U.S. House of Representatives
Committee on Transportation and Infrastructure
Washington, DC 20515

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May 12, 2009

SUMMARY OF SUBJECT MATTER

TO: Members of the Subcommittee on Railroads, Pipelines, and Hazardous Materials

FROM: Subcommittee on Railroads, Pipelines, and Hazardous Materials Staff

SUBJECT: Hearing on "Reauthorization of the Department of Transportation's Hazardous Materials Safety Program"

PURPOSE OF HEARING

The Subcommittee on Railroads, Pipelines, and Hazardous Materials will meet on Thursday, May 14, 2009, at 2:00 p.m., in room 2167 of the Rayburn House Office Building to receive testimony on reauthorization of the Department of Transportation's (DOT) hazardous materials safety program. The program was last reauthorized in the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) (P.L. 109-59); it expired on September 30, 2008. The purpose of the hearing is to review implementation of the SAFETEA-LU amendments and prepare for reauthorization of the program.

BACKGROUND

As one of 10 agencies within the DOT, the Pipeline and Hazardous Materials Safety Administration (PHMSA) is responsible for developing and enforcing regulations to ensure the safe movement of nearly 1.2 million daily shipments of hazardous materials by all modes of transportation.

Over the last decade, there have been 170,446 incidents involving the transportation of hazardous materials, resulting in 134 fatalities, 2,783 injuries, and more than $631 million in property damage. The incidents primarily occurred during unloading (99,964 incidents), while the package is in transit (30,007 incidents), or while loading (27,685 incidents). Other incidents occurred while the package was in storage (10,872 incidents) or were unreported. The top five causes of the incidents

were human error, improper preparation of the package for transportation, forklift operations, improper blocking and bracing, and package dropped.

Aviation incidents involving the transportation of hazardous materials dropped from 1,582 incidents in 1999 to a decade-low of 732 incidents in 2002, but more than tripled in number from 2002 to 2006, when the number of aviation incidents involving hazardous materials totaled 2,411. They began decreasing again in 2007 to 1,554 and again in 2008 to 1,272, resulting in no fatalities and seven injuries.

Highway incidents involving hazardous materials decreased from 15,804 incidents in 2001 to 13,461 in 2005 and then increased to 14,669 incidents in 2008, resulting in five fatalities and 109 injuries. Rail incidents have steadily decreased from a high of 1,058 incidents in 2000 to 730 incidents in 2008, resulting in no fatalities and 14 injuries. Water incidents have increased dramatically over the last decade from a low of six in 2001 to a high of 98 in 2008, resulting in no fatalities or injuries. See Attachment A.

PHMSA's regulations are applicable to any person who transports, ships, or causes to be transported or shipped, hazardous material, or who is involved with the manufacture or testing of hazardous materials packaging or containers. However, under current law, such entities may submit applications to the Secretary for exemptions from the hazardous materials regulations, known as special permits or approvals. Depending on the permit request, the exemption is for four or more years. According to the DOT Inspector General, PHMSA has issued more than 4,500 special permits and 125,000 approvals since the inception of the program. Concerns have been raised about the ability of PHMSA to oversee and enforce the terms of special permits and approvals, given that PHMSA has 35 inspectors responsible for more than 300,000 entities. Concerns have also been raised about whether PHMSA is coordinating with the operating administrations before issuing special permits or approvals, in particular the Federal Aviation Administration (FAA). As such, the DOT Inspector General, acting on its own initiative, is conducting an audit of PHMSA to assess the effectiveness of PHMSA's policies and processes for reviewing and coordinating with the affected operating administration before authorizing a special permit or approval. The Inspector General is also assessing PHMSA's and other operating administrations' oversight and enforcement of approved parties' compliance with the terms and conditions of special permits and approvals. The audit is not yet complete, but the DOT Inspector General did bring to our attention their concern that PHMSA was issuing special permits to entire trade associations; meaning, the association would obtain the special permit and all of their members would be exempted from certain hazardous materials regulations. Twelve trade associations have been approved for special permits.

Any person who offers for transportation or transports certain hazardous materials in intrastate, interstate, or foreign commerce must register with the DOT. The DOT is required to collect an annual fee with the registration, which ranges from $250 to $3,000 (the maximum fee was reduced from $5,000 to $3,000 in SAFETEA-LU). The fees fund the Hazardous Materials Emergency Preparedness (HMEP) grant program which helps States, local governments, and tribal governments to develop, improve, and implement emergency plans; train public sector hazardous materials emergency response employees to respond to accidents and incidents involving hazardous materials; determine flow patterns of hazardous materials through communities; and determine the need within a state for regional hazardous materials emergency response teams. On November 4, 2008, the Director of the Office of Hazardous Materials Planning and Analysis wrote a memo to the

DOT Inspector General requesting an audit of the HMEP program, citing concerns about the management and oversight of the program. The DOT Inspector General's office referred the issue back to PHMSA for handling. PHMSA is currently engaged in a comprehensive review of the program to ensure that it is effectively meeting emergency response planning and training needs and to identify ways to increase its effectiveness.

PHMSA estimates that the program provides more than two million emergency responders with initial training or periodic recertification training, including 250 paid firefighters, 850,000 volunteer firefighters, 725,000 law enforcement officers, and 500,000 emergency medical service providers.

Chairman Oberstar and Chairwoman Brown have raised concerns about whether these responders will be able to receive training beyond 2009 because of a lack of funding in the HMEP program account. In SAFETEA-LU, Congress doubled funding for the HMEP program from $14.3 million to $28.8 million. It was the understanding of Congress at the time that PHMSA would increase the registration fees to finance the higher authorizations if necessary. This did not occur and, as a result, the current amounts of the registration fees are not sufficient to cover the authorized levels beyond this fiscal year. On February 13, 2009, Chairman Oberstar and Chairwoman Brown sent a letter to Secretary LaHood, urging him to increase fees to fund the program at the authorized levels.

Secretary LaHood responded to the letter on May 5, 2009, stating: "We acknowledge that the current amounts of the registration fees are not sufficient to cover the authorized levels beyond this fiscal year. In order to address this issue, PHMSA will evaluate future funding needs and fee structures."

There are five levels of hazardous materials training, prescribed by the Occupational Safety and Health Administration (OSHA) and recommended by the National Fire Protection Association (NFPA): First Responder Awareness Level; First Responder Operations Level; Hazardous Materials Technician; Hazardous Materials Specialist; and On-Scene Incident Commander. First responders at the Awareness Level are individuals who are likely to witness or discover a hazardous substance release and initiate an emergency response sequence by notifying the proper authorities of the release. They are trained to take no further action beyond notifying authorities of the release. Most transportation workers are trained at the Awareness Level. Organizations representing fire fighters, however, recommend that responders who may be called to the scene of an accident receive more advanced training. They recommend, at a minimum, Operations Level training.

First responders at the Operations Level are individuals who respond to releases or potential releases of hazardous substances as part of the initial response to the site for the purpose of protecting nearby persons, property, or the environment from the effects of the release. They are trained to respond in a defensive fashion without actually trying to stop the release. Their function is to contain the release from a safe distance, keep it from spreading, and prevent exposures. First responders at the Operations Level must receive at least eight hours of training or have had sufficient experience to objectively demonstrate competency in the following areas: (A) Knowledge of the basic hazard and risk assessment techniques; (B) Knowledge of how to select and use proper personal protective equipment provided to the First Responder Operational Level; (C) An understanding of basic hazardous materials terms; (D) Knowledge of how to perform basic control, containment and/or confinement operations within the capabilities of the resources and personal

protective equipment available with their unit; (E) Knowledge of how to implement basic decontamination procedures; and (F) An understanding of the relevant standard operating procedures and termination procedures.

Currently, the law does not require the States, local governments, and Indian tribes that receive HMEP grants to train fire fighters at a specific level. As a result, most fire fighters only receive Awareness Level training. Organizations representing fire fighters have raised concerns about the adequacy of training provided to emergency responders through HMEP grants. According to the U.S. Fire Administration and the NFPA, which develops national fire fighter training standards, 36 percent of fire departments involved in hazardous materials response have not provided formal training in those duties to all involved personnel.[1] Further, more than four out of five fire departments do not have all their personnel involved in hazardous materials response certified to the Operations Level, and almost no departments have all those personnel certified to the Technician Level.

Organizations representing fire fighters have recommended that States, local governments, and Indian tribes that receive HMEP grants be required to train emergency responders at the Operations Level, at a minimum. A similar requirement exists for States that receive pipeline safety emergency response training grants, which was inserted into the law in the 106th Congress, the last pipeline safety reauthorization bill.

In addition to fire fighter training, hazardous materials regulations require all hazmat employers to provide training to their hazmat employees on the safe loading, unloading, handling, storage, and transportation of hazardous material and emergency preparedness in the event of an accident or incident. SAFETEA-LU strengthened hazmat training requirements by clarifying who was considered to be a hazmat employee and hazmat employer; requiring that maintenance-of-way employees and railroad signalmen be provided with general awareness and familiarization training; and increasing funding for train-the-trainer programs. The National Labor College provides one such program on behalf of the railroad unions for training rail workers, called the Rail Workers Hazardous Materials Training Program. The program meets DOT and OSHA training standards and provides workers with advanced classroom instruction, small group activities, intensive hands-on drills, and a simulated hazmat response. The training is above that required of railroads and does not replace, but rather builds upon, the training provided by hazmat employers. The program is funded, in part, through the National Institute of Environmental Health Sciences, the North American Railway Foundation, and the DOT (through registration fees).

SAFETEA-LU also addressed the issue of commercial motor carrier safety permits. With respect to Federal permits, current law requires commercial motor carriers that transport or cause to be transported in commerce certain quantities of high-hazard materials, such as radioactive material, explosives, compressed or refrigerated liquefied methane, liquefied natural gas, and poisonous-by-inhalation materials, to hold a safety permit the Secretary issues authorizing the transportation of those materials. There is no fee for the permit. In order to obtain and hold a safety permit, carriers must:

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[1] Four Years Later – A Second Needs Assessment of the U.S. Fire Service, U.S. Fire Administration, Department of Homeland Security, and the National Fire Protection Association, October 2006.

- maintain a satisfactory safety rating;
- maintain their crash rate, and their driver, vehicle, hazardous materials or out-of-service rating so they are not in the worse 30 percent of the national average as indicated in the Federal Motor Carrier Safety Administration's (FMCSA) Motor Carrier Management Information System;
- have a satisfactory security program (and associated training) in place;
- maintain registration with PHMSA;
- develop a system of communication that will enable the vehicle operator to contact the motor carrier during the course of transportation and maintain records of these communications;
- have written route plans required under current regulations for radioactive materials; and
- perform a pre-trip North American Standard Level VI inspection for radioactive materials shipments.

In the final rule implementing the Federal permitting requirements, FMCSA stated that if a State had an equivalent program to the Federal program, the FMCSA would accept the State permit and the carrier would not need to also obtain a Federal permit. To date, no State has applied to FMCSA to have their permitting programs deemed "equivalent." Some industry and safety groups have raised concerns about FMCSA's implementation of the Federal permitting program.

In addition to obtaining a Federal safety permit, 42 states require commercial motor carriers to register, obtain a safety permit, and/or submit a hazardous/radioactive waste disclosure (if applicable), for a fee, in order to transport various hazardous materials through the state. The permits and the procedures for obtaining and holding the permits differ from state-to-state, with the exception of the States of Illinois, Michigan, Minnesota, Nevada, Ohio, Oklahoma, and West Virginia. These seven states belong to the Alliance for Uniform Hazmat Transportation Procedures, which is essentially a base state system whereby each commercial motor carrier transporting hazardous materials obtain a permit in the state the carrier travels the most miles. These permits are recognized by all the other participating states. Each state charges their own fees, but the Alliance has recommended a fee structure that double apportions fees based on miles and hazardous materials activity.

At the Federal level, the FMCSA is charged with implementing the program if 26 states adopt it, but they have indicated a lower threshold of 18 to 20 might be acceptable for moving ahead with a rule. Many states, however, have been reluctant to join the program.

SAFETEA-LU required the Secretary to establish a working group to develop a program that may be acceptable to the States and to report to the Secretary recommendations for establishing uniform forms and procedures. The Secretary was then authorized to issue regulations to carry out the recommendations of the working group. In issuing the regulations, the Secretary was required to consider the state needs associated with the transition to and implementation of a uniform forms and procedures program. The Secretary never established the working group and no regulations were issued.

With respect to background checks, SAFETEA-LU required the Transportation Security Administration (TSA) to develop and implement a process for notifying hazmat employers if an applicant fails a background records check and to eliminate redundant background checks. The law also set-forth a state appeals process, and required the TSA to submit two reports to the Committee:

one on the implementation of fingerprint-based security threat assessments and the other on the TSA's plans to reduce or eliminate redundant background checks for holders of hazardous materials endorsements.

Drivers who haul hazardous materials in a commercial motor vehicle at quantities requiring vehicle placards under DOT regulations must have a hazardous materials endorsement (HME). The USA Patriot Act (P.L. 107-56), enacted in 2001, prohibits states from issuing a license to transport hazardous materials in commerce to any individual without a determination by the Secretary of Homeland Security that the individual does not pose a security risk. TSA meets this mandate by requiring drivers seeking to apply for, renew, or transfer a HME on their state-issued Commercial Driver's License (CDL) to undergo a security threat assessment. The assessment includes a fingerprint based Federal Bureau of Investigation criminal history records check, a check for ties to terrorism, and an immigration status check. The TSA background check is valid for five years. A driver applying for or renewing an HME on a CDL must submit to fingerprinting at a TSA location, and must pay an $89.25 fee if the state is using a TSA agent to conduct the background check or $86.25 if the state is not using a TSA agent. The states of Florida, Kentucky, Indiana, Massachusetts, Mississippi, New Mexico, New York, Pennsylvania, South Carolina, Tennessee, Texas, Virginia, and Wisconsin do not use a TSA agent. Typically, receipt of the results of the background check occurs within 30 days.

An individual may be disqualified from holding an HME based on being convicted of, or found not guilty by reason of insanity, a list of specific crimes, in the past seven years. An individual is entitled to appeal or seek a waiver of a TSA determination, except if the individual has committed espionage, sedition, treason, or terrorism (which is defined as a crime under 18 U.S.C. Chapter 113B or a comparable state law). These are known as "permanently disqualifying" offenses. The disqualification standards under the HME program are identical to the standards TSA applies under the Transportation Worker Identification Credential (TWIC). Industry and some labor groups have raised concerns about the number of background checks that they are subject to, because a few states and localities have started to conduct their own additional background checks of drivers.

With respect to background checks for commercial drivers registered to operate in Mexico or Canada, SAFETEA-LU required TSA to ensure that the drivers undergo a background records check similar to the background records check for U.S. drivers, but TSA failed to implement the requirement as Congress had intended. Following enactment, TSA determined that commercial drivers in Mexico and Canada would undergo checks of their criminal history in the United States, but not checks of their criminal history in Mexico or Canada. Fortunately, the Government of Canada decided to share the results of their own background records checks of commercial drivers with U.S. enforcement officials. However, a similar arrangement does not exist between the U.S. and the Government of Mexico; as a result, the U.S. grants commercial drivers from Mexico authority to transport hazardous materials in the U.S. (currently limited to commercial zones) without receiving a check of their criminal history in Mexico.

SAFETEA-LU also conferred new inspection and investigative authority on PHMSA regarding the transportation of hazardous materials. According to the Government Accountability Office (GAO), more than three billion tons of regulated hazardous materials are transported in the United States each year. Under DOT-mandated safety standards, nearly all of these shipments move through the system safely and without incident. When incidents do occur, DOT-mandated labels and other forms of hazard communication provide transportation employees and emergency

responders the information necessary to mitigate the consequences. Yet their effectiveness depends largely on compliance by hazmat offerors and carriers, beginning with proper classification and packaging of hazardous materials. When a package containing hazardous materials is placed in transportation without regard to or in violation of hazardous materials requirements, the effectiveness of all other risk controls is compromised, increasing both the likelihood of an incident and the severity of consequences. Accordingly, DOT has considered undeclared and improperly marked shipments of hazardous materials to be serious safety issues. FAA enforcement statistics, in particular, show that undeclared hazardous materials are a frequent and persistent problem. In 1993, FAA reported 420 enforcement cases involving undeclared hazardous materials shipments. Seven years later, the number of such enforcement cases rose to 1,716.

The new authority provided in SAFETEA-LU authorizes DOT inspectors to open and inspect cargo when they have "an objectively reasonable and articulable belief that the package may contain a hazardous material" and to remove from transportation packages in a shipment offered for, or in, transportation when the inspector "has an objectively reasonable and articulable believe that the package may pose an imminent hazard" and documents the belief. Prior to enactment of SAFETEA-LU, the DOT could not generally open and inspect packages without a warrant or the shipper's consent.

On October 2, 2008, PHMSA issued a Notice of Proposed Rulemaking (NPRM) to implement their new authority. In the NPRM, PHMSA makes clear that inspectors will not be permitted to open single packages, including boxes, cylinders, portable tanks, and cargo tanks. The new inspection procedures only apply to the opening of an overpack, outer packaging, freight container, or other packaging component not immediately adjacent to the hazardous material.

Industry has raised concerns about how DOT intends to reclose inspected packages, the amount of time required to conduct the inspections, citing concerns with delaying business operations, and the costs of inspections. DOT believes that many of industry's concerns were addressed in the NRPM, and has stated that it is in the process of developing inspection procedures to ensure they are adhered to in the field.

It is important to note that PHMSA currently has only 35 inspectors responsible for overseeing more than 300,000 entities. The special investigations unit, located in Washington, DC, has seven inspectors. The others are divided into five regions:

- The Eastern Region has four inspectors covering Connecticut, Delaware, District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, Virginia, and West Virginia.
- The Central Region has six inspectors covering Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin.
- The Southern Region has six inspectors covering Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, Puerto Rico, South Carolina, and Tennessee.
- The Southwest Region has seven inspectors covering Arkansas, Louisiana, New Mexico, Oklahoma, and Texas.
- The Western Region has five inspectors covering Alaska, American Samoa, Arizona, California, Colorado, Commonwealth of Northern Mariana Islands, Guam, Hawaii, Idaho, Montana, Nevada, Oregon, Utah, Washington, and Wyoming.

SAFETEA-LU strengthened enforcement of hazardous materials regulations and increased civil and criminal penalties. SAFETEA-LU also limited Federal preemption of enforcement of hazardous materials regulations.

Federal hazmat law contains strong preemption provisions requiring state, local, and Indian tribe hazmat transportation requirements to be similar to Federal requirements. The first basis for preemption – the dual compliance test – refers to when compliance with the non-Federal requirement would force noncompliance of the Federal rule. For example, if Federal law requires a red placard for a specific material, state law cannot require an orange placard. The second basis – the obstacle test – refers to when non-Federal requirements pose an obstacle to carrying out the Federal law and achieving its purpose. For example, if state law provides additional requirements for Federal shipping papers causing confusion for emergency responders, it will be considered an obstacle and preempted by Federal law because the purpose of the Federal shipping papers has been defeated. Therefore, a non-Federal entity may adopt additional or different requirements pertaining to the transportation of hazardous material provided those requirements do not preclude compliance with the Federal rule and are not an obstacle to the purpose of Federal law.

However, there is typically no Federal preemption of enforcement. SAFETEA-LU amended the law to make sure that State, local, and tribal enforcement of hazmat requirements does not have to parallel Federal enforcement standards, procedures, and penalties. Most states, for example, have lower civil and criminal penalties than Federal law. For example, Georgia has a maximum civil penalty of $15,000 (less than the Federal maximum of $50,000 or $100,000 if the violation results in death, serious illness, or severe injury to any person or substantial destruction of property) and a maximum criminal penalty of $1,000 and one-year incarceration (less than the Federal maximum of $500,000 and five years). Georgia's Public Safety Commission states that a typical violation results in a $500 fine. The situation is apparently similar in most other states. DOT has stated that state and local penalties for violating consistent state and local rules are not preempted unless they are so extreme or arbitrarily applied as to reroute our delay shipments, and that mere differences in amount do not result in preemption.

With respect to research, SAFETEA-LU required PHMSA and the Transportation Research Board of the National Academy of Sciences to conduct nine research projects related to hazardous materials safety. Six of the nine projects have been started, including (1) development of a guidebook for conducting hazardous materials commodity flow surveys to support local risk assessment, emergency response preparedness, and resource allocation (to be completed in September 2009); (2) development of a set of recommendations for methods to improve the availability and quality of hazardous materials transportation incident data, identify gaps and redundancies in reporting requirements, and provide an estimate of under-reporting (to be completed in June 2009); (3) development of a guide for assessing emergency response needs and capabilities for hazardous materials releases (to be completed in September 2009); (4) identification and analysis of emerging safety technologies applicable to hazardous materials transportation safety and security (to be completed in March 2009); (5) development of a roadmap for the use of electronic shipping papers as an alternative to the current paper-based system (to be completed in January 2010); and (6) development of a tool to assess soil and groundwater impacts of chemical mixture releases from hazardous materials transportation incidents (to be completed in April 2010).

Three more projects are just getting started: (1) the performance of bulk containers involved in a transportation accident; (2) the feasibility of a single transportation worker identification credential and license; and (3) dry ice limits on aircraft (dry ice is defined as a hazardous material). PHMSA currently has no other research and development program.

Other issues which may be discussed at the hearing include the safety of transporting lithium batteries by air; coordination between PHMSA and the modal administrations; DOT preemption of OSHA standards protecting the occupational safety and health of hazmat employees that load, unload, and handle hazardous materials; and the safety of loading lines on trucks that transport fuel and other flammable materials.

WITNESSES

Mr. LaMont Byrd
Director of Safety and Health
International Brotherhood of Teamsters

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

Ms. Cynthia Douglass
Acting Deputy Administrator
Pipeline and Hazardous Materials Safety Administration
U.S. Department of Transportation

Ms. Elizabeth Harman
Director of Hazardous Materials
International Association of Fire Fighters

Ms. Deborah Hersman
Board Member
National Transportation Safety Board

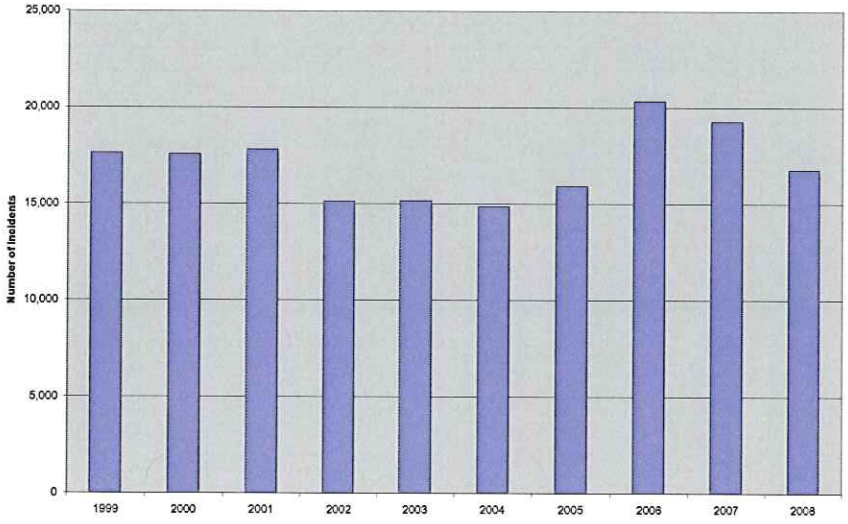
Ms. Cynthia Hilton
Executive Vice President, Institute of Makers of Explosives and
Co-Facilitator, Interested Parties for Hazardous Materials Transportation

Chief Jeffrey D. Johnson
First Vice President, International Association of Fire Chiefs, and
Chief, Tualatin Valley Fire and Rescue (Aloha, OR)

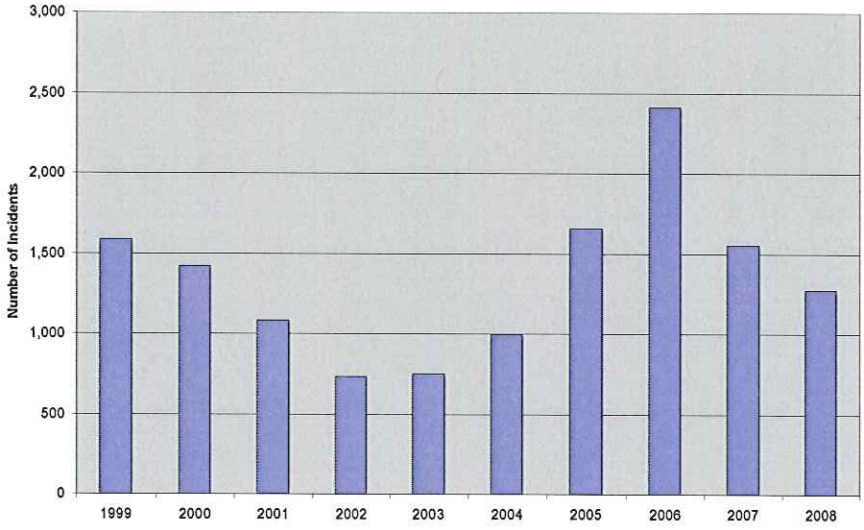
Mr. Robert Petrancosta
Vice President - Safety
Con-way Freight
On behalf of the American Trucking Association, Inc.

Mr. Mark Rogers
Director, Dangerous Goods Program
Air Line Pilots Association, International

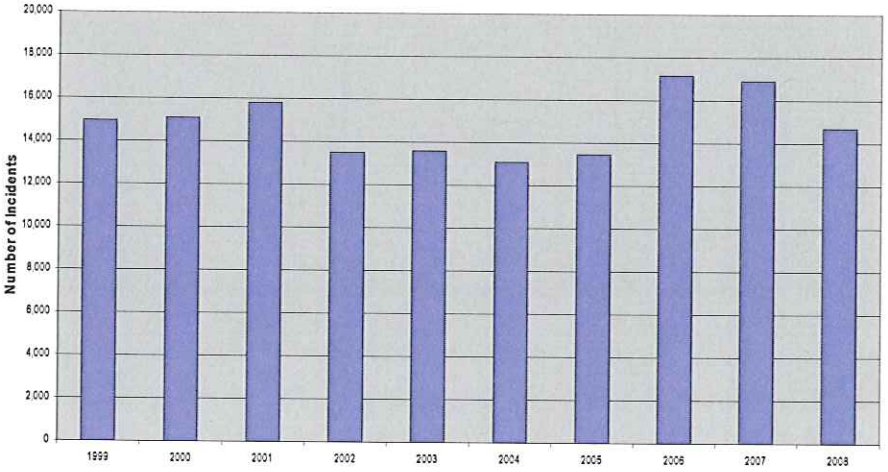
Total Number of Hazmat Incidents 1999-2008



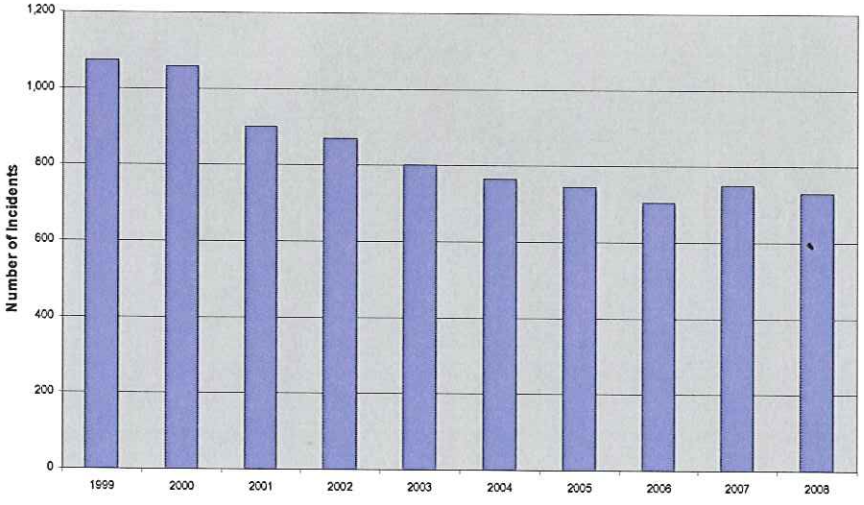
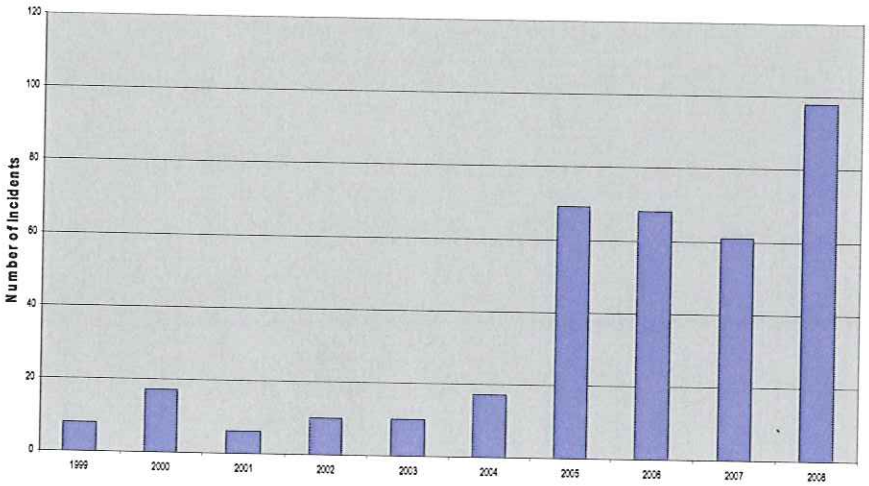
Air Hazmat Incidents 1999-2008



Highway Hazardous Materials Incidents 1999-2008



Rail Hazardous Materials Incidents 1999-2008



Water Hazardous Materials Incidents 1999-2008