THE TRANSPORTATION INSTITUTIONAL PLAN:

COOPERATIVE PLANNING FOR NWPA TRANSPORTATION

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ABSTRACT

The Transportation Institutional Plan, published in 1986 by the U.S. Department of Energy's Office of Civilian Radioactive Waste Management (OCRWM), defines a process for effective interaction among those who may be affected by transportation activities conducted under provisions of the Nuclear Waste Policy Act of 1982 (NWPA). The Plan, which was developed in cooperation with numerous interested parties, describes formal mechanisms for identifying, addressing, and resolving specific transportation issues in a responsive, timely manner. An appendix to the Plan includes detailed discussion of the following transportation issues: (1) the transportation of defense waste; (2) prenotification; (3) physical protection procedures; (4) highway routing; (5) rail routing; (6) inspection and enforcement for highway and rail shipments; (7) emergency response; (8) liability coverage for transportation to NWPA facilities; (9) cask design and testing; (10) overweight truck shipments; (11) rail service analysis; (12) mixture of transportation modes; (13) transportation infrastructure improvements; (14) OCRWM training standards; (15) transportation operational procedures; and (16) State, Tribal, and local regulation of transportation. In the future, the OCRWM expects to update and combine the Transportation Institutional Plan with program information on business and operational planning activities to form a comprehensive transportation plan. This document will be updated and released on a periodic basis to reflect major decisions and program evaluations. The OCRWM's intent is to provide an open accounting of planning, to identify opportunities for public involvement in program activities, and to foster communication and negotiation in the cooperative development of a safe, efficient, and cost-effective NWPA transportation program.

INTRODUCTION

The Nuclear Waste Policy Act of 1982 (NWPA), 42 U.S.C. 10101 et seq., established a program for the permanent disposal of spent nuclear fuel and high-level radioactive waste in deep geologic repositories, and directed the U.S. Department of Energy (DOE) to develop the necessary components for a waste-management system. The transportation of nuclear waste to NWPA facilities will be an important element of the waste-management system. The NWPA directs the DOE to take title to spent fuel from utilities at commercial nuclear reactor sites and to be responsible for its transportation to a repository or temporary storage facility. In addition to transporting civilian waste, the DOE will be responsible for transporting defense high-level radioactive waste (generated in national defense activities) to repositories.

The NWPA provides the DOE with an opportunity to develop an innovative transportation system that is uniquely adapted to future shipping needs, meets extensive regulatory safety requirements, and effectively builds on the United States' long and successful history of transporting radioactive materials. While the operation of such a system will ultimately be contingent on the provision of safe, efficient, and economical shipping services and equipment, it also will be significantly enhanced by a stable institutional environment. Consistent with the general policy contained in the NWPA, the DOE recognizes that public and private sector participation in transportation planning will be important to promote better understanding and foster public confidence in the safety of nuclear waste transportation. Accordingly, the DOE's Office of Civilian Radioactive Waste Management (OCRWM)--established to implement provisions of the NWPA--has developed a strategy for constructive interaction with a broad range of parties having an interest in NWPA transportation. The strategy has been outlined in the Transportation Institutional Plan (DOE/RW-0094, August 1986).

The following discussion provides an overview of the cooperative development of the Transportation Institutional Plan, outlines major provisions of the Plan, and reviews current OCRWM strategies for working toward the timely resolution of specific transportation issues. Also included is a description of plans for the development of a comprehensive transportation document that will provide integrated guidance on all major elements of the NWPA transportation program.

PLAN DEVELOPMENT

The OCRWM's commitment to produce transportation planning documents was formally announced in 1985 with the release of the OCRWM's Mission Plan for the Civilian Radioactive Waste Management Program (DOE/RW-0005, June 1985). In keeping with the directives of the NWPA, the Mission Plan provided an overview of the objectives of the waste management program, expected institutional activities, and management approaches. In the discussion of the development of an NWPA transportation system, the Mission Plan noted the importance of both technical and institutional planning. The OCRWM's development of adequate types and quantities of transportation equipment was to be accompanied by

cooperative planning with Congress, other Federal agencies, States, Indian Tribes, the electric utilities, the transportation industry, and the public to address concerns about waste transportation. A stated objective was to collectively resolve to the extent possible the institutional issues that could become impediments to the safe and efficient functioning of the transportation system. In recognition of the need to further review and discuss the OCRWM's transportation plans and policies, the Mission Plan committed to the development of two supplementary plans: the transportation business plan and the transportation institutional plan.

The Draft Transportation Business Plan (DOE/RW-0026, August 1985) was subsequently issued in 1985; the plan described projected activities needed to develop a fleet of shipping casks and other hardware for transporting nuclear waste under provisions of the NWPA. The draft plan, which was reviewed in a workshop attended by representatives from Federal, State and Tribal governments as well as from the utilities and transportation industry, was revised and issued in final form in January 1986 (DOE/RW-0046).

The OCRWM issued the Draft Transportation Institutional Plan (DOE/RW-0031) in September 1985. Numerous comments were received on the draft document--both in writing and in group reports presented at an "OCRWM Transportation Institutional Workshop" in Atlanta, Georgia in November 1985. Again, all of the groups interested in the development of an NWPA transportation system were well represented at this meeting of more than 400 attendees.

The most frequently received comments on the draft Institutional Plan called for--

- definition of the roles of various offices of the DOE in planning for NWPA transportation, and identification of Federal agency responsibilities for regulating nuclear waste transportation;
- clarification of planned interactions with interested parties;
- definition of the degree to which the OCRWM will provide financial assistance to support participation in transportation planning activities;
- discussion of the potential use of conflict-resolution procedures;
- detailed discussion of the OCRWM's plans to address specific transportation issues, and the expected timing of related OCRWM policy decisions; and
- the development of a comprehensive transportation plan to provide integrated guidance on major elements of the NWPA transportation system.

In response to such comments, the provisions and scope of the draft document were significantly altered and expanded; the revised Transportation Institutional Plan was subsequently released in August 1986. In addition, the OCRWM committed to the development of a comprehensive transportation plan that would combine the institutional plan and business plan with discussion of operational procedures and policies, and provide integrated guidance on all major elements of transportation planning.

CONTENTS OF THE PLAN

While the Transportation Institutional Plan (hereafter referred to as the Plan) will require future revisions and updating to reflect program activities and public comment, the OCRWM believes that the document lays the foundation for interaction among all interested parties in addressing and working to resolve issues related to the establishment and operation of the NWPA transportation system. As important, the Plan reflects a significant first step in conducting transportation planning with the active participation and cooperative effort of many interested parties. The discussion that follows provides a synopsis of major provisions of the Plan, notes recent developments in the transportation program, and traces the OCRWM's efforts to respond to public comments.

Transportation Planning Principles

Consistent with general Congressional findings and purposes contained in the NWPA, the Plan identifies three important goals for transportation program activities: protection of public safety and environmental quality; active public participation; and cost-effectiveness.

Protection of public health and safety and the quality of the environment. This goal is the cornerstone of all program activity. As noted in the Plan, the OCRWM will meet all safety and security requirements of the Nuclear Regulatory Commission (NRC) and Department of Transportation (DOT) that exist at the time that waste is transported to NWPA facilities. In addition, the OCRWM will conform to the transport requirements of States, Indian Tribes and local governments that are consistent with Federal law. While the NWPA requires the OCRWM to "... utilize by contract private industry to the fullest extent possible" in carrying out all transportation activities, the OCRWM will remain responsible for overseeing the development and operation of a transportation system that is safe, economical, and publicly acceptable. A quality assurance plan is being developed to ensure that such requirements are met.

Active public participation in planning for NWPA transportation. The Plan is intended to be the implementing document for interactive transportation planning by interested parties. Discussion is included of mechanisms that the OCRWM will employ to facilitate participation in planning activities.

Cost-effectiveness. The NWPA requires that the costs of radioactive waste disposal be borne by the owners and generators of such waste and provides for the establishment of a Nuclear Waste Fund for this purpose. While commercial utilities currently make direct payments to the Fund, those who ultimately bear the major share of the cost incurred in establishing the disposal system for commercial waste are ratepayers throughout the country who are the consumers of electricity generated by nuclear power plants. Costs associated with the co-location of defense waste in a commercial repository will be funded by the taxpayer through annual Congressional appropriations. The OCRWM recognizes its responsibility to ensure that program activities are conducted in an efficient and cost-effective manner. As one criterion to determine appropriate Waste Fund expenditures for the development and operation of the NWPA transportation system, the OCRWM will evaluate whether the necessity of the activity to be undertaken can be attributed to the passage of the NWPA.

Federal Agencies Involved in Transportation Planning and Regulation

The OCRWM received several requests to include in the Plan a discussion of various DOE offices now involved in planning for NWPA transportation, and a review of the roles of Federal agencies having responsibility for regulating nuclear waste transportation. The Plan was therefore drafted to include a description of the role of the OCRWM in directing cask-development activities, conducting institutional outreach activities, and in planning for transport operations; the Plan also discusses the support for such activities that is provided by DOE Operations Offices. In addition, the Plan reviews the role of DOE's repository project offices in conducting site-specific transportation analyses and in interacting with potential host States and affected Indian Tribes. Also recognized are the other programs and offices within the DOE (e.g. Office of Defense Programs, Office of General Counsel) with whom the OCRWM consults and interacts on a routine basis.

Development of an NWPA transportation system will be within the existing framework of regulatory authority and procedures that governs nuclear waste transportation. The coordination that occurs with other Federal agencies (e.g., DOT, NRC) is described in the Plan. In addition, an appendix to the Plan provides a detailed summary of Federal agency roles in the regulation of nuclear waste transportation.

Interaction with Interested Parties

Consistent with comments received, the Plan outlines mechanisms that will be used to promote interaction with interested parties and describes the network whose members the OCRWM expects will actively participate in establishing a system for NWPA transportation. This network is comprised of six categories of participants: (1) Federal, State, Indian Tribal, and local governments; (2) the electric utilities; (3) the transportation industry; (4) special interest groups; (5) the media; and (6) the public at large.

Methods the OCRWM will use to facilitate ongoing interactions with members of the network are summarized below:

Exchange of general information. The OCRWM plans to develop transportation information resources to reinforce public knowledge of transportation requirements and procedures; such information resources may include fact sheets, program reports, visual aids, and computer data bases. In addition, members of the transportation network are encouraged to communicate their ideas, suggestions, concerns, or needs for information to the OCRWM at any time. To reinforce and systematize the exchange of information, the OCRWM has developed a comprehensive Public Information Guidance Document. This document, which describes mechanisms for implementing public information objectives, is expected to be incorporated into the comprehensive transportation plan (see discussion below under "DEVELOPMENT OF COMPREHENSIVE TRANSPORTATION PLAN").

Development of issue discussion papers. To address specific transportation issues, the OCRWM will prepare and release (for comment) issue discussion papers. In general, the papers are intended to provide background information on various issues, review OCRWM policy options for addressing issues, identify opportunities for public involvement in the evaluation of policy options, and note progress toward issue resolution. Additional discussion of the format and scope of such papers and identification of specific issues for which discussion papers have been developed are included below under "DISCUSSION OF SPECIFIC TRANSPORTATION ISSUES."

Active participation in meetings, briefings and workshops. The OCRWM plans to participate in a wide range of meetings and briefings, and to sponsor workshops for the discussion of specific issues. The comments received during such interchange will assist in the development of transportation policies. The OCRWM's Transportation Coordination Group (TCG), which was originally chartered to provide technical interface between transportation program managers and their contractors, has now been reoriented to include opportunities for expanded interaction on institutional as well as technical issues. Active participation in TCG meetings by States, Tribes, the utilities and other interested groups is now being encouraged.

Financial Support for Program Participation

The OCRWM received numerous questions concerning the extent to which financial support would be provided for participation in transportation program activities. Plan provisions were therefore drafted to discuss principles and mechanisms by which participation in transportation activities will be supported. The Plan describes the financial support currently available under the NWPA to (1) States having potentially acceptable sites for certain NWPA facilities; (2) affected Indian Tribes (those Indian Tribes that have reservations in which an NWPA facility is proposed to be located, or having possessory or usage rights to other lands outside of reservations that may be affected by the siting of an NWPA facility); and (3) local governments within whose boundaries an NWPA facility may be located.

The Plan also discusses OCRWM strategies to foster program participation by other States and Indian Tribes that may be affected by transportation through the use of contractual arrangements with national, regional, and transportation-related organizations.

Potential Use of Conflict-Resolution Procedures

As noted in the Plan, the OCRWM will use all practical measures to resolve issues through cooperative discussion and interaction. Forums for interaction, as discussed above, include workshops, informational briefings, seminars, and issue study groups. In recognition that an impass on certain issues could arise, the Plan further reviews the potential use of mediation to assist in issue resolution. In mediation, a neutral third party facilitates but does not actually make a decision that resolves a conflict. The goal of mediation is to reach a solution to a conflict that is acceptable to all parties involved.[a]

[a]In contrast to mediation, arbitration is a conflict-resolution mechanism that uses a neutral third party to actually make a decision to resolve a conflict; the parties can agree that the arbitrator's decision is binding and may be judicially imposed. In general, the OCRWM does not envision entering into binding arbitration in order to resolve conflicts over policy issues.

While it is the intent of the OCRWM to resolve issues without resorting to litigation, the Plan also recognizes that in some instances litigation may be the appropriate course of action for settling disputed issues.

Issue Closure and Policy Decision

Following consultation with interested parties, a careful evaluation of the specific transportation issue involved, and, where appropriate, consideration of the results of formal conflict-resolution processes, the OCRWM will announce a policy decision. To implement the decision, the OCRWM may be required to cooperate with other agencies, where such agencies have ultimate responsibility for transportation activities or decisions. Alternatively, where appropriate authority exists, the OCRWM may initiate direct DOE action through such initiatives as the development of new operating procedures.

DISCUSSION OF SPECIFIC TRANSPORTATION ISSUES

To permit broad-based consideration of specific transportation issues, the OCRWM added an appendix to the Plan with detailed discussion papers on each of 16 major transportation issues and associated issue-elements. The discussion papers include an overview of the issues, identify opportunities for public involvement in the evaluation of OCRWM policy options for addressing the issues, and provide a suggested time-frame for reaching policy decisions and conducting program activities.

The tentative schedule established for decisions on the transportation issues currently reflects OCRWM program requirements only. The schedule will be reevaluated in light of comments now being submitted to the OCRWM by States, Indian Tribes, local governments, utilities and others. It should also be noted that the OCRWM will review transportation-scheduling assumptions for consistency with overall program-schedule projections contained in the recently released Draft Mission Plan Amendment (DOE/RW-0128, January 1987). Under the revised schedule outlined in the draft document, a first repository would begin operations in 2003 (originally scheduled for 1998), and a monitored retrievable storage facility (if approved by Congress) would start operations in 1998 (previously scheduled for 1996).

The following summary provides a brief overview of each of the 16 discussion papers, and outlines recent activities that have been undertaken by the OCRWM to promote cooperative issue resolution.

Transportation of Defense Waste

The OCRWM will accept high-level radioactive waste generated in national defense activities at designated loading areas adjacent to the DOE facilities where it is currently stored and arrange for shipment to a repository. Casks will be provided by the OCRWM and certified by the NRC. All shipments will be made in compliance with applicable Federal regulations and State, Tribal, and local transport requirements that are consistent with Federal law.

Prenotification

When conducting commercial and defense waste shipments to NWPA facilities, the OCRWM will comply with applicable prenotification requirements of the NRC. Such notification will be provided to States through whose jurisdictions waste is transported. Furthermore, the OCRWM will work with other DOE offices, the Department of Interior, and Indian Tribal authorities to determine those Tribal governments that might appropriately be notified before NWPA shipments are made through Indian reservations.

In addition, the OCRWM will evaluate an ongoing DOE study of real-time satellite tracking of shipments for potential application to NWPA transportation. The evaluation of satellite tracking as an option for meeting the objectives of current written and telephone prenotification will be made in consultation with the NRC and interested parties.

Physical Protection Procedures

The OCRWM will comply with NRC requirements for the physical protection of shipments from acts of theft and sabotage when shipping commercial and defense waste to NWPA facilities. The OCRWM will therefore work with the NRC to review credible security threats and the appropriate level of physical protection that should be afforded to NWPA shipments.

Highway Routing

When shipping radioactive waste to NWPA facilities, the OCRWM will comply with all applicable DOT highway routing requirements. Current DOT regulations require highway shipments of such waste to be transported on preferred routes--consisting of Interstate highways or alternative routes designated by appropriate State and Indian Tribal routing authorities. The OCRWM has entered into cooperative agreements with regional organizations to support the development of route-selection factors and methodologies for potential use by States and Tribes in the designation of highway routes as alternatives to Interstate highways. The OCRWM is also participating in DOT regional workshops to review, along with other current transportation issues, current DOT routing requirements and State and Indian Tribal route-designation procedures. The OCRWM will further assist States and Tribes in highway route-designation activities by providing or facilitating access to routing, cost, and risk models.

To assist in developing and conducting the NWPA transportation system, several other initiatives related to routing are planned. First, to aid in defining the appropriate parameters for its future NWPA transportation analyses, the OCRWM plans to include a 1-day workshop in its next Transportation Coordination Meeting (in April 1987) to cover the following topics:

- a review of requirements for computer models;
- appropriate methods for determining, for the purpose of transportation analyses, feasible routes;
- specific factors that could be considered in transportation analyses; and
- the availability of transportation data, and data-collection methods.

Second, the OCRWM plans to develop route-planning criteria several years before NWPA shipping to provide carriers with guidance on the selection of routes for specific NWPA shipments. The criteria will require carriers to select routes to conform to DOT regulations, reduce time in transit, and avoid operational delays. Guidance will also be provided on considerations such as

the preferred time of day for shipping through urban areas and appropriate stopping places. Draft criteria will be released for review and comment.

Rail Routing

There are currently no Federal regulatory requirements for rail routing. The OCRWM will therefore consult with other DOE offices, the DOT, the NRC, and railroad representatives to review the need for Federal rail-routing regulations. Mechanisms for addressing the potential need for Federal rail-routing regulations may include the use of technical studies and workshops. If, after such review, it is concluded that regulations are required, the OCRWM will petition the DOT for rule-making. The OCRWM will also develop route-planning criteria (that parallel highway route-planning criteria) for use by carriers in making NWPA rail-routing decisions.

Inspection and Enforcement

Numerous issues related to inspection-and-enforcement activities for NWPA shipments have been identified, including the need to define appropriate inspection roles of Federal, State, and Indian Tribal governments, and to develop uniform State and Tribal inspection programs. The OCRWM believes that the resolution of such concerns is dependent on the close interaction with responsible Federal, State, and Indian Tribal authorities.

As a first step in developing a standardized, cooperative inspection program, the OCRWM has entered into a two-year cooperative agreement with the Commercial Vehicle Safety Alliance (CVSA) to assist in the development of uniform inspection standards for highway shipments of radioactive materials. The CVSA, an organization of State highway officials having expertise in State highway safety inspections, will draft proposed inspection procedures and will work to gain consensus and approval of the draft procedures from appropriate State and Indian Tribal authorities. The OCRWM hopes that such an effort will foster the adoption of a system of reciprocal recognition of inspection among States and Tribes and reduce the need for duplicative, in-transit inspections of NWPA shipments.

Emergency Response

The OCRWM will work with other Federal agencies, States, Indian Tribes, and local governments to define emergency response roles and to ensure the availability of adequate emergency response capabilities. A primary task will be to coordinate and organize the considerable emergency response capability already in existence at the Federal level. In addition, the OCRWM is now working with the Federal Emergency Management Agency (FEMA) and other Federal agencies in the revision of a guidance document for State, Tribal, and local emergency response planning activities related to transportation accidents involving radioactive materials. To further assist in planning efforts undertaken as the NWPA program progresses, the OCRWM plans to work with other government agencies to formulate advisory guidelines for emergency response activities related to NWPA transportation.

Liability

The Price-Anderson Act (42 U.S.C. 2014 and 2210, as amended) currently provides extensive liability coverage to reimburse the public for damages suffered in the event of certain nuclear incidents. Coverage under the Price-Anderson Act in its current form would extend to incidents involving NWPA transportation. The Price-Anderson Act is now being reviewed by Congress for potential amendment and reauthorization. Unless reauthorized by Congress, the law will expire in August 1987. The OCRWM plans to schedule a seminar to review liability coverage for NWPA transportation within six months after final Congressional action. The OCRWM will also develop information on liability coverage as part of its public information program.

Cask Design and Testing

The OCRWM will use casks that have been certified by the NRC for commercial and defense waste shipments to NWPA facilities. The OCRWM will work to facilitate understanding of the NRC standards and their application to NWPA transportation through the development of public information material and participation in seminars. The OCRWM is also developing a cask-testing plan to outline cask-testing requirements and related quality assurance and quality control provisions. The draft document will be made available for review and comment.

Overweight Trucks

The potential use of overweight trucks offers an important alternative for reducing the number of highway shipments to NWPA facilities. The OCRWM is now evaluating Federal and State highway-weight limits, the relationship between highway damage and vehicle weight, State permit requirements, and the cost and safety factors associated with overweight trucks. At the request of the OCRWM, the American Association of State Highway and Transportation Officials (AASHTO) has formed a task force to evaluate State permitting requirements and procedures for overweight trucks with the objective of developing a standard permit for overweight radioactive shipments. It is expected that the AASHTO evaluation will assist the OCRWM in determining the potential for developing nationally consistent and stable permitting requirements and procedures as well as the extent to which the use of overweight trucks offers a viable option for NWPA transportation.

Rail Service

The OCRWM is currently evaluating the cost and risks associated with two rail-service options for NWPA transportation: regular-train service and dedicated-train service. Under regular-train service, trains typically carry a mixture of commodities for many customers and from several origins to several destinations. Dedicated-train service generally involves the shipment of a single commodity for a single customer, from a single point of shipping origin to a single destination. Current OCRWM planning projects the primary use of dedicated trains to transport waste that has been consolidated at a monitored retrievable storage facility (if such a facility is approved by Congress) to a repository.

The OCRWM's evaluations of rail transport do not include the study of special-train service (service in which only spent nuclear fuel is carried, travel speeds are limited to 35 miles per hour, and other operating restrictions are required). Consistent with environmental impact statements developed by the NRC and Interstate Commerce Commission (ICC), and ICC and court rulings, the OCRWM does not consider special-train service to be cost-effective or necessary for the transportation of radioactive materials.

Modes of Transportation

The OCRWM is conducting technical evaluations of truck, rail, and barge transportation. To assist in selection of modal mixes for NWPA transportation, the OCRWM will develop criteria for use in weighing the relative importance of cost, risk, and other factors associated with various transport modes and transportation systems; the criteria will be made available for review and comment.

Infrastructure Improvements

The OCRWM will evaluate the potential impacts of NWPA shipments on the transportation infrastructure in States that may host an NWPA facility or reservations of affected Indian Tribes, and include provisions for making required improvements in formal agreements with the States and Tribes. As a general rule, however, the OCRWM does not expect waste shipments through States or Tribal lands that do not host an NWPA facility to create any unique needs for infrastructure improvements, or maintenance in addition to that normally required for general transportation. Exceptions to this rule will be considered on a case-by-case basis.

OCRWM Training Standards

The OCRWM will develop standards for NWPA transportation activities that will specify training requirements for drivers, rail operators, shipment escorts, and cask inspection and maintenance personnel. These standards will be based on Federal regulatory requirements.

Operational Procedures

The OCRWM is conducting numerous studies to assist in the definition of operational procedures and practices for NWPA transportation. These studies range from such topics as the evaluation of options for managing operations to the costs and risks associated with various transportation practices designed to reduce radiation exposures to levels as low as practicable. A framework of operational procedures will be included as one element of the comprehensive transportation plan.

State, Tribal, Local Regulation of Transportation

When conducting NWPA transportation, the OCRWM will comply with all State, Indian Tribal and local requirements that are consistent with Federal law. The consistency of State, Tribal and local requirements with Federal law will be defined by DOT and court rulings. Future editions of the comprehensive transportation plan will outline DOT and court rulings, and note progress toward the definition of regulatory authority.

The OCRWM will make a special effort to further study and address issues related to the authority of Indian Tribes to regulate transportation, and will consult with Indian Tribes, representative organizations, the Department of the Interior, and other DOE offices to determine appropriate study mechanisms.

DEVELOPMENT OF COMPREHENSIVE TRANSPORTATION PLAN

A frequent suggestion received by the OCRWM has been to combine the Transportation Institutional Plan with the Transportation Business Plan and an operations plan to provide integrated guidance on all major elements of NWPA transportation planning. In response to such comments, the OCRWM has announced its intent to produce a comprehensive transportation plan. A major step toward plan integration is expected to be accomplished in 1988 with the release of the first iteration (in draft form) of a comprehensive transportation document. (The release of the draft document, originally set for the fall of 1987, has been rescheduled to enable more detailed discussion of management options for transportation operations; a study of management options that is currently underway is expected to be completed in early 1988, and will be reviewed in the draft document.)

Under current planning, the draft comprehensive document will contain information on (1) institutional interactions and related planning principles; (2) business activities related to cask and equipment design and development; and (3) options for managing transportation activities and obtaining necessary transportation services, and a preliminary definition of operational tasks and procedures that will be needed to complete NWPA shipments (e.g., personnel training, equipment maintenance, and traffic management). It should be noted that the operational element in the first iteration of the comprehensive plan will be a preliminary outline of operational activities and procedures; when the comprehensive plan is fully developed, the operational element will provide an overview of the basic procedures under which nuclear waste will be transported. The draft comprehensive plan will, of course, be made available for public review and comment.

CONCLUSION

The Transportation Institutional Plan, developed in cooperation with many interested parties, establishes a foundation for the OCRWM's projected interactions in establishing an NWPA transportation system. The OCRWM hopes that continued cooperative effort in implementing provisions of the Plan and in addressing specific transportation concerns will facilitate the resolution of issues through a process that focuses on communication and constructive interaction rather than conflict.