Workshop on Regulation

Deborah Rudolph

I. ISSUE/PROBLEM: THE PURPOSE OF HAZARDOUS MATERIALS REGULATIONS

Due in part to the legislative history involving hazardous materials and wastes, many statutes exist that deal with differing needs and purposes for regulation in this area. In some cases, there appear to be contradictions between them.

In addition, a piecemeal regulatory system exists that covers the whole field and is managed by several federal agencies. A rational approach is needed that will minimize the inconsistencies and provide a clear purpose for regulation of hazardous materials and wastes.

In some cases, although there appears to be disagreement in interpreting these statutes, it is the belief of many that the statutes are broad enough to allow development of the needed rational approach to regulation without additional legislation.

Also lacking is a clear policy statement relating to an acceptable level of risk. There is no absolute way to avoid all risk or prevent all accidents. However, stating an acceptable risk level is not politically acceptable. While a strict policy statement, such as "thou shall not pollute" or "thou shall not spill", is unrealistic, protection is needed from an unreasonable risk. But what is a reasonable risk?

A policy statement that deals with risk and protection levels is clearly necessary.

The following statements were offered as options for a recommended policy statement on the purpose of hazardous materials regulation.

Recommended Options for a Policy Statement on the Purpose of Regulation

Statement 1. It is the responsibility of the U.S. Secretary of Transportation to assure the safe and effective transportation of hazardous materials. The Secretary shall develop feasible requirements and compliance incentives to enhance national and international harmony in minimizing risk to life, health, property, and the environment from such transportation. As the lead national official charged with this reponsibility, the Secretary shall give full consideration to the views of the affected state and local governments and shall provide technical guidance to such governments in the implementation and enforcement of national hazardous materials transportation standards.

Statement 2. The purpose of regulation is to prevent death and injury to persons, property, or the environment that result from the transportation of hazardous materials and to reduce the serious consequences of accidents that arise from such transportation. However, since the resources of society are limited, regulation must likewise be limited to reducing significant potential for simultaneous harm to many persons or to highly valuable property or natural resources.

Statement 3. Recognizing the need to serve public safety while maintaining the nation's economic system within the context of the risk brought about by the transportation of hazardous material or waste, the purpose of regulation is to reduce or minimize significant injury and death through the efficient use of technology and economic resources.

Statement 4. The safe and effective transportation of hazardous materials should be promoted.

Statement 5. To promote the safe, efficient, and economic intrastate and interstate, as well as the international, transportation of hazardous materials and wastes by devising various incentives, including, but not limited to, tax incentives, regulation, legal liability mechanisms, etc., and by taking into account the need to minimize impediments, inconsistencies between laws, etc. The national regulatory program should assure the efficient transportation of hazardous substances on the nation's streets, highways, pipelines, waterways, and airways at minimal risk to persons, property, and the environment, through controls used by private and public organizations, from point of origin to destination.

Statement 6. Human life and health, property, and the environment should be protected with due regard to the needs of commerce and defense, within a national framework that covers the special conditions accompanied by a national commitment of will and resources to implement national, state, and local objectives.

Considerations for the Purpose of Hazardous Materials Regulation

The following were offered by the workshop participants as important considerations for exacting a purpose for the regulation of hazardous materials.

1. To achieve safety for the general public through national controls that are defensible;
2. Safe, standard, effective, and flexible;
3. How best to motivate or police for safety;
4. Not based on the marginal operator but toward the ease of effectiveness and enforcement;
5. Safe and economic transportation by devising incentives--e.g., taxes, liability, etc.;
6. To protect by nature of the risk;
7. Guidelines to states (giving the states the advantage of the expertise that now exists);
8. Federal guidelines for the states for safety and efficiency;
9. Provide a uniform framework to facilitate trade given intergovernmental impediments;
10. Guidelines for safe, standard, and effective transportation other than federal preemption;
11. A deregulation of transportation to protect health, property, the environment (state and local participation must be sought);
12. Federal government should provide leadership to state and local governments with the involvement of the states;
13. Federal guidance for the safe and efficient movement of transportation and minimization of impediments to transportation;
14. A legislative initiative added to the Hazardous Materials Transportation Act should be taken into account in the mandated program, enforcement inconsistencies, and other features of the Act (the purpose is in the mandated statute);
15. National standards that would be uniform and enforced; and

16. Assure efficient transportation through controls by public and private organizations.

Recommendations

1. A select committee, which represents shippers, receivers, carriers, public interest groups, regulators, and all levels of government, should be formed to draft a revised policy statement that considers the concerns expressed and is augmented to include recognition of the duty of shippers, carriers, and receivers to protect the public. This statement should also include the specific authority of the U.S. Secretary of Transportation expressed in terms of criteria and prohibitions. The committee's report should be issued for comment, followed by submittal to Congress for action. The Transportation Research Board may be useful in facilitating this work.

2. This conference should recommend that a change of law, or a constitutional amendment, require that regulations have clearly stated objectives, performance measures, and time frames. Regulations not meeting the desired performance levels should be repealed.

3. Regulators should be given better guidance by the Congress and other legislators. Within these parameters, regulators should be forced to develop regulations with wide input from interested parties.

4. A Presidential Study Commission should be established to discourse on and set recommended guidance and policy for regulatory agencies and legislators to use in applying levels of risk to safety and aimed at achieving a balance in risk acceptability.

II. ISSUE/PROBLEM: THE PROCESS OF HAZARDOUS MATERIALS REGULATIONS

The process of rulemaking and the process of making changes and amendments contribute to the lack of understanding of the hazardous materials regulations. The multiplicity of the regulations--international, domestic, various modes, various government agencies at all levels--also inhibits their understanding and usage, which, in turn, compromises the goal of safety.

The multiplicity of the dockets was also mentioned as compounding the problem. The 30-day period to petition for reconsideration, for example, is not long enough to review the Federal Register, or to study, develop, petition, and submit responses. The various federal agencies have differing comment periods throughout the year that are a burden on those that are regulated.

The effective dates for implementation of the regulations also vary throughout the year and to the user's confusion and lack of understanding. There are too many dates and timetables for implementations. This also inhibits training schedules.

It was recommended that the regulators should solicit comments from the affected parties and the other levels of government early in the rulemaking process.

The format of the regulations is thought to be of more use to the regulator than the regulated. Generally, the hazardous materials regulations are geared more to the attornies and regulators rather than to the affected parties. This inhibits safety efforts.

There is also great confusion about priority setting in the rulemaking process. The schedule for the review of the regulations should be set and available to the general public--especially the regulated parties and other levels of government. This schedule should also be based on the levels of risk of a material and on its quantity and form. Agencies should take no regulatory action if there is not a real problem.

The current high levels of applications for exemptions were cited as indications of the need for general amendment that could alleviate this burden. The issuance of regulations is but one means to cure an ill; it is not the only method. The U.S. Department of Transportation (DOT) should approach hazardous material regulation with that in mind.

Petitions for rulemaking should also highlight for DOT the areas that require changes. These petitions should be assigned a priority rating and a timetable. This information should be communicated to the regulated parties.

The regulations should also be based on a real hazard with the goal of increased safety. Enforcement and penalties should be coordinated to reflect these levels of risk. Current incident-reporting data could be used for setting such risk levels--these data should be used, not just collected.

The process should also include evaluation. If a regulation or solution does not solve problems, it should be reviewed and reworked, not just kept on the books indefinitely.

As pointed out in other sections of this report, the need to petition MTB for an exemption to the current design standards could be eliminated through use of performance specifications.

Recommendations

1. One annual effective date should be set for final rulemakings by modes or even by various agencies. For example, all MTB regulations finalized in the previous 12 months would become effective for compliance on July 1 of every year.

2. Effective dates of regulations should be reviewed for DOT and other agencies and how best to coordinate them.

III. ISSUE/PROBLEM: ENFORCEMENT AND COMPLIANCE WITH THE HAZARDOUS MATERIALS REGULATIONS

The elements of the purpose statement for the national hazardous materials regulatory program should be reflected in the enforcement and compliance system. As a regulatory technique, the issuance of detailed regulation implies the necessity of an enforcement program. Without such a program, a system of voluntary compliance exists. It was pointed out that, since the resources available for enforcement have been limited, the enforcement program now depends a great deal on the voluntary efforts of the regulated community. There was a strong sense that the enforcement program should move toward a policy of voluntary compliance, rather than employ sufficient numbers of inspectors to totally police the industry.

Although it was agreed that there should be enforcement of the hazardous materials regulations, the enforcement program should be based on the need for enforcement. Penalties and fines should be based on levels of noncompliance. Penalties should fall heaviest on those who have the most severe and frequent violations. This also assumes that the enforcement program and the penalties would relate to the levels of hazard of the material and of the risk--i.e., for high levels of risk there would be high levels of enforcement and fines, and vice versa.

The regulations are currently written with the idea of making them "violation proof" for enforcement purposes. Instead, the regulation should be written more simply with the idea of encouraging voluntary compliance by the user. This would increase safety.

The enforcement program would also benefit from the simplification of the regulations. They should be made more understandable to the user community. An effective enforcement program implies that legislators and regulators sufficiently fund enforcement activities; violations be prioritized by levels of severity based on experience, and sanctions applied accordingly; and uniformity of enforcement be enhanced, i.e., state versus federal, mode versus mode.

Recommendations

1. Existing hazardous materials incident data should be analyzed to assess the levels of risk according to the volume of shipment.
2. A clear statement of enforcement policy by the regulatory authorities is needed.
3. Based on incident data, levels of enforcement based on severity should be determined and prioritized.
4. Uniformity in enforcement should be established.
5. If there are regulations, there needs to be enforcement, but enforcement should be based on the need for enforcement.
6. Fines should be based on the different levels of noncompliance.
7. The problem of enforcement would be substantially reduced if insignificant regulation would also be reduced. The reduction of regulation does not mean reverting to the law of the jungle. It would simply compel greater reliance over other inducements to socially desirable behavior, e.g., the civil liability system.
8. Elements of regulatory purpose, objectives, and compliance evidence must be incorporated into each regulation.
9. A penalty policy based on disincentives for noncompliance should be developed.
10. An enforcement management system should be developed that provides feedback to the regulated community as well as inspectors concerning enforcement, and includes comprehensive compliance history and decisions on the local regional level.
11. The levels of compliance severity should be related to the sanctions.

IV. ISSUE/PROBLEM: GOVERNMENTAL, PRIVATE SECTOR, AND INTERNATIONAL RELATIONSHIPS

The primary role in the field of hazardous materials transportation must and should be played by the federal government. However, state and local issues should and must be addressed by the federal government. Regulation cannot occur on a state-by-state basis.

The federal government should give priority consideration to issues and complaints, such as those about routing, from the other levels of government.

There must be a mechanism to give speedy attention to problems as they arise. If a problem comes up that requires regulatory attention by a non-federal authority, there should be a mechanism that allows a deviation from federal regulations to deal with such a problem.

Coordinated involvement of state and local issues could be accomplished by establishing an advisory council that would include federal, state, and local government representatives, as well as those of the private sector and public-interest groups. Such an advisory council would

1. Determine what categories and activities should be absolutely preempted (where there is a need for absolute uniformity);
2. Establish guidelines for acceptable state and local activities in other areas, which are not preempted; and
3. Coordinate enforcement activities.

There should also be a process for assessing the validity of state and local regulations and to resolve intergovernmental conflicts as they arise. Groups could also be established on a regional basis, similar to the Puget Sound Advisory Council, to assist in these functions.

Recommendations

1. Federal preemption should be established with some exceptions for specific problems associated with unique geographic areas.
2. The state and local roles should be limited to enforcement.
3. There should be a mechanism for state and local input to the strong central federal role.
4. DOT should strive to incorporate international standards and procedures wherever applicable.

V. ISSUE/PROBLEM: REGULATORY SIMPLIFICATION AND CLASSIFICATION

As Don Boyd related in his resource paper on The Complexity of Hazardous Materials Transportation Regulation (see Appendix 2), one of the recommendations of the Airlie House Conference on Hazardous Materials held in 1969 was that "immediate efforts be made to simplify the existing regulations. The secondary mission consists of simplification and condensation of present regulations to a more realistic and workable document."

In 1979 the National Transportation Safety Board recommended that DOT evaluate every hazardous materials regulation so that the regulations could be understood by those who need to use them.

The participants of this workshop echoed these same findings and stressed the need for regulations that can be understood and used by those in the field who need to use them--truck drivers, shipping clerks, etc.

The format and arrangement of 49 CFR contribute to the problem as much as the language, which appears to be written more for lawyers and regulators than operational personnel. This situation requires "translation" of regulations that result in an increased need for training courses and the possibility that safety is compromised (through lack of understanding or by the translation process).

Boyd also pointed out that, "simple, clearcut, but no less demanding regulations would enable people to be occupied with safety performance rather than preoccupied and confused with complex and sometimes conflicting regulations. It is quite possible that easily understood regulations would result in better compliance."

It was also suggested that the various shippers, carriers, and manufacturers develop guidebooks and handbooks for their employees to inform them of the specific regulations necessary for performance of their job functions. This could result, however, in the need for many such guidebooks with considerable cost for development and training employers.

The Code is too large a document to be used in its current form as a guidebook, or to be understood or applied by both shippers and manufacturers for all modes. The use of guidebooks would relieve this problem as well. It was the general thinking of the group that, although 49 CFR would never be a household document for all regulated parties, it could be simplified to some degree to the benefit of all.

The increased use of performance specifications

in the regulations, rather than detailed design standards, could simplify and reduce the 400 pages in the Code that cover container requirements. Performance standards prescribe what a container must be capable of doing after it is built. Design standards specify how a container must be built. The 1969 Airlie House Conference also stated that a performance standard approach to hazardous materials regulation should be used, where practical, in the regulations. The United Nations Committee has also recommended the use of performance standards over design standards. Another significant benefit of performance standards would be to encourage technological innovation and increased productivity. In the long run, this would mean increased cost-effectiveness.

The current need for a procedure to acquire an exemption to the design standards, requiring a substantial amount of MTB staff time, would be considerably reduced if performance specifications were used. It is estimated that 1200 exemption applications are filed annually with MTB. The existing design standards should not be thrown out, but should be kept as references in 49 CFR.

It was also pointed out that information is duplicated in 49 CFR and could be eliminated.

Recommendations

1. MTB should develop an "acceptable practices guide" for use by both regulatory inspectors and enforcement agencies that will also permit industry to comply with the regulations from a common set of lay terminology and understanding.
2. The use of jargon and "legalese" should be eliminated in favor of more common words with understood meanings.
3. Conversion to performance standards, where possible, should occur to allow for more innovation and to reduce the quantity of the text of 49 CFR.
4. The index to the Code should be improved to allow for quick reference to specific requirements.
5. The regulations should be rewritten for users and not lawyers. 49 CFR can and should be simplified. Credit language has been simplified in many states as a result of local laws. The life insurance industry is making an effort to simplify the language in insurance policies, and DOT must do the same for these regulations.

Workshop on Training

G.R. Choppin

In Transportation Research Circular 219 (July 1980), the 10 most critical issues in hazardous materials transportation were tabulated. Issue 4 was defined as the "training for all persons involved in the transportation of hazardous materials, including shippers, carriers, and emergency response personnel". It was noted that more than 2 million people require training in hazardous materials transportation and that the existing training opportunities were quite inadequate to meet this demand. It was within the context of these concerns that the panel discussions on training were held at the 1981 strategies conference.

In the position papers on training by Arthur Bensmiller, F.H. Halvorsen, and John Granito (see Appendix 2) the principal issues in training were defined. In brief, these involved questions of who should be trained, the goals and objectives for training of the various groups, and evaluations of the training programs and of the personnel who participate in the training.

Different groups constituted the panels on each day. The meeting of the first panel group was opened by Bensmiller with a statement of purpose for the panel discussion. This was defined as the development of recommendations on training for a comprehensive national strategy to provide safe and efficient transportation of hazardous materials and waste in the 1980s. Bensmiller proposed that the panel develop a factual statement of the problem to be addressed, followed by discussion of the factors bearing on this problem and possible solutions to the problem. After a discussion of each solution the panel would be asked to recommend the best possible solution. The strategies that might be useful for implementing such a "best possible solution" would be evolved and form part of the solution statement.

The panel members reviewed the issues defined in the position papers and proposed a number of statements of the most serious training problems regarding time and priority. There was strong consensus on this and several problem statements evolved. These are discussed briefly below.

PROBLEM STATEMENT I

Not all persons involved in overall transportation and incidence (e.g., packaging, labeling, shipping, receiving, incident response, etc.) of hazardous materials receive proper training to fulfill their legal and moral obligations.

The panel unanimously endorsed this statement of the major concern in training. The factors indentified as having significant bearing on this problem were as follows:

1. The number and types of people to be trained,
2. The technical background of the people who must understand and apply regulations,
3. The complexity of the regulations,
4. The fragmentation of responsibility and of training direction among different federal and state agencies,
5. The lack of defined objectives and standards in training programs,
6. The lack of a means of measuring the effectiveness of the training programs, and
7. Funding for the training programs.

Among the various groups that require training of various extent and type, the following were identified by the panel:

1. Personnel involved in establishing regulations and enforcing them;
2. Shippers whose responsibility involved the classification, packaging, marking, labeling, and certification of the hazardous material to be transported, as well as compliance with applicable rules and regulations for preparation of the hazardous material for shipment;
3. Carrier personnel who have the responsibility for accepting, handling, or transporting hazardous materials in commerce;
4. Personnel who receive the materials from the carriers and must handle them in their dissemination to users; and
5. Emergency-response personnel whose responsibility is to respond to an incident involving hazardous materials.

All of these must be trained in the proper function-