
The OCRWM Transportation Institutional Program: Cooperative Planning for NWPA Transportation

E.A. Livingston-Behan¹, J.A. Holm², S.A. Smith³

¹*U.S. Department of Energy, Washington, DC*

²*United States Department of Energy, Chicago Operations Office, Argonne, Illinois*

³*Jacobs Engineering Group, Washington, DC, United States of America*

INTRODUCTION

The Nuclear Waste Policy Act of 1982 (NWPA) 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 waste to NWPA facilities will be an important element of the waste-management system.

The NWPA provides the DOE with a unique 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 shipping radioactive materials. The operation of the system will ultimately be contingent on the provision of safe, efficient and economical shipping services and equipment. It will also be significantly enhanced by a stable institutional environment and by broad-based public understanding and confidence in program activities. Such goals are emphasized in the NWPA; the NWPA includes a Congressional finding that public and private sector participation in the planning and development of the waste-management program is essential to promote better understanding and to foster public confidence in the safety of waste management and disposal.

In 1987 the Nuclear Waste Policy Amendments Act (the Amendments Act), further reinforced the need to coordinate transportation planning with States, Indian Tribes, and local governments. The Amendments Act requires the OCRWM to provide technical assistance and funding to States for training the personnel of local governments and Indian Tribes through whose jurisdictions waste is to be transported to a repository or a facility for monitored retrievable storage (MRS); training is to extend to procedures for routine transportation and emergency response.

To satisfy the directives of the NWPA and the Amendments Act the DOE's Office of Civilian Radioactive Waste Management (OCRWM) has developed an extensive transportation program to include constructive interaction and problem solving with a broad range of parties having an interest in transportation. The Transportation Institutional Plan, issued in 1986 (DOE/RW-0094, August 1986), laid the foundation for these activities.

The following discussion provides a description of the categories of parties with an interest in the development of an operational transportation system for NWPA shipping, and the strategy the OCRWM has developed to promote effective interactions with such interested parties. This paper also reviews the OCRWM's preliminary plans for implementing the training assistance requirements of the Amendments Act. The intent of the OCRWM in conducting all such activities is to foster cooperative effort and to focus on communication and negotiation.

INSTITUTIONAL NETWORK AND INTERACTIONS

The OCRWM has identified six groups whose members are expected to have an interest in participating in the development of the OCRWM transportation system: (1) Federal, State, 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. Under the OCRWM's strategy for institutional interactions, current activities with these groups focus primarily on--

- Sponsoring and participating in regular transportation meetings to provide information on OCRWM transportation activities and plans.
- Meeting formally and informally with other Federal agencies to review regulatory issues.
- Developing public-information materials and detailed "transportation-issue discussion papers."
- Using contractual arrangements with representative governmental groups and technical organizations to promote the study of specific transportation issues and the development of uniform transportation policies and procedures.

As the development of the transportation program progresses, the OCRWM will interact more closely with specific parties--such as the utilities, carriers, States, Indian Tribes, and local governments--to coordinate shipping arrangements, to clarify individual responsibilities for transportation activities, and to finalize shipping policies and plans for training.

A more detailed discussion of these activities is provided below.

Participation in Meetings

To assist in the identification and discussion of issues and to promote the cooperative development of transportation policies, the OCRWM participates in a wide range of meetings. These include technical workshops, attendance by OCRWM transportation officials at meetings of regional and national organizations, and professional meetings.

In addition, the OCRWM has established a Transportation Coordination Group (TCG) to facilitate the provision of information on transportation activities and to support the discussion and resolution of specific technical and institutional issues. Meetings of the TCG are held approximately twice a year and are attended by representatives of the OCRWM, States, Indian Tribes, transportation industry, utilities, and the public. The meetings typically include a seminar on an issue of particular interest (e.g., routing and cask design and testing). Presentations are given not only by the OCRWM but also by representatives of States, Indian Tribes, local governments, utilities, and the transportation industry.

Interactions with Other Federal Agencies

The U.S. Department of Transportation (DOT) and the U.S. Nuclear Regulatory Commission (NRC) are the major Federal agencies involved in the regulation of radioactive-materials transportation. For NWPA shipments, the OCRWM will be the shipper of record, and the Department of Transportation and the Nuclear Regulatory Commission will be the primary regulating agencies. The Federal Emergency Management Agency (FEMA) is also involved in coordination of radioactive-materials transportation emergency response planning.

The OCRWM interacts on a regular basis with the NRC, DOT, FEMA and with other Federal agencies, as appropriate. The purpose of these interactions is to coordinate planning and to ensure that all applicable regulatory requirements and policies are met.

Public Information Materials

The OCRWM is developing both general public information and technical information resources for the transportation program. These resources cover several broad categories, including--

- Written material--such as pamphlets, brochures, fact sheets, program reports, and press releases.
- Visual aids, including films, slide presentations, exhibits, videotapes, and demonstrations.

- Computer data bases. In addition to providing access to technical databases (related to cost, risk and routing), the OCRWM also plans to provide direct access to the Transportation Legislative Data Base (TLDB), which includes summaries of Federal and State laws, regulations, and pending legislation that are applicable to the transportation of radioactive waste.

In response to numerous comments, the OCRWM is also developing a "comprehensive" transportation plan, with release of the first iteration of the document (in draft form) expected in the summer of 1989. The draft document will include information on (1) institutional activities, formerly contained in the Transportation Institutional Plan; (2) activities related to cask design and testing, formerly contained in the Transportation Business Plan (DOE/RW-0046, January 1986); (3) system studies needed for the integrated development of an operational transportation system; (4) planning for the development of transportation-support systems and operational procedures; and (5) the application of quality-assurance procedures in transportation planning and activities.

To promote public participation in the review and evaluation of various transportation options and to assist in information dissemination, it should be noted that the OCRWM also initiated (in November 1984) a series of discussion papers on transportation issues. The papers were subsequently revised, additional papers were developed, and the collection was published as an appendix to the Transportation Institutional Plan. The OCRWM will continue to develop and release for comment discussion papers on specific transportation issues. The papers will review OCRWM policy options, constraints on policy decisions, elements of an issue that remain unresolved, and the predicted time frame for reaching an OCRWM policy decision. The issue-discussion papers are expected to be produced shortly after the transportation plan, and will continue to be updated as necessary to provide information on program developments and activities.

Agreements with Regional and National Groups

Cooperative agreements between the OCRWM and regional and national groups support the groups' review of program developments, the study of transportation issues of regional or national interest, and the formulation of recommendations to the OCRWM on planning options or policies. The final products of such cooperative efforts provide a sound perspective on representative interests concerning transportation issues providing an opportunity for balanced decisionmaking.

A brief summary of the State and Indian Tribal organizations that currently have agreements with the OCRWM Transportation Program, and the activities being conducted under such arrangements, is provided below.

National Conference of State Legislatures (NCSL). The NCSL membership consists of legislatures from all 50 States. The organization coordinates the review of regulatory issues and encourages the development of uniform regulatory policies and procedures. NCSL has developed briefing papers for state legislatures on transportation issues or developments (e.g., DOT inconsistency rulings, court cases related to transportation, mutual-aid agreements between States and Indian Tribes, and liability coverage for transportation accidents). The group has also reviewed and compiled listings of State legislation related to the transportation of radioactive materials, and convened working groups to brief elected representatives and their staff on transportation regulatory issues and technical developments.

National Congress of American Indians (NCAI). The OCRWM is working with the National Congress of American Indians--an organization representing over 150 separate Tribal governments--to promote the Tribes' review of transportation issues and participation in program planning. NCAI develops articles for the NCAI News Bulletin reviewing the OCRWM's activities and transportation developments; has identified contacts in Indian Tribes or Nations whose reservations or other Tribal lands are traversed by interstate highways and rail lines; and will develop a handbook on Federal and Tribal authority to regulate transportation of radioactive waste.

Southern States Energy Board (SSEB). The Southern States Energy Board represents State governors and energy offices of 16 southern States and assists in establishing regional policies. SSEB has developed a detailed transportation primer that includes a review of Federal laws and requirements for transportation of radioactive waste, State responsibilities under Federal law for the regulation of transportation, liability coverage for transportation accidents, and issues related to routing and cask design. SSEB has identified State routing authorities for the designation of preferred highway routes for the transportation of radioactive waste (consistent with DOT regulations), and identified emergency-response authorities and mutual-aid agreements between the southern States.

Western Interstate Energy Board (WIEB). The Western Interstate Energy Board is an organization that represents 15 western States' governors and State energy offices, transportation offices, and agencies that are active in transportation issues. WIEB is developing a detailed transportation primer; reviewing methods that can be used to supplement DOT guidelines for the evaluation of alternative highway routes for the transportation of radioactive waste; has developed a recommended process for the OCRWM's selection of routes for NWPA shipping; and is reviewing State training programs for emergency response and related sources of funding.

Council of State Governments--Midwestern Office (MW/COSG). The Midwestern Office of the Council of State Governments, an organization of 12 midwest States, represents State governors,

legislatures, and energy offices and works to promote the development of regional policies for midwestern States. MW/COSG under a recent agreement will identify transportation issues of interest to member States and develop a transportation primer and identify State contacts and responsibilities for addressing transportation issues of particular interest to the region.

To promote the participation in transportation planning by all regions in the United States, the OCRWM also plans to establish an agreement with a northeastern group in the near future.

Agreements with Technical Groups

In addition to agreements with regional and national organizations of States and Indian Tribes, the OCRWM has established arrangements with three technical organizations to support the study of operational issues related to inspection and enforcement and State permits for overweight trucks. These organizations and their activities are briefly discussed below.

Commercial Vehicle Safety Alliance (CVSA). At present, the Alliance has 48 member States. The members have established a uniform system for inspecting the safety of commercial vehicles in which an inspection conducted by one State is recognized by other member States. The activities being conducted or planned under a cooperative agreement with the OCRWM include developing recommended inspection procedures and testing the proposed procedures in pilot programs to be completed by 1994. CVSA will also promote the adoption of final procedures by States and encourage reciprocal recognition of inspections among States.

Council of Radiation Control Program Directors (CRCPD). The Council members represent the radiation-safety offices of all 50 States. The members review emergency response activities for shipment of radioactive materials and establish standards for radiological inspection. Under an agreement with the OCRWM, the CRCPD will coordinate with the CVSA to review the radiation-safety portion of proposed inspection standards for the transport of radioactive materials by highway; and will review State emergency-response and radiation-safety programs and responsibilities.

American Association of State Highway and Transportation Officials (AASHTO). The membership of this organization represents all 50 States and consists of the State offices with authority to regulate overweight truck shipments. AASHTO is reviewing, at OCRWM's request, permit requirements and issues related to overweight truck shipments to determine the feasibility of adopting a nationally uniform permit system for overweight trucks. (The OCRWM expects to review progress on the development of permit uniformity in 1990 to assist in deciding whether to proceed with the development of overweight truck casks.)

The OCRWM expects that additional study-group efforts and technical policy studies will be started as needed to assist in the resolution of other transportation issues.

PROCESS FOR RESOLVING ISSUES

The OCRWM believes that its strategy for conducting institutional interactions will assist both in resolving specific issues and in the cooperative development of shipping policies. Its strategy is a phased process that focuses on general interactions at the current stage of the transportation program, with more focus on specific interactions as planning continues. After consultation with all interested parties and careful evaluation of the transportation issues involved, the OCRWM will announce its policy decisions.

AN EXAMPLE OF ISSUE MANAGEMENT: INTERACTIONS IN THE ASSESSMENT OF TRAINING-ASSISTANCE NEEDS

As noted above, the OCRWM has identified a broad range of issues that are of particular interest to various institutions and has initiated various mechanisms to assist in their cooperative resolution. With the enactment of the Amendments Act in 1987, one issue is recognized to be of special importance: the provision of training assistance by the OCRWM. The development of program activities for interaction during the evaluation and determination of training assistance needs is provided below as an example of issue management and resolution.

The OCRWM plans to use a phased approach under which ongoing activities will be extended and reoriented to specifically address training capabilities. The first phase will be dedicated to defining the roles and responsibilities of various government entities in the inspection of shipments, the enforcement of transportation safety requirements, and emergency response.

In the area of inspection and enforcement, the definition of roles and responsibilities will be assisted by work being conducted by the Commercial Vehicle Safety Alliance to promote the development of uniform State inspection procedures for highway shipments of radioactive materials. The OCRWM plans to further support the definition of inspection-and-enforcement roles through consultation with the Department of Transportation and through TCG workshops.

The clarification of emergency-response roles will be assisted by the development of a document that describes the DOE's current emergency-response equipment, personnel, and procedures. Further clarification of emergency-response roles in transportation accidents involving radioactive materials is expected to be provided through TCG workshops and through a guidance document being drafted under the direction of the Federal Emergency Management Agency.

To develop a strategy for supplementing ongoing inspection and emergency-response activities, the OCRWM plans to investigate the specific training needs and existing capabilities of local governments and Indian Tribes and determine the training programs that would be appropriate. The NRC is currently conducting a survey of all States and selected Indian Tribes training programs. Many training programs are currently available for inspection-and-enforcement activities and for response to emergencies involving shipments of radioactive materials; these programs are offered by the DOE, the Department of Transportation, the Federal Emergency Management Agency, the States, and private organizations. The OCRWM will evaluate various training options and review them at OCRWM meetings and workshops with regional and national groups. The OCRWM believes that existing programs can provide an effective basis for safety training but will evaluate them to ensure that they are adequate for the training needs of local governments and Indian Tribes.

To assist in defining the local governments and Indian Tribes that will require training and in determining the level of technical and financial assistance that will be needed, the OCRWM will evaluate potential routes that may be used to transport waste. (The OCRWM will review with the States any routing changes that may be made during actual shipping to disposal or storage facilities; subsequent assistance for training the public-safety officials of local governments and Indian Tribes will be adjusted as necessary.)

Resulting evaluations of options for providing assistance will be discussed with other Federal agencies and State and Tribes in OCRWM meetings and workshops. Related findings will then form the basis for the definition of specific Tribal and local training requirements and a policy for related technical and financial assistance. The OCRWM expects that assistance should be provided 3 to 5 years before shipments begin (i.e., on the basis of the current schedule, in the years 1998 to 2000) to allow time for the actual training.

CONCLUSION

In an effort to foster a climate conducive to the identification and resolution of transportation issues, the OCRWM has initiated a dialogue with a wide range of parties having an interest in waste transportation. The OCRWM is now working to resolve transportation issues in a manner that promotes involvement of all interested parties and that fosters responsible management of the transportation program and expenditures from the Nuclear Waste Fund. Such a process requires the judicious weighing of interests in order to achieve satisfactory issue resolution.

REFERENCES

DOE (U.S. Department of Energy), 1986. Transportation Business Plan, DOE/RW-0046, Washington, D.C.

DOE (U.S. Department of Energy), 1986. Transportation Institutional Plan, DOE/RW-0094, Washington, D.C.