



POLICY ISSUE

(Information)

SECY-90-165

May 10, 1990

For: The Commissioners

From: James M. Taylor
Executive Director
for Operations

Subject: FINAL REPORT - "SURVEY OF STATE AND TRIBAL EMERGENCY
RESPONSE CAPABILITIES FOR RADIOLOGICAL TRANSPORTATION
INCIDENTS" (COMPLETED FEBRUARY 1990)

Purpose: To inform the Commissioners of the results of the survey and
to publish the subject report.

Background: Previously, the U.S. Nuclear Regulatory Commission
(NRC) sponsored a survey of State emergency response
capabilities to provide NRC with information for developing
guidelines for State organizations and planning for emergency
response. The survey was published as NUREG/CR-1620, "Survey
of Current State Radiological Emergency Response Capabilities
for Transportation Related Incidents," in September 1980. In
June 1980, the Federal Emergency Management Agency (FEMA)
assumed the responsibility for offsite emergency response
planning. Since then, FEMA and the States have pursued
emergency response planning for all hazardous materials.
Nevertheless, emergency response remains an issue of interest
to the public.

The 1990 survey was conducted to provide NRC, other federal
agencies, and interested parties with information about the
current level of emergency-preparedness planning and
capabilities for responding to transportation incidents
involving radioactive materials. The survey included the
fifty States, the District of Columbia, Puerto Rico, and
selected Indian tribal jurisdictions. The survey report
provides information on the current level of preparedness
and an assessment of the changes that have occurred since
1980.

NOTE: TO BE MADE PUBLICLY AVAILABLE
IN 10 WORKING DAYS FROM THE
DATE OF THIS PAPER

CONTACT:
John R. Cook, NMSS
49-20458

The Transportation Research Center, School of Public and Environmental Affairs, at Indiana University, Bloomington, Indiana, conducted both the 1980 survey and the present survey for NRC. Interview guidelines were developed based on the 1980 report, with review by advisors from the National Congress of American Indians, FEMA, and the Department of Transportation (DOT). Telephone interviews were conducted with officials in each of the States and 14 Indian tribes. The contractor summarized interview data and sent them to all respondents, for verification. The verified data were used to prepare the final report (Enclosure 1).

Discussion:

A general characterization of the report would be that the States' emergency response strategies and field capabilities are essentially the same as reported in 1980. However, States reported that they have made incremental progress in updating and refining their plans, are more confident in first responder incident assessments, and view radiological transportation incidents more in balanced perspective with other hazardous materials. Indian tribes have little emergency response organization, but States are able to provide emergency response upon request of tribal authorities.

The review of the final report has been coordinated with DOT and FEMA. DOT staff noted that the report would identify State response agencies, and would aid DOT's effort to provide information dealing with emergencies in transporting radioactive material. FEMA staff has indicated that the report would be used to determine: the number of States using FEMA's radiological emergency planning guidance document; whether States have specific planning documents for transportation incidents involving radioactive materials, and the relationship with planning for any fixed-facilities; and State program development needs that could be aided by FEMA's grant programs.

Chapter 2 of the final report presents a nationwide overview of the five major topics addressed in the survey:

1. Administration and Planning;
2. Maintaining Preparedness;
3. Field Emergency Response Operations;
4. Funding and Assistance; and
5. Progress and Plans.

Within these topics, the areas of training, actual experience, and adequacy of preparedness are of particular interest. A synopsis of overview remarks on these areas, presented for the States and then for the Indian tribes, follows.

The survey identifies three major personnel groups affected by training:

1. Radiation emergency response personnel;
2. State police; and
3. Local police and fire personnel.

Most States rely exclusively on professional radiation emergency response personnel from the radiation control agency to render authoritative decisions concerning radiation threat at the scene of a transportation incident. In virtually all States, a sizable proportion of the professional staff has had supplemental training in emergency management, especially FEMA's "Radiological Emergency Response Operations" (RERO), as well as numerous other federally sponsored training programs. State police officers receive training as cadets at the States' service academies, as well as being sent to federal training programs. The most notable change over the past decade is State professionals' confidence that proper and timely notification by local personnel is the normal response when a radiation incident does occur.

With respect to actual experience, the States reported a total of 141 field deployments in 1987 for possible radiological transportation incidents, yielding a national average of 2.7 deployments annually per State in recent years (versus 4.1 deployments in 1980). The report suggests the lower number of deployments may be attributable in part to a two-tier response strategy in which local officials provide State emergency professionals with an accurate and timely description of the incident, enabling the State to determine whether a field deployment is really necessary. For recent years, all the States reported that they have not found it necessary to call for federal assistance. The report continues, "Most states stressed that they would have no hesitation to call for guidance or assistance, and many indicated that reliance on federal capabilities would be a central component of incident management if a serious event occurred. Most states indicated, however, that nearly all transportation incidents to which they respond turn out to be non-events in terms of any radiation threat."

The Office of Nuclear Material Safety and Safeguards (NMSS) has recently compiled available reports of transportation incidents, for 1987-89, which involve radioactive materials. Information on the incidents is obtained from NRC Preliminary Notifications of Events or Unusual Occurrences (PNO's) and DOT's Hazardous Material Incident Reports. Staff has compiled 39 incident reports for 1987; these reports indicate that States provide response to incidents, including health physics

expertise, in some cases. Staff attributes the difference between the number of field deployments reported by States (141) and the number of incident reports (39) to deployments for which no report is filed because the incidents "...turn out to be non-events."

When queried about additional resources needed, there was substantial variation in the State responses, reflecting divergence as to what comprises an adequate level of preparedness. Some States apparently feel compelled to be prepared for any contingency, whereas others plan to rely more on federal assistance. About one-third of the States reported that their programs are basically adequate and that they have no pressing needs. About one-fourth of the States indicated that their programs are more or less adequate, but do have needs for equipment upgrades, training, and support for field exercise and emergency planning. About one-fifth of the States reported that their programs are deficient. Several of these States added more personnel slots to the list of needed resources.

Although some States reported limited program resources, no State indicated it was incapable of providing appropriate response. The technical and staff needs identified by the States appear commensurate with their identification of program deficiencies.

Only one Indian tribal jurisdiction indicated it had any personnel with training in health physics; none of the tribes reported any personnel with RERO training.

None of the tribes reported any recent experience with actual incidents, although one tribe reported two incidents in 1987, involving spills of uranium ore.

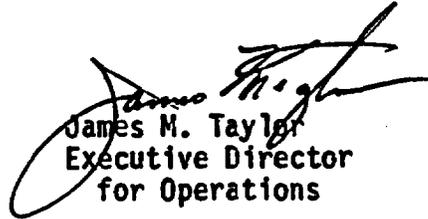
None of the Indian tribes surveyed reported that it had ever conducted any study of emergency preparedness resource allocation. Further, most tribes have no organized program of emergency preparedness. Among States where sizable Indian tribal lands are present, nearly all States indicated they would enter tribal lands for emergency response purposes, on request of tribal authorities.

Scheduling:

The survey final report will be published as NUREG/CR-5399, and a wide distribution for the report is planned. All State governors' designees for spent fuel shipment notification (per 10 CFR 73.37(f)) will receive a copy by separate transmittal letter (Enclosure 2). The report will be distributed to all survey participants, other federal agencies, and interested parties. A press release announcing availability of the

report (Enclosure 3) will be coordinated with the report's publication. In addition, FEMA and DOT have both requested copies for subsequent distribution.

Coordination: This paper has been coordinated with the Office of the General Counsel, and it has no legal objection. The Office of Governmental and Public Affairs has also reviewed this document and concurred.



James M. Taylor
Executive Director
for Operations

Enclosures:

- *1. Final Report
2. Draft Transmittal Letter
3. NRC Issues Report on Transportation
Emergency Response Capabilities

*Commissioners, SECY, OGC only

DISTRIBUTION:

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Draft Transmittal Letter

To: State Governor's Designee for Spent Fuel Shipment Notification

Dear Sir:

I have enclosed a copy of a recently published report issued by the U.S. Nuclear Regulatory Commission (NRC) on the capability of States and selected Indian tribes to respond to transportation incidents involving nuclear materials. The report is entitled "Survey of State and Tribal Emergency Response Capabilities for Radiological Transportation Incidents," NUREG/CR-5399. The report provides the results of a survey conducted for NRC by the Indiana University Transportation Research Center (TRC). The project was designed to update a 1980 status report by TRC on the same topic, and to determine what changes had occurred in terms of emergency response preparedness and the frequency of actual transportation incidents.

We trust that you will find the report an information resource regarding State emergency response programs for transportation incidents.

Sincerely,

Robert M. Bernero, Director
Office of Nuclear Material Safety
and Safeguards

Enclosure:
As stated

**NRC ISSUES REPORT ON TRANSPORTATION EMERGENCY
RESPONSE CAPABILITIES**

The Nuclear Regulatory Commission (NRC) is issuing a report on the capability of States to respond to transportation incidents involving nuclear materials.

The report provides the results of a survey conducted for NRC by the Indiana University Transportation Research Center (TRC). The project was designed to update a 1980 status report by TRC on the same topic and to determine what changes had occurred in terms of emergency response preparedness and the frequency of actual transportation incidents.

The new report also reviews selected Indian tribal emergency preparedness planning and the capability of selected Indian tribes to respond to transportation incidents involving radioactive materials in their jurisdictions.

In general, the report finds that the States' emergency response strategies and field capabilities are essentially the same as reported in 1980. However, States reported that they have made incremental progress in updating and refining their plans, are more confident in first responder incident assessments, and view radiological transportation incidents more in perspective with other hazardous materials. Indian tribes have little emergency response organization, but States are able to provide emergency response upon request of tribal authorities.

Copies of the report, "Survey of State and Tribal Emergency Response Capabilities for Radiological Transportation Incidents," NUREG/CR-5399, are available for purchase from the U. S. Government Printing Office, P. O. Box 37082, Washington, D. C. 20013 (202)275-2060.

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