

RADIOACTIVE AND HAZARDOUS MATERIALS TRANSPORTATION: WHAT LOCAL OFFICIALS ARE TELLING US

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ABSTRACT

This paper summarizes the results of a 1989 interactive meeting of U.S. Department of Energy (DOE) representatives with over twenty local government officials from cities and counties around the country. The DOE officials were from the Transportation Management Division and the local officials were primarily senior and mid-level managers with interests in transportation and emergency management.

Management Systems Laboratories of Virginia Tech, in coordination with the Energy Task Force Management Corporation (now called the Urban Energy & Transportation Corporation), designed and facilitated the meeting with these goals:

- Share information that local government officials can apply to their own communities
- Exchange experiences and ideas applicable to other emergency management programs
- Identify areas of productive action for DOE and local government to address issues of mutual concern

The highlight of the meeting was a Program Planning Exercise. The participants, playing the roles of Federal managers in DOE, developed programs to address the concerns of local governments on the subjects of transportation of hazardous and nuclear materials, and emergency preparedness related to incidents involving shipments of those materials.

BACKGROUND: DOE'S EFFORT TO NETWORK WITH LOCAL GOVERNMENTS

DOE's Transportation Management Division (TMD) is responsible for supporting DOE programs in the movement of all materials, including the development of packaging and systems for transporting radioactive materials. TMD also coordinates DOE's program for regulatory and policy development in this area.

As part of a Transportation Management Division ongoing effort to establish a network of local government contacts, they sponsored four major workshops -- one of which this paper describes -- and a national conference during 1988 and 1989. The 1988 workshops focused on issue identification and prioritization, while the 1989 programs

began to develop policy recommendations and action items as well as specific products that local government participants could take back home.

More than 100 local government participants at these programs represented professions such as law enforcement, emergency management, fire protection, environmental planning, public health, and elected and appointed officials. They came from over 50 cities and counties and were generally senior managers within their agencies: division, battalion, and deputy chiefs in fire departments; heads of public health, public safety, and emergency management departments; environmental and emergency medical pro

gram coordinators; and city managers and council members.

PROGRAM PLANNING EXERCISE METHODOLOGY

The Program Planning Exercise used meeting techniques designed to develop ideas for a Department of Energy program plan to address local government concerns about emergency preparedness for nuclear materials transportation incidents. Participants were asked to play the role of a staff member for a DOE administrator, to review a report identifying local government concerns (the "report" used was based on the actual product of an earlier workshop), and to develop a program plan for FY90 and subsequent years to address those concerns.

We designed a structured process to accomplish our objective and maximize our limited time. The process was interactive, collectively building a consensus plan based on both individual participation and team thinking. The exercise placed the participants in the role of a Federal manager faced with a difficult job--trying to satisfy transportation concerns while staying within organizational constraints. We hoped the result of our participative exercise would be two-fold: first, to generate a program of initiatives to address local concerns (and suggestions for their implementation); and second, to foster a better mutual appreciation of the problems facing all of us in developing such a program.

To do this we designed an exercise with three main parts. First we divided into teams for the purpose of designing programs to meet our objective. For the second part we reconvened to have team leaders report back to the larger group on the initiatives and implementing steps developed by each team. And for the third part we discussed the various aspects of each plan and achieved consensus on a composite program plan that might serve as a model for continued cooperation between DOE and local governments.

PROGRAM INITIATIVES RECOMMENDED BY LOCAL OFFICIALS

The teams initially came up with a list of over 50 program recommendations covering areas such as emergency response information; public education; training; planning support; regulations and enforcement; and institutional arrangements. From this list, the teams selected the nine detailed program suggestions. For each initiative, they also listed the desired outcomes, significant milestones, resources, and other items which each team of role players iden-

tified. The key recommendations from the exercise are summarized below:

1. Develop a central database of radioactive materials transportation information with *electronic access* by local governments.
2. Expand the existing public information program.
3. Facilitate the development of national standards of operation and training for emergency responders.
4. Establish a Nuclear Transportation Advisory Committee made up of interested (targeted) Federal agencies, States, and local governments.
5. Develop a cooperative Federal training program for local first responders and managers, with representatives from all Federal agencies involved in nuclear materials transportation.
6. Support general public education on transportation and repository programs to reinforce credibility with targeted audiences.
7. Develop an integrated training program to certify first responders for radioactive materials transport accidents.
8. Provide policy guidelines and procedures for local governments to incorporate into their overall emergency plans.
9. Require States to notify local jurisdictions on some radioactive material shipments, through Federal legislation or regulations.

WHAT LOCAL OFFICIALS ARE TELLING US

Based on the Program Planning Exercise and the other agenda items at the Workshop -- including presentations by local government representatives of problems and good practices in their own jurisdictions -- local officials are delivering a consistent set of messages:

1. They view Federal programs as disjointed and uncoordinated. Local officials may be unaware of many inter-agency coordination efforts. Nevertheless, they consistently called for greater coordination among Federal agencies, especially in the areas of training delivery, resource sharing, and research.
2. They cited many ways the Federal government could help which did not involve a direct purchase, subsidy, or transfer of funds for local governments. Unfortunately, their suggestions *often require a greater time and manpower commitment*, as with recommendations for more participation in emergency response planning efforts with local governments and working with local committees to resolve issues such as routing,

and chain of command, mutual aid, and communications during emergencies.

Additionally, local officials felt that Federal agencies could contribute to their professional development, for example, by working with national standard-making and certification organizations such as the National Fire Protection Association, and by providing technical guidance on nuclear hazards and safety.

3. Local officials want to increase their capability to directly access Federal databases and decision-makers. They want this partly because the cities and counties represented (most of them large and mid-size jurisdictions) felt they had the means and the need and partly because they were dissatisfied with the States' role as information middlemen. Thus, they called for electronic access to DOE's transportation databases, representation on Federal advisory committees, and Federal insistence that States do more and share more with local governments, even calling for Federal regulations requiring States to give advance shipment information to local agencies. They also want to see DOE meet with and work with their membership organizations and associations that develop policy recommendations and propose legislation related to nuclear and hazardous materials transportation.
4. In conjunction with the expanded community relations effort discussed in item 2, they believe that DOE needs to greatly expand and upgrade its public education program. Workshop participants said that DOE needs to focus on more specific audiences and to be more diverse in its efforts to expand community awareness and distribute information, for example, by developing education programs or workshops for members of local judicial systems.

EVALUATION

We distributed a questionnaire to all workshop participants. All respondents said the Program Planning Exercise was very useful in providing an opportunity to develop specific program ideas for DOE that would directly address their local needs.

Some other general and logistical suggestions included:

- Add more time for thorough discussion; not enough time to agree on common thought; devote a whole day to the Program Planning Exercise
- Use a pro-con presentation, then discussion, for some items
- Make the workshop more task oriented, with an even greater emphasis on outputs

- Focus on one or two specific issues at each workshop

CONCLUSIONS

The objective of our exercise was to develop a Department of Energy program plan. The initiatives address the concerns of local governments in the transportation of hazardous and nuclear materials and emergency preparedness related to potential incidents involving shipment of those materials.

We believe the Program Planning Exercise was successful in developing the set of recommendations discussed here because: (1) we designed a structured method, which clearly spelled out the steps the participants should take to reach the objective; (2) we used a modified nominal group technique which gave people time to generate and list ideas before they were discussed and elaborated on; and (3) we incorporated consensus-building, teaming, and role playing techniques, which encouraged participation and creativity and even made it fun.

We believe the workshop overall was a success because of the collegial atmosphere, which emphasized what local governments could share with one another as well as what local and Federal agencies think each could do to improve their programs. The workshop also had a good mix of new participants along with people who had attended previous workshops or were familiar with DOE programs or nuclear materials transportation issues.

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