DOT's Ongoing Efforts to Improve the Safe and Secure Transportation of Hazardous Materials

STATEMENT OF

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BEFORE THE

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COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION
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Mr. Chairman, I am Stacey L. Gerard, the Acting Assistant Administrator/Chief Safety Officer of PHMSA, the Pipeline and Hazardous Materials Safety Administration of the Department of Transportation. With me is Robert McGuire, PHMSA's Associate Administrator for the Office of Hazardous Materials Safety. Thank you for this opportunity to discuss with you the Department's ongoing efforts to improve the safe and secure transportation of hazardous materials.

Before I begin, I would like to note an important milestone. This is the first appearance of an official of the new Pipeline and Hazardous Materials Safety Administration before your Committee. Our new organization reflects the Department's longstanding commitment to the safety of our Nation's pipeline infrastructure and our continuing emphasis on the safety and security of commercial shipments of hazardous materials by all modes of transport. The importance of this new organization is underscored by the fact that our regulatory authority for safety covers 28% of the ton freight moved annually in the United States.

PHMSA's Office of Hazardous Materials Safety is responsible for a comprehensive, nationwide program designed to protect the Nation from the risks to life, health, property, and the environment inherent in the commercial transportation of hazardous materials.

Hazardous materials are essential to the economy of the United States and the well-being of its people. Hazardous materials fuel automobiles, and heat and cool homes and offices, and are used for farming and medical applications and in manufacturing, mining, and other industrial processes. More than 3 billion tons of regulated hazardous materials – including explosive, poisonous, corrosive, flammable, and radioactive materials – are transported in this country each year. There are over 800,000 daily shipments of hazardous materials moving by plane, train, truck, or vessel in quantities ranging from several ounces to many thousands of gallons. These shipments frequently move through densely populated or sensitive areas where the consequences of an incident could be loss of life or serious environmental damage. Our communities, the public, and workers engaged in hazardous materials commerce count on these shipments being safe and secure.

Safety continues to be Secretary Mineta's highest priority, and it is the first priority for the hazardous materials safety program. Overall, the safety record for the transportation of hazardous materials is excellent. Over the past ten years, 221 fatalities were caused by incidents involving hazardous materials in transportation, and half of those were due to a single event, the Valujet tragedy in 1996. While every casualty is one too many, in the context of 800,000 daily shipments, this is a remarkable record.

Since 9/11, we have moved aggressively to recognize and address security issues associated with the commercial transportation of hazardous materials. In the wrong hands, hazardous materials could pose a significant security threat. Hazardous materials in transportation are frequently transported in substantial quantities and are potentially vulnerable to sabotage or misuse. Such materials are already mobile and are frequently transported in proximity to large population centers. Further, security of hazardous materials in the transportation environment poses unique challenges as compared to security at fixed facilities. Finally, hazardous materials in transportation often bear clear identifiers to ensure their safe and appropriate handling during transportation and to facilitate identification and effective emergency response in the event of an accident or release.

Hazardous materials safety and security are two sides of the same coin. Congress legislated its intent that "hazmat safety [was] to include hazmat security" when it enacted the Homeland Security Act of 2002. Section 1711 of that act amended the Federal hazardous materials transportation law to authorize the Secretary of Transportation to "prescribe regulations for the safe transportation, including security, of hazardous material in intrastate, interstate, and foreign commerce" and to provide that the Hazardous Materials Regulations "shall govern safety aspects, including security, of the transportation of hazardous material the Secretary considers appropriate." DOT shares responsibility for hazardous materials transportation security with the Department of Homeland Security. The two departments consult and coordinate concerning security-related hazardous materials transportation requirements to assure that they are consistent with the overall security policy goals and objectives established by DHS and that the regulated industry is not confronted with inconsistent security regulations promulgated by multiple agencies.

PHMSA's hazardous materials transportation safety and security program is focused on four principal areas. First, we have in place comprehensive regulations for the safe and secure transportation of hazardous materials. Second, we help shippers and carriers understand the regulations and how to comply with them. Third, we identify those persons who refuse or neglect to comply with safety and security requirements and stop their illegal activities. Finally, we assist the Nation's response community to plan for and respond to hazardous materials transportation emergencies. Throughout the remainder of my testimony, I will highlight actions we have taken in all of these areas to enhance hazardous materials transportation safety and security.

Regulations Development

The Hazardous Materials Regulations – or HMR – are designed to achieve three goals:

1. To ensure that hazardous materials are packaged and handled safely during transportation;
2. To provide effective communication to transportation workers and emergency responders of the hazards of the materials being transported; and
3. To minimize the consequences of an incident should one occur.

The hazardous material regulatory system is a risk management system that is prevention-oriented and focused on identifying a safety or security hazard and reducing the probability and quantity of a hazardous material release. We collect and analyze data on hazardous materials – incidents, regulatory actions, and enforcement activity – to determine the safety and security risks associate

transportation of hazardous materials and the best ways to mitigate those risks. Under the HMR, hazardous materials are categorized by analysis and experience into hazard classes and packing groups based upon the risks they present during transportation. The HMR specify appropriate packaging and handling requirements for hazardous materials, and require a shipper to communicate the material's hazards through use of shipping papers, package marking and labeling, and vehicle placarding. The HMR also require shippers to provide emergency response information applicable to the specific hazard or hazards of the material being transported. Finally, the HMR mandate training requirements for persons who prepare hazardous materials for shipment or who transport hazardous materials in commerce. The HMR also include operational requirements applicable to each mode of transportation.

In 2003, we published a final rule to require shippers and carriers of certain highly hazardous materials to develop and implement security plans. The security plan must include an assessment of possible transportation security risks and appropriate measures to address the assessed risks. At a minimum, the security plan must address personnel security, unauthorized access, and en route security. For personnel security, the plan must include measures to confirm information provided by job applicants for positions that involve access to and handling of the hazardous materials covered by the plan. For unauthorized access, the plan must include measures to address the risk that unauthorized persons may gain access to materials or transport conveyances being prepared for transportation. For en route security, the plan must include measures to address security risks during transportation, including shipments stored temporarily en route to their destinations. The final rule also included new security awareness training requirements for all hazardous materials employees and in-depth security training requirements for employees of persons required to develop and implement security plans.

We continue to seek ways to assure the security of hazardous materials shipments. For example, we are working with DHS to examine ways to enhance the security of rail shipments of materials that are classified as Toxic by Inhalation (TIH). Under the HMR, TIH materials are gases or liquids that are known or presumed on the basis of tests to be toxic to humans and to pose a hazard to health in the event of a release during transportation. TIH materials play a vital role in our society, including purifying water supplies, fertilizing crops, providing fundamental components in manufacturing, and fueling the space shuttle. TIH materials pose special risks during transportation because their uncontrolled release can endanger significant numbers of people. Because of the importance of ensuring their safe and secure transportation, TIH materials are among the most stringently regulated hazardous materials. DHS and DOT are examining the feasibility of specific security enhancements, including potential costs and benefits. Security measures being considered include improvements to security plans, modification of methods used to identify shipments, enhanced requirements for temporary storage, strengthened tank car integrity, and implementation of tracking and communication systems.

In addition to a new focus on security issues, PHMSA’s hazardous materials regulatory program has recently finalized regulations in a number of important areas. For example, in December 2004, we amended the HMR to prohibit the transportation of primary lithium batteries and cells as cargo on board passenger aircraft. Primary lithium batteries and cells pose an unacceptable fire risk for passenger aircraft.

Further, we amended the incident reporting requirements in the HMR to improve the usefulness of data collected for risk analysis and management by government and industry. The new incident reporting regulations include a requirement for carriers to report undeclared shipments when they are discovered.

International Standards Harmonization

The continually increasing amount of hazardous materials transported in international commerce warrants the harmonization of domestic and international transportation requirements to the gre

possible. Harmonization serves to facilitate international transportation while helping to assure the protection of people, property, and the environment. The HMR provide that both domestic and international shipments of hazardous materials may be offered for transportation and transported under provisions of international standards applicable to air or vessel transportation of hazardous materials or the Canadian hazardous materials standards. In this way, carriers are able to train their hazmat employees in a single set of requirements for the classification, packaging, communication of hazards, handling, stowage, and the like, thereby minimizing the possibility of improperly transporting a shipment of hazardous materials because of differences in national regulations.

Basic requirements of the HMR and these international standards are based on the United Nations Recommendations on the Transport of Dangerous Goods. Indeed, most national and regional regulations, such as the European road and rail regulations, are based on the UN Recommendations, as are the regulations of some of our largest trading partners, including Mexico, Canada, and Japan. DOT represents the United States at meetings of international standards-setting organizations concerned with the safe transportation of hazardous materials with the goal of promoting a uniform, global approach to the safe transportation of hazardous materials. Our participation is essential to ensure that U.S. interests are considered in the development of the standards issued by these organizations.

We recently completed a rulemaking to harmonize the HMR with international standards applicable to the transportation of hazardous materials by air and vessel and to the transportation of radioactive materials. We are currently engaged in rulemaking to harmonize HMR cylinder requirements and requirements applicable to the transportation of infectious substances with international requirements.

Outreach and Training

Developing rigorous safety regulations that protect the public and workers engaged in hazardous materials commerce is critical to safe transportation. But regulations cannot be effective if shippers and carriers do not understand them. Therefore, we invest significant resources to help shippers and carriers know the regulatory requirements and how to comply with them. Our comprehensive hazardous materials website and Hazardous Materials Information System allow easy access to vital hazardous materials data and information by industry, the public, DOT employees, hazardous materials workers, and Federal and state agencies. We also operate a toll-free hotline service every day from 9:00 am until 5:00 pm; the hotline answers over 130 calls per day. We hold training workshops, and we develop and provide industry and the public with many publications and training modules.

Since 9/11, PHMSA's hazardous materials outreach and training program has devoted substantial time and effort to assisting shippers and carriers to comply with the new security plan requirements and to generally enhance hazardous materials transportation security. To assist hazardous materials shippers and transporters in evaluating security risks and implementing measures to reduce those risks, we developed a security template for the Risk Management Self-Evaluation Framework or RMSEF. RMSEF is a tool we developed through a public process to assist regulators, shippers, carriers, and emergency response personnel to examine their operations and consider how they assess and manage risk. The security template illustrates how risk management methodology can be applied to security issues. We also developed a Hazardous Materials Transportation Security Awareness Training Module directed at law enforcement, industry, and the hazmat community. The training module is computer-based, posted on our website and is available free of charge on CD-ROM. To date we have distributed over 68,000 copies of the training module. In addition, we have developed security information, including a sample security plan, to assist farmers to comply with security plan requirements. Finally, PHMSA's outreach staff has conducted numerous training sessions to assist the regulated community to understand and comply with hazardous materials transportation security requirements.

Enforcement

Although training and education are valuable tools for enhancing compliance, there will always be people who, through ignorance, negligence or as a result of knowing or intentional actions, do not comply with the hazardous materials transportation safety regulations. Compliance enforcement efforts are thus key to PHMSA's efforts to reduce incidents that result from unsafe operations by companies or individuals who ship or transport hazardous materials or who manufacture or test hazardous materials containers and packagings. PHMSA enforcement specialists at our headquarters and five regional offices conduct 1,900 inspections annually of hazardous materials shippers, freight forwarders, container manufacturers and packaging requalifiers. Since the implementation of new security requirements in the HMR, our inspectors have conducted nearly 700 inspections in which the company was required to have a security plan. To date, 57 percent of the companies are in full compliance. We are aggressively enforcing against those who are not. Our sister DOT operating administrations – the Federal Aviation Administration, Federal Motor Carrier Safety Administration, and Federal Railroad Administration – together with the United States Coast Guard, also conduct modal inspections of shippers and carriers. To further leverage our resources, we conduct joint inspections with other Federal agencies and States.

Emergency Response

Despite best efforts, accidents will occur. We have a responsibility to reduce the consequences of transportation accidents involving hazardous materials. Thus, we play a major role in assisting the emergency response community to plan for and respond to hazardous materials transportation incidents. Every four years, PHSMA and our partners in Canada and Mexico publish an updated version of the Emergency Response Guidebook. We developed the Guidebook for use by "first responders" – those public safety personnel first dispatched to the scene of a hazardous materials transportation incident, such as fire fighters, police, and emergency services personnel. The Guidebook provides first responders with a guide for initial actions to be taken in those critical first minutes after an incident to protect the public and to mitigate potential consequences. The Guidebook has been widely hailed as the single most valuable reference for initial response to hazardous materials emergencies. We work with our Canadian and Mexican partners and with the emergency response community and hazardous materials industry to assure its continuing accuracy and utility. To date, we have published and distributed over 2.1 million copies of the 2004 edition of the Guidebook for first responders and others responsible for handling hazardous materials transportation emergencies in the U.S. The Guidebook is also globally recognized and in addition to the English, French and Spanish editions produced by the U.S., Canada, and Mexico, it has been translated into Chinese, Dutch, German, Hebrew, Hungarian, Japanese, Korean, Polish, Portuguese, Russian, Thai and Turkish.

We also operate a planning and training grants program to assist local responders at hazardous materials incidents. The possible consequences of a serious incident, even if unlikely, require that all communities develop response plans and train emergency services, fire and police personnel to assure an effective response. The importance of planning and training cannot be overemphasized. To a great extent, we are a nation of small towns and rural communities served by largely volunteer fire departments. In many instances, communities' response resources already are overextended in their efforts to meet routine emergency response needs.

Our Emergency Preparedness Grants program provides assistance to States, territories, and Indian tribes, and, through them, to local communities. Planning grants are made for developing, improving, and implementing emergency plans. Training grants provide for training public sector employees to respond to accidents and incidents involving hazardous materials. Planning and training grants are funded through registration fees paid by the hazardous materials industry. Since the program's inception, grantees have developed or updated an average of 3,759 plans per year with

grant funds. Grant program funds have been used to train over 1.7 million first responders and to compile over 43,000 local hazardous materials response plans.

Hazardous Materials Program Reauthorization

You invited me here today specifically to discuss reauthorization of the hazardous materials transportation safety program. We hope that the Committee's proposal will include the proposals submitted in prior years by the Administration, as did S. 1072 in the 108th Congress. For example, we urge you to consider reallocating responsibilities for sanitary food transportation among the Departments of Health and Human Services, Agriculture, and Transportation to ensure that each aspect of the food transportation safety mission is made the responsibility of the most qualified agency. Similarly, to address the problem of undeclared hazardous materials shipments in the mail, we support measures to provide authority for the United States Postal Service to collect civil penalties and recover costs and damages for violations of its hazardous materials regulations.

In addition, we would support revisions to the terms under which exemptions from the HMR may be granted. The exemptions program permits shippers and carriers to take advantage of new technologies and improved business methods by applying for permission to deviate from existing regulatory requirements. Applicants for exemptions must demonstrate that the new technology or improved way of doing business maintains a safety level equivalent to current regulatory requirements. The exemptions program provides an opportunity for the testing and evaluation of technological improvements in a real-world transportation environment. Exemptions that result in demonstrated safety and efficiency benefits are frequently converted into regulations of general applicability. We suggest a provision to change the term "exemption" to "special permit;" we believe that this change appropriately conveys that hazardous materials transportation conducted under what are now termed exemptions is required to be conducted in accordance with the terms and conditions established by PHMSA. In addition, revising the effective period for which a renewal of a special permit may be issued from two years to four years will eliminate a great deal of unnecessary industry and government processing time and will enable PHMSA staff to focus attention on significant special permit issues rather than routine renewals.

We hope you will also consider measures to enhance our ability to enforce the hazardous materials regulations and to take swift action to identify hidden shipments and remove unsafe shipments from transportation. Hidden hazardous materials pose a significant threat to transportation workers, emergency responders, and the general public. Moreover, it is likely that terrorists who seek to use hazardous materials to harm Americans will move those materials as hidden shipments. Expanding our inspection authority to permit an enforcement officer to open and examine packages suspected to contain a hazardous material will help us to address the pervasive problem of undeclared hazardous materials shipments in transportation. Authorization for enforcement officials to remove packages from transportation if the package poses an imminent safety hazard or to issue emergency orders to stop unsafe practices that present an immediate threat will materially enhance our ability to prevent unsafe movements of hazardous materials and possible accidents resulting from such unsafe movements. And increasing the maximum civil penalty from $27,500 to $100,000 for each violation will provide us with the flexibility to assess appropriately high civil penalties in cases involving significant non-compliance with the regulations and especially those resulting in death, serious injury, or significant property or environmental damage.

We do not support proposals to revise the registration fee program that funds the Emergency Preparedness Grants program. Specifically, we are concerned that a cap on the maximum annual registration fee, when coupled with the significant increase to the grant program being considered by both the Senate and the House, may require us to modify our current two-level fee structure and impose substantial registration fee increases on small entities. We are also concerned that red

authorization levels for elements of the grant program may limit our ability to administer that program effectively.

Finally, we request that you consider our proposal to reduce the area of overlap between DOT's regulation of hazardous materials transportation and the Occupational Safety and Health Administration's (OSHA's) regulation of worker protection. The Hazardous Materials Transportation Uniform Safety Act of 1990 gave OSHA duplicative regulatory authority over hazardous materials training, handling criteria, registration, and motor carrier safety. In consultation with OHSA, we propose to correct the extent of shared DOT/OSHA jurisdiction by eliminating dual jurisdiction over handling criteria, registration, and motor carrier safety. DOT and OSHA would retain their respective jurisdiction over employee training, and OSHA would retain its jurisdiction over the occupational safety or health protection of employees responding to a release of hazardous materials.

Conclusion

We look forward to working with the Members of this committee and with Congress to enhance the safe and secure transportation of hazardous materials. At the same time, we will continue to evaluate and implement additional safety and security measures, and we will continue to work with the hazardous material transportation community and our Federal, State, and local partners to maximize the contribution that hazardous materials make to our economy while minimizing their safety and security risks.

Thank you again, Mr. Chairman, for the opportunity to appear today and respond to your questions and concerns.

Witness:
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