



**ADVOCATES**  
for Highway & Auto Safety

*U.S. Hazardous Materials Safety and Security Policies Need Major Revisions*

**Statement of Gerald A. Donaldson, Ph.D.  
Senior Research Director  
Advocates for Highway and Auto Safety**

**Reauthorization of the U.S. Department of Transportation  
Hazardous Materials Safety Program**

**Before the**

**Subcommittee on Railroads, Pipelines, and Hazardous Materials**

**Transportation and Infrastructure Committee**

**2167 Rayburn House Office Building**

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**750 First Street, NE, Suite 901, Washington, DC 20002 • 202-408-1711**

Good afternoon. My name is Gerald Donaldson, Senior Research Director of Advocates for Highway and Auto Safety (Advocates). I am accompanied today by Henry Jasný, General Counsel. Founded in 1989, our organization has worked closely with the Transportation and Infrastructure Committee and has been integrally involved in many issues related to highway and large truck safety. Advocates is grateful for the opportunity to assist the subcommittee today in its inquiry into the safety and security of hazardous materials (hazmat) transported throughout the United States (U.S.) by highway as you consider reauthorization of the U.S. Department of Transportation's hazardous materials safety programs.

Today we would like to address critical issues affecting the safety and security of hazmat transported by motor vehicle in the U.S. Our testimony documents a weak, inconsistent, and incomplete federal policy approach to the safety and security of hazmat transported in both interstate and intrastate commerce.

Even prior to the national tragedy of September 11, 2001, Congress had already realized that the highway transportation of hazmat was fraught with perils. As a result, when the Hazardous Materials Transportation Act of 1975 was reauthorized in 1990 as the Hazardous Materials Uniform Transportation Safety Act (HMTUSA), Congress wanted to substantially upgrade the protection of public health and safety in hazmat transportation. Lax controls, procedures, and weak regulation made it difficult to determine how safely hazmat was being packaged, stored, and transported. Even our national reporting of hazmat spills and crashes by motor vehicles transporting hazmat was woefully inadequate.

Attacks on the World Trade Center and the Murrah Federal Building in Oklahoma City should have been startling wake-up calls that business-as-usual hazmat transportation was unequal to the task of protecting the U.S. people and their institutions. However, there was little indication that the agencies of jurisdiction knew that vigorous responses to the need of dramatically enhanced hazmat transportation safety were quickly needed. Since the national tragedy of September 11, 2001, heightened security controls have been applied by many departments and agencies of the U.S. federal government, with significant complementary policies newly adopted or modified by state governments as well.

The Government Accountability Office (GAO) in a major report on national transportation security released in 2003<sup>1</sup> repeatedly stresses the extraordinary difficulties of protecting transportation assets from attack, and how an uncoordinated, disaggregated, and incomplete approach by public authorities to the laws, regulations, oversight, and enforcement practices governing transportation security at all government levels continues to permit high vulnerability of surface transportation freight movement to disruption and illicit use. It is patent that the most susceptible portion of that massive, daily movement of goods across the nation to interception and dangerous use is the motor carrier transportation of hazmat, especially types of hazmat that can be used to threaten our country.

But actions taken especially by the Federal Motor Carrier Safety Administration (FMCSA) and the Pipeline and Hazardous Materials Safety Administration (PHMSA) since 2001 have not only been too slow in being engaged, they also have fallen short of the level of control over highway hazmat transportation that should have quickly been put in place. In some cases, as Advocates will show in our testimony, neither agency acted with dispatch to adopt aggressive, fail-safe regulatory controls over highway hazmat transportation. In one case, FMCSA waited 14 years after the statutory mandate from Congress in the 1990 hazmat reauthorization legislation to institute a hazmat special permit program for especially dangerous substances and gases, and three years after 9/11.

In most cases, the rules and policies currently in effect covering highway hazmat transportation have left pre-9/11 regulations largely unaltered. Moreover, Congressional direction in the 1990 HMUTSA have not been fulfilled. The Research and Special Programs Administration (RSPA), now PHMSA, only partially implemented the Congressional direction in the 1990 hazmat bill to conform intrastate hazmat transportation to the interstate requirements of the Hazardous Materials Regulations (HMR). One of the major actions taken in a mid-1990s regulatory proceeding was to exempt farmers from most of the HMR requirements regarding placarding, training, and emergency contact information. Farmers transporting large quantities of unplacarded hazmat also do not have to have commercial driver licenses (CDLs), including the basic CDL that must be supplemented with additional endorsements in order to qualify commercial drivers to transport hazmat.<sup>2</sup> Those exemptions involve large, dangerous

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<sup>1</sup> *Transportation Security: Federal Action Needed to Help Address Security Challenges*, U.S. General Accounting Office (now the U.S. Government Accountability Office), Report GAO-03-843, June 2003.

<sup>2</sup> The original purpose of the farmer CDL exemption was to unencumber family farms from the responsibility of drivers on the farms having to comply with the multiple requirements of the CDL. 53 FR 37313, (Sept. 26, 1988). The original conditions for the waiver were established to ensure that the waiver focused specifically on this type of farm operation. However, 'farmer' is defined in 49 CFR § 390.5 as "any person who operates a farm or is directly involved in the cultivation of land, crops, or livestock which

quantities of hazmat that can easily be used to mount security threats against the U.S. However, after 9/11, those exemptions have remained unaltered by the successor agency, PHMSA, even now in the spring of 2009.

In addition, fundamental goals of the hazardous materials reauthorization enacted in 1990 remain unfulfilled with respect to the conformity of intrastate hazmat transportation to interstate commerce hazmat movement. FMCSA has demurred on requiring states, for example, to adhere to the special permit requirements of 49 U.S.C. § 5109 if state laws and regulations in place prior to the 2004 final rule differ, even if they fall short of the permit provisions of the new regulation. Other departures from intrastate hazmat commerce conformity are even more extensive: under current FMCSA regulation the HMR apply to motor carriers in intrastate commerce only if they transport hazardous wastes, hazardous substances, flammable cryogenic liquids in portable tanks and cargo tanks, and marine pollutants (as those terms are defined in the HMRs). 49 CFR § 171.1(a)(3). Moreover, such carriers transporting any other cargo are not required to use hazmat placards, *even if the cargo qualifies as hazardous under the federal HMRs*. Unless the vehicles used by these carriers had gross vehicle weight ratings (GVWR) of 26,001 pounds or more, they would not meet either the placarding or the GVWR test in the jurisdictional definition of a commercial motor vehicle pursuant to 49 CFR § 383.5, and the driver would also be exempt from CDL requirements.

Along with exemptions mentioned above that allow large quantities of hazmat to escape the regulation, oversight, and enforcement requirements of the HMR, the strong statement of Congressional purpose in the Hazardous Materials Uniform Transportation Safety Act of 1990 (HMTUSA) to conform interstate hazmat transportation federal requirements with intrastate laws, regulations, and practices has still not been realized.

Taken together, when our federal regulatory and enforcement controls over highway transportation of hazmat are judged for how well they ensure a much more stringent hazmat safety and security regime, they simply come up short. Our national policies are inadequate, incomplete, and inconsistent at both the federal and state levels to provide the level of safety and security that the American public deserves.

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(a) [a]re owned by that person; or (b) [a]re under the direct control of that person.” Since farming partnerships, corporations and associations, even large agribusinesses, are legal “persons,” the States may exempt drivers working for these organizations from the CDL requirements. *See*, CDL Guidance by FMCSA in response to Question 30, <http://www.fmcsa.dot.gov/rules-regulations/administration/fmcsr/fmcsrruletext.asp?chunkkey=0901633480023236>.

Today, I will review three critical areas of hazmat safety and security needing legislative and regulatory action: hazmat transportation security plans, hazmat highway transportation special permits, and hazmat transportation location/tracking technologies.

**I. All Motor Carriers Should Have Security Plans Meeting Specific Criteria, Approved and Audited by the U.S. Department of Transportation.**

**A. Current Weak Regulation for Hazmat Security Plans.**

In 2003, RSPA, the predecessor agency of the current agency of jurisdiction over highway transportation of hazmat, PHMSA, issued a final rule on the security requirements for offerors and transporters of hazmat. 68 FR 14510 (March 25, 2003). This was preceded by a proposed rule published in 2002. 67 FR 22028 (May 2, 2002).

The proposed rule had the following main features:

- A requirement for motor carriers already registered with the agency to maintain a copy of that current registration certificate on board each motor vehicle transporting hazmat;
- A requirement for shipping papers to show the name and address of both the consignor (origin) and of the consignee (receiver) and for the shipping papers to show the shipper's U.S. DOT Hazmat Registration number;
- A requirement that shipper and carrier of certain highly hazardous materials to develop and implement hazmat transportation security plans; and,
- A requirement that hazmat shippers and carriers assure that their employee training includes a security component.

The agency received more than 270 comments “from hazardous materials shippers, carriers, industry associations, and local government agencies.” In the final rule of March 25, 2003, RSPA, however, made no acknowledgement that the agency had received comments from any commercial motor vehicle or highway safety organization, although Advocates for Highway and Auto Safety filed extensive comments pointing out the cardinal shortcomings of the proposed rule.<sup>3</sup>

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<sup>3</sup> See, Comments of Advocates for Highway and Auto Safety, Docket No. RSPA-02-12064 (HM-232), May 30, 2002.

### **Highlights of the final rule:**

- RSPA placed industry economic considerations before safety and security:  
RSPA stated in the final rule that security measures cannot adversely affect the efficient transportation of hazmat or impose excessive economic burdens on the hazmat transportation industry. This elevates industry costs above safety and security needs for hazmat transportation.
- No requirement that a copy of current hazmat registration be on board each vehicle:  
RSPA proposed this requirement, but deleted it in the final rule.
- No requirement that shipping papers have current hazmat registration number:  
Deleted in the final rule by RSPA as too burdensome for industry.
- No requirement that shipping papers have name and address of both consignor and consignee:  
RSPA thought that the idea had merit, but the agency rejected a requirement in a final rule because too many adverse comments were received from industry opposing it.
- RSPA weakened requirements for security plans for both offerors of hazmat and carriers of hazmat:  
RSPA adopted a requirement for hazmat security plans,<sup>4</sup> but:
  - ▶ There are no required elements for the plans in the final rule.
  - ▶ Shippers and carriers can use any risk model they like.
  - ▶ RSPA will not review the plans for adequacy before the time of their adoption.
  - ▶ There is no indication that RSPA would sample security plans to audit in order to assess their strengths and weaknesses.
  - ▶ RSPA will not keep any of the security plans on file in the agency.

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<sup>4</sup> The final rule limits the requirement to develop and implement security plans only to persons who offer for transportation or transport the following hazardous materials to develop and implement security plans: (1) A highway route-controlled quantity of a Class 7 (radioactive) material; (2) more than 25 kg (55 lbs) of a Division 1.1, 1.2, or 1.3 (explosive) material; (3) more than 1 L (1.06 qt) per package of a material poisonous by inhalation in Hazard Zone A; (4) a shipment in a bulk packaging with a capacity equal to or greater than 13,248 L (3,500 gal) for liquids or gases or greater than 13.24 cubic meters (468 cubic feet) for solids; (5) infectious substances listed as select agents by the Centers for Disease Control and Prevention (CDC) in 42 CFR Part 73; and, (6) a shipment that requires placarding. The fifth category, select agents, are infectious substances identified by CDC as materials with the potential to have serious consequences for human health and safety if used illegitimately.

- RSPA weakened shipper and carrier responsibility for the terrorist use of hazmat: The agency strengthened the language of one feature of the new regulation to reduce the liability of a shipper or carrier if a terrorist action happens, despite their compliance with the terms of the final rule. In effect, this provides a hold harmless provision exonerating a shipper or carrier from any liability no matter how weak and inadequate its security plan and implementation might be prior to a terrorist use of hazmat.
- RSPA adopted a weakened requirement for employers who are shippers or carriers to validate information provided by job applicants to handle or transport hazmat: RSPA weakened the final rule by changing the employer's responsibility from "verify" to "confirm" that information supplied by job applicants is accurate and agreed with industry comments that "verify" is too stringent. Moreover, RPSA "do[es] not expect companies to confirm all of the information that a job applicant may provide as part of the application process." A question here is whether this meets the letter and spirit of the U.S. PATRIOT Act.
- RSPA adopted a weak requirement that employee hazmat training contain a security component: The required hazmat training was retained as a feature of the final rule, but the agency will not specify what that security training should consist of, would not establish specific security hazmat training principles related to compliance with security plans, and would perform no follow-up reviews of the quality and effectiveness of employee hazmat training.
- RSPA will not actually collect or retain any shipper or carrier security plans: Not only does RSPA not require specific security plan content, or review them for approval, or subsequently audit their quality, security plans of any hazmat shipper or carrier will be available only from the company, not from the agency. Security plans are thus not available to the public to evaluate their quality because RPSA will have no plans on file that it could provide voluntarily upon request or supply relevant documents in response to a Freedom of Information Act request.

In the post-9/11 era, it is hard to reconcile other stringent actions taken to protect the American people and their homeland against hazmat security breaches that can threaten the nation, with this new regulation that requires little that is mandatory for the hazmat transportation industry. The major failures of the regulation include no agency approval or oversight of how well security plans are constructed and implemented, and no assessment of the extent to which hazmat transportation security plans actually protect the U.S. people and their institutions against security vulnerabilities that can result in severe dangers from the exploitation and release of numerous dangerous hazmat

substances.

### **B. Subsequent Action by U.S. DOT Further Weakened Safety and Security Requirements.**

In a companion rulemaking action a few weeks later in 2003, RSPA issued an interim final rule (IFR) entitled "Enhancing Hazardous Materials Transportation Security." 68 FR 23832 (May 5, 2003). The IFR incorporates into the Hazardous Materials Regulations (HMR) a requirement that shippers and transporters of certain hazmat comply with federal security regulations that apply to motor carrier and vessel transportation. The final rule also revised the procedures for applying for an exemption from the HMR to require applicants to certify compliance with applicable federal transportation security laws and regulations.

However, the final rule had several major weaknesses:

- No Additions to List of Dangerous Hazmat for Security Reasons:  
The IFR required persons offering for transport or actually transporting hazmat to develop and implement security plans, as adopted in March 2003. But the IFR relies on the existing, pre-9/11 regulations concerning the types and amounts of hazmat and Centers for Disease Control "select agents." Despite the extensive list of substances that could be interdicted or illicitly used to mount threats against the U.S. people and their institutions, RSPA considered – but rejected – any expansion of the list of dangerous hazmat that could be used for terrorist purposes.
- RSPA allowed current, broad exemptions for large quantities of dangerous agricultural hazmat to remain unchanged.  
RSPA considered but rejected consideration of the application of the more comprehensive definitions of explosive hazmat used by the Bureau of Alcohol, Tobacco, and Firearms (BATF) that would have increased both the safety and security controls over a much wider list of especially dangerous hazmat. The BATF list includes fuel oil and ammonium nitrate fertilizer of any amount that PHMSA continues to allow in very large amounts to be exempted for farmers and farm suppliers. These drivers of these farming vehicles are not required to have commercial driver licenses, to have emergency contact information for hazmat incidents, to have placards, or to have training in the handling of large quantities of fuel oil and ammonium nitrate fertilizer. Ammonium nitrate and fuel oil when mixed produce a powerful explosion and are easily obtained for use in threats against the U.S. RSPA concluded in the IFR that mixtures of ammonium nitrate and fuel oil, like that used to blow up the Murrah federal building in Oklahoma

City in 1995, “do[es] not meet the definition of a Class 1 material under the HMR” and that they “generally do[es] not pose a sufficient security risk when transported in commerce to warrant detailed employee background checks.” However, the amounts of both substances allowed under current PHMSA regulation – a maximum of 16,094 pounds of ammonium nitrate fertilizer and up to 502 gallons of liquids or solids, including fuel oil – are far larger than the estimated amounts used to blow up the federal building in Oklahoma two years prior to this rulemaking action.<sup>5</sup>

- RSPA rejected any changes in the present minimum quantities of hazmat requiring placarding:

RSPA also concluded that its present threshold amounts for placarding of certain radioactive materials, explosives, and agents toxic by inhalation are sufficient to control any security risk of their improper use. This means that the agency has not adopted lower amounts than currently in federal law and regulation so that placarding and the use of a security plan would apply to these smaller amounts of hazmat. RSPA also decided that it would not review or disturb the current threshold quantities of different hazmat requiring placarding, such as toy caps,

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<sup>5</sup> An estimated 5,000 pounds of ammonium nitrate and fuel oil were used to demolish the Murrah Federal Building, an explosion that killed 168 people and injured 800. Two years later in early 1997, RSPA issued a final rule under Docket HM-200 that exempted certain agricultural chemicals and "materials of trade" from most of the HMR. 62 FR 1208 (Jan. 8, 1997). The current regulation in 49 CFR § 173.5 exempts farmers who are private motor carriers in intrastate commerce from all requirements of the entire subchapter governing transportation, marking, packaging, placarding, emergency contact information, and training if the transportation takes place within a 150 miles of a farm. RSPA further weakened the HM-200 final rule in early 1998 by allowing state controls over hazmat transportation conducted in wholly intrastate commerce, to govern transportation of these exempted agricultural chemicals, despite the fact that the state regulations could be weaker than the federal regulations, if the state law or regulation was in effect prior to Oct. 1, 1998. 63 FR 8140 (Feb. 18, 1998). Not only did these RSPA concessions undermine the regulation by allowing weaker, less secure pre-existing state rules, this open-ended grandfathering action arguably fails to comply with the clear direction of Congress in the 1990 hazardous materials reauthorization legislation that RSPA conform intrastate hazmat transportation operations to the federal interstate transportation model in the HMR. *See*, 49 U.S.C. 5103(b)(1).

It should also be noted here that PHMSA has continued to allow small quantities of “materials of trade also to be transported in highway intrastate commerce without full adherence to the HMR. These “materials of trade,” although arguably transported in relatively small amounts in each instance, can easily be stockpiled to use for illicit purposes. In response to docket comments, RSPA in 1997 also expanded the list of the exempted “materials of trade” to include several types of hazmat that the agency did not propose in the SNPRM. Those exemptions are “not restricted to purely intrastate carriers. Thus, RSPA is providing significant regulatory relief to small (and many large) entities that currently transport hazardous materials by motor vehicle in interstate commerce.” 62 FR 1214. In addition, RSPA permitted certain non-specification cargo tanks in intrastate commerce to continue to be used to transport flammable liquid petroleum. *Id.*, at 1216. Those exemptions are also still undisturbed by events or subsequent regulatory actions since their adoption in 1997.

signal devices, flares, and distress signals less than 454 kg (1,000 lbs.). As a result, the agency states that it has judged that “[w]hen shipped in amounts that do not require placarding, such shipments do not pose a security risk when transported in commerce sufficient to warrant detailed employee background check requirements at this time” and they “generally do not present a significant security threat involving their use during transportation for a criminal or terrorist act.” There is no support in the IFR for this conclusory assertion. It is easy to formulate scenarios where unplacarded, but significantly large, quantities of hazmat are incrementally stockpiled for illicit purposes.

Although RSPA openly states that it is authorized under 49 U.S.C. § 5101 *et seq.* to designate any hazmat, including explosives, as dangerous when transported in commerce because it poses an unreasonable risk to health, safety, or security, the agency has judged “that the most significant security risks are associated with the transportation of explosives shipments in quantities that require placarding under the HMR.” The shippers and carriers must formulate security plans to cover such transport, but the agency has not changed the types and quantities of explosives subject to placarding that were adopted in a different – pre 9/11/01 – era.

## **II. A New Evaluation of the FMCSA Hazmat Special Permits Regulation Is Needed.**

In connection with a general review of the substances and quantities that should be placarded, Congress should consider an allied review of the need for expanding the list of hazmat requiring special federal permits pursuant to 49 U.S.C. § 5109. That list is comprised of especially dangerous types of hazmat requiring permits that was forged in an earlier era that did not have the sense of public urgency about potential threats to the health and safety of the American people that can result from the use of other types of dangerous hazmat. Also, as discussed below, FMCSA should be directed to evaluate the scope of § 5109 hazmat permits and their applicability to intrastate commerce.

Under current law, the implementing regulations for §5109 in 49 CFR Parts 385, 386, and 390 were adopted by FMCSA in 2004, 14 years after the mandate enacted in 1990 by Congress in the hazmat reauthorization legislation. Hazardous Materials Uniform Transportation Safety Act, Pub. L. 101-615, §8(b) (Nov. 16, 1990). That final rule expanded the statutory list of substances that Congress wanted to control with special permits for highway transportation, but many dangerous substances were left out. 69 FR 39350 (June 30, 2004). The substances for which a special hazmat highway transportation federal permit are the following:

- ▶ Any Class 7 radioactive materials whose transportation is route-controlled
- ▶ Division 1.1, 1.2, 1.3 explosives in amounts exceeding 55 pounds
- ▶ Division 1.5 material requiring placarding pursuant to 49 CFR Part 172, Subpart F.
- ▶ Division 2.3 and 6.1 Hazard Zone A Toxic-by-Inhalation materials in packaging with a capacity greater than 0.26 gallons; Hazard Zone B Toxic-by-Inhalation materials in a bulk packaging greater than 119 gallons; Hazard Zone C or D Toxic-by-Inhalation materials in a bulk packaging equal to or greater than 3,500 gallons.
- ▶ A shipment of compressed or refrigerated liquid methane or natural gas or other liquefied gas with a methane content of at least 85 percent in a bulk packaging equal to or greater than 3,500 gallons.

Advocates regards this list as incomplete and insufficient to protect the American people. Several other categories and quantities of dangerous hazmat present a security threat to the U.S. and should be regulated through special permit with its accompanying approval and oversight mechanisms. For example, several serious biohazards list in 49 CFR § 172.323 can be used to threaten the U.S. people and their institutions. Paradoxically, some of these biohazardous materials are required to be covered by the security plans for transport currently administered by PHMSA, such as infectious substances listed as select agents by the CDC in 42 CFR Part 73. Also, materials that are highly toxic through skin contact are not required to have special permits. Furthermore, the allowable quantities in the 2004 FMCSA final rule triggering special permit requirements are too high. This may especially be true in the case of toxic by inhalation, methane, natural gas, and other liquefied gases that may be transported in quantities just under 3,500 gallons without a special permit.

In our comments to the rulemaking docket on the contours of the special permit program proposed by FMCSA, Advocates stated that the agency should consider substantially expanding this list and lowering the quantities permitted. This view was supported in docket comments by Onyx, a major hazardous waste transportation company, which similarly argued that FMCSA should at a minimum consider expanding the range of special permit hazmat to the categories listed in 49 CFR § 172.800(b). That list governs the development and implementation of security plans required for handling the listed types of hazmat. One of those categories covers select agents or toxins regulated by the CDC under 42 CFR part 73 or, by April 1, 2007, a select agent or toxin regulated by the United States Department of Agriculture under 9 CFR Part 121.<sup>6</sup> These

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<sup>6</sup> “The biological agents and toxins listed in this part have the potential to pose a severe threat to public health and safety, to animal health, or to animal products.” Vol. 9 CFR § 121.2.

select agents and toxins should be evaluated along with several other types of hazmat to fall under the special permit requirements of § 5109.

A peculiar feature of the categories of hazmat subject to the RSPA security plan requirements and to FMCSA's special permit requirements is the strong overlap between the list for each agency subject to the regulations, but also the exclusion of types of hazmat from RSPA's list in FMCSA's list, and vice versa. The security plan requirements of PHMSA and the special permit requirements of FMCSA should be concordant, but the scope and quantities of both regulatory schemes need to be substantially revised.

It is important to note that in adopting the final rule, FMCSA ignored the pivotally important report published by the Government Accounting Office (GAO)<sup>7</sup> two months prior to the supplemental notice of proposed rulemaking (SNPRM) published in late 2003 that formed the basis for the final rule. 68 FR 49737 (Aug. 19, 2003). Although Advocates drew the agency's attention to the implications for special permit hazmat risk assessment contained in this major report on security threats to the U.S., the agency simply disregarded a careful examination of the concerns and recommendations in this important report. GAO in the report repeatedly stresses the extraordinary difficulties of protecting transportation assets from attack, and how an uncoordinated, disaggregated, and incomplete approach by public authorities to the laws, regulations, oversight, and enforcement practices governing transportation security at all government levels continues to permit high vulnerability of surface transportation freight movement to disruption and illicit use. It is patent that the most susceptible portion of that massive, daily movement of goods across the nation to interception and dangerous use is the motor carrier transportation of hazmat, especially types of hazmat that can be used to threaten our country.

FMCSA also ignored the clear intent and purpose of Congress in directing agencies of jurisdiction over hazmat transportation to conform intrastate transportation of hazmat to the requirements of the HMR. In the final rule, FMCSA rejected Advocates' arguments in our comments to the SNPRM docket that intrastate hazmat transportation must be governed by the special permitting process of § 5109, asserting that "an intrastate carrier would not be required to comply with any Federal Motor Carrier Safety Regulations (FMCSRs) to which it is not already subject." 69 FR 39350, 39351. Yet, in the same breath FMCSA stated that foreign hazmat commerce in the U.S., such as Mexico-domiciled motor carriers transporting hazmat, would be subject to the special permit requirements. *Id.* This is an irrational and dangerous stance. It means that a Mexico-domiciled motor carrier transiting our southern border to penetrate the U.S. for

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<sup>7</sup> "Transportation Security: Federal Action Needed to Help Address Security Challenges," *op. cit.*

only a few miles as a drayage operation to drop a hazmat trailer for pickup by a U.S.-registered motor carrier is subject to the special permit requirements, while motor carrier making an intrastate hazmat trip of § 5109 materials in a large state for the length of the state may have no such obligation if a similar state permit requirement is not already in effect.

This statement that intrastate transportation of special permit hazmat is ungoverned by the agency's implementing regulations is not defensible. It ignores express Congressional intent in hazardous materials reauthorization legislation directing the Secretary to reduce the disparities between the intrastate and interstate transportation of hazmat, including transportation by motor carrier. Congress expressly consigned broad authority to the Secretary to achieve increased uniformity between the interstate and intrastate transportation of hazmat by highway. In fact, one of the signal purposes of the legislation was to increase and strengthen the Secretary's authority to ensure public safety through such uniformity, including the issuance of appropriate regulations to fulfill this statutory goal. 49 U.S.C. §§ 5101, 5103(b)(1)(B).<sup>8</sup> The Secretary was directed to create a close rapprochement between interstate and intrastate hazmat transportation safety policy and practice. When disparities between the two domains demonstrably compromise the goals of public safety, the Secretary can pre-empt differing state hazmat laws and regulations to achieve greater uniformity, including any attendant or derivative administrative mechanisms or programs that the Secretary finds necessary.

Congress made it clear in HMTUSA that it specifically wanted agencies of jurisdiction to create more uniformity between the two domains and minimize any differences. The FMCSA is evading clear statutory instruction in an attempt to regulate

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<sup>8</sup> This has been repeatedly recognized, emphasized, and acted upon by the agencies of jurisdiction of the U.S. Department of Transportation since the passage of HMTUSA. For example, the authority to create uniformity between intrastate and interstate hazmat transportation was exercised in RSPA's final rule of Docket No. HM-200 that required that all intrastate shippers and carriers comply with the agency's implementing regulations for hazmat motor carrier transport. 62 FR 1208 (Jan. 8, 1997). RSPA asserted in that final regulation that such state conformity to federal regulation was "necessary to comply with amendments to the Federal hazardous materials transportation law mandating that DOT regulate the transportation of hazardous materials in intrastate commerce." *Id.* at 1208. Moreover, this drive towards adopting intrastate-interstate uniformity in federal motor carrier hazmat transportation policy was recognized by the Federal Highway Administration (FHWA), the agency preceding the transfer of motor carrier safety authority to the FMCSA, in its 1998 notice asking for public comments on the final report and recommendations of the Alliance for Uniform Hazardous Materials Transportation Procedures concerning U.S. Department of Transportation implementation of a nationally uniform permitting system for motor carrier transport of hazmat, pursuant to 49 U.S.C. § 5119. The FHWA stated in that notice that even the original "HMTA [Hazardous Materials Transportation Act] was designed to replace a patchwork of State and Federal laws and regulations concerning hazardous materials transportation with a framework of uniform, national regulations." 63 FR 15362, 15363, March 31, 1998. That acknowledgement has apparently had no impact on the policy choice offered in FMCSA's special hazmat permit final rule.

only the minimum number of motor carriers while simultaneously lowering its oversight and enforcement obligations also to the minimum possible. In light of current safety and security needs, which cannot be readily separated, it is surprising and disturbing that the agency refuses to regulate the maximum number of carriers to ensure that they are vetted by an appropriate safety permitting system.

That authority has already been exercised on numerous occasions to create more uniformity between interstate and intrastate hazmat transportation. RSPA published a final rule for Docket No. HM-200 in early 1997. 62 FR 1208 (Jan. 8, 1997). The new regulation required that all intrastate shippers and carriers comply with that agency's implementing regulations for hazmat motor carrier transport. RSPA asserted that such state conformity to federal regulation, with very limited exceptions, was "necessary to comply with amendments to the Federal hazardous materials transportation law mandating that DOT regulate the transportation of hazardous materials in intrastate commerce." *Id.* at 1208. RSPA's final rule expressly pre-empts state laws, regulations, and other administrative mechanisms that conflict with prevailing federal hazmat law and regulation. RSPA is clearly fulfilling the Congressional direction of HMTUSA by applying the broad authority granted to the Secretary to achieve more intrastate-interstate hazmat transportation uniformity. Equivalent authority for the FMCSA to establish more uniformity in the domain of motor carrier hazmat transportation is clearly comparable that of RSPA/PHMSA.

Similarly, RSPA again emphasized the Congressional direction to achieve uniformity between federal and state hazmat law and regulation in a Federal Register notice asking for comments on a published report:<sup>9</sup> "The HMTA [Hazardous Materials Transportation Act] was designed to replace a patchwork of State and Federal laws and regulations concerning hazardous materials transportation with a framework of uniform, national regulations." 63 FR 15363.

FMCSA in the final special permit rule also saw fit to weaken the adopted regulation in several ways from the proposed version it had offered in a supplemental notice of proposed rulemaking (SNPRM) published in late 2003. For example, although the agency proposed that written route plans prepared by the motor carrier govern all of the regulated materials that could be transported by highway only under special permit, the agency reduced the requirement for a written route plan to cover only some of the types and quantities of hazmat requiring a § 5109 permit – only radioactive Class 7 and Division 1.1, 1.2, 1.3 explosive materials. Similarly, although FMCSA proposed

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<sup>9</sup> "Recommendations on Uniform Forms and Procedures for the Transportation of Hazardous Materials, Supplementary Notice of Report Availability," 63 FR 16362 (March 31, 1998).

provisions for a communications system to be installed on each motor vehicle used to transport special permit materials to enable the driver to immediately contact the motor carrier during the course of hazmat transportation, FMCSA deleted this requirement in the final rule. The agency also weakened allied requirements for a driver to communicate with the motor carrier every two hours when operating a motor vehicle transporting special permit materials, changing the requirement so that contact was only required twice a day. All of these changes, as well as others, were adopted in response to industry claims of burden. It should be stressed here that this was an attempt by FMCSA to implement some system of tracking and communication that would ensure that special permit hazmat in transportation would have its location known to the dispatching motor carrier. Right now, there is still no requirement for any type of location and tracking system, such as EOBRs, for any motor carriers, including none for hazmat motor carriers, much less for special permit hazmat transportation by highway of what FMCSA decided were the most dangerous substances requiring the federal permit.

Finally, FMCSA in its 2004 final rule on implementing the safety permit system of § 5109 required that special permit Class 7 radioactive hazmat undergo a pre-trip inspection conforming to the Level VI inspection protocol developed by the Commercial Vehicle Safety Alliance (CVSA), but rejected Advocates' request in our comments that the agency extend the requirement to all dangerous hazmat transported under special permit. 69 FR 39357. This means that there is no required federal intensive pre-trip inspection for the three classes of explosives covered by the special permit or the other dangerous substances. It also means that even roadside inspections may consist only of a driver-only or vehicle-only inspection without the additional rigor and detail of a Level VI inspection adapted for use with non-route controlled radioactive hazmat. Advocates strongly supports a requirement that all special permit hazmat motor vehicles undergo an adapted version of the Level VI inspection for other special permit hazmat and that a CVSA decal be applied to the vehicles showing that they passed a rigorous pre-trip inspection.

### **III. All Hazmat Motor Carriers Should Be Required to Have Electronic On-Board Recorders (EOBRs) and Event Data Recorders (EDRs).**

It is crucial for both safety and security for hazmat motor carriers to be able to track the routing and have moment-to-moment real-time location of hazmat. EOBRs have been strongly and repeatedly recommended by the National Transportation Safety Board (NTSB) for many years for use on all commercial motor vehicles.<sup>10</sup> This ensures

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<sup>10</sup> NTSB elevated its recommendation for EOBRs, which it has stressed has gone unheeded for many years, to its Most Wanted safety improvements list, citing its Recommendation H-07-41.

that drivers are not fatigued from driving illegal, excessive hours pursuant to the limits specified in the hours of service regulations of FMCSA; that routing controls are not being violated; and that hazmat loads are not being transported on roads and bridges that are subject to lower weight limits than the gross vehicle weight of the truck carrying hazmat. Many hazmat motor carriers have installed and used EOBRs for several years and have found that their use increases carrier operational efficiencies, including improved dispatching with more reliable consignee delivery timing, use of less fuel, reduced commercial motor vehicle maintenance, better rested drivers, and, accordingly, increased profitability. The use of EOBRs, even in general freight delivery, has been lauded many times by several major motor carriers as improving both the safety and the efficiency of their companies' operations. This is a technology where the benefits of enhanced safety, increased security oversight and control, and more economical and, hence, profitable operations intersect.

Section 113(a) of the Hazardous Materials Transportation Authorization Act of 1994 (Pub. L. 103-311, Aug. 26, 1994) requires the Secretary to prescribe regulations to improve compliance by commercial motor vehicle drivers and motor carriers with hours-of-service requirements, and to improve the effectiveness and efficiency of federal and state enforcement officers reviewing such compliance. However, the U.S. Department of Transportation has taken no action to fulfill this statutory mandate.

The ability to determine the location of drivers and hazmat loads on trucks is a crucial aspect of general hazmat safety oversight, but it should be regarded as especially necessary for transportation of hazmat of the types and quantities that trigger PHMSA-required security plans and FMCSA-required § 5109 special permits. Advocates urges Congress to require EOBRs for all motor vehicle hazmat carriage in both intrastate and interstate commerce, including transport by motor vehicle. The EOBRs should include Global Positioning System (GPS) technology permitting real-time tracking of hazmat loads, but should also be integrated with engine and transmission functions to record vehicle speeds and other vehicle operating information fed through and captured by the electronic control module (ECM). The installation and use of EOBRs should be a requirement for gaining operating authority as a hazmat motor carrier. Safety inspectors conducting new entrant safety audits, Compliance Reviews, and roadside inspections should be able to access EOBR data, including GPS information, in order to confirm

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<http://www.nts.gov/Recs/mostwanted/FedMWLPPTwebFINAL.pdf>. In an amendment to its October 2008 Most Wanted list, an unprecedented action, NHTSB effectively censured the U.S. Department of Transportation for its failure to equip commercial motor vehicles with EOBRs and changed its rating of DOT's progress from code Yellow, representing slow but acceptable progress, to code Red, an indication that NTSB believes that DOT has failed to act to adopt this crucial safety technology.

commercial driver hours of service compliance, as well as to determine whether hazmat vehicles have taken prohibited routes or have evaded safety inspections or weigh stations.

Similarly, hazmat motor vehicles, especially large trucks, including tank trucks, should be equipped with event data recorders (EDRs) that will record critical vehicle operational events of both pre-crash maneuvers, including hazmat spills, as well as specific vehicle dynamics information on the severity of crash avoidance vehicle behavior involving steering, braking, and potential rollover. EDRs have also been strongly recommended by NTSB for many years.<sup>11</sup> The extraordinary value of EDR data for improving both vehicle and driver safety performance, and the safety of highway design features, have been demonstrated in several studies and rulemaking actions over the past several years, including publications released through the National Academy of Sciences. See, for example, *Use of Event Data Recorder (EDR) Technology for Highway Crash Data Analysis*, National Cooperative Research Program Contractor Final Report, Project 17-24, Dec. 2004. The National Highway Traffic Safety Administration published its final rule on the policy for EDRs on passenger motor vehicles in 2006 (71 FR 50998, Aug. 28, 2006). However, that policy governs only the data parameters to be collected by EDRs if passenger motor vehicle manufacturers choose to install them voluntarily. The final rule does not mandate their installation.

Despite the fact that FMCSA was specifically required by Congress in Section 408 of the Interstate Commerce Commission Termination Act of 1995 (Pub. L. 104-88, Dec. 29, 1995, 109 Stat. 803, 958) to address the problem of hours of service regulations by evaluating EOBRs, the agency procrastinated until it was compelled by an appellate court in 2004 to address the problem. *Public Citizen v. FMCSA*, 374 F.3d 1209 (D.C. Cir. 2004). The court acted because FMCSA had proposed adoption of EOBRs in the hours of service rulemaking proposal in 2000, 65 FR 25540 (May 2, 2000), but then had a change of heart after strong opposition from major sectors of the trucking industry. FMCSA terminated EOBR rulemaking in 2003 when it issued its first attempt at an amended hours of service regulation. 68 FR 22456 (April 28, 2003). Even then, the agency responded with only an advance notice of proposed rulemaking in September 2004 instead of proposing a long overdue EOBR regulation. 69 FR 53386 (Sept. 1, 2004).

The appellate court in 2004 could not have been stronger in chastising FMCSA for backing off its 2000 proposal to require EOBRs. The court characterized FMCSA's

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<sup>11</sup> NTSB has evaluated the state-of-the-art of EDRs on all commercial motor vehicles most recently in its report on the Bluffton University motorcoach tragedy, <http://www.nts.gov/publictn/2008/HAR0801.pdf>, and strongly urged EDRs to be installed on all motorcoaches and school buses. See, NTSB Recommendations H-99-53 and H-99-54.

retreat as demonstrating "questionable rationality," and it added that it "cannot fathom . . . why the agency has not even taken the seemingly obvious step of testing existing [recorders] on the road" to see if EOBRs should be required on all large trucks.

The pending EOBR proposal also violates FMCSA's legislative mandate in Sec. 101(a) of its enabling legislation, the Motor Carrier Safety Improvement Act of 1999, to promote commercial motor vehicle safety to the highest feasible degree. Pub. L. 106-159, Dec. 9, 1999. The proposed rule clearly demonstrates that the agency had no intention of stopping the widespread, systematic violations of hours of service limits and routine falsification of paper logbooks through the mandatory use of EOBRs. Despite FMCSA's claim that it wanted to reduce fatigue among truck drivers, the EOBR proposed rule cast a large shadow of doubt that the agency is at all serious about reducing commercial driver fatigue by abating hours of service driving time violations by all interstate truck drivers.

Although there is documented, widespread violation of even the excessive working and driving hours of the current hours of service regulation, FMCSA in its recent EOBR rulemaking proposal, 72 FR 2340 (Jan. 18, 2007), disregarded all previous research and survey literature on the pervasive violation of hours of service regulation and, instead, argued that EOBRs should be required only for the "worst offenders." These "worst offenders" are those motor carriers who are detected in Compliance Reviews (CRs) as having at least 10 percent of their drivers found to have violated hours of service and then, within another two years, at least 10 percent are found again in a subsequent CR to have violated the regulation. Only then would the agency impose a requirement to install and use EOBRs to record driving time. The agency's estimates of how many motor carriers would be compelled to install and use EOBRs for a minimum of two years amount to less than one-tenth of one percent of registered motor carriers.

The remainder of the proposed rule provided a *laissez faire* approach to the crucial issues of the accuracy and security of EOBRs. Despite the agency's own current regulation for Automatic On-Board Recording Devices, its contracted research recommendations, and the publicly available views of agency staff for the need to integrate EOBRs with operating functions of the vehicle, FMCSA would allow EOBRs that are not integrated with engine functions such as the vehicle electronic control module that monitors and records transmission use, vehicle distance, and speed. This proposal in many respects is even weaker than the agency's current regulations for Automated On-Board Recording Devices in 49 CFR § 395.15 that requires integral synchronization and recordation of engine use, road speed, miles driven, date, and time of day. Using location-only tracking systems prevents the mutual corroboration of vehicle-based electronic control module data with driving hours represented by GPS systems,

EOBR, a supposed "on-board" device, is a misnomer for some of these devices. The agency proposed the use of hand-held cellular telephones that can be transferred from driver to driver, and vehicle to vehicle, even though major motor carriers like Schneider National oppose handheld GPS devices serving as EOBRs. But even this is not the end of the security and accuracy defects of the proposal: FMCSA will not set certification requirements for EOBRs, will not certify manufacturers, will perform no oversight of EOBR operation and accuracy, and will not certify repair and recalibration facilities. Moreover, it will not require any specific security requirements to ensure that only the authorized driver actually operates the commercial motor vehicle in connection with an EOBR. FMCSA only proposes that some kind of security control be used. Combined with the use of portable, hand-held devices, this *laissez faire* approach to crucial issues of veracity and security will generate fraud and abuse, and facilitate the illicit use of many kinds of hazmat.

It would be difficult to construct a more irresponsible approach to use of a technology that can help to control hours of service violations, reduce fatigue, and help improve driver health. Yet, FMCSA stated its concern in the proposed rule that EOBRs might have a deleterious effect on driver health by causing undue stress!

Highway and truck safety organizations, enforcement authorities, and even some major motor carriers, such as J.B. Hunt, have called for the universal, mandatory installation of EOBRs to stop these flagrant, growing abuses of hours of service that can only increase the dangers of big truck operations on our nation's highways. The Canadian Trucking Alliance called for mandatory use of EOBRs on November 26, 2004. Furthermore, all European Union (EU) countries require tamper-proof electronic tachographs, and, according to major EOBR manufacturers, other countries in addition to those in the EU require recording devices, including Morocco, Argentina, Brazil, Peru, Uruguay, Venezuela, Israel, Turkey, Japan, South Korea, and Singapore. Australia, a country that has suffered many casualties from an extraordinarily high level of commercial driver fatigue-triggered crashes, is considering electronic tachographs for recording driving hours.

The National Transportation Safety Board (NTSB) has also recommended for years that motor vehicles be equipped with EDRs in order to provide the same indispensable information that has been gathered for years through the use of flight recorders in commercial aviation. *See*, for example, NTSB Safety Recommendation H-04-26 issued Aug. 30, 2004, and the commercial motor vehicle findings and recommendations of the NTSB's Transportation Event Recorders Symposium, June 4-5, 2003. NTSB also has listed the need for EOBRs on all interstate commercial motor vehicles in its current 2008 Most Wanted list of transportation safety improvements and called on FMCA to mandate them. As already indicated earlier, NTSB currently regards

FMCSA's action on its EOBR recommendation to be Code Red – Unsatisfactory Response.

In the current safety and security environment, requiring EOBRs and EDRs to be used by hazmat motor carriers is simply prudent national public policy to forestall the use of a wide variety of hazmat to mount threats against the U.S. people and its institutions. Yet, no motor carriers of any kind in the U.S. are required to install and record tracking and hours of service data to ensure the real-time whereabouts and commercial driver compliance with hours of service requirements, including driving time limits per shift and over a tour of duty, total working hours, and minimum off-duty rest time.

Advocates strongly recommends that Congress consider legislation mandating EOBRs and EDRs for, at a minimum, all hazmat motor carriers in both intrastate and interstate commerce.

#### **IV. Conclusion.**

Advocates' testimony portrays a weak, incomplete, and inconsistent federal response to the safety and security of hazmat transported in both interstate and intrastate commerce. Our testimony addresses selected major areas of hazmat safety and security policy, but even this evaluation clearly shows that there is a disconnect between the real need for substantially elevated safety and security controls over hazmat in a post-9/11 era and the startling "business as usual" regulatory choices made over the last several years. Those choices made by PHMSA and FMCSA contradict other, more stringent safety and security countermeasures adopted in other transportation sectors, for example, in commercial aviation. Hazmat transportation by motor vehicle has not been subjected to a comprehensive, detailed and rigorous upgrade of policies and practices. In almost all cases, it appears that the rationale for the weak responses to the need to tighten highway transportation of hazmat is based on avoiding burdens to industry. But in each case, there is really no evaluation of what the real implications are of a continuing lax regulatory approach to highway hazmat transportation, particularly an assessment that has predictive value in judging how all our surface transportation policies jointly administered by two modal agencies, FMCSA and PHMSA, help or harm our national security posture and our day-to-day safety needs to ensure that hazmat handling, storage, transportation, and tracking of hazmat loads, the vehicles, and their drivers are as safe as possible.

#### **Congress Should Consider the Following Recommendations:**

► Mandate EOBRs and EDRs on all hazmat motor carriers. At a minimum, the mandate should cover all § 5109 special permit hazmat transportation and hazmat transportation requiring security plans.

- ▶ Require untethered trailer tracking technologies that will provide real-time information on the location and status of sensitive hazmat on board a trailer.
- ▶ Require specific training and security plan criteria to be applied by PHMSA for motor carriers, and that those plans be approved, stored, and periodically audited for adequacy by PHMSA.
- ▶ Require PHMSA and FMCSA to expand the types of materials subject to the hazmat regulations for security plans and § 5109 special permits. This includes PHMSA and FMCSA expanding the list of materials and quantities considered hazardous by the BATF that should be subject to the Federal Motor Carrier Safety Regulations and the HMR for placarding, training, security plans, special permits, and other governing requirements.
- ▶ Direct PHMSA and FMCSA to lower the quantities of *all* types of hazmat currently permitted to be transported without placarding.
- ▶ Direct FMCSA and PHMSA to conform intrastate transportation of hazmat to the laws and regulations governing hazmat transportation, including special permit hazmat, that cover both FMCSA's and PHMSA's legal responsibilities for the safe transportation of hazmat.
- ▶ Require appropriately adapted CVSA Level Six pre-trip inspections of all motor vehicles transporting special permit and security plan-related hazmat both in intrastate and interstate commerce.

These actions are the bare minimum to ensure that the people and institutions of the U.S. are adequately protected against both poor safety policies and practices in the motor carrier industry as well as increasing the quality of safety management of hazmat transportation to lower the chances that unscrupulous individuals and organizations will not use dangerous, lethal materials to endanger our population.

Advocates deeply appreciates this invitation to testify, and we are ready to respond to any question you may have and provide any additional information.