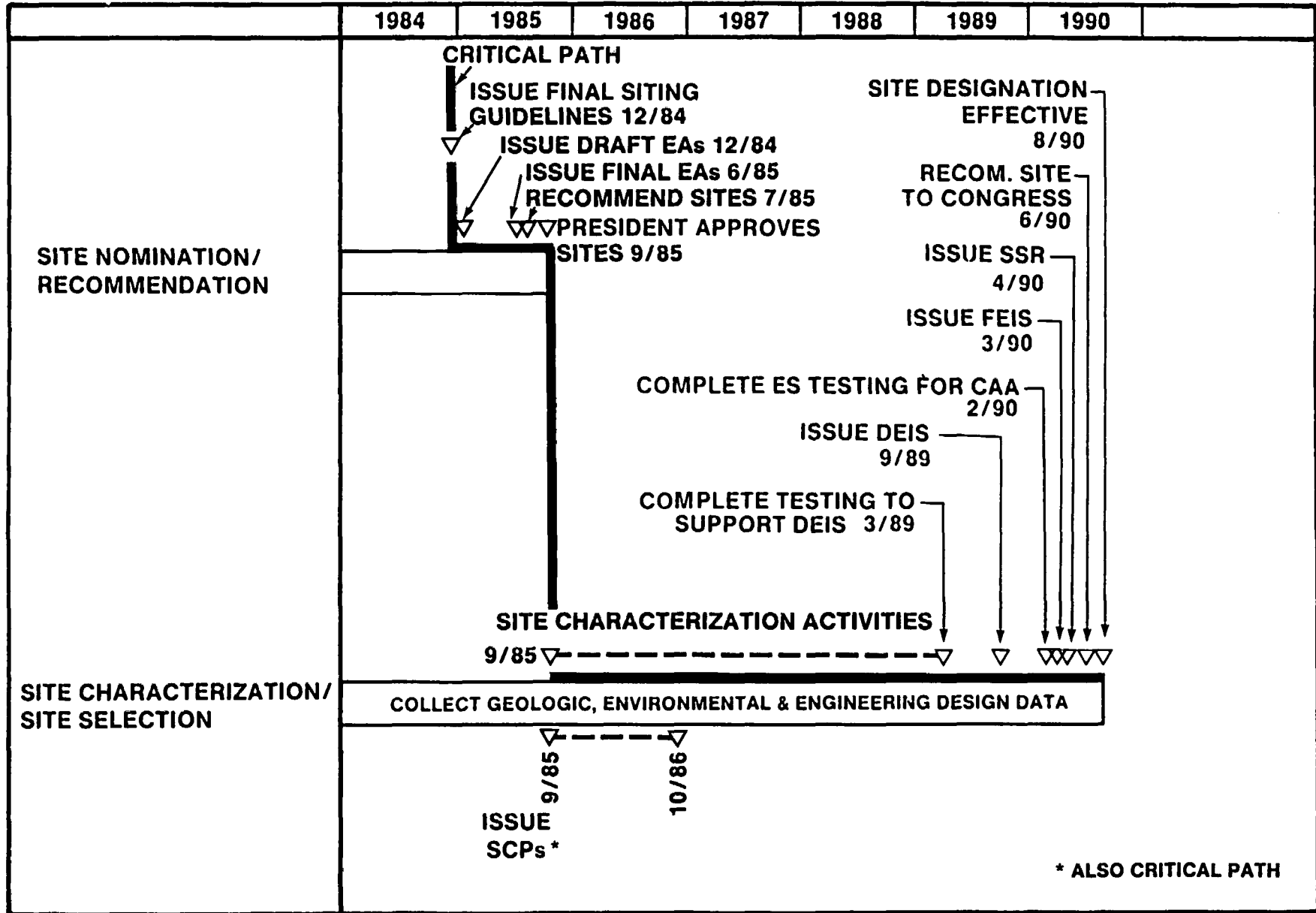
disapproval is filed, then the site designation takes effect 60 days after the site is recommended by the President to Congress. If a notice of disapproval is filed, then Congress has 90 days of continuous session to act on the notice. If Congress overrides the notice by a joint resolution, the site designation becomes effective. If Congress does not override the disapproval, then the disapproval stands and the President must recommend another site not later than 1 year after the disapproval.

The reference schedule for phase 3 also assumes that neither extensive modification to the draft EIS nor judicial review of the EIS will cause delays. Also assumed is that the President will approve the recommended site and that no notice of disapproval will be filed by affected States or Indian tribes. Phase 3 is completed when the site designation is effective. The specific milestones for phase 3 are as follows:

- The draft EIS is issued by September 1989.
- The final EIS is issued by March 1990.
- The Site Selection Report is issued in April 1990.
- The President recommends the site by June 1990.
- Site designation is effective August 1990.

The reference schedule for phases 1, 2 and 3 is depicted in Figure 3.

**FIGURE 3
FIRST GEOLOGIC REPOSITORY
SITE RECOMMENDATION, CHARACTERIZATION & SELECTION PHASES**



Following site approval and site designation, the Department will submit a repository Construction Authorization Application (CAA)* to NRC. The Act allows the NRC a 3-year review period. However, it authorizes them to extend its review by 1 year if needed. The specific milestones for phase 3 are as follows:

- The CAA is submitted in August 1990.
- NRC issues a construction authorization in August 1993.

The reference schedule assumes that the Department will submit a satisfactory CAA to NRC immediately upon site designation becoming effective and that NRC then takes no more than 3 years to issue the construction authorization.

Upon receipt of the construction authorization, the Department will begin construction of the surface and subsurface facilities. During the final stages of construction, the Department will complete any necessary pre-operational testing in order to receive a license to accept waste and operate the facility.

The reference schedule for phase 4 assumes that the Department constructs the repository in two phases. Phase 1 consists of the construction of the surface and shaft facilities that are required to allow the Department to

* This terminology is consistent with that used in the Act to describe this portion of the repository program. It does not exactly reflect the terminology used in NRC regulations (10 CFR Part 60), but it does indicate a step in the licensing process that has been established by NRC.

begin accepting up to 400 MTU/yr of spent fuel in 1998. Phase 2 consists of the construction of the remaining facilities needed to develop the repository to its full scale capacity. It is anticipated that the existing exploratory shafts will be utilized to the extent possible to minimize costs and improve schedules. Phase 1 and Phase 2 construction and pre-operational testing would be completed in 53 and 90 months, respectively, after receipt of the construction authorization.

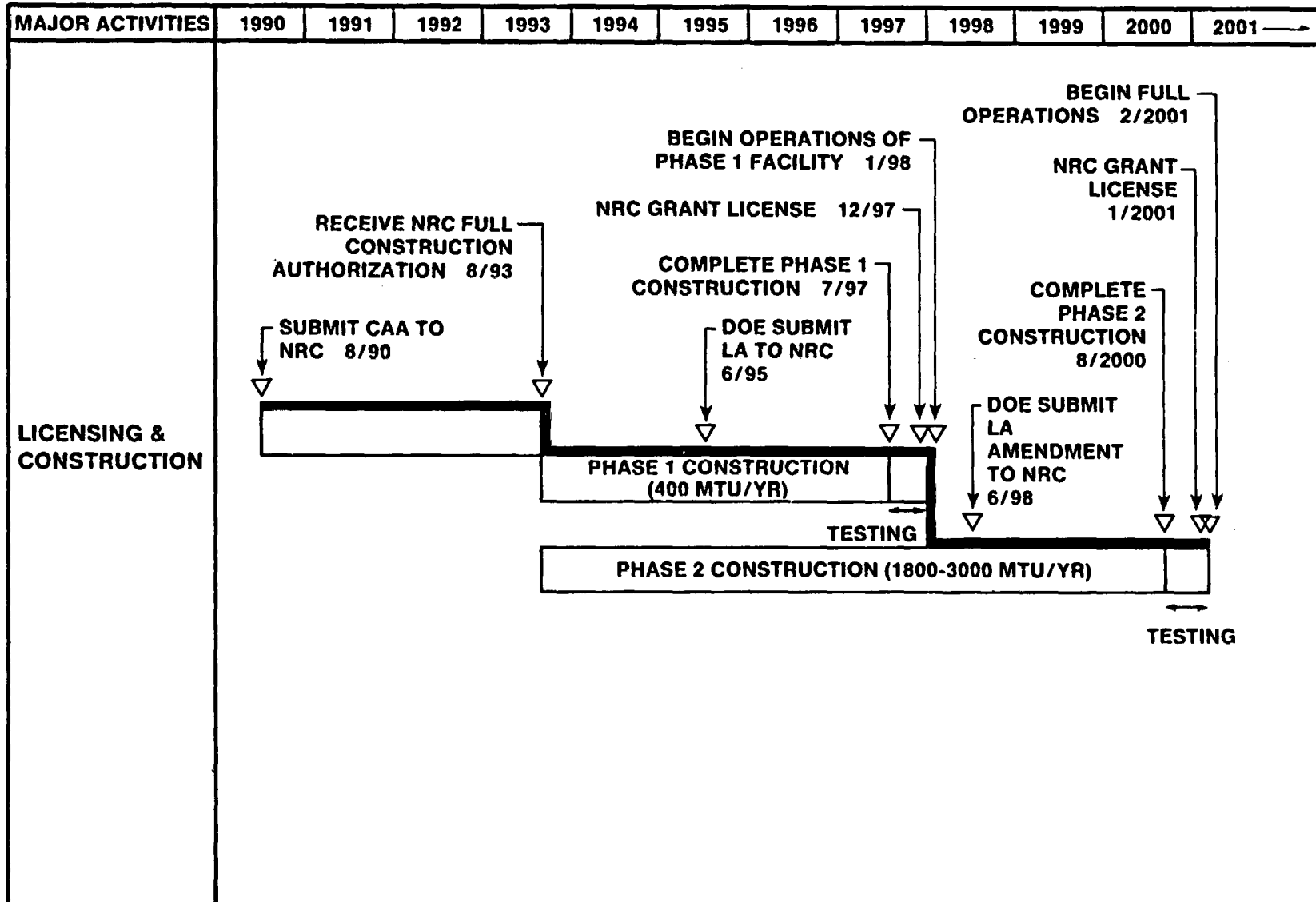
The specific milestones for phase 4 are as follows:

- Begin construction in August 1993.
- Complete phase 1 construction and begin pre-operational testing in July 1997.
- Complete phase 1 pre-operational testing and begin operation in January 1998.
- Complete phase 2 construction and begin pre-operational testing in August 2000.
- Complete phase 2 pre-operational testing and begin operation in February 2001.

The reference schedule for phases 3 and 4 is shown in Figure 4.

The Department is aware that the reference schedule is aggressive but believes that it is achievable. The Department also understands that the

**FIGURE 4
FIRST GEOLOGIC REPOSITORY
LICENSING AND CONSTRUCTION PHASES**



potential for schedule delays is present. If delays are encountered, the Department will, if appropriate, attempt to accelerate portions of future phases of the program in an effort to meet the 1998 waste management system startup date that the Department has committed to meet. The Department will, as it moves forward with the program, make every effort to minimize or eliminate delays, particularly for those activities which are under its control.

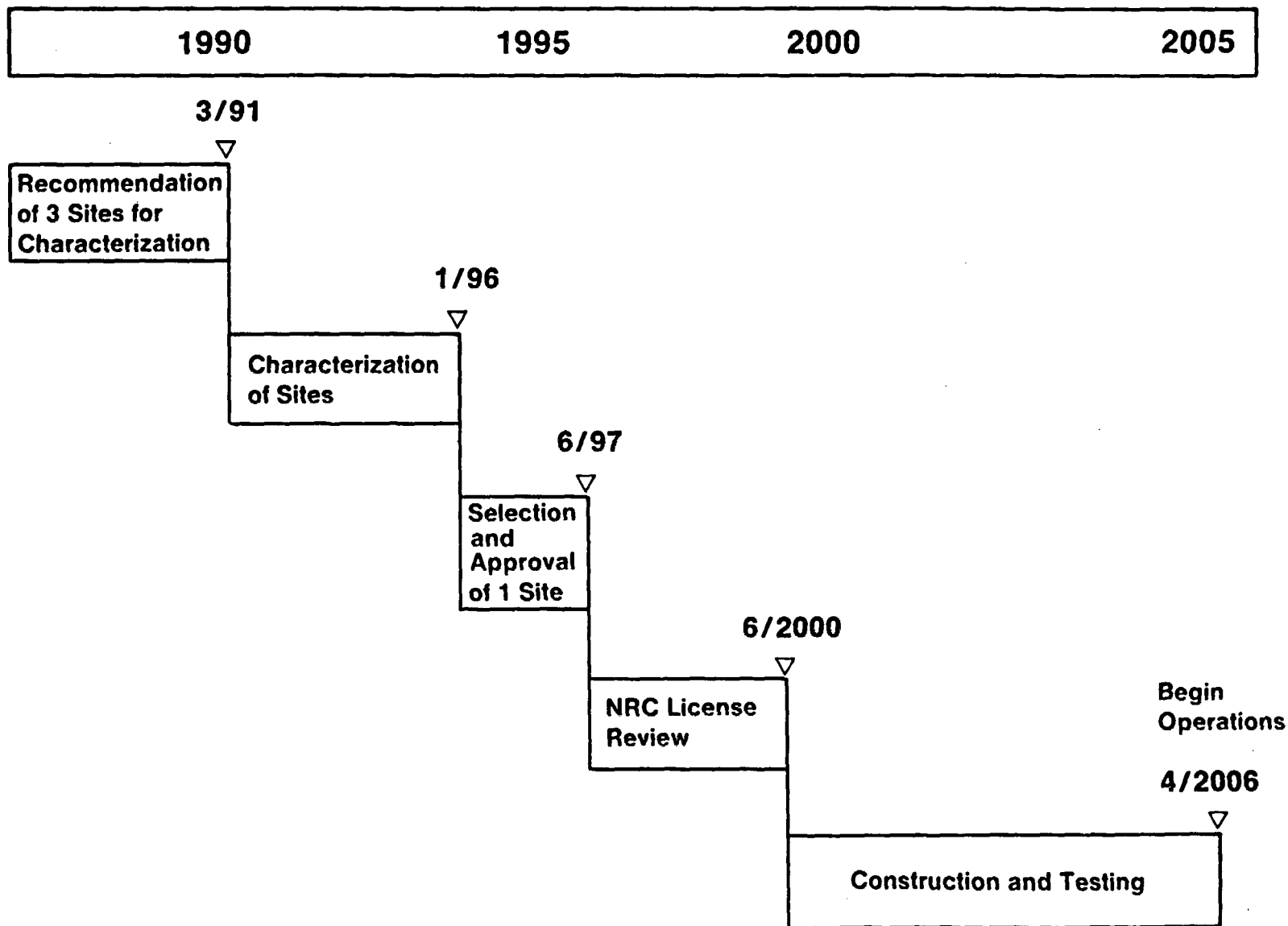
b. Monitored Retrievable Storage (MRS)

The NWPA characterizes Monitored Retrievable Storage (MRS) as an option for the safe, reliable management of spent fuel and high level waste, and directs the Executive Branch and the Congress to expeditiously consider a proposal for construction of MRS facilities. The proposal is to be submitted to Congress by June 1, 1985 (Section 141(b)). As discussed in the Draft Mission Plan, the Department is developing designs for MRS facilities as backup capability if there are long-term delays in repository deployment. Currently, the Department is evaluating the potential benefits and impacts of integrating the MRS into the waste disposal system. The activities that describe the process covering the MRS proposal can be found in Section B, Table 1 of this document. Additional information concerning the MRS program can be found in the draft Mission Plan.

c. Second Repository

The process and schedule established to achieve the siting and operation of the second repository is discussed in the Draft Mission Plan and shown in Figure 5. As discussed in the Mission Plan, the Department anticipates that a

**FIGURE 5
REFERENCE SCHEDULE FOR SECOND GEOLOGIC REPOSITORY**



second repository will be required and, in 1992, the Department plans to request Congressional approval for the construction of this facility.

The first major decision point for the second repository program will occur in March 1986 when the Department will have completed initial Region-to-Area Screening of sites. Field investigations in the recommended areas will begin in July 1986 and progress according to area characterization plans reviewed by the States. Field investigations will be completed in January 1989, and candidate sites for nomination will be identified in the fall of 1990. The Department is aware that these dates are in conflict with the requirements of Section 112(b)(1)(c) of the Act which states:

'not later than July 1, 1989, the Secretary shall nominate 5 sites, which shall include at least 3 additional sites not nominated under subparagraph (A), and recommend by such date to the President from such 5 nominated sites 3 candidate sites the Secretary determines suitable for site characterization for selection of the second repository.'

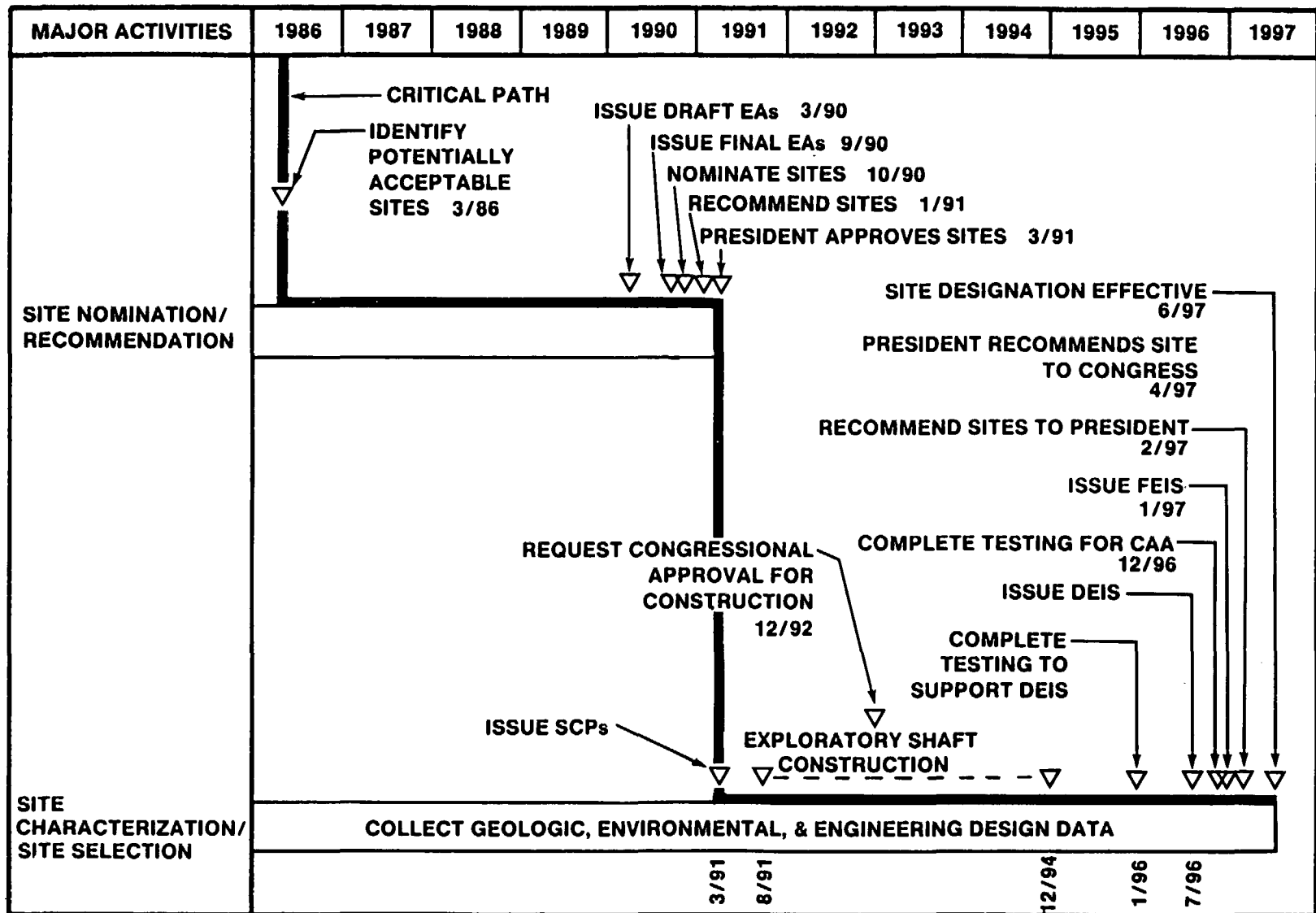
As discussed in the draft Mission Plan, site characterization at the three candidate sites for the first repository will not be completed when sites for the second repository were to be nominated under the Act. Therefore, the delay in the second repository schedule is necessary to coordinate with the site selection process for the first repository.

At that point, the process of siting and developing the second repository will be very similar to that of the first repository, except that the phased

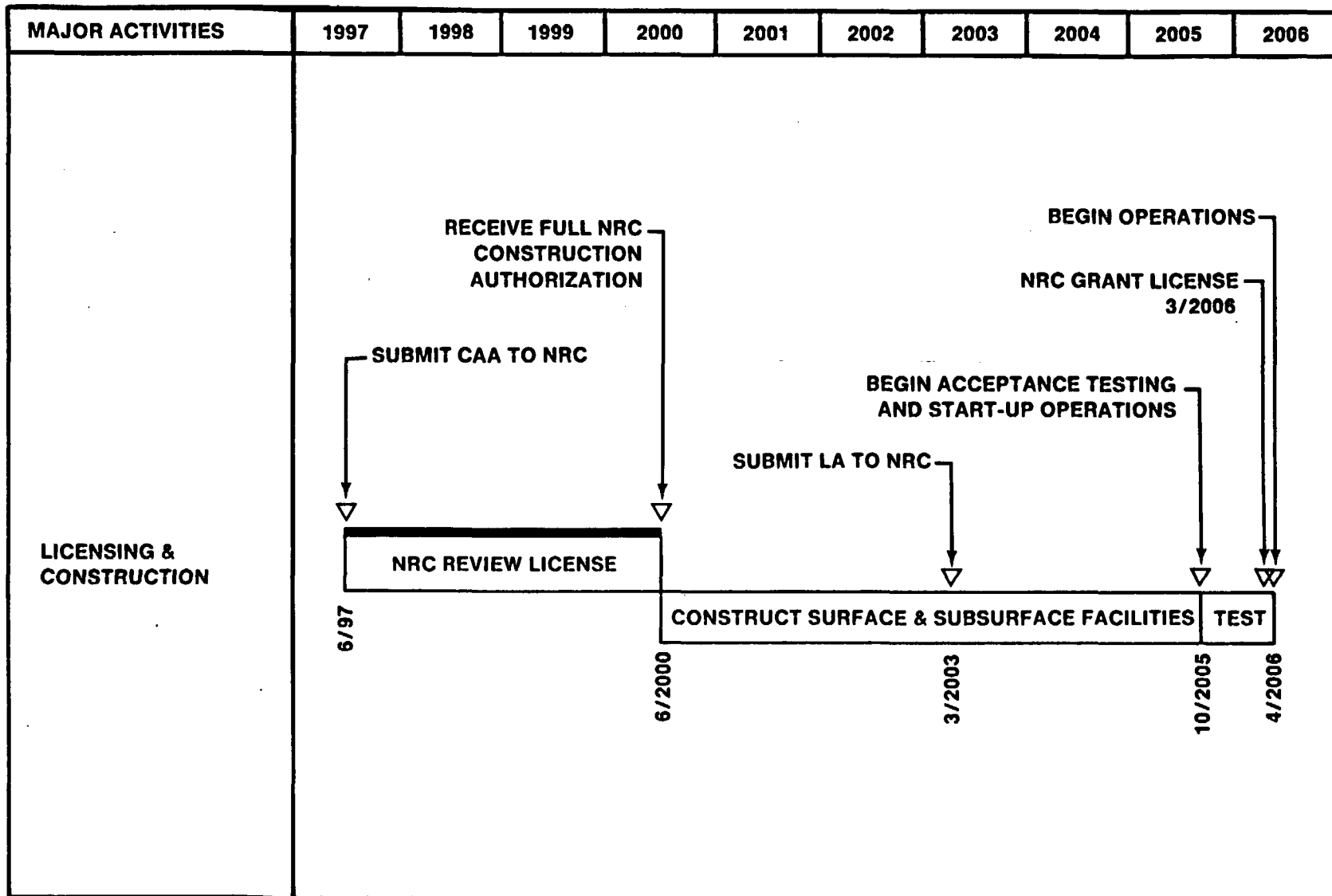
construction approach which was assumed for the first repository will not be used. Instead, full scale repository facilities will be constructed without any intermediate steps. The major milestones for the second repository are listed below and also shown in Figures 6 and 7:

- Identify potentially acceptable sites for the second repository March 1986
- Issue final EAs September 1990
- Nominate sites October 1990
- Recommend sites for characterization January 1991
- Issue initial Site Characterization Plan March 1991
- Request Congressional approval for construction December 1992
- President recommends site for repository to Congress April 1997
- Submit CAA to NRC June 1997
- Receive construction authorization from NRC and begin construction June 2000
- Begin emplacement of radioactive waste April 2006

**FIGURE 6
SECOND GEOLOGIC REPOSITORY
SITE RECOMMENDATION, CHARACTERIZATION AND SELECTION PHASES**



**FIGURE 7
SECOND GEOLOGIC REPOSITORY
LICENSING AND CONSTRUCTION PHASES**



3. ACTIONS REQUIRED OF FEDERAL AGENCIES

Agencies are required by the Act to respond in an expeditious manner to DOE requests for authorization needed to conduct site characterization or repository development activities.

The Act specifically provides for three major types of Federal agency actions required to support the Radioactive Waste Management System decisions: (1) issuance of regulations and standards by NRC and EPA, (2) consultation on various aspects of the program, and (3), in the case of NRC, concurrence or approval at key points in the system development process. Significant aspects of these Federal agency actions are summarized below. These actions and other activities required to support each critical path milestone are shown in Figures 8, 9, and 10. Additional Federal agency roles may be identified as the Radioactive Waste Management System continues to develop and the interaction of affected Federal agencies evolves.

The Act established a schedule for the promulgation of regulations by two other Federal agencies -- NRC and EPA. The EPA is to promulgate generally applicable standards to be codified as 40 CFR Part 191 for protecting the public from offsite releases from the radioactive material in repositories. These standards are to be implemented and enforced by NRC, which is required to issue technical criteria for that purpose. The Department must comply with both regulations during repository siting, design, construction, operation, closure, and decommissioning. Although the Act requires that EPA standards be promulgated not later than January 7, 1984, the standards have not yet been issued, but are expected to be issued soon. The Department and NRC have been

**FIGURE 8
PDS MILESTONES DURING SITE RECOMMENDATION PHASE**

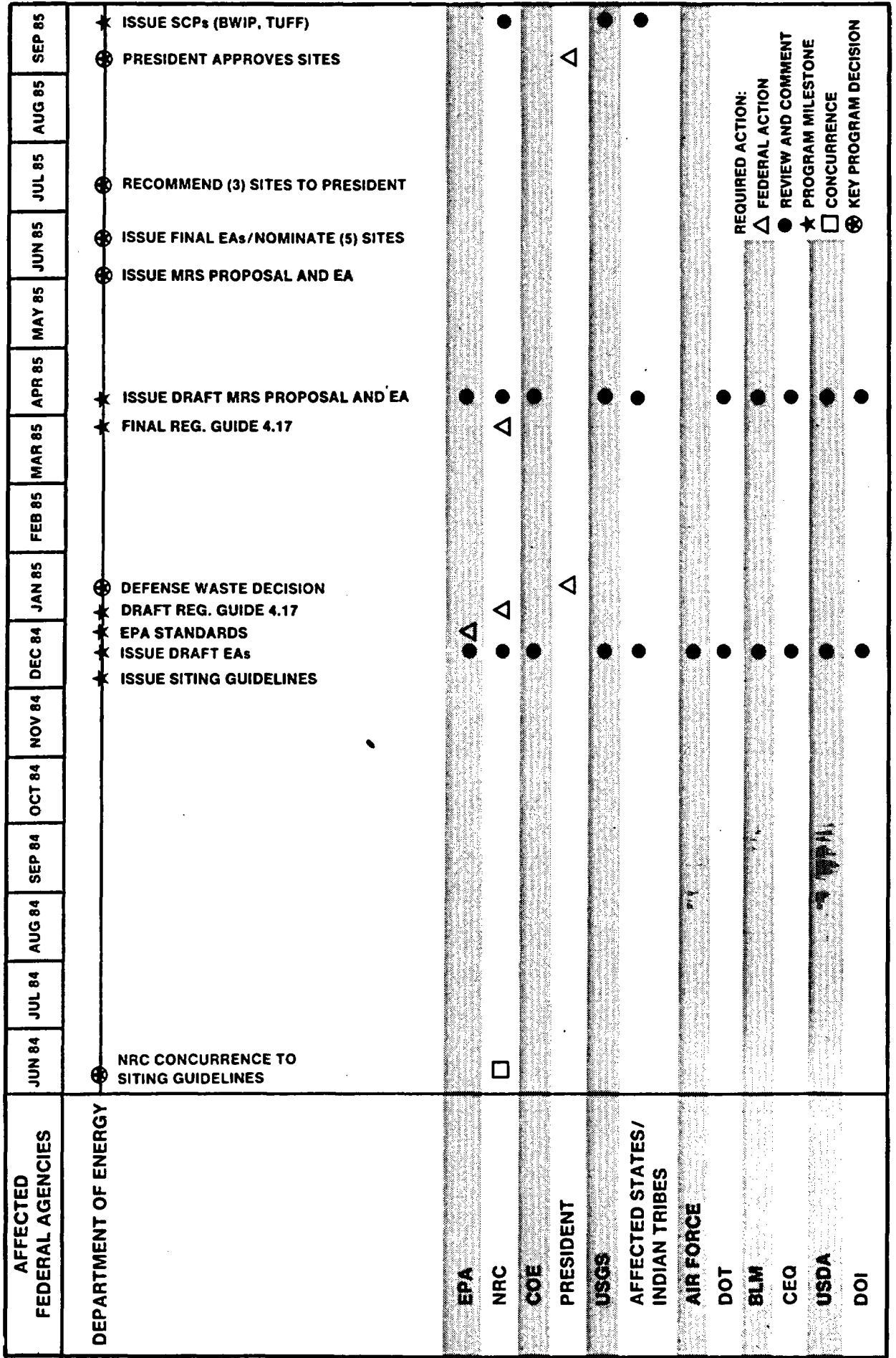
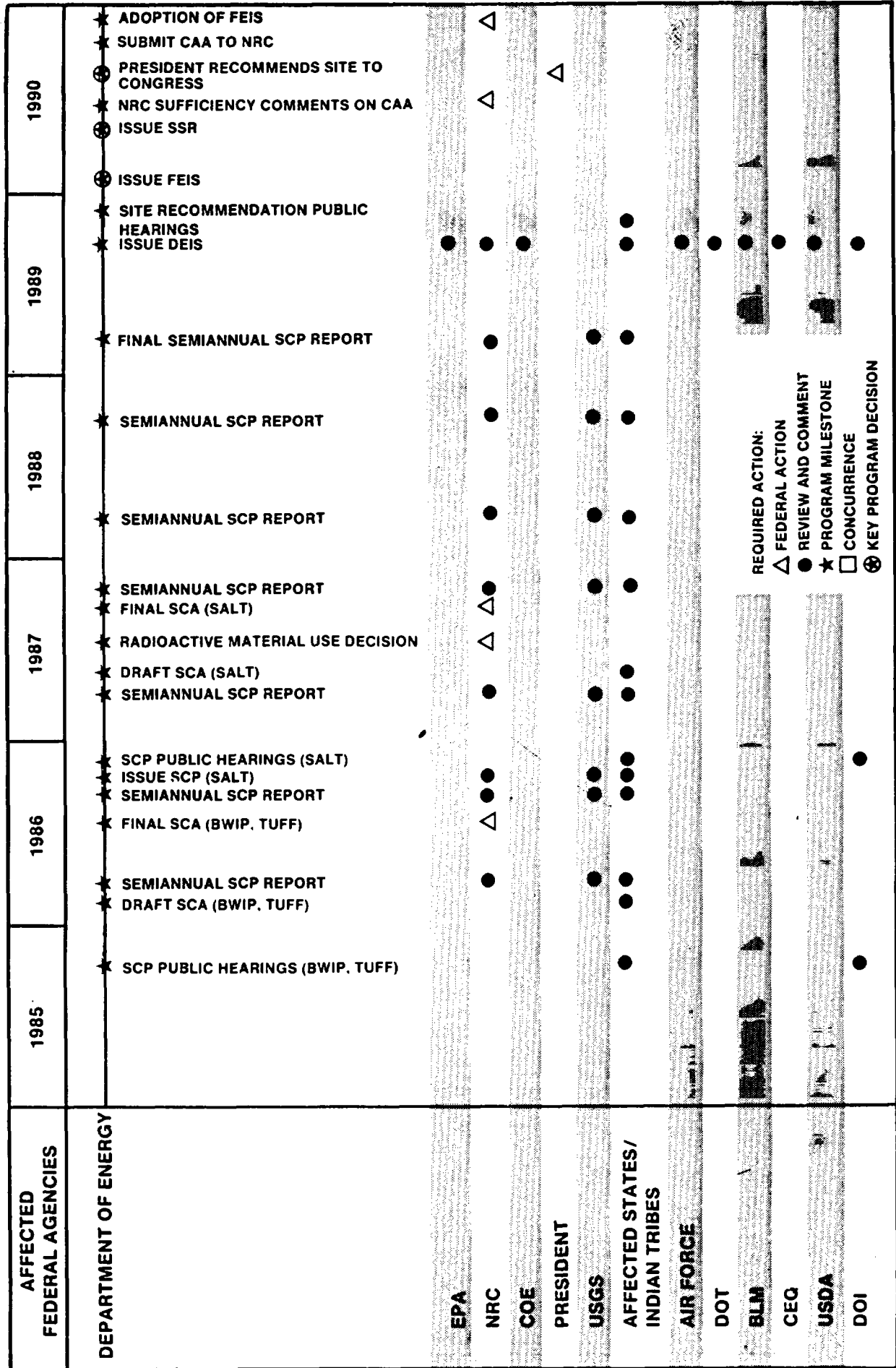
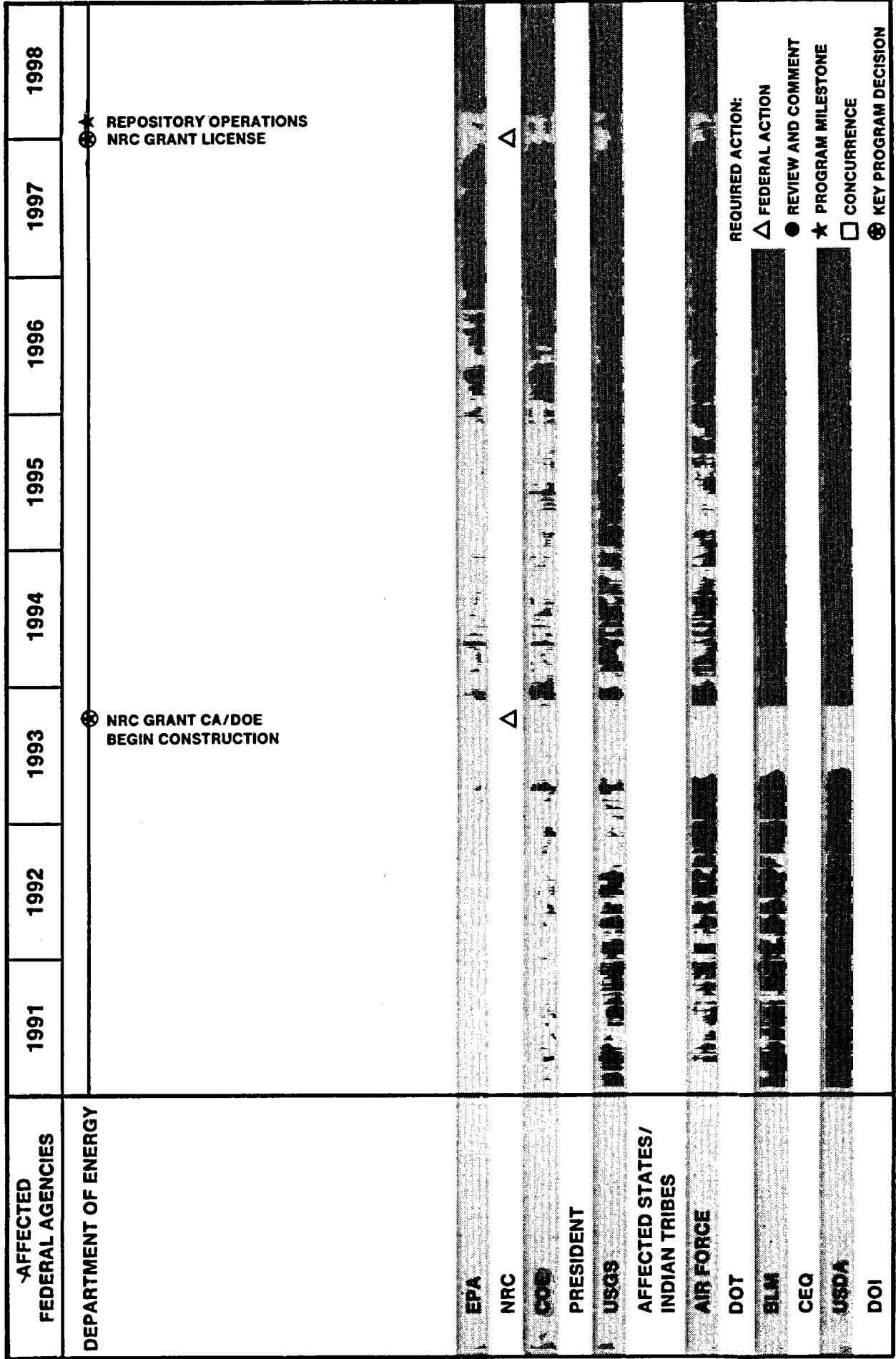


FIGURE 9
PDS MILESTONES DURING SITE CHARACTERIZATION AND SELECTION PHASES



**FIGURE 10
PDS MILESTONES DURING NRC LICENSING AND REPOSITORY
CONSTRUCTION PHASES**



proceeding forward based on the contents of the proposed EPA standards. For this reason, the delay in publication of final EPA standards has not as yet resulted in any delay in the program.

The NRC regulations in 10 CFR Part 60 consist of rules which establish the following: (1) procedures for the licensing of geologic disposal of high-level radioactive waste, and (2) technical criteria to be used in the evaluation of license applications under those procedural rules. The procedural rules were published on February 25, 1981. The NRC is currently revising the procedural rules to be consistent with the Act. Revised procedural rules should soon be forthcoming. It is the Department's understanding that the procedural rule revisions will reflect the provisions in the Act for State and Indian tribe involvement in licensing the repositories. The reference schedule assumes that this can be achieved without significant schedule impacts.

In addition to the procedural rule in 10 CFR Part 60, the NRC is guided by its regulations in 10 CFR Part 2, "Rules of Practice for Domestic Licensing Proceedings" which also apply to the licensing of geologic repositories. This rule includes procedures for the reviews of applications and of staff findings by the Advisory Committee for Reactor Safeguards, for procedures in adjudicatory hearings before Atomic Safety and Licensing Boards, for reviews of the records of such hearings by the Atomic Safety and Licensing Appeals Board, and finally for the instruction by the Commission to authorize or deny the application. The reference schedule assumes that these procedures are accommodated within the statutory 36 month schedule allocated for the NRC review and issuance of a construction authorization.

The final technical criteria were issued by NRC on June 21, 1983. An amendment to these criteria regarding disposal in the unsaturated zone has been proposed and is currently being evaluated. The NRC will review the technical criteria after EPA's final standards are published and will initiate subsequent rulemaking actions, as necessary, to take the standards into account. The reference schedule in the Mission Plan requires a phased approach to repository operation; the Department believes that approach is compatible with procedures currently contained in 10 CFR Part 60.

The reference schedule also assumes timely performance of two types of consultative activities by other Federal agencies: (1) review and comment on program documents such as the Mission Plan, draft EAs, draft EIS, MRS Proposal, Project Decision Schedule, Site Characterization Plans and (2) technical support to the Department in their areas of expertise. Some of the specific consultative activities are mandated by law; others are deemed necessary by the Department in implementing the law. The U.S. Department of Agriculture (USDA), the Air Force (AF), the Army Corps of Engineers (COE), the U.S. Department of the Interior (DOI), the Bureau of Land Management (BLM), the U.S. Geological Survey (USGS), the U.S. Department of Transportation (DOT), the Council on Environmental Quality (CEQ), the Environmental Protection Agency (EPA), and the Nuclear Regulatory Commission (NRC) will be requested to provide review comments on the draft EAs, draft EIS, Project Decision Schedule, and Mission Plan. The reference schedule assumes that each agency will provide comments within the allotted comment periods. The Department will then be able to review and consider the comments received and issue the final versions of these documents in accordance with the reference schedule.

Although the Act requires only one Federal Agency (NRC) to comment on the Site Characterization Plans, the Department will also request comments from the USGS (DOI). They will be asked to assess the technical credibility of the site characterization testing program.

In addition to providing review comments, other Federal agencies will be asked to provide technical support to the Office of Civilian Radioactive Waste Management within their areas of expertise. NRC Regulatory Guide 4.17, describes the format and content of Site Characterization Plans. It was prepared prior to enactment of the Act and is now undergoing revision. The reference schedule assumes that NRC will issue Regulatory Guide 4.17 in draft by December 1984 and finalize it by March 1985. The Department and NRC have signed a procedural agreement which outlines the procedures for consultation and exchange of information in connection with the investigation and characterization of sites for a geologic repository under the Act. The Department believes that this procedural agreement will assure that appropriate information flow is maintained between the two agencies and that appropriate guidance on a wide range of issues will be made available in a timely fashion.

The Department has also signed a procedural agreement with USGS. The USGS, as requested by the Department, will provide earth science support to OCRWM by performing tasks such as furnishing earth science data, and reviewing, analyzing, or critiquing data acquired by the Department.

Support from other affected Federal agencies will also be required in order to achieve the goals of the OCRWM program. For example, departmental consultation and cooperation with DOI and USDA will be directed towards the determination as to the data that are needed to ensure repository compliance with DOI and USDA administered regulations. Of importance in these consultations will be the specific identification of the data needed for compliance with regulatory requirements pertaining to programs such as historic preservation, endangered species, fish and wildlife, and other land access regulations. If the repository is considered to be a mine as defined by the Mine Safety and Health Act of 1977 (MSHA), the Department will be required to interact with the Department of Labor (DOL) which is responsible for the administration and enforcement of MSHA regulations. At that time, DOL will become an affected Federal agency and the Project Decision Schedule will be updated accordingly.

The third type of Federal action is NRC concurrence or approval at key points during the repository development process. Several NRC actions, for example, are on the critical path for the deployment of the first and second repositories:

- Issuance of the construction authorization for the repository
- Issuance of a license to the Department to receive and possess high-level waste and spent fuel.

As noted above, in addition to the specific agency actions mandated by the Act, each agency has a broader responsibility to help ensure that DOE meets its repository schedule. Pursuant to Section 120, Federal agencies, except NRC, are required to handle requests for authorization related to site characterization or repository construction/operation on an expedited basis. Such requests are to be given precedence over similar applications not related to repository activities, and authorization granted as soon as possible to the extent permitted by law.

The siting, licensing, and operation of the Radioactive Waste Management System requires that a demanding set of technical, regulatory, and institutional challenges be met. The Project Decision Schedule is a mechanism for describing the objectives and defining the deadlines for Federal agency actions related to the optimal initiation of operation of a Radioactive Waste Management System scheduled for 1998 as mandated by the Act for high-level radioactive waste and spent fuel acceptance. The Department is committed to meeting the January 1998, date for acceptance of radioactive waste and will work actively with Congress, affected States and Indian tribes, other Federal agencies, utilities, and the public to identify and resolve potential problems, and to minimize delays in order to meet this objective.

B. Tables

TABLES

Tables 1 and 2 list all of the Federal agency activities that are required in the Act to site, construct and operate the Radioactive Waste Management System (first and second geologic repositories, respectively). The tables also list the required schedules and the Federal agencies involved in each activity. Other required Federal agency activities related to technical and environmental issues are listed in Tables 3 and 4, respectively. These activities include such things as licensing and permitting activities. As program definition improves, more detailed schedules will be developed to describe the activities necessary to accomplish those programs. At that time, Tables 3 and 4 will be updated to reflect those new program activities. At this time, Tables 3 and 4 represent the current program definition. Table 5 lists the same information contained in Tables 1 through 4 categorized by Federal agency. Critical path activities (i.e., those activities for which a delay in the start or completion will cause a delay in beginning repository operation) are identified with asterisks on all of the tables. In addition, the consultation and cooperation activities required by the Act between the Department and affected States and Indian tribes are listed in the Tables 1 through 4 and 6. Other activities needed to comply with State regulations will be addressed in the EIS.

First Repository NWPA Activities

TABLE 1
NWPA Activities Required to Site, Construct and Operate
the First Geologic Repository

<u>Provision and Required Action</u>	<u>NWPA</u> <u>Schedule</u>	<u>Reference</u> <u>Schedule</u>	<u>Agency</u>
(1) <u>State Notification</u> "The Secretary shall identify the States with one or more potentially acceptable sites for a repository within 90 days after the date of enactment of this Act." Section 116(a).			
(1a) State Notification by DOE	3/7/83	2/2/83 Actual	DOE
(2) <u>Grants for Potentially Acceptable Sites</u> The Secretary shall make grants to each State (affected tribe) notified under Section 116(a) for the purpose of participating in activities required by Sections 116 and 117 or authorized by written agreement entered into pursuant to subsection 117(c). Sections 116(c)(1)(A) and 118(b)(1).			
(2a) Provide Grants to States and/or Affected Indian Tribes Having a PAS	N/A	Ongoing	DOE
* (3) <u>Siting Guidelines</u> "Not later than 180 days after the date of the enactment of this Act, the Secretary, following consultation with the Council on Environmental Quality, the Administrator of the Environmental Protection Agency, the Director of the Geological Survey, and interested Governors, and the concurrence of the Commission, shall issue general guidelines for the recommendation of sites for repositories." Section 112(a).			
(3a) Complete Consultation on Siting Guidelines/Issue Draft to NRC for Concurrence	7/7/83	11/22/83 Actual	CEQ, EPA, USGS, States, Indian tribes, DOE
(3b) Concurrence from NRC on Siting Guidelines	7/7/83	6/22/84 Actual	NRC
(3c) Issue Siting Guidelines	7/7/83	12/6/84 Actual	DOE

*CRITICAL PATH ACTIVITY

TABLE 1 (Continued)
NWA Activities Required to Site, Construct and Operate
the First Geologic Repository

<u>Provision and Required Action</u>	<u>NWA Schedule</u>	<u>Reference Schedule</u>	<u>Agency</u>
(4) <u>Pre-nomination Notification</u>			
"Before nominating a site, the Secretary shall notify the Governor and legislature of the State in which such site is located, or the governing body of the affected Indian tribe where such site is located, as the case may be, of such nomination and the basis for such nomination. Before nominating any site, the Secretary shall hold public hearings in the vicinity of such site to inform the residents of the area in which such site is located of the proposed nomination of such site and to receive their comments. At such hearings, the Secretary shall also solicit and receive any recommendations of such residents with respect to issues that should be addressed in the environmental assessment described in paragraph (1) and the site characterization plan described in section 113(b)(1)." Section 112(b)(1)(H) and 112(b)(2).			
(4a) Notify States and Affected Indian Tribes of Nomination	Before (5c)		DOE
(4b) Participate in Public Hearings	Before (5c)	3/83 - 5/83 Actual	States, Indian tribes
* (5) <u>Environmental Assessments</u>			
Following the issuance of guidelines and consultation with the Governors of the affected States, the Secretary shall nominate at least five sites that he determines suitable for site characterization for selection of the first repository site. Each nomination shall be accompanied by an environmental assessment. Section 112(b)(1)(A) and (E).			
(5a) DOE Issue Draft EAs for Review	N/A	12/19/84 Actual	DOE
(5b) Review and Comment on Draft EAs	N/A	12/19/84 - 3/20/85	BLM, AF, NRC CEQ, DOT, COE, DOI, USGS, USDA, EPA, States, Indian tribes
(5c) Issue Final EAs and Nominate at Least (5) Sites	N/A	6/20/85	DOE

*CRITICAL PATH ACTIVITY

TABLE 1 (Continued)
NWA Activities Required to Site, Construct and Operate
the First Geologic Repository

<u>Provision and Required Action</u>	<u>NWA Schedule</u>	<u>Reference Schedule</u>	<u>Agency</u>
* (6) <u>Three Site Recommendation</u> "Subsequent to such nomination, the Secretary shall recommend to the President three of the nominated sites not later than January 1, 1985, for characterization as candidate sites." Section 112(b)(1)(B).			
(6a) Secretary Recommend Three Sites	1/1/85	7/5/85	DOE
* (7) <u>Preliminary Determination</u> "...the Secretary shall consider as alternate sites for the first repository to be developed under this subtitle three candidate sites with respect to which (1) site characterization has been completed under section 113; and (2) the Secretary has made a preliminary determination, that such sites are suitable for development as repositories..." Section 114(f).			
(7a) Secretary Makes Preliminary Determination That Sites Are Suitable for Development	N/A	After 6a	DOE
* (8) <u>Presidential Review of Recommendation</u> "The President shall review each candidate site recommendation made by the Secretary under Subsection (b) Not later than 60 days after the submission by the Secretary of a recommendation of a candidate site, the President, in his discretion, may either approve or disapprove such candidate site." Section 112(c)(1).			
(8a) Transmit Decision on Approval or Disapproval of Site Recommendation to the DOE and the Affected States and/or Indian Tribes.	3/1/85 (possible 6 mo. extension)	9/5/85	President
(9) <u>Grants for Candidate Sites</u> The Secretary shall make grants to each State (affected Indian tribe) in which a candidate site for a repository is approved under section 112(c). Section 116(c)(1)(B) and (118(b)(2)(A)).			
(9a) Provide Grants to States and/or Affected Indian Tribes Having a Candidate Site	N/A	Negotiated Upon Request	DOE

*CRITICAL PATH ACTIVITY

TABLE 1 (Continued)
NWA Activities Required to Site, Construct and Operate
the First Geologic Repository

<u>Provision and Required Action</u>	<u>NWA Schedule</u>	<u>Reference Schedule</u>	<u>Agency</u>
(10) <u>Payment in Lieu of Taxes</u> The Secretary shall also grant to each State (affected Indian tribe) and unit of general local government in which a site for a repository is approved under section 112(c) an amount each fiscal year equal to the amount such State (Indian tribe) and unit of general local government, respectively, would receive were they authorized to tax site characterization activities at such site, and the development and operation of such repository... Section 116(c)(3) and (118(b)(4)).			
(10a) Provide Payment in Lieu of Taxes		Candidate Site Designation thru completion of Operations at site	DOE
* (11) <u>Site Characterization Plan</u> Before proceeding to sink shafts at any candidate site, the Secretary shall submit to the NRC and the affected States or Indian tribes a general plan for site characterization activities, a waste form or packaging description and a conceptual repository design. Section 113(b)(1).			
(11a) Issue SCP for Review	After (7)	Basalt 9/85 Tuff 9/85 Salt 10/86	DOE
(11b) Review and Comment on SCP		Basalt 12/85 Tuff 12/85 Salt 1/87	USGS, States, Indian tribes
(11c) Review and Comment on SCP (See Table 3, Activity 3)		Basalt 7/86 Tuff 7/86 Salt 8/87	NRC
(12) <u>NRC Requirements for SCP</u> "(A) A general plan for site characterization activities to be conducted at such candidate site, which plan shall include--... (V) any other information required by the Commission." Section 113(b)(1)(A).			
(12a) Issue Revised Draft of Regulatory Guide 4.17	N/A	12/84	NRC
(12b) Issue Final Regulatory Guide 4.17	N/A	3/85	NRC

*CRITICAL PATH ACTIVITY

TABLE 1 (Continued)
NWA Activities Required to Site, Construct and Operate
the First Geologic Repository

<u>Provision and Required Action</u>	<u>NWA Schedule</u>	<u>Reference Schedule</u>	<u>Agency</u>
(12c) Identify Additional SCP Content Requirements	N/A	Continuing through 3/1/90	NRC
<p>*(13) <u>SCP Public Hearings</u> "Before proceeding to sink shafts at any candidate site, the Secretary shall (A) make available to the public the site characterization plan described in paragraph (1); and (B) hold public hearings in the vicinity of such candidate site to inform the residents of the area in which such candidate site is located of such plan, and to receive their comments." Section 113(b)(2).</p>			
(13a) DOE Hold Public Hearings on SCP	Before Sinking Shafts	Basalt 12/85 Tuff 12/85 Salt 1/87	DOE, DOI States Indian tribes
<p>(14) <u>Written Agreements</u> "Not later than 60 days after (1) the approval of a site for site characterization for such a repository under Section 112(c), or (2) the written request of the State or Indian tribe in any affected State notified under Section 116(a) to the Secretary, whichever first occurs, the Secretary shall seek to enter into a binding written agreement, and shall begin negotiations, with such State and, where appropriate, to enter into a separate binding agreement with the governing body of any affected Indian tribe, setting forth (but not limited to) the procedures under which the requirements of subsections (a) and (b), and the provisions of such written agreement, shall be carried out.... Each such written agreement shall, to the maximum extent feasible, be completed not later than six months after such notification. If such written agreement is not completed within such period, the Secretary shall report to the Congress in writing within 30 days on the status of negotiations to develop such agreement..." Section 117 (c).</p>			
(14a) DOE Negotiate Written Agreements with States and/or Affected Indian Tribes	Ongoing	Ongoing	DOE States Indian tribes
(14b) If No Agreement is Reached, DOE will Submit Written Explanation to Congress	7 Months After Request	7 Months After Request	DOE

*CRITICAL PATH ACTIVITY

TABLE 1 (Continued)
 NWA Activities Required to Site, Construct and Operate
 the First Geologic Repository

<u>Provision and Required Action</u>	<u>NWA Schedule</u>	<u>Reference Schedule</u>	<u>Agency</u>
*(15) <u>Site Characterization</u> "The Secretary shall carry out, in accordance with the provisions of this section, appropriate site characterization activities..." Section 113(a).			
(15a) DOE Perform Site Characterization Activities	After (10a)	9/85 - 2/90	DOE
(16) <u>Semi-annual SCP Report</u> "During the conduct of site characterization activities at a candidate site, the Secretary shall report not less than once every 6 months to the Commission and to either the Governor and legislature of the State in which such candidate site is located, or the governing body of the affected Indian tribe where such candidate site is located, as the case may be, on the nature and extent of such activities and the information developed from such activities." Section 113(b)(3).			
(16a) Issue Semi-Annual SCP Reports	Semi- annual update	3/1/86- 3/1/90	DOE
(17) <u>Radioactive Material Use</u> "In conducting site characterization activities -- (A) the Secretary may not use any radioactive material at a candidate site unless the Commission concurs that such use is necessary to provide data for the preparation of the required environmental reports and an application for construction authorization for a repository at such candidate site." Section 113(c)(2)(A).			
(17a) Request Use of Radioactive Materials for Characterization	N/A	5/86	DOE
(17b) NRC Concurrence on Use of Radioactive Materials for Characterization	N/A	5/87	NRC

*CRITICAL PATH ACTIVITY

TABLE 1 (Continued)
NWA Activities Required to Site, Construct and Operate
the First Geologic Repository

<u>Provision and Required Action</u>	<u>NWA Schedule</u>	<u>Reference Schedule</u>	<u>Agency</u>
(18) <u>Site Recommendation Public Hearing</u> "The Secretary shall hold public hearings in the vicinity of each site under consideration for recommendation to the President under this paragraph as a site for the development of a repository, for the purposes of informing the residents of the area in which such site is located of such consideration and receiving their comments regarding the possible recommendation of such site." Section 114(a).			
(18a) DOE Hold Public Hearings on Site Recommendation	After (19a)	9/89	DOE, DOI States, Indian tribes
*(19) <u>Environmental Impact Statement</u> "...A final environmental impact statement prepared pursuant to subsection (f) and the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.), including an analysis of the consideration given by the Secretary to not less than three candidate sites for the first proposed repository or to all of the characterized sites for the development of subsequent repositories..." Section 114(a)(1)(D).			
(19a) DOE Issue Draft EIS for Review	N/A	9/89	DOE
(19b) Review and Comment on Draft EIS	N/A	9/89- 11/89	CEQ, DOT, COE NRC, DOI, USDA USGS, EPA, States, AF, BLM, Indian tribes
(19c) Issue Final EIS, Incorporating Above Comments	N/A	3/90	DOE
*(20) <u>NRC Preliminary Sufficiency Comments</u> "Preliminary comments of the Commission concerning the extent to which the at-depth site characterization analysis and the waste form proposal for such site seem to be sufficient for inclusion in any application to be submitted by the Secretary for licensing of such site as a repository." Section 114(a)(1)(E).			
(20a) NRC Comment on Characterization Analysis	N/A	9/89- 4/90	NRC

*CRITICAL PATH ACTIVITY

TABLE 1:(Continued)
 NWA Activities Required to Site, Construct and Operate
 the First Geologic Repository

<u>Provision and Required Action</u>	<u>NWA Schedule</u>	<u>Reference Schedule</u>	<u>Agency</u>
* (21) <u>Site Selection Report</u> "...the Secretary shall notify the Governor and legislature of the State in which such site is located, or the governing body of the affected Indian tribe where such site is located, as the case may be, of such decision....Together with any recommendation of a site under this paragraph, the Secretary shall make available to the public, and submit to the President, a comprehensive statement of the basis of such recommendation." Section 114(a)(1)(A)(B)(C)(F)(G)(H).			
(21a) Notify Affected States and/or Indian Tribes of Proposed Site Selection	N/A	9/89	DOE
(21b) Issue Site Selection Report to President	N/A	4/90	DOE
* (22) <u>Site Recommendation</u> "Not later than March 31, 1987, the President shall submit to the Congress a recommendation of one site from the three sites initially characterized that the President considers qualified for application for a construction authorization for a repository." Section 114(a)(2)(A).			
(22a) President Recommend Site to Congress	3/31/87 (possible 1 yr extension)	6/90	President
(23) <u>Assistance for Repository State</u> The Secretary shall provide financial and technical assistance to any State (affected Indian tribe) requesting such assistance in which there is a site with respect to which the Commission has authorized construction of a repository. Section 116(c)(2)(A) and 118(b)(3)(A).			
(23a) Prepare and Submit to DOE an Impact Description Report	After site characterization and before 21b		States Indian tribes
(23b) Enter into a Binding Agreement Defining Assistance	After CA	10/93	States Indian tribes DOE

*CRITICAL PATH ACTIVITY

TABLE 1 (Continued)
 NWA Activities Required to Site, Construct and Operate
 the First Geologic Repository

<u>Provision and Required Action</u>	<u>NWA Schedule</u>	<u>Reference Schedule</u>	<u>Agency</u>
(23c) Provide Financial and Technical Assistance to Mitigate Impact of Repository Development	NLT 6 months after CA	2/94	DOE
* (24) <u>Construction Authorization Application</u> "If the President recommends to the Congress a site for a repository under subsection (a) and the site designation is permitted to take effect under section 115, the Secretary shall submit to the Commission an application for a construction authorization for a repository at such site not later than 90 days after the date on which the recommendation of the site designation is effective..." Section 114(b).			
(24a) Submit CAA (License Application per 10 CFR Part 60)	8/31/87	8/90	DOE
(24b) Review CAA	3 years (possible 1 yr extension)	8/90-8/93	NRC
(24c) Issue Construction Authorization	3 years after (24a)	8/93	NRC
(25) <u>Adoption of Final EIS</u> "...Any environmental impact statement prepared in connection with a repository proposed to be constructed by the Secretary under this subtitle shall, to the extent practicable, be adopted by the Commission in connection with the issuance by the Commission of a construction authorization and license for such repository." Section 114(f).			
(25a) NRC Adoption of DOE Final EIS, to Extent Practicable		9/90	NRC
(26) <u>NRC Status Report</u> "Not later than 1 year after the date on which an application for a construction authorization is submitted under subsection (b), and annually thereafter until the date on which such authorization is granted, the Commission shall submit a report to the Congress describing the proceedings undertaken through the date of such report with regard to such application..." Section 114(c).			

*CRITICAL PATH ACTIVITY

TABLE 1 (Continued)
NWA Activities Required to Site, Construct and Operate
the First Geologic Repository

<u>Provision and Required Action</u>	<u>NWA Schedule</u>	<u>Reference Schedule</u>	<u>Agency</u>
(26a) NRC's Status Report on CAA Review to Congress	Within 1 Year After CAA Submittal	8/91, 8/92, 8/93	NRC
(27) <u>Defense Waste Position</u> "Not later than 2 years after the date of the enactment of this Act, the President shall evaluate the use of disposal capacity at one or more repositories to be developed under subtitle A of the title 1 for the disposal of high-level radioactive waste resulting from atomic energy defense activities." Section 8(b).			
(27a) Document Decision on Placing Defense Waste in Repository	1/7/85	1/7/85	President
(28) <u>Report to Congress on TEF</u> "Not later than 1 year after the date of enactment of this Act, the Secretary shall transmit to the Congress a report setting forth whether the Secretary plans to locate the test and evaluation facility at the site of a repository." Section 305(a).			
(28a) DOE Submit Report to Congress on its Position on a TEF	1/7/84	4/84 Actual	DOE
(28b) DOE Decision on TEF need		10/87	DOE
(29) <u>Project Decision Schedule</u> "The Secretary shall prepare and update, as appropriate, in cooperation with all affected Federal Agencies, a project decision schedule that portrays the optimum way to attain the periods specified in this subtitle." Section 114(e).			
(29a) Develop and Issue Draft PDS	N/A	3/85	DOE
(29b) Review and Comment on PDS	N/A	3/85 - 5/85	NRC, USDA, EPA, BLM, USGS, AF, COE, DOI, DOT, CEQ, DOJ, States, Indian tribes

TABLE 1 (Continued)
 NWA Activities Required to Site, Construct and Operate
 the First Geologic Repository

<u>Provision and Required Action</u>	<u>NWA Schedule</u>	<u>Reference Schedule</u>	<u>Agency</u>
(29c) Issue Revised PDS	N/A	5/85	DOE
(29d) Notify DOE and Congress of Problems or Potential Problem Involved in Meeting Repository Schedule	N/A	As Needed	NRC, USDA, EPA, BLM, USGS, AF, COE, DOI, DOT, CEQ, DOJ
(30) <u>Mission Plan</u> "The Secretary shall prepare a comprehensive report, to be known as the Mission Plan, which shall provide an informational basis sufficient to permit informed decisions to be made in carrying out the Repository Program and the Research, Development, and Demonstration Programs required under this Act." Section 301(a).			
(30a) Issue Working Draft Mission Plan		12/20/83 Actual	DOE
(30b) Agency Review and Comment on Working Draft Mission Plan		12/20/83- 1/31/84 Actual	NRC, CEQ, States, EPA BLM, USGS, DOT, DOI, Indian tribes
(30c) Issue Draft Mission Plan	NLT 4/7/84	5/7/84 Actual	DOE
(30d) Agency Review and Comment on Draft Mission Plan	N/A	5/7/84 - 9/20/84 Actual	Same as 30b
(30e) Issue Revised Mission Plan to Congress	6/7/84	3/85	DOE
(31) <u>Environmental Protection Agency Standards</u> "Not later than 1 year after the date of the enactment of this Act, the Administrator, pursuant to authority under other provisions of law, shall, by rule, promulgate generally applicable standards for protection of the general environment from offsite releases from radioactive material in repositories. "Section 121(a).			

TABLE 1 (Continued)
 NWPA Activities Required to Site, Construct and Operate
 the First Geologic Repository

<u>Provision and Required Action</u>	<u>NWPA Schedule</u>	<u>Reference Schedule</u>	<u>Agency</u>
(31a) EPA Develop Standards	1/7/84	12/84	EPA
(32) <u>NRC Requirements and Criteria</u> Not later than January 1, 1984, the Commission, pursuant to authority under other provisions of law, shall, by rule, promulgate technical requirements and criteria that it will apply, under the Atomic Energy Act of 1954 (42 U.S.C. 2011 et seq.) and the Energy Reorganization Act of 1974 (42 U.S.C. 5081 et seq.). Section 121(b).			
(32a) NRC Develop Criteria	1/1/84	6/21/83 Actual	NRC
(32b) NRC Revise Criteria, if Necessary, to be Consistent with EPA Standards	N/A	After 31a	NRC
(33) <u>M.O.U. For Test and Evaluation Facility (TEF)</u> "Not later than 1 year after the date of the enactment of this Act, the Secretary and the Commission shall reach a written understanding establishing the procedures for review, consultation, and coordination in the planning, construction, and operation of the Test and Evaluation Facility under this section." Section 217(f).			
(33a) DOE and NRC Sign an Agreement on Procedures for a TEF (if 28b decision is positive)	1/7/84	4/88	DOE, NRC
(33b) NRC Report to Congress and President on Analysis of Activities Undertaken to Support a TEF	After 33a	12/88	NRC
(34) <u>Monitored Retrieivable Storage (MRS) Proposal</u> "On or before June 1, 1985, the Secretary shall complete a detailed study of the need for and feasibility of, and shall submit to the Congress a proposal for, the construction of one or more Monitored Retrieivable Storage facilities for high-level radioactive waste and spent nuclear fuel. . . The Secretary shall prepare, in accordance with regulations issued by the Secretary implementing such Act, an environmental assessment with respect to such proposal." Section 141(b), 141(c).			

TABLE 1 (Continued)
 NWA Activities Required to Site, Construct and Operate
 the First Geologic Repository

<u>Provision and Required Action</u>	<u>NWA Schedule</u>	<u>Reference Schedule</u>	<u>Agency</u>
(34a) Consultation with EPA and NRC for the development of an MRS proposal	N/A	6/84- 6/85	NRC, EPA
(34b) Issue draft MRS proposal	N/A	4/1/85	DOE
(34c) Review and comment on draft MRS proposal	N/A	4/1/85- 5/1/85	NRC, EPA
(34d) Issue final MRS proposal and EA to Congress	6/1/85	6/1/85	DOE

**Second Repository
NWPA Activities**

TABLE 2
NWPA Activities Required to Site, Construct and Operate
the Second Geologic Repository

<u>Provision and Required Action</u>	<u>NWPA</u> <u>Schedule</u>	<u>Reference</u> <u>Schedule</u>	<u>Agency</u>
(1) <u>State Notification</u> "The Secretary shall identify the States with one or more potentially acceptable sites for a repository within 90 days after the date of enactment of this Act." Section 116(a).			
(1a) State Notification by DOE	N/A	3/86	DOE
(2) <u>Grants for Potentially Acceptable Sites</u> The Secretary shall make grants to each State (affected tribe) notified under Section 116(a) for the purpose of participating in activities required by Sections 116 and 117 or authorized by written agreement entered into pursuant to subsection 117(c). Sections 116(c)(1)(A) and 118(b)(1).			
(2a) Provide Grants to States and/or Affected Indian Tribes Having a PAS	N/A	After (1a)	DOE
(3) <u>Pre-nomination Notification</u> "Before nominating a site, the Secretary shall notify the Governor and legislature of the State in which such site is located, or the governing body of the affected Indian tribe where such site is located, as the case may be, of such nomination and the basis for such nomination. Before nominating any site, the Secretary shall hold public hearings in the vicinity of such site to inform the residents of the area in which such site is located of the proposed nomination of such site and to receive their comments." Section 112(b)(1)(H) and 112(b)(2).			
(3a) Notify States and Affected Indian Tribes of Nomination	Before (4c)	9/90	DOE
(3b) Participate in Public Hearings	Before (4c)	9/90	States Indian tribes
* (4) <u>Environmental Assessments</u> "Not later than July 1, 1989, the Secretary shall nominate 5 sites which shall include at least 3 additional sites not nominated under subparagraph (a),..." Each nomination shall be accompanied by an environmental assessment. Section 112(b).			

*CRITICAL PATH ACTIVITY

TABLE 2 (Continued)
NWA Activities Required to Site, Construct and Operate
the Second Geologic Repository

<u>Provision and Required Action</u>	<u>NWA Schedule</u>	<u>Reference Schedule</u>	<u>Agency</u>
(4a) DOE Issue Draft EAs for Review		3/90	DOE
(4b) Review and Comment on Draft EAs		3/90 - 6/90	BLM, CEQ, DOT, NRC, USDA DOI, States AF, EPA, USGS, COE Indian tribes
(4c) DOE Issue Final EAs		9/90	DOE
(4d) Nominate at Least (5) Sites	After (4c)	10/90	DOE
* (5) <u>Three Site Recommendation</u> "...and recommend by such date to the President from such 5 nominated sites 3 candidate sites the Secretary determines suitable for site characterization for selection of the second repository." Section 112(b).			
(5a) Secretary Recommend Three Sites	7/1/89	1/91	DOE
(6) <u>Grants for Candidate Sites</u> The Secretary shall make grants to each State (affected Indian tribe) in which a candidate site for a repository is approved under section 112(c). Section 116(c)(1)(B) and 118(b)(2)(A).			
(6a) Provide Grants to States and/or Affected Indian Tribes Having a Candidate Site	N/A	Negotiated Upon Request	DOE
* (7) <u>Presidential Review of Recommendation</u> "The President shall review each candidate site recommendation made by the Secretary under Subsection (b). Not later than 60 days after the submission by the Secretary of a recommendation of a candidate site, the President, in his discretion, may either approve or disapprove such candidate site." Section 112(c).			
(7a) Transmit Decision on Approval or Disapproval of Site Recommendation to the DOE and the Affected States and/or Indian Tribes	9/1/89	3/91	President

*CRITICAL PATH ACTIVITY

TABLE 2 (Continued)
NWA Activities Required to Site, Construct and Operate
the Second Geologic Repository

<u>Provision and Required Action</u>	<u>NWA Schedule</u>	<u>Reference Schedule</u>	<u>Agency</u>
(8) <u>Payment in Lieu of Taxes</u> The Secretary shall also grant to each State (affected Indian tribe) and unit of general local government in which a site for a repository is approved under section 112(c) an amount each fiscal year equal to the amount such State (Indian tribe) and unit of general local government, respectively, would receive were they authorized to tax site characterization activities at such site, and the development and operation of such repository... Section 116(c)(3) and 118(b)(4).			
(8a) Provide Payment in Lieu of Taxes		Candidate Site Designation thru Completion of Operations at Site	DOE
* (9) <u>Site Characterization Plan</u> "Before proceeding to sink shafts at any candidate site, the Secretary shall submit for such candidate site to the Commission and to either the Governor and legislature of the State in which such candidate site is located, or the governing body of the affected Indian tribe on whose reservation such candidate site is located, as the case may be, for their review and comment, a general plan for site characterization activities..." Also, a waste form or packaging description and a conceptual repository design must be issued. Section 113 (b).			
(9a) DOE Issue SCP for Review	After (7)	3/91	DOE
(9b) Review and Comment on SCP		3/91 - 6/91	USGS States, Indian tribes
(9c) Review and Comment on SCP (See Table 3, Activity 3)		1/92	NRC
(10) <u>NRC Requirements for SCP</u> "(A) A general plan for site characterization activities to be conducted at such candidate site, which plan shall include---... (V) any other information required by the Commission." Section 113(b)(1)(A).			
(10a) Identify Additional SCP Content Requirements	N/A	Continuing through 3/96	NRC

*CRITICAL PATH ACTIVITY

TABLE 2 (Continued)
 NWA Activities Required to Site, Construct and Operate
 the Second Geologic Repository

<u>Provision and Required Action</u>	<u>NWA Schedule</u>	<u>Reference Schedule</u>	<u>Agency</u>
* (11) <u>SCP Public Hearings</u> "Before proceeding to sink shafts at any candidate site, the Secretary shall (A) make available to the public the site characterization plan described in paragraph (1); and (B) hold public hearings in the vicinity of such candidate site to inform the residents of the area in which such candidate site is located of such plan, and to receive their comments." Section 113(b)(2).			
(11a) DOE Hold Public Hearings on SCP and Receive Comments	Before Sinking Shafts	NLT 6/91	DOE, DOI, States Indian tribes
(12) <u>Written Agreements</u> "Not later than 60 days after (1) the approval of a site for site characterization for such a repository under Section 112(c), or (2), the written request of the State or Indian tribe in any affected State notified under 116(a) to the Secretary, whichever first occurs, the Secretary shall seek to enter into binding written agreement, and shall begin negotiations, with such State...each such written agreement shall, to the maximum extent feasible, be completed within such period. The Secretary shall report to Congress in writing within 30 days on the status of negotiations to develop such agreement...." Section 117(c).			
(12a) DOE Negotiate Written Agreements with States and/or Indian Tribes	After (1a) and/or (7a) Approval	Within 6 Months After Request	DOE States Indian tribes
(12b) If No Agreement is Reached, DOE will Submit Written Explanation to Congress		7 Months After Request	DOE
* (13) <u>Site Characterization</u> "The Secretary shall carry out, in accordance with the provisions of this section, appropriate site characterization activities..." Section 113(a).			
(13a) DOE Perform Site Characterization Activities	After 9a	3/91 - 6/96	DOE

* CRITICAL PATH ACTIVITY

TABLE 2 (Continued)
 NWA Activities Required to Site, Construct and Operate
 the Second Geologic Repository

<u>Provision and Required Action</u>	<u>NWA Schedule</u>	<u>Reference Schedule</u>	<u>Agency</u>
(14) <u>Semi-annual SCP Report</u> "During the conduct of site characterization activities at a candidate site, the Secretary shall report not less than once every 6 months to the Commission and to either the Governor and legislature of the State in which such candidate site is located, or the governing body of the affected Indian tribe where such candidate site is located, as the case may be, on the nature and extent of such activities and the information developed from such activities." Section 113(b)(3).			
(14a) Issue Semi-Annual SCP Report	Semi- annual update	9/91 - 3/96	DOE
(15) <u>Radioactive Material Use</u> "In conducting site characterization activities -- (A) the Secretary may not use any radioactive material at a candidate site unless the Commission concurs that such use is necessary to provide data for the preparation of the required environmental reports and an application for construction authorization for a repository at such candidate site." Section 113(c)(2)(A).			NRC
(15a) NRC Concurrence on Use of Radioactive Materials for Characterization (if requested)		6/91	NRC
(16) <u>Site Recommendation Public Hearing</u> "The Secretary shall hold public hearings in the vicinity of each site under consideration for recommendation to the President under this paragraph as a site for the development of a repository, for the purposes of informing the residents of the area in which such site is located of such consideration and receiving their comments regarding the possible recommendation of such site." Section 114(a).			
(16a) DOE Hold Public Hearings on Site Recommendation	After (17a)	7/96	DOE, States, Indian tribes

*CRITICAL PATH ACTIVITY

TABLE 2 (Continued)
NWPA Activities Required to Site, Construct and Operate
the Second Geologic Repository

<u>Provision and Required Action</u>	<u>NWPA</u> <u>Schedule</u>	<u>Reference</u> <u>Schedule</u>	<u>Agency</u>
*(17) <u>Environmental Impact Statement</u>			
"...A final environmental impact statement prepared pursuant to sub-section (f) and the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.), including an analysis of the consideration given by the Secretary to not less than three candidate sites for the first proposed repository or to all of the characterized sites for the development of subsequent repositories..." Section 114(a)(1)(D).			
(17a) DOE Issue DEIS	NA	7/96	DOE
(17b) Review and Comment on DEIS	N/A	7/96 - 9/96	CEQ, DOT, NRC, EPA, COE DOI, States, USDA, USGS, BLM, AF Indian tribes
(17c) Issue FEIS, Incorporating Above Comments	N/A	1/97	DOE
*(18) <u>Preliminary Determination</u>			
"The Secretary shall consider as alternative sites for subsequent repositories at least three of the remaining sites recommended by the Secretary by January 1, 1985 and by July 1, 1989, pursuant to section 112(b) and approved by the President for site characterization pursuant to section 112(c) for which (1) site characterization has been completed under section 113; and (2) the Secretary has made a preliminary determination that such sites are suitable for development as repositories..." Section 114(f).			
(18a) Secretary Makes Preliminary Determination that Sites are Suitable for Development	N/A	After 5a	DOE
*(19) <u>NRC Preliminary Sufficiency Comments</u>			
"Preliminary comments of the Commission concerning the extent to which the at-depth site characterization analysis and the waste form proposal for such site seem to be sufficient for inclusion in any application to be submitted by the Secretary for licensing of such site as a repository." Section 114(a)(1)(E).			
(19a) NRC Comment on Characterization Analysis		7/96	NRC

*CRITICAL PATH ACTIVITY

TABLE 2 (Continued)
NWA Activities Required to Site, Construct and Operate
the Second Geologic Repository

<u>Provision and Required Action</u>	<u>NWA Schedule</u>	<u>Reference Schedule</u>	<u>Agency</u>
*(20) <u>Site Selection Report</u>			
...the Secretary shall notify the Governor and legislature of the State in which such site is located, or the governing body of the affected Indian tribe where such site is located, as the case may be, of such decision... "Together with any recommendation of a site under this paragraph, the Secretary shall make available to the public, and submit to the President, a comprehensive statement of the basis of such recommendation." Section 114(a).			
(20a) Notify Affected States and/or Indian Tribes of Proposed Site Selection	N/A	7/96	DOE
(20b) Issue Site Selection Report	N/A	2/97	DOE
*(21) <u>Site Recommendation</u>			
"Not later than March 31, 1990, the President shall submit to the Congress a recommendation of a second site from any sites already characterized that the President considers qualified for a construction authorization for a second repository." Section 114 (a)(2)(A).			
(21a) President Recommend Site to Congress	3/31/90 (possible 1 yr extension)	4/97	President
(22) <u>Assistance for Repository State</u>			
The Secretary shall provide financial and technical assistance to any State (affected Indian tribe) requesting such assistance in which there is a site with respect to which the Commission has authorized construction of a repository. Section 116(c)(2)(A) and 118(b)(3)(A).			
(22a) Prepare and Submit to DOE an Impact Description Report	After site characterization		States Indian tribes
(22b) Enter into a Binding Agreement Defining Assistance	After CA	9/2000	States Indian tribes DOE
(22c) Provide Financial and Technical Assistance to Mitigate the Impact of Repository Development	NLT 6 months after CA	12/2000	DOE

*CRITICAL PATH ACTIVITY

TABLE 2 (Continued)
 NWPA Activities Required to Site, Construct and Operate
 the Second Geologic Repository

<u>Provision and Required Action</u>	<u>NWPA Schedule</u>	<u>Reference Schedule</u>	<u>Agency</u>
*(23) <u>Construction Authorization Application</u> "If the President recommends to the Congress a site for a repository under subsection (a) and the site designation is permitted to take effect under section 115, the Secretary shall submit to the Commission an application for a construction authorization for a repository at such site not later than 90 days after the date on which the recommendation of the site designation is effective..." Section 114(b).			
(23a) Submit CAA		6/97	DOE
(23b) NRC Review of CAA	3 years (possible 1 yr extension)	6/97 - 6/2000	NRC
(23c) Issue CA		6/2000	NRC
(24) <u>NRC Status Report</u> "Not later than 1 year after the date on which an application for a construction authorization is submitted under subsection (b), and annually thereafter until the date on which such authorization is granted, the Commission shall submit a report to the Congress describing the proceedings undertaken through the date of such report with regard to such application..." Section 114(c).			
(24a) NRC's Status Report on CAA to Congress	Within 1 Year After CAA Submittal	6/98 - 6/2000	NRC
(25) <u>Adoption of FEIS</u> "...Any environmental impact statement prepared in connection with a repository proposed to be constructed by the Secretary under this subtitle shall, to the extent practicable, be adopted by the Commission in connection with the construction authorization and license for such repository." Section 114 (f).			
(25a) NRC Adoption of FEIS, to Extent Practicable		7/97	NRC

* CRITICAL PATH ACTIVITY

**Other Federal Activities:
Technical Issues**

TABLE 3
Federal Technical Activities Required to Site,
Construct and Operate the First and Second Geologic Repositories

<u>Task and Required Action</u>	<u>Reference Schedule</u>	<u>Agency</u>
(1) Memorandum of Understanding (MOU) between DOE and NRC concerning inter- action during the Site Characterization phase of repository deployment		
(1a) Develop MOU	6/27/83 Actual	DOE, NRC
(2) MOU between DOE and USGS concerning the review of Site Characterization Plans		
(2a) Develop MOU	3/29/84 Actual	DOE, USGS
(2b) Review SCP's for 1st Repository Sites	9/85-1/87	USGS
(2c) Review SCP's for 2nd Repository Sites	3/91-6/91	USGS
(3) Site Characterization Analysis (SCA) (10CFR60) ⁽¹⁾		
(3a) Issue Draft SCA for 1st Repository	Basalt 2/86 Tuff 2/86 Salt 3/87	NRC
(3b) Review and Comment on SCA for 1st Repository	Basalt 5/86 Tuff 5/86 Salt 6/87	States, Indian tribes
(3c) Issue Final SCA for 1st Repository	Basalt 7/86 Tuff 7/86 Salt 8/87	NRC
(3d) Issue Draft SCA for 2nd Repository	9/91	NRC
(3e) Review and Comment on SCA for 2nd Repository	12/91	States, Indian tribes
(3f) Issue Final SCA for 2nd Repository	2/92	NRC

⁽¹⁾According to the current procedural rule (10 CFR Part 60), the NRC will issue a draft and final site characterization analysis (SCA). The final would be completed ten months after receipt of the SCP. A change to this rule has been proposed that would require the NRC to issue only a final SCA. The final SCA would be issued for comment five months after receipt of the SCP. Comments would be incorporated into the next SCA update.

TABLE 3
Federal Technical Activities Required to Site,
Construct and Operate the First and Second Geologic Repositories

<u>Task and Required Action</u>	<u>Reference Schedule</u>	<u>Agency</u>
(4) Semiannual SCP Report		
(4a) Review (1st Repository)	3/86 - 3/90	NRC, States, Indian tribes
(4b) Review (2nd Repository)	9/91 - 3/96	NRC, States, Indian tribes
* (5) Update License Application In Accordance With 10 CFR Part 60.24		
(5a) Submit Update to NRC - Authority to Receive and Possess HLW for 1st Repository	6/95	DOE
(5b) NRC Review of Update for 1st Repository	6/95-12/97	NRC
(5c) Issue License to Receive and Possess HLW for 1st Repository	12/97	NRC
(5d) Submit Update to NRC - Authority to Receive and Possess Waste for 2nd Repository	3/2003	DOE
(5e) NRC Review of Update for 2nd Repository	3/2003-2/2006	NRC
(5f) Issue License to Receive and Possess Waste for 2nd Repository	3/2006	NRC
(6) License Amendments (10 CFR Part 60)		
(6a) Apply for License Amendment for Permanent Closure of Repository	Prior to Permanent Closure	DOE
(6b) Review License Amendment for Closure	Prior to Permanent Closure	NRC
(6c) Issue License Amendment for Closure	Prior to Permanent Closure	NRC
(6d) Apply for License Amendment for License Termination	After Closure and Decontamination of Surface Facilities	DOE
(6e) Review License Amendment for License Termination	After Closure and Decontamination of Surface Facilities	NRC

*CRITICAL PATH ACTIVITY

TABLE 3 (Continued)
Federal Technical Activities Required to Site,
Construct and Operate the First and Second Geologic Repositories

<u>Task and Required Action</u>	<u>Reference Schedule</u>	<u>Agency</u>
(6F) Issue License Amendment for License Termination	After Closure and Decontamination of Surface Facilities	NRC
* (7) Site Model Development (Tuff Site) ⁽²⁾		
(7a) Geology Defined for Surface Facility Design	8/86	DOE, USGS
(7b) Geology Defined for Subsurface Facility Design	9/88	DOE, USGS
(7c) Reach a Consensus on Tectonic Model	9/88	DOE, USGS
(7d) Reach a Consensus on Geologic Model	9/88	DOE, USGS
(7e) Reach a Consensus on Saturated Zone Hydrology Model	2/89	DOE, USGS
(7f) Reach a Consensus on Unsaturated Zone Hydrology Model	9/89	DOE, USGS
* (8) Land Acquisition Procedures for Tuff Site (If President Approves Site for Characterization)		
(8a) Renew Land Use Permit	8/85	AF, DOE
(8b) Extend Cooperative Agreement	4/86	BLM, DOE
(8c) Renew Permits and Agreements as Needed	10/85-5/93	AF, BLM, DOE
(8d) Begin Pre-Application Consultation	1/91	BLM, DOE
(8e) Apply for Withdrawal of Public Land	11/91	DOE
(8f) Begin Preparation of Case File Reports	11/91	DOE
(8g) Publish Notice in Federal Register for Withdrawal Application, Invitation to Comment, Public Meeting	12/91	BLM

***CRITICAL PATH ACTIVITY**

⁽²⁾These activities, which are being performed by the USGS under a contract with the DOE, are outside the scope of the Project Decision Schedule. However, since they are being performed by a Federal agency, they are included here and in Table 5.12 for completeness.

TABLE 3 (Continued)
Federal Technical Activities Required to Site,
Construct and Operate the First and Second Geologic Repositories

<u>Task and Required Action</u>	<u>Reference Schedule</u>	<u>Agency</u>
(8h) Public Comment Period Closes	2/92	BLM
(8i) Hold Public Meeting	5/92	BLM
(8j) Submit Case File Reports	5/92	DOE
(8k) Issue Public Land Order	5/93	DOI
(8l) Provide Congress with Withdrawal Information	5/93	DOI
(8m) Discharge from Further Consideration Unless Disapproval Resolution Reported	6/93	Congressional Committees
(8n) Withdrawal Takes Effect, Unless Vetoed	8/93	Congress
* (9) Land Acquisition Procedures for Salt Sites (If President Approves Sites for Characterization) ⁽³⁾		
(9a) Sign Interagency Agreement on Land Acquisition Support for Site Characterization	10/85	COE, DOE
(9b) Prepare and Submit Land Acquisition Plan for ES, Site Characterization, and Site Protection	2/86	COE
(9c) Approve Land Acquisition Plan	4/86	DOE
(9d) Complete Survey	6/86	COE
(9e) Complete Appraisal	6/86	COE
(9f) Begin Negotiation for Surface/Subsurface Rights Required for Exploratory Shaft Facility	7/86	COE
(9g) Negotiate Land Use Permits or Agreements, as needed	7/86	(Cypress Creek) (Davis/Lavender Canyons) DOE, USDA, DOJ DOE, BLM, DOJ

***CRITICAL PATH ACTIVITY**

⁽³⁾Land acquisition procedures for second repository sites have not been developed at this time, but are expected to be similar to those for the first repository. These procedures will be included in future updates of the Project Decision Schedule.

TABLE 3 (Continued)
Federal Technical Activities Required to Site,
Construct and Operate the First and Second Geologic Repositories

<u>Task and Required Action</u>	<u>Reference Schedule</u>	<u>Agency</u>
(9h) Prepare and Submit Land Acquisition Status Report	7/86, ongoing	COE
(9i) Submit Evidence of Title Acquired (if any)	7/86	COE
(9j) Approve Evidence of Title	7/86	DOJ
(9k) Apply for Institution of Condemnation Proceedings (if needed)	7/86	COE
(9l) Issue Declaration of Taking (Condemnation, if needed)	8/86	COE
(9m) File Complaint in U.S. District Court (if needed)	8/86	DOJ
(9n) Deposit Estimated Compensation with District Court (if needed)	8/86	COE
(9o) Set Time for Surrender of Possession of Land	8/86	U.S. District Court
(9p) Surrender Possession of Land	Date Ordered By Court	
(9q) Enter Judgement on Compensation Issues	After Hearing	U.S. District Court
(9r) Prepare and Submit Land Acquisition Plan for Repository Acquisition	6/90	COE
(***)Steps for Acquiring Federal Land at Davis and Lavender Canyons, Utah and Cypress Creek, Mississippi Differ from this Step on. Refer to (9aaa)***)		
(9s) Approve Land Acquisition Plan	8/90	COE
(9t) Begin Negotiation for Surface/Subsurface Rights Required for Repository Siting	8/90	COE
(9t) Prepare and Submit Land Acquisition Status Report	4/93, ongoing	COE
(9u) Submit Evidence of Title Acquired	4/93	COE

TABLE 3 (Continued)
Federal Technical Activities Required to Site,
Construct and Operate the First and Second Geologic Repositories

<u>Task and Required Action</u>	<u>Reference Schedule</u>	<u>Agency</u>
(9v) Evidence of Title Approved	5/93	DOJ
(9w) Apply for Institution of Condemnation Proceedings	6/93	COE
(9x) Issue Declaration of Taking (Condemnation)	7/93	COE
(9y) File Complaint in Condemnation via U.S. District Court	7/93	DOJ
(9z) Deposit Estimated Compensation with District Court	7/93	COE
(9aa) Set Time for Surrender of Possession of Land	8/93	U.S. District Court
(9bb) Surrender Possession of Land	Date Ordered By Court	
(9cc) Enter Judgement on Compensation Issues	After Hearing	U.S. District Court
Steps for Acquiring Land at Davis and Lavender Canyons, Utah		
(9aaa) Begin Pre-Application Consultation	8/90	DOE/BLM
(9bbb) Apply for Withdrawal of Public Land	5/91	DOE
(9ccc) Begin Preparation of Case File Reports	5/91	DOE
(9ddd) Publish Notice in Federal Register for Withdrawal Application, Invitation to Comment, Public Meeting	6/91	BLM
(9eee) Public Comment Period Closes	8/91	BLM
(9fff) Hold Public Meeting	11/91	BLM
(9ggg) Submit Case File Reports	5/92	DOE
(9hhh) Issue Public Land Order	5/93	DOI
(9iii) Provide Congress with Withdrawal Information	5/93	DOI

TABLE 3 (Continued)
Federal Technical Activities Required to Site,
Construct and Operate the First and Second Geologic Repositories

<u>Task and Required Action</u>	<u>Reference Schedule</u>	<u>Agency</u>
(9jjj) Discharge from Further Consideration Unless Disapproval	6/93 Resolution Reported	Congressional Committees
(9kkk) Withdrawal Takes Effect, Unless Vetoed	8/93	Congress
(10) Define Affected Indian Tribes which have Treaty Rights		
(10a) Analyze all Sites and Make Determination	1/85	DOI
(11) MOU between DOE and BLM Concerning Environmental Reviews for Site Characterization Activities	6/83 Actual	
(11a) Develop MOU		DOE, BLM
(12) Provide Detailed Guidance for a Construction Authorization Application		
(12a) Update 10 CFR 60.21 Along With a Regulatory Guide that is Similar to Regulatory Guide 1.70 Rev. 3	10/86	NRC
(13) <u>Transportation Program Milestones</u>		
<u>Engineering and Procurement</u>		
(13a) Sign procedural agreement with NRC to address certification process for transportation casks	11/3/83 Actual	DOE, NRC
(13b) Issue Business Plan	10/85	DOE
(13c) Issue RFP to private industry for cask design	1/86-1/90	DOE
(13d) Issue Safety Analysis Report Package to NRC	1/88-1/91	DOE
(13e) NRC review Safety Analysis Report Package	1/88-1/91	NRC
(13f) NRC grant certification of cask designs	1/89-1/92	NRC

TABLE 3 (Continued)
**Federal Technical Activities Required to Site,
 Construct and Operate the First and Second Geologic Repositories**

<u>Task and Required Action</u>	<u>Reference Schedule</u>	<u>Agency</u>
<u>DOE/DOT Interaction</u>		
(13g) Procure transportation casks	4/92-4/96	DOE*
(13h) Sign M.O.U. with DOT to cover transportation aspects of the Nuclear Waste Policy Act	1985	DOE, DOT
(13i) DOE initiate industry participation economic study	1/94	DOE
(13j) DOT determine transportation services, if required	1/95	DOT
<u>Intergovernmental/Public Interactions</u>		
(13k) Issue Institutional Plan	3/85	DOE
(13l) Interact with public and intergovernmental agencies to identify fuel acceptance ranking, routing, and impacts	3/85-1/98	DOE, DOT, States, Indian Tribes

*DOT could become involved in determination of cask procurement decision process if private industry is unable or unwilling to provide transportation services at reasonable cost.

**Other Federal Activities:
Environmental Issues**

TABLE 4
**Federal Environmental Activities Required to Site,
 Construct and Operate the First and Second Geologic Repositories**

<u>Task and Required Action</u>	<u>Reference Schedule</u>	<u>Agency</u>
	<u>First Repository</u>	
1) <u>REVIEW THE APPLICABILITY OF FEDERAL REGULATIONS AND STATUTES* AS THEY APPLY TO SITE CHARACTERIZATION AND SELECTION ACTIVITIES, LICENSING ACTIVITIES, AND CONSTRUCTION ACTIVITIES</u>	Site Charac- 9/85-3/89 terization Site Selec- 3/89-8/90 tion Licensing 8/90-8/93 Construction 8/93-2/2001	DOE
A) <u>Pollution Control</u>	<u>Second Repository</u>	
<u>Executive Orders:</u>	Site Charac- 3/91-1/96	DOE
• Federal Compliance with Pollution Control Standards, Executive Order No. 12088 (1978)	terization Site Selec- 1/96-6/97 tion Licensing 6/97-6/2000 Construction 6/2000-4/2006	
B) <u>Air Quality</u>		
<u>Statutes:</u>		
• Clean Air Act As Amended 42 U.S.C. § 7401 et seq.		EPA, Affected States
<u>Implementing Regulations:</u>		
• Requirements for Preparation, adoption, and submittal of Implementation Plans, 40 CFR 51		
• Approval and Promulgations of Implementation Plans, 40 CFR 52		
• Procedures for Decision making 40 CFR 124		
• National Primary and Secondary Ambient Air Quality Standards, 40 CFR 50		
• Standards of Performance for New Stationary Sources, 40 CFR 60		

*Review should include but not be limited to those Federal Regulations and Statutes which are listed; however, each reviewing agency should update this list as appropriate to include all applicable regulations and statutes.

TABLE 4 (Continued)
 Federal Environmental Activities Required to Site,
 Construct and Operate the First and Second Geologic Repositories

<u>Task and Required Action</u>	<u>Reference Schedule</u>	<u>Agency</u>
C) <u>Cultural Resources</u>		
<u>Statutes:</u>		
<ul style="list-style-type: none"> • Archeological Resources Protection Act of 1979, 16 U.S.C. § 470 and 469(a)(2) • Antiquities Act of 1906, 16 U.S.C. § 431, 432, 433 • National Historic Preservation Act of 1966, 16 U.S.C. § 470 to 470b, 470c to 470n • Historic Sites, Buildings, and Antiquities Act of 1935, 16 U.S.C. § 461 to 467, as amended 		<p>BLM, CEQ, DOI, DOT, USDA, Affected</p> <p>Indian tribes</p>
<u>Executive Orders:</u>		
<ul style="list-style-type: none"> • Protection and Enhancement of Cultural Environment, Executive Order No. 11593 (1971) 		
<u>Implementing Regulations:</u>		
<ul style="list-style-type: none"> • Historic Preservation Certifications Pursuant to the Tax Reform Act of 1976, The Revenue Act of 1978, The Tax Treatment Extension Act of 1980, and The Economic Recovery Act of 1981, 36 CFR 67 • Determination of Eligibility for Inclusion in the National Register of Historic Places, 36 CFR 63 • Protection of Archaeological Resources; Uniform Regulations, 36 CFR 296 • Procedures for Approved State and Local Government Historic Preservation Programs, 36 CFR 61. 		
D) <u>Ecology and Wildlife Protection</u>		
<u>Statutes:</u>		
<ul style="list-style-type: none"> • Fish and Wildlife Act of 1956, 16 U.S.C. § 742a to 742e, 742j • Endangered Species Act of 1973, 16 U.S.C. § 1532. • Migratory Bird Treaty Act, 16 U.S.C. § 703 to 708, 709(a) to 711, as amended • Bald and Golden Eagle Protection Act, 16 U.S.C. § 668a • Fish and Wildlife Coordination Act, 16 U.S.C. § 661 to 666, as amended • Wild Free Roaming Horses and Burros Protection Act of 1971, 16 U.S.C. § 1331-1340, as amended • Fish and Wildlife Conservation Act of 1980, 16 U.S.C. § 2901-2911 • Federal Insecticide, Fungicide, and Rodenticide Act, 7 U.S.C. § 135 <u>et. seq.</u> 		<p>EPA, BLM, DOI, COE, Affected States and Indian tribes,</p>

TABLE 4 (Continued)
Federal Environmental Activities Required to Site,
Construct and Operate the First and Second Geologic Repositories

<u>Task and Required Action</u>	<u>Reference Schedule</u>	<u>Agency</u>
<u>Executive Orders:</u>		
<ul style="list-style-type: none"> • Environmental Safeguards, Executive Order No. 11870 (1975) • Protection of Wetlands, Executive Order No. 11990 (1977) • Floodplain Management, Executive Order No. 11988 (1977); as Amended by Executive Order No. 12148 (1979) • Activities for Animal Damage Control on Federal Lands, Executive Order No. 11917 (1976) 		
<u>Implementing Regulations:</u>		
<ul style="list-style-type: none"> • Wild Free Roaming Horses and Burros Protection Act, Management and Control, 43 CFR 4700 • Range Management - Management of Wild Free Roaming Horses and Burros, 36 CFR 222 (Subpart B) • Compliance with Floodplains/Wetlands Environmental Review Requirements, 10 CFR 1022 • General Permit Procedures, 50 CFR 13 Endangered and Threatened Wildlife and Plants, 50 CFR 17, Migratory Bird Permits, 50 CFR 21 		
E) <u>Hydrology and Water Quality</u>		
<u>Statutes:</u>		
<ul style="list-style-type: none"> • Rivers and Harbors Act of 1899, 33 U.S.C. § 401-413 • Safe Drinking Water Act, 42 U.S.C. § 300 f <u>et seq</u>; as amended • Federal Water Pollution Control Act as amended by the Clean Water Act of 1977, 33 U.S.C. § 1251 <u>et seq</u>. • Marine Protection Research and Sanctuaries Act of 1972, 16 U.S.C. § 1431 <u>et seq</u>., 33 U.S.C. § 1401 <u>et seq</u> 		EPA, CEQ, COE, USGS, Affected States
<u>Implementing Regulations:</u>		
<ul style="list-style-type: none"> • National Pollutant Discharge Elimination System, 40 CFR 122 • Criteria and Standards for the National Pollutant Discharge Elimination System, 40 CFR 125 • Water Quality Standards 40 CFR 131 • Toxic Pollutant Effluent Standards, 40 CFR 129 • Underground Injection Control Program, 40 CFR 144 • Underground Injections Control Program: Criteria and Standards, 40 CFR 146 		

TABLE 4 (Continued)
Federal Environmental Activities Required to Site,
Construct and Operate the First and Second Geologic Repositories

- Reivew of Projects Affecting the Edwards Underground Reservoir, a designated Sole Source aquifer in the San Antonio, Texas Area, 40 CFR 149
- Public Participation in Programs Under the Resource Conservation and Recovery Act, The Safe Drinking Water Act, and the Clear Water Act, 40 CFR 25.
- Determination of Reportable Quantities for Hazardous Substances, 40 CFR 117

Task and Required Action

Reference Schedule

Agency

F) Land Use

Statutes:

- Federal Land Policy and Management Act of 1976, 43 U.S.C. § 1701-1782 et seq
- Wild and Scenic Rivers Act, 16 U.S.C. § 1271 et seq; as amended
- Coastal Zone Management Act of 1972, 16 U.S.C. § 1451 et seq
- National Forest Management Act of 1972, 16 U.S.C. § 472(a), 476
- Farmland Protection Policy Act, 7 U.S.C. § 4201 et seq.
- Taylor Grazing Act, 43 U.S.C. § 315-315g, 315k-315m, 315n and 315o-1

EPA, BLM,
COE, USDA,
DOI, CEQ,
Affected
States

Executive Orders:

- Protection of Wetlands, Executive Order No. 11990 (1977)
- Floodplain Management, Executive Order No. 11988 (1977)

Implementing Regulations:

- U.S. Forest Service: Land Use, 36 CFR 251
- U.S. Forest Service: Minerals, 36 CFR 228
- Objects Affecting Navigable Airspace, 14 CFR 77
- Leases, Permits and Easements for Non-Federal use of Public Lands, 43 CFR 2920

TABLE 4 (Continued)
 Federal Environmental Activities Required to Site,
 Construct and Operate the First and Second Geologic Repositories

G) Waste Disposal

Statutes:

- Resource Conservation and Recovery Act of 1976, 42 U.S.C. § 6901 et seq.
- Solid Waste Disposal Act, as Amended, 42 U.S.C. § 3251 et seq
- Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. § 9601 et seq
- Toxic Substances Control Act, 15 U.S.C. § 2601 et seq
- Atomic Energy Act of 1954, as Amended, 42 U.S.C. § 2011 et seq

NRC, EPA,
 Affected
 States

Task and Required Action

Reference Schedule

Agency

Implementing Regulations:

- Hazardous Waste Management System: General, 40 CFR 260
- Identification and Listing of Hazardous Waste, 40 CFR 261
- Standards Applicable to Transporters of Hazardous Waste, 40 CFR 263
- Public Participation Programs, 40 CFR 25
- Standards for Generators of Hazardous Waste, 40 CFR 262
- State Program Requirements, 40 CFR 123
- Standards for Owners and Operators of Hazardous Waste Treatment Storage, and Disposal Facilities, 40 CFR 264
- Interim Status Standards for Owners and Operators of Hazardous Waste Treatment Storage, and Disposal Facilities, 40 CFR 265

H) Noise

EPA

Statutes:

- Noise Control Act of 1972, 42 U.S.C. § 4901 et seq

Implementing Regulations:

- Noise Emission Standards for Construction Equipment, 40 CFR 204

TABLE 4 (Continued)
Federal Environmental Activities Required to Site,
Construct and Operate the First and Second Geologic Repositories

2)	<u>CONSULTATION TO RESOLVE REGULATION AND STATUTE CONFLICTS AND TO DEVELOP MITIGATION/SITE CLEARANCE AGREEMENTS; PARTICULAR EMPHASIS ON HISTORIC PRESERVATION, ENDANGERED SPECIES, AND WATER ISSUES</u>	Informal Consultation Throughout Project; Begin Formal Consultation Process Upon Presidential Approval of Recommended Sites; 9/5/85 (1st Repository); 3/91 (2nd Repository)	DOE, EPA, DOI Affected States, and Indian tribes
3)	<u>MONITOR FEDERAL AND STATE AGENCY PERMITTING REQUIREMENTS FOR AIR, WATER, AND SOLID WASTE; FINALIZE PERMIT REQUIREMENTS AS EARLY AS PRACTICABLE</u>	Monitor Throughout Project; Finalize Permit Requirements for each Recommended Site to Conserve Scheduled Time; 3/90 - 9/90 (1st Repository); 6/96-1/97 (2nd Repository)	DOE, EPA, Appropriate State Permitting Agency
4)	<u>FILE ENVIRONMENTAL PERMIT APPLICATIONS; AIR, WATER, SOLID WASTE</u>	Upon Presidential Recommendation of Single Site; 12/90 (1st Repository); 5/97 (2nd Repository)	DOE
5)	<u>ISSUE ENVIRONMENTAL PERMITS</u>	Some Permits may Require up to 18 Months Under Current Regulations; Agency Agreements on Implementation Schedules may be Required to Avoid Project Delays	DOE, EPA, Appropriate State Permitting Agency

Activities By Agencies

TABLE 5

Activities Required to Site, Construct and
Operate a Geologic Repository By Agency

NOTE: The following tables list activities by agency. The numbers in the far left column correspond to the activity numbers on Table 1, 2, 3, and 4. For example, the number I-2b is a NWPA activity for the first repository listed in Table 1, the number II-2b is an activity for the second repository and is listed in Table 2, and the number III-1a is a Federal activity listed in Table 3.

- 5.1 U.S. Department of Agriculture
 - U.S. Department of Defense
 - 5.2 Air Force
 - 5.3 Army Corps of Engineers
 - 5.4 U.S. Department of Interior
 - 5.5 Bureau of Land Management
 - 5.6 U.S. Geological Survey
 - 5.7 U.S. Department of Justice
 - 5.8 U.S. Department of Transportation
 - 5.9 Council on Environmental Quality
 - 5.10 Environmental Protection Agency
 - 5.11 Nuclear Regulatory Commission
-
- 6.0 States and Indian Tribes

TABLE 5.1

AGENCY: U.S. DEPARTMENT OF AGRICULTURE (USDA)

	<u>Task</u>	<u>Action Required</u>	<u>Date</u>
I-5b *	Environmental Assessments	Review and Comment	12/84 - 3/85
I-19b *	Environmental Impact Statement	Review and Comment	9/89 - 11/89
II-4b *	Environmental Assessments	Review and Comment	3/90 - 6/90
II-17b *	Environmental Impact Statement	Review and Comment	7/96 - 9/96
III-9	Land Acquisition Procedures for Salt Sites	Negotiate Land Use Permits or Agreements, As Needed	7/86
IV-1	Review Regulations	Identify Applicable Requirements	9/85 - 2/2001

*CRITICAL PATH ACTIVITY

TABLE 5.2

AGENCY: AIR FORCE (AF)

	<u>Task</u>	<u>Action Required</u>	<u>Date</u>
I-5b *	Environmental Assessments	Review and Comment	12/84 - 3/85
I-19b *	Environmental Impact Statement	Review and Comment	9/89 - 11/89
II-4b *	Environmental Assessments ⁽¹⁾	Review and Comment	3/90 - 6/30
II-17b *	Environmental Impact ⁽¹⁾ Statement	Review and Comment	7/96 - 9/96
III-8 *	Land Acquisition Procedures for Tuff Site	Review and Approve Land Withdrawal	8/85 - 8/93

*CRITICAL PATH ACTIVITY

⁽¹⁾ Only required if the Nevada Tuff site is included in those being considered for the second repository.

TABLE 5.3

AGENCY: ARMY CORPS OF ENGINEERS (COE)

	<u>Task</u>	<u>Action Required</u>	<u>Date</u>
I-5b *	Environmental Assessments	Review and Comment	12/84 - 3/85
I-19b *	Environmental Impact Statement	Review and Comment	9/89 - 11/89
II-4b *	Environmental Assessments	Review and Comment	3/90 - 6/90
II-17b *	Environmental Impact Statement	Review and Comment	7/96 - 9/96
III-9 *	Land Acquisition Procedures for Salt Sites	Review and Approve Land Withdrawal	10/85 - 7/93
IV-1	Review Regulations	Identify Applicable Requirements	9/85 - 2/2001

*CRITICAL PATH ACTIVITY

TABLE 5.4

AGENCY: U.S. DEPARTMENT OF THE INTERIOR (DOI)

	<u>Task</u>	<u>Action Required</u>	<u>Date</u>
I-5b *	Environmental Assessments	Review and Comment	12/84 - 3/85
I-13a *	SCP Public Hearings	Comment	12/85 - 1/87
I-18a	Pre-Recommendation Public Hearing	Comment	9/89
I-19b *	Environmental Impact Statement	Review and Comment	9/89 - 11/89
II-4b *	Environmental Assessments	Review and Comment	3/90 - 6/90
II-11a *	SCP Public Hearings	Comment	6/91
II-16a	Pre-Recommendation Public Hearing	Comment	7/96
II-17b *	Environmental Impact Statement	Review and Comment	7/96 - 9/96
III-8	Land Acquisition Procedures for Tuff Site	Issue Public Land Order	5/93
III-9	Land Acquisition Procedures for Salt Sites	Issue Public Land Order	5/93
III-10a	Define Affected Indian Tribes	Make a Determination	1/85
IV-1	Review Regulations	Identify Applicable Requirements	9/85 - 8/90
IV-2	Review Regulations	Consultation	9/85 - 2/2001

*CRITICAL PATH ACTIVITY

TABLE 5.5

AGENCY: BUREAU OF LAND MANAGEMENT (BLM)

	<u>Task</u>	<u>Action Required</u>	<u>Date</u>
I-5b *	Environmental Assessments	Review and Comment	12/84 - 3/85
I-19b *	Environmental Impact Statement	Review and Comment	9/89 - 11/89
II-4b *	Environmental Assessments ⁽¹⁾	Review and Comment	3/90 - 6/90
II-17b *	Environmental Impact Statement	Review and Comment	7/96 - 9/96
III-8 *	Land Acquisition Procedures for Tuff Site	Review and Approve Land Withdrawal	4/86 - 5/92
III-9 *	Land Acquisition Procedures for Salt Sites	Review and Approve Land Withdrawal	8/90- 11/91
III-11a	MOU Concerning Environmental Reviews for Site Characterization Activities	Develop MOU	6/83 Actual
IV-1	Review Regulations	Identify Applicable Requirements	9/85 - 2/2001

***CRITICAL PATH ACTIVITY**

⁽¹⁾ Only required if the Nevada Tuff site is included in those being considered for the second repository.

TABLE 5.6

AGENCY: U.S. GEOLOGICAL SURVEY (USGS)

	<u>Task</u>	<u>Action Required</u>	<u>Date</u>
I-3b *	Siting Guidelines	Consultation	9/21/83 Actual
I-5b *	Environmental Assessments	Review and Comment	12/84 - 3/85
I-11a *	Site Characterization Plans	Review and Comment	9/85 - 10/86
I-19b *	Environmental Impact Statement	Review and Comment	9/89 - 11/89
II-4b *	Environmental Assessments	Review and Comment	3/90 - 6/90
II-9b *	Site Characterization Plans	Review and Comment	3/91- 6/91
II-17b *	Environmental Impact Statement	Review and Comment	6/96 - 8/96
III-2a	MOU on Site Characterization Plans	Develop MOU with DOE	3/29/84 Actual
III-2b *	Site Characterization Plans	Review and Comment	9/85 - 1/87
III-2d *	Site Characterization Plans	Review and Comment	3/91 - 6/91
III-7 *	Site Model Development (Tuff Site)	Reach Consensus w/ DOE on Site Models	8/86 - 9/89
IV-1	Review Regulations	Identify Applicable Requirements	9/85 - 2/2001

*CRITICAL PATH ACTIVITY

TABLE 5.7

AGENCY: U.S. DEPARTMENT OF JUSTICE (DOJ)

	<u>Task</u>	<u>Action Required</u>	<u>Date</u>
III-9 *	Land Acquisition Procedures for Salt Sites	Provide Legal Review of Land Acquisition	7/86 - 7/93

*CRITICAL PATH ACTIVITY

TABLE 5.8

AGENCY: U.S. DEPARTMENT OF TRANSPORTATION (DOT)

	<u>Task</u>	<u>Action Required</u>	<u>Date</u>
I-5b *	Environmental Assessments	Review and Comment	12/84 - 3/85
I-19b *	Environmental Impact Statement	Review and Comment	9/89 - 11/89
II-4b *	Environmental Assessments	Review and Comment	3/90 - 6/90
II-17b *	Environmental Impact Statement	Review and Comment	7/96 - 9/96
III-13h	MOU on Transportation aspects of NWPA	Develop MOU with DOE	1985
III-13j	Determination of Transportation Services, if required	Determine who will provide transportation services	1/95
III-131	Interaction of Public and Intergovernmental agencies during Transportation Program	Consultation	3/85 - 1/98

*CRITICAL PATH ACTIVITY

TABLE 5.9

AGENCY: COUNCIL ON ENVIRONMENTAL QUALITY (CEQ)

	<u>Task</u>	<u>Action Required</u>	<u>Date</u>
I-3b *	Siting Guidelines	Consultation	9/21/83 Actual
I-5b *	Environmental Assessments	Review and Comment	12/84 - 3/85
I-19b *	Environmental Impact Statement	Review and Comment pursuant to Sec. 309 of the Clean Air Act, if referred by EPA	9/89 - 11/89
II-4b *	Environmental Assessments	Review and Comment	3/90 - 6/90
II-17b *	Environmental Impact Statement	Review and Comment pursuant to Sec. 309 of the Clean Air Act, if referred by EPA	7/96 - 9/96
IV-1	Review Regulations	Identify Applicable Requirements	9/85 - 2/2001

*CRITICAL PATH ACTIVITY

TABLE 5.10

AGENCY: ENVIRONMENTAL PROTECTION AGENCY (EPA)

	<u>Task</u>	<u>Action Required</u>	<u>Date</u>
I-3c *	Siting Guidelines	Consultation	9/21/83 Actual
I-5b *	Environmental Assessments	Review and Comment	12/84 - 3/85
I-19b *	Environmental Impact Statement	Review and Comment pursuant to Sec. 309 of the Clean Air Act	9/89 - 11/89
I-31a	EPA Standards	Develop Standards under Applicable statutes	12/84
I-34a	Development of MRS Proposal	Consultation	6/84 - 6/85
I-34c	Draft MRS Proposal	Review and Comment	4/1/85 - 5/1/85
II-4b *	Environmental Assessments	Review and Comment	3/90 - 6/90
II-17b *	Environmental Impact Statement	Review and Comment pursuant to Sec. 309 of the Clean Air Act	7/96 - 9/96
IV-1,2,3	Review Regulations	Identify Applicable Requirements	9/85 - 2/2001
IV-5	Environmental Permits	Issue Permits	9/85 - 2/2001

*CRITICAL PATH ACTIVITY

TABLE 5.11

AGENCY: NUCLEAR REGULATORY COMMISSION (NRC)

	<u>Task</u>	<u>Action Required</u>	<u>Date</u>
I-3c	* Siting Guidelines	Concurrence	7/10/84 Actual
I-5b	* Environmental Assessments	Review and Comment	12/84 - 3/85
I-11c	* Site Characterization Plans (SCP)	Review and Comment	7/86 - 8/87
I-12a	Draft Regulatory Guide 4.17	Update RG 4.17 on SCP Contents	12/84
I-12b	Final Regulatory Guide 4.17	Issue Final RG 4.17	3/85
I-12c	SCP Content	Identify Information Requirements	Through 3/1/90
I-17b	Radioactive Material Use	Concur on Use	5/87
I-19b	* Environmental Impact Statement	Review and Comment	9/89 - 11/89
I-20a	NRC Preliminary Sufficiency Comments	Review and Comment	9/89 - 4/90
I-24b	* Construction Authorization Application (CAA)	Review	8/90 - 8/93
I-24c	* Construction Authorization Application (CAA)	Issue Construction Authorization (CA)	8/93
I-25a	Adoption of FEIS	Adopt FEIS, to Extent Practicable	9/90
I-26a	NRC Status Report	Report to Congress	8/91, 8/92, & 8/93
I-32a	NRC Requirements and Criteria	Develop Criteria	6/21/83 Actual
I-32b	Revise Criteria	Revise Criteria Based on EPA Standards	1985

*CRITICAL PATH ACTIVITY

TABLE 5.11 (Continued)

AGENCY: NRC

	<u>Task</u>	<u>Action Required</u>	<u>Date</u>
I-33a	TEF MOU	Sign Agreement on Procedures	4/88
I-33b	TEF Report	Report Activities Under- taken to Support a TEF	1988
I-34a	Development of MRS Proposal	Consultation	6/84 - 6/85
I-34c	Draft MRS Proposal	Review and Comment	4/1/85 - 5/1/85
II-4b *	Environmental Assessments	Review and Comment	3/90 - 6/90
II-9c *	Site Characterization Plans	Review and Comment	1/92
II-10a *	Requirements for SCPs	Identify Information Requirements	Con- tinuing thru 3/96
II-15a	Radioactive Material Usage	Concur on Use	6/91
II-17b *	Environmental Impact Statement	Review and Comment	7/96 - 9/96
II-19a	Preliminary Sufficiency Comments	Review and Comment	7/96
II-23b *	Construction Authorization Application (CAA)	Review	6/97 - 6/2000
II-23c *	Construction Authorization Application (CAA)	Issue Construction Authorization (CA)	6/2000
II-24a	CAA Status Report	Report to Congress	6/98, 6/99, & 6/2000
II-25a	Adoption of FEIS	Adopt FEIS to Extent Practicable	7/97

*CRITICAL PATH ACTIVITY

TABLE 5.11 (Continued)

AGENCY: NRC

	<u>Task</u>	<u>Action Required</u>	<u>Date</u>
III-1a	MOU on Site Characterization Phase Activities	Develop MOU with DOE	6/27/83 Actual
III-3a	Draft Site Characterization Analysis	Issue Draft SCA	2/86-3/87
III-3c	Final SCA	Issue Final SCA	7/86-8/87
III-3d	Draft SCA	Issue Draft SCA	9/91
III-3f	Final SCA	Issue Final SCA	2/92
III-4a	Semiannual SCP Reports	Review	3/86-3/90
III-4b	Semiannual SCP Reports	Review	9/91-3/96
III-5b *	Update License Application in Accordance With 10 CFR Part 60.24	Review and Grant DOE a License to receive and possess HLW	6/95 -
III-5c *			12/97
III-5e *	Update License Application in Accordance With 10 CFR Part 60.24	Review and Grant DOE a License to Receive and Process HLW	3/2003 -
III-5f *			2/2006
III-6b,c	License Amendment	Review and Issue License Amendment for Repository Closure	Prior to Permanent Closure
III-6e,f	License Amendment	Review and Issue License Amendment for License Termination	After Closure and Decontamination of Surface Facilities
III-12a *	Construction Authorization Application	Provide Detailed Guidance on CAA Content	10/86
III-13a	Develop Procedural Agreements with DOE	Sign Procedural Agreement	11/3/84 Actual

*CRITICAL PATH ACTIVITY

TABLE 5.11 (Continued)

AGENCY: NRC

	<u>Task</u>	<u>Action Required</u>	<u>Date</u>
III-13e	Review Safety Analysis Report Package (SARP)	Review and Comment	3/88 - 1/99
III-13f	Cask Design Certification of First Phase	Grant Certification of Design	1/89 - 1/92

*CRITICAL PATH ACTIVITY

TABLE 6
STATES AND INDIAN TRIBES**

	<u>Task</u>	<u>Action Required</u>	<u>Date</u>
I-3b *	Siting Guidelines	Consultation	9/21/83 Actual
I-4b	Pre-Nomination Public Hearing	Comments	3/83- 5/83
I-5b *	Environmental Assessments	Review and Comment	12/84 - 3/85
I-11b *	Site Characterization Plans	Review and Comment	12/85 - 1/87
I-13a *	SCP Public Hearing	Comment	12/85, 12/85 & 1/87
I-14a	Consultation & Cooperation Agreements	Negotiate Agreements	Ongoing
I-18a	Pre-Recommendation Public Hearings	Comment	9/89
I-19b *	Environmental Impact Statement	Review and Comment	9/89 - 11/89
I-23a	Assistance for Repository State	Submit Impact Description	After 2/90
I-23b	Assistance for Repository State	Enter into Binding Agreement	10/93
II-3b	Pre-Nomination Public Hearings	Comments	9/90
II-4b *	Environmental Assessments	Review and Comment	3/90 - 6/90
II-9b *	Site Characterization Plans	Review and Comment	3/91 - 6/91
II-11a *	SCP Public Hearings	Comments	6/91

*CRITICAL PATH ACTIVITY

TABLE 6 (Continued)
STATES AND INDIAN TRIBES**

	<u>Task</u>	<u>Action Required</u>	<u>Date</u>
II-12a	Consultation & Cooperation Agreements	Negotiate Agreements	Within 6 Months After Request
II-16a	Pre-Recommendation Public Hearings	Comments	7/96
II-17b	Environmental Impact Statement	Review and Comment	7/96 - 9/96
II-22a	Assistance for Repository State	Submit Impact Description	After 3/96
II-22b	Assistance for Repository State	Enter into Binding Agreement	After 9/2000
III-3b	SCA	Review and Comment	5/86 - 6/87
III-3e	SCA	Review and Comment	12/91
III-4a	Semiannual SCP Reports	Review	3/86 - 3/90
III-4b	Semiannual SCP Reports	Review	9/91 - 3/96
III-13m	Interaction with Public and Intergovernmental agencies during Transportation Program	Consultation	3/85 - 1/98
IV-1,2,3	Review Regulations	Identify Applicable Requirements	9/85 - 2/2001
IV-5	Environmental Permits	Issue Permits	9/85 - 2/2001

*CRITICAL PATH ACTIVITY

**Items I-3c, I-27b, I-28b are also applicable to the 2nd Repository States and Indian Tribes

Acronyms

APPENDIX A

LIST OF ACRONYMS AND DEFINITIONS

ACHP	Advisory Council on Historic Preservation
AF	Air Force
The Act	The Nuclear Waste Policy Act of 1982--Public Law 97-425
BIA	Bureau of Indian Affairs
BLM	Bureau of Land Management
CA	Construction Authorization
CAA	Construction Authorization Application
CEQ	Council on Environmental Quality
COE	Army Corps of Engineers
DEIS	Draft Environmental Impact Statement
Department	Department of Energy
DOD	Department of Defense
DOE	Department of Energy
DOI	Department of Interior
DOJ	Department of Justice
DOL	Department of Labor
DOT	Department of Transportation
EA	Environmental Assessment
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
FEIS	Final Environmental Impact Statement
FWS	Fish and Wildlife Service
HLW	High Level Waste
LA	License Application
Mission Plan	Mission Plan for the Civilian Radioactive Waste Management Program (DOE/RW-0005 Draft, April 1984)
MOU	Memorandum of Understanding
MSHA	Mine Safety and Health Administration of the DOL
N/A	Not Applicable
NLT	No Later Than
NRC	Nuclear Regulatory Commission
NWPA	The Nuclear Waste Policy Act of 1982--Public Law 97-425
OCRWM	Office of Civilian Radioactive Waste Management
OMB	Office of Management and Budget
PAS	Potentially Acceptable Sites
PDS	Project Decision Schedule
Regulatory Guide 4.17	Standard Format and Content of Site Characterization Reports for High-Level-Waste Geologic Repositories
SCA	Site Characterization Analysis
SCP	Site Characterization Plan
Secretary	Secretary of Energy
SG	Siting Guidelines
SHPO	State Historic Preservation Office
SSR	Site Selection Report
TEF	Test and Evaluation Facility
USDA	United States Department of Agriculture
USGS	United States Geological Survey

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