REAUTHORIZATION OF THE DEPARTMENT OF TRANSPORTATION’S HAZARDOUS MATERIALS SAFETY PROGRAM

(111–76)

HEARING BEFORE THE SUBCOMMITTEE ON RAILROADS, PIPELINES, AND HAZARDOUS MATERIALS OF THE COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE HOUSE OF REPRESENTATIVES ONE HUNDRED ELEVENTH CONGRESS FIRST SESSION

November 16, 2009

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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 is scheduled to meet on Monday, November 16, 2009, at 1:00 p.m., at Drache Hall, the University of Maryland (Baltimore), 222 W. Lombard Street, Baltimore, Maryland, to receive testimony on the reauthorization of the Department of Transportation’s (DOT) hazardous materials safety program. The hearing will focus on issues in H.R. 4016, the “Hazardous Materials Transportation Safety Act of 2009” and, in particular, the sections dealing with wet lines and lithium batteries.

BACKGROUND

The authorization for DOT’s hazardous material safety program expired on September 30, 2008. The Pipeline and Hazardous Materials Safety Administration (PHMSA) is one of 10 agencies within the DOT, and is responsible for protecting the American public and the environment by ensuring the safe movement of hazardous material by all modes of transportation. PHMSA regulates 1.2 million daily shipments of hazardous material across the United States.

On May 14, 2009, the Subcommittee on Railroads, Pipelines, and Hazardous Materials held a hearing on “Reauthorization of the Department of Transportation’s Hazardous Materials Safety Program”. The purpose of the hearing was to review the current program and discuss issues for reauthorization of the program. The hearing included discussions on wet lines, lithium batteries, and other issues involving the transportation of hazardous material.

On September 10, 2009, the Committee on Transportation and Infrastructure held a hearing on "Concerns with Hazardous Materials Safety in the U.S. Is PHMSA Performing its Mission?" The hearing highlighted concerns with PHMSA's oversight and management of hazardous materials safety in the United States.

On November 4, 2009, Chairman James L. Oberstar introduced H.R. 4016, the "Hazardous Material Transportation Safety Act of 2009." The section on wet lines in the introduced bill is identical to that section in the Committee print approved by the Subcommittee on Highways and Transit in June. The section on lithium batteries in the introduced bill is substantially similar to the section in the bill approved by the Subcommittee in June.

I. Summary of H.R. 4016

Sec. 101. Minimum Standards for Emergency Response Information Services. This section requires the Secretary of Transportation (Secretary), within 24 months of the date of enactment, to prescribe minimum standards for persons who provide hazardous material transportation emergency response information services. Carriers and shippers often list third parties on their shipping papers as persons to contact in cases of emergency. PHMSA has found that some third parties do not staff their telephone around the clock, which jeopardizes emergency response. PHMSA is currently planning to develop standards that these third parties would be required to meet to provide such services.

Sec. 102. Training for Emergency Responders. This section enhances training for emergency responders. PHMSA estimates that the Hazardous Materials Emergency Preparedness (HMEP) grant 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. Grants are provided to States and Indian tribes to conduct such training. However, currently the law does not require the States 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.

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.

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 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.

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. 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.

This bill requires States and Indian tribes that use grants for training emergency responders to train those responders at an operations level, at a minimum. A similar requirement exists for States that receive pipeline safety emergency response training grants, which was included in the Pipeline, Inspection, Protection, Enforcement, and Safety Act of 2006 (P.L. 109-468).

Sec. 103. Assessment of Volunteer Firefighter Training Capabilities. This section authorizes the Secretary to conduct an assessment of current volunteer fire service hazmat response capabilities. Upon completion of the assessment, the Secretary may carry out a volunteer fire fighter hazardous material training pilot program to develop new training methods and curricula. The Secretary shall submit a report on the results of the assessment and pilot program to the Committee on Transportation and Infrastructure of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate.

Sec. 104. National Hazardous Materials Fusion Center. This section requires the Secretary to establish a national hazardous materials fusion center to serve as a data and information network for emergency response providers, government, and other emergency responders. The center will enhance emergency response provider communication and safety relating to hazmat transport,

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improve decision making for prevention and mitigation of hazmat incidents, and find ways
to improve on current incident prevention and response.

Sec. 105. Paperless Hazard Communications Pilot Program. This section authorizes the
Secretary to conduct three pilot projects to evaluate the feasibility and effectiveness of using
paperless hazard communications systems. Firefighters, law enforcement, emergency responders,
hazmat producers, hazmat transporters, and employees of hazmat transporters must be consulted in
the development of the pilot projects.

If the pilot projects are conducted, the Secretary shall submit a report to the Committee
on Transportation and Infrastructure of the House of Representatives and the Committee on
Commerce, Science, and Transportation of the Senate that evaluates each pilot project and the
impacts of paperless hazardous communications systems on safety. The report must include a
recommendation on whether these systems should be incorporated into the Federal hazardous
material transportation safety program.

Title II – Strengthening Hazardous Material Safety

Sec. 201. Transportation of Lithium Cells and Batteries. This section requires the Administrator
of PHMSA, in coordination with the Administrator of the Federal Aviation Administration (FAA),
to issue regulations for the safe transportation of lithium cells and batteries on board aircraft. The
regulations, at a minimum, must: (1) require proper identification of lithium cells and batteries as
hazardous material on packages and in shipping documents; (2) establish requirements for testing
and retesting lithium cells and batteries that are, at a minimum, equivalent to the United Nations
testing regime; (3) provide for an appropriate marking that indicates compliance with testing
requirements; (4) adopt a watt-hours requirement for easily understandable hazard levels; (5)
establish appropriate packaging performance requirements for lithium cells and batteries; (6)
establish limits on the number of packages that may be transported in a unit load device, pallet, or
other container based on watt-hour ratings; (7) limit the stowage of lithium cells and batteries to
crew-accessible locations, unless the batteries or cells are transported in a fire-resistant container or
the aircraft is equipped with appropriate fire-suppression systems; and (8) require reporting of all
accidents and incidents involving lithium cells and batteries. The section provides exceptions for
small quantities of batteries that are shipped on board aircraft for the personal use of the receiver of
the shipment, and maintains the exceptions in current regulations for passengers, crewmembers, and
air operators.

The section also requires PHMSA, in coordination with FAA, to:

- review all special permits and approvals that allow grantees to deviate from current
  lithium battery requirements to determine if such exemptions, special permits, and
  approvals should be modified to reflect the new regulations.

- establish safety measures for the transport (other than on board aircraft) of lithium cells
  or batteries identified as being defective for safety reasons or damaged and prohibits the
  transport of such defective or damaged items on board aircraft. This section also creates
  a mechanism in the case of product recalls, to notify manufacturers and consumers that
  the product is prohibited from being transported in air transportation.
Section 202. Requirements Relating to External Product Piping on Cargo Tanks: Transporting Hazardous Material. This section prohibits the transportation of Class 3 flammable liquid in the external product piping of all cargo tank motor vehicles manufactured two years after the date of enactment. All existing vehicles are prohibited from transporting Class 3 flammable liquid in the external product piping of cargo tank motor vehicles on or after December 31, 2020.

Section 203. Improving Data Collection, Analysis, and Reporting. This section requires PHMSA to establish a working group consisting of representatives from each of the modes and the Coast Guard for the purpose of improving the collection, analysis, reporting, and use of data related to accidents and incidents involving the transportation of hazardous material. Following its review, the working group must make recommendations to the Administrator which will be used to develop an action plan and timeline for improving PHMSA's collection, analysis, reporting, and use of data. The action plan and timeline must be submitted to the Committee on Transportation and Infrastructure of the House and the Committee on Commerce, Science, and Transportation of the Senate.

Title III - Strengthening Enforcement

Section 301. Hazardous Material Enforcement Training Program. This section requires the Secretary of Transportation to carry out a hazardous material enforcement training program to: (1) develop uniform performance standards for training hazardous material inspectors and investigators; (2) train hazardous material inspectors and investigators on how to collect, analyze, and publish findings from inspections and investigations of accidents or incidents involving the transportation of hazardous material; and (3) train hazardous material inspectors and investigators on how to identify noncompliance with hazardous material regulations and take appropriate enforcement action.

Section 302. Inspections and Investigations. The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (P.L. 109-59 (SAFETEA-LU)) provided PHMSA with enhanced inspection and investigation authority. This section requires that the Secretary provide affected offerors, carriers, packaging manufacturer or tester, or other person responsible for the package reasonable notice of any findings made during an inspection or investigation and actions being taken as a result of a finding of noncompliance. The section also requires the Secretary in issuing its implementing regulations to address: safe and expedient resumption of transportation of perishable hazardous material, including radiopharmaceuticals and other medical products; appropriate training and equipment for inspectors; and the proper closure of packaging.

The section also provides new authority to the Secretary for investigating accidents and incidents. A savings clause is included to ensure the NTSB retains authority to lead investigations into accidents or incidents involving hazardous materials.
Sec. 303. Civil Penalties for Denial of Entry. This section permits the Secretary to impose penalties on a person who obstructs or prevents hazmat inspections and investigations conducted by the Secretary. The section also prohibits a person subject to the hazardous materials regulations for whom a civil penalty relating to hazardous materials transportation is assessed and who does not pay such penalty or fails to arrange and abide by an acceptable payment plan for such civil penalty to conduct any hazardous materials transportation activities beginning on the 91st day after the date specified by order of the Secretary for payment of such penalty. This prohibition currently exists in the law for commercial motor vehicle operators. See 49 U.S. Code 521.

Sec. 304. Additional Resources. This section directs the Secretary to increase the personnel of PHMSA by a total of 84 full-time employees to carry-out the hazardous materials safety program, 30 of which must be inspectors. PHMSA currently has a total of 42 inspectors for five regions.

Title IV – Miscellaneous

Sec. 402. Special Permits, Approvals, and Exclusions. This section maintains current law authorizing the Secretary to issue special permits and approvals but requires the Secretary prior to issuance of a special permit or approval to determine that the person is fit, willing, and able to conduct the authorized activity. In making the determination, the Secretary must consider the person’s safety history (including prior compliance history), accident and incident history, and any other information the Secretary considers appropriate to make such a determination. The safety fitness review, including the safety history and compliance review, are required in the current hazardous materials regulations. This section requires coordination between PHMSA and the modal agencies, including the Coast Guard. If the Secretary finds that the person has violated the special permit or approval or the regulations issued under chapter 51 in a manner demonstrating that the person is not fit to conduct the activity authorized by the special permit or approval, the Secretary must immediately modify, suspend, or terminate such special permit or approval. In addition, the section provides for emergency processing of special permits under certain circumstances and authorizes the Secretary to establish a reasonable fee for covering the cost of processing applications for special permits and approvals.

Sec. 403. Uniform Hazardous Material State Registration and Permit Program. This section directs the Secretary to carry out a program to develop uniform forms and procedures for States to register, and issue permits to persons who transport, or cause to be transported, hazardous material by motor vehicle. The Secretary should consider the “Alliance for Uniform Hazmat Transportation Procedures” when developing the program. One million is authorized from the motor carrier safety administrative account to assist States in transitioning to the program.

Sec. 404. Regular Reporting on Use of Fees. This section requires States, political subdivisions, and Indian tribes that levy fees in connection with the transportation of hazardous materials to report biennially to the Secretary on (1) the basis on which the fee is levied; (2) the purpose for which the revenues from the fee are used; (3) the annual total amount of the revenues collected from the fee; and (4) such other matters as the Secretary requests.

Sec. 405. Implementation of the Hazardous Material Safety Permit Program. This section requires the Government Accountability Office to conduct a study on the implementation of the hazardous material safety permit program under section 5109 of title 49, United States Code.
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Sec. 406. Authorization of Appropriations. This section authorizes appropriations for PHMSA to carry out its hazardous materials safety program. It maintains the HMEP grant program at the current level of $21.8 million but allows the Secretary to use more of that funding for training.

Witnesses

Mr. Ron Andenmatten
Owner
Cargo Tank Concepts, Ltd

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

Mr. John F. Cannon
Vice President – Sales & Marketing
Walker Group Holdings

Mr. Bob Chipkevich
Director, Office of Railroad, Pipeline and Hazardous Materials Investigations
National Transportation Safety Board

Mr. Jim Casey
Vice President, Industry Services and Deputy General Counsel
Air Transport Association of America, Inc.

The Honorable John Porcari
Deputy Secretary
U.S. Department of Transportation

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

Ms. Barbara Windsor
Hahn Transportation (New Market, Maryland)
On behalf of American Trucking Association
REAUTHORIZATION OF THE DEPARTMENT OF TRANSPORTATION’S HAZARDOUS MATERIALS SAFETY PROGRAM

Monday, November 16, 2009

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON RAILROADS, PIPELINES, AND HAZARDOUS MATERIALS,
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE,
Washington, DC.

The Subcommittee met, pursuant to call, at 1:05 p.m., at the William Donald Schaefer Tower, 6 St. Paul Street, 16th Floor, Baltimore, Maryland, Hon. Corrine Brown [Chairwoman of the Subcommittee] presiding.

Ms. BROWN OF FLORIDA. Good afternoon. The Subcommittee on Railroads, Pipelines, and Hazardous Materials will come to order.

The Subcommittee is meeting today to hear testimony on the re-authorization of the Department of Transportation’s hazardous materials safety program.

Earlier today, we had an opportunity to visit a cargo sustaining repair station and see a trailer with plunging equipment; and I think it helped us understand what is involved with retrofitting these vehicles and what safety advantages it provides. I don’t believe anyone on our Committee wants to compromise the safety of the traveling public or American workers, but we need to implement this legislation in a common sense manner that doesn’t harm the same businesses that we relied on to improve the current economic climate.

H.R. 4016, the Hazardous Materials Safety Act of 2009, included important safety provisions that enhanced training for emergency responders and hazardous material inspectors, stressed enforcement of hazardous materials regulations, and improved the performance of the Pipeline and the Hazardous Materials Safety Administration.

However, I feel we need an additional look at issues in H.R. 4016 going into next week’s mark-up, so I decided to hold this field hearing to enable Members of Congress to hear from all sides of the issues, including wetlines and lithium battery safety.

Like many Members I spoke to, I do have some concerns with the changes affecting wetlines and impact on the trucking industry. Currently, there is only one manufacturer in the United States that has a system to make cargo trucks—tanker trucks comply with the new law we are creating.
I know that there are patents pending on similar technology, but I believe we need to ensure that the equipment is available and that there is a robust industry that will spur innovation and competition. Manufacturers and repair shops must be given time to perfect their product and procedures which, in turn, will bring down the cost during these tough economic times.

Similarly, as more and more lithium batteries are transported in the United States, we must ensure that there are adequate protections in place to ensure safety. But some have raised concerns about provisions in the bill related to lithium batteries, and I am sure today's witnesses will be able to answer any questions that we may have.

With that, I want to welcome today's panelists and thank them for joining us. I am looking forward to their testimony.

Before I yield to Mr. Shuster, I ask unanimous consent that Members be given 14 days to revise and extend their remarks and to permit the submission of additional statements and material by Members and witnesses. Without objection, so ordered.

I ask unanimous consent for other Members who are not on the Subcommittee to participate in today's hearing and ask questions of the witnesses. Without objection, so ordered.

I yield to Mr. Shuster for an opening statement.

Mr. SHUSTER. I thank the chairwoman and thank you for holding this hearing.

As you mentioned, we have already visited a facility today that I think gave us a lot of good information on at least the wetlines issue that we are facing. So I appreciate you holding the hearing.

I have several serious concerns about the HAZMAT bill that we plan to mark up this Thursday; and I have said before we need to strike a balance in HAZMAT transportation, making sure that the appropriate safeguards are in place while at the same time careful not to unnecessarily burden the workhorse industries of our economy with restrictions and red tape. In certain areas, I am afraid this bill does not do a good job in striking that balance.

It is absolutely essential to our way of life that we are able to safely and quickly deliver a wide range of potentially dangerous material without unnecessary bureaucratic interference. Hazardous materials include everyday consumer items we rely on, heating oil, as well as items that are critical to our health such as medical devices and the chemicals that make our drinking water safe.

HAZMAT carriers have a remarkably safe record. The percentage of hazardous good movements resulting in an injury or fatality is an astonishing endorsement of the safety of that industry. Only.00002 percent of movement results in an injury and about.000014 percent—I don't even know what that number is, actually—of movements result in a fatality, unbelievably low percentages.

Of course, anytime there is a loss of life we need to be concerned about that and try to find ways to stop it. But it is very, very difficult to get zero percentage when you are moving items around the country. It is very difficult. In fact, when you want to compare it to something, there are four times as many deaths caused by lightning strikes annually than hazardous materials transportation ac-
cidents. So this is a remarkably safe industry, considering the huge volume of goods that flow through the system.

We need to make careful choices about where we can best use our resources to minimize these small risks while maintaining an effectively functioning system. If we regulate too much, we risk knotting the system in so much red tape it will cease to be effective for its users and could damage the economy.

I have grave concerns that we are doing exactly that in this bill. Creating new regulations could have serious and sometimes unintended consequences on the movement of goods and commerce as well as on safety.

This bill requires the rule making regulating shipments of lithium batteries and air cargo, despite the fact that PHMSA is about to issue a new rule on this very issue in the next few weeks. Lithium batteries are everywhere in our society—cell phones, Black-Berries, watches, medical devices, laptops, to name a few.

One of the problems with this section is that we mandate the shipments of these batteries be placed in crew-accessible locations or in fire-resistant containers if there are no fire-suppressing equipment systems on the plane. The problem is that on many flights it would be impossible to place all the batteries in a crew-accessible location, and fire-resistant containers have not been developed. This means that air cargo and airlines would have to invest an unknown amount in fire-suppression systems that would not necessarily work to extinguish all lithium battery fires. If the airlines choose not to purchase these systems, it seems likely that many lithium battery shipments will be forced on to other modes, which would have untold consequences on our commerce and our economy. As much as I like the railroads, in many cases air cargo is the most efficient method to move these high-value goods.

There are other issues and concerns throughout the directed rule making on lithium batteries. Passenger airlines are worried about how the section will affect the ability of shipments of lithium batteries that are currently allowed. Several parties have also raised concerns about how the section will comport with international standards and how the new prescriptive regulations could impact the United States' ability to compete in international markets.

So I support removing this section from the bill in its entirety, letting PHMSA proceed with their the rule making and allowing the normal course of notice and comment without this inflexible congressional mandate.

Another issue that concerns me is the ban on carrying flammable liquids and wetlines in cargo tank trucks. A ban will force many tank car operators to install equipment to purge products from the wetlines. The problem with this provision is that purging equipment must be installed by welding to the cargo tank. I am told that three times as many shop workers have been killed in cargo tank welding accidents in the last 10 years than have been killed in accidents caused by flammable materials in the wetlines.

Additionally, this legislation does not allow for manufacturers to develop innovative solutions creating equivalent levels of safety for new manufactured trucks.

Finally, I would like to address the new section on special permits and approvals. This section was not included in the original
highway authorization bill that was marked up in the Highway and Transit Subcommittee in June, and we had a hearing on this subject in September.

Special permits and approvals are routinely issued when the HAZMAT carrier is performing a function that falls outside the normal HAZMAT regulation. Based on what I heard at that hearing in September, PHMSA had issues administering this program, but I am concerned that the legislation goes beyond just addressing the issues of PHMSA. We are creating a new fee system that will impose undue costs on industry for processing applications and ensuring compliance with the terms of special permits. Furthermore, the section requires a new fitness determination without giving industry a chance to comment on the rule making.

So, again, I support making reforms at PHMSA to make sure the program is being properly administered, but I think we are going too far with this costly and prescriptive regulation that will have unknown negative consequences on the important industry.

And, with that, I yield back. I want to also welcome our witnesses, and I yield back.


Mrs. Napolitano.

Mrs. Napolitano. Thank you, Madam Chair. I agree with the comments and associate myself with the comments by our Ranking Member.

I think our first responsibility is for providing for the safety of our communities. I come from Los Angeles where we are just packed, and any accident is not a situation that we look forward to.

The focus of this, of course, is the two important safety issues that are to be addressed, the safety of the trucks and the air transportation safety, both. I have at least 60,000 trucks traveling through my district daily, so I have a lot of interest in how it is carried and how safe it is. The wetlines have caused serious accidents in California that we know of. I believe if we have the technology we should be looking at how that can be implemented without heavier costs on the trucking industry and the ability for it to be implemented.

The lithium batteries are extremely flammable; and since we travel on the airplanes twice a week, I certainly want to ensure that we, the passengers, especially the ones I am on, are safe. If we have the resources to properly package them and stow them on the aircraft, then so be it, but let’s find out how we can get this done. We must require battery companies and airline companies to use as many of these resources as possible to protect both the airplane and its cargo of people and its regular cargo.

I do look forward to the testimony, Madame Chair. Thank you.

I yield back.


Mr. Petri, when you make your opening statement, can you introduce your person from your district? Because I understand you are going to have to leave at some point.

Mr. Petri. First, I want to thank you, Madam Chairman, for holding this important hearing.
I realize that this issue has been before the Congress for some considerable time, but there have been difficulties in getting proper input. And I really do think it is important to try to follow the regular order and to have an opportunity to hear from experts in the industry.

Because you get into these specialized areas, and people ask me what it is like to be a Member of Congress. And I say, I didn’t know any more the day after I was elected than I knew the day before I was elected. Suddenly, I was elected. Suddenly to have to vote on all kinds of issues that I was not an expert on.

And the purpose of having hearings and this sort of input I think is very important because it gives different elements that are concerned about an issue an opportunity to go on the public record and to hear each other’s views; and we, in effect, get to sit a little bit like a jury and try to sort out how things fit together. And often in that process the groups will come to an informed compromise that serves the public interest on their own.

So I commend you for having this hearing; and I especially am glad that you are willing to include a neighbor of mine from Fond du Lac, Wisconsin, John Cannon, who flew out I guess yesterday from the not-yet snows but frost of Wisconsin to be here. He has had over 20 years of experience in the tank industry. He has been an engineer. He has served in leadership positions on a number of trade associations related to the industry. He has written many, many papers and served on many industry study groups and I think will be a real addition to the hearing when you get to the second panel.

So thank you very much.

Ms. BROWN OF FLORIDA. Thank you.

Mr. Walz.

Mr. WALZ. Thank you, Madam Chairwoman and Ranking Member Shuster. Thank you to the citizens of Maryland for hosting us today. It is a great opportunity to be here and watch democracy in action.

To all of our witnesses, I truly appreciate it. For our two witnesses from DOT and NTSB, thank you for your service to this country. We truly appreciate it.

We have got advocates here from industry groups that create jobs and make this country grow. We have got safety advocates. And, like most of us out here, we may be parents; and, like Mrs. Napolitano said, safety is a big concern when I strap my 3-year-old into the car and into the plane. And we also know that there has to be that fine line, that sweet spot between ensuring safety and commerce and business to be able to continue. So I want to thank the chairwoman and the Ranking Member for taking the time to allow us to be educated.

Mr. Petri is exactly right. Listening to the experts and getting the feedback and going out to cargo tank services this morning and crawling underneath there and looking at wetlines and listening to experts telling us what we were seeing and what happens, that is critically important in rule making and legislating.

I, too, have seen some of the concerns. My constituents from out in southern Minnesota have been absolutely concerned. And there is no false sides of this. Everyone is concerned about safety, and
everyone is concerned that we get this right. The question is, how do we best do that? How do we make sure that the safety and the cost-benefit analysis are coming in and how do we allow the rule making of the experts to play a role in this?

So thank you for this opportunity. I am looking forward to hearing from our experts today to help us make some decisions as we move closer to getting this bill forward.

With, that I yield back.

Ms. BROWN OF FLORIDA. Thank you.

Mr. LATTA. Thank you, Madam Chair, Ranking Member Shuster. Thank you very much for holding this hearing today.

I, too, as Mr. Shuster, have several concerns with regard to section 201 of H.R. 4016, the Hazardous Material and Transportation Act, which I raised during hearing on the highway bill back in June. The specific section adds a new requirement for the transportation of lithium cells and batteries. As I noted at that time, I requested input from all stakeholders for this matter in the legislation. H.R. 4016 was not released until a little time afterwards.

As I understand it, the Pipeline and Hazardous Materials Safety Administration, that is, PHMSA, and the FAA are already working on rule making regarding lithium battery transportation regulation. Furthermore, that rulemaking will address concerns the Highway Subcommittee has raised in addition to allowing for public input into this matter. It is my understanding that OMB currently has a rule and will be announced in the next several weeks to begin the rule making process.

We are all concerned about the safety issues surrounding this matter. However, I believe that the additional regulations can be accomplished through the appropriate rule making without necessary legislation. This process will allow the public to comment on the matter as well as the PHMSA and FAA to offer their expertise that they have in the area of transporting lithium batteries.

At this time, I am unclear that the benefits of including a provision like section 201 in the legislation, especially when the requirements are going to be another thing that is going to be detrimented in manufacturing. Imposing these requirements could have enormous consequences both for both consumers and for American companies. This language contains very restrictive requirements that will lead to unnecessary loss of business or revenue.

In my district, there is a lead battery facility that will be negatively impacted by this language. At a time when our unemployment in parts of my district hovers around 15 percent, we cannot pass yet another change that will negatively impact business.

The specific language of the bill restricts placement of batteries in aircraft to crew-accessible locations unless the battery is in a fire-resistant container or the aircraft has a fire-suppression system in place. I believe this is a major problem and fear that the practical impact of this language will be to ban lithium batteries and devices that use lithium batteries, i.e., computers and cell phones, from aviation. Currently, there are no fire-resistant containers in existence; and it is not possible to place all batteries in crew-accessible locations on these planes.
Finally, the legislation does not allow for the harmonization with the International Civil Aviation Organization standards, the ICAO. In short, it is very important that cargo regulations and requirements be harmonized internationally. Harmonization best guarantees safety in the provision of commerce, especially in aviation. The ICAO has spent extensive time and energy creating agreed-to international standards that have been adopted.

In summary, I believe this language will be extremely disruptive to the battery manufacturers and could have a very negative impact on battery production. And, with that, I thank the chairwoman; and I yield back.

Ms. Brown of Florida. Mr. Cummings.

Mr. Cummings. Thank you very much, Madam Chair; and let me welcome my colleagues not only to my hometown but to my district. Madam Chair, this is an outstanding facility in which we hold this hearing today. The Maryland Public Service Commission has shown an exceptional hospitality; and I want to thank the Commission, including Chairman Nazarian and all of the other Commissioners. And we want to especially thank Ms. Cassandra Boykin with the PSC who did just an outstanding job in helping us to arrange this hearing.

I also thank you, Madam Chair, for convening today's hearing on the reauthorization of the Department of Transportation's hazardous materials safety program. And thank you for providing us with an outstanding opportunity to learn more about wetlines on tanker trucks through the site visit we completed this morning. It was quite educational. We certainly thank Mr. Roy Clark for his hospitality.

We have before us, ladies and gentlemen, an incredibly diverse and knowledgeable group of panelists who will help us critically examine the issues to be addressed by the hazardous materials reauthorization pending before the Transportation Committee.

Let me recognize Deputy Secretary of Transportation John Porcari. Mr. Porcari is the former Secretary of the Maryland Department of Transportation. I know personally of Secretary Porcari's commitment to the safe transport of hazardous materials; and I want to thank you, Mr. Secretary, for returning to Maryland today.

I also to extend a special welcome to Ms. Barbara Windsor of Maryland's own Hahn Transportation, who is representing the American Trucking Association. Last month, I met with Ms. Windsor; and she personally assured me of the trucking community's focus on ensuring the safe and secure transport of hazardous materials.

Madam Chair, I think that is one of the things that we all recognize, that it seems like we have a chorus of people saying that they want safety, but they want to make sure that it is balanced with regard to cost and other considerations. And so I want to thank Ms. Windsor for all that she has done. Thank you for your testimony.

Ladies and gentlemen, we have entrusted the Department of Transportation with the critical responsibility of protecting the American public and the environment from the risks that the transportation of hazardous materials can pose to them. The city of Baltimore has experienced a major hazardous materials incident.
In fact, it occurred not very far from this building; and so I know firsthand the risks the transportation of hazardous materials can pose.

Back on July 18th, 2001, 11 cars, including 4 tank cars, of a 60-car CSX train, derailed in Baltimore while traveling through the Howard Street tunnel, not very far from here. One of the tank cars was punctured, releasing a flammable liquid which subsequently ignited and burned for days.

Given the risks associated with the movement of hazardous materials, we must trust the DOT and its safety agencies to put safety above all considerations.

Earlier this year, I was shocked to learn that employees at PHMSA reported that it is common practice to make decisions on whether or not to grant companies special permits or what used to be called exemptions from otherwise applicable safety regulations based on the financial interest of the company seeking the permits rather than the relevant safety concerns.

Today, we convene to consider the provisions that should be included in the hazardous materials reauthorization pending before the Transportation Committee, including measures to ensure that PHMSA effectively manages the special permits program. We will also be joined by a representative from the National Safety Transportation Board who will discuss several of the Board’s top recommendations pertaining to hazardous materials transportation.

Finally, I note that in 2005 the Transportation Research Board issued Special Report 238 which found that, while there are a number of agencies involved in regulation of hazardous materials shipping, each agency often examines its transportation from its own isolated perspective. Following the release of that report, I introduced legislation to create a Hazardous Materials Cooperative Research Program. This program was created as a pilot in the SAFETEA-LU legislation. The research program has already become an invaluable forum through which applied research is being conducted on a multi-modal basis on the transportation of hazardous materials.

It is my hope, Madam Chair, finally that the program will be made permanent in the hazardous materials reauthorization. And with that I thank you again, and I yield back.

Ms. BROWN OF FLORIDA. Thank you.

And now Ms. Edwards.

Ms. EDWARDS. Thank you—I’m not sure this is on. Can everyone hear me?

Thank you, Madam Chairwoman, and thank you to the Subcommittee. Because I am not a Member of this Subcommittee, but I really appreciate being here in my home State of Maryland in my colleague Elijah Cummings’ district.

I recall the September 10th testimony. Some of our witnesses, Deputy Secretary Porcari, on PHMSA and some of the difficulty, frankly, with the special permitting that has been done under this program, it certainly signaled either or both a need for legislative statutory action and certainly regulatory action. Because you can’t run a program just on special permitting alone, and that has become incredibly clear with PHMSA.
I will say that, Madam Chairwoman, I am honored that you have chosen to conduct this field hearing. Because I think it is important for us to be in location on site and with a real-world experience of the challenges that are in front of us when we were considering—as we have been considering this legislation.

It seems to me—again, Mr. Petri, this is also an area I don’t know a lot about, and I am learning, but it does seem to me that there is an important balance to be struck between the public safety, worker safety, and the ability to move commerce; and that is what we are looking for here. It doesn’t necessarily mean, in my view, that that means an absence of any legislative action at all, but it may mean figuring out what that balance is between what is happening currently in the regulatory process and what we need to do legislatively.

I look forward to the testimony today, from the wide range of testimony today, so that we can really get some answers and figure out the best way to move forward; and I appreciate the opportunity to sit in this field hearing as a guest of the Subcommittee.

Thank you, Madam Chair.


Now it is my pleasure to introduce our first panel of witnesses.

First, I am going to have the honor of introducing John Porcari, who is the Deputy Secretary of the U.S. Department of Transportation——

Mr. Porcari. Thank you.

Ms. Brown of Florida. —and former Secretary for Maryland.

And we have with us Mr. Bob Chipkevich, who is the Director of the Office of Railroad, Pipeline, and Hazardous Materials Investigations at the National Transportation Safety Board.

I want to welcome both of you here today, and we are very pleased to have you.

We will start with you, Mr. Secretary.

TESTIMONY OF THE HONORABLE JOHN PORCARI, DEPUTY SECRETARY, U.S. DEPARTMENT OF TRANSPORTATION; AND BOB CHIPKEVICH, DIRECTOR, OFFICE OF RAILROAD, PIPELINE, AND HAZARDOUS MATERIALS INVESTIGATIONS, NATIONAL TRANSPORTATION SAFETY BOARD

Mr. Porcari. Thank you, Madam Chairwoman, Ranking Member Shuster, and distinguished Members of the Subcommittee. Thank you for the opportunity to appear today.

Secretary LaHood and I regard the safety of America’s transportation system as our highest priority. When I last testified before the Full Committee on September 10th on PHMSA’s special permit program for hazardous materials, I made a commitment to put safety first as we carry out our duty to protect people and the environment from the risks inherent in hazardous materials transportation. At that time, I told you of our step-by-step plan to aggressively address the issues raised by the Committee and the Office of Inspector General Advisory on Special Permits. I can report to you today that the agency is making great strides in completing each action item.

Today, I would like to address two safety issues highlighted by the National Transportation Safety Board and Members of this
Committee—the risks posed by the transportation of lithium batteries, particularly on board aircraft, and safety problems associated with the transportation of flammable liquids in unprotected product piping on cargo tank motor vehicles, known as wetlines.

In 2008, an estimated 3.3 billion lithium batteries were transported worldwide by all modes of transportation, including passenger and cargo aircraft. Lithium batteries are regarded as hazardous materials because they can overheat and ignite in certain conditions and once ignited can be especially difficult to extinguish. Since 1991, we have identified over 40 air-transport-related incidents involving lithium batteries in devices powered by lithium batteries.

We have addressed a number of concerns as the technology of lithium batteries develops. For example, regulations that prohibit transportation of most metal lithium batteries as cargo on passenger aircraft. The prohibition resulted from FAA testing indicating that current aircraft cargo fire suppression systems would not be capable of suppressing a fire if a shipment of metal lithium batteries were ignited in flight. However, more work to ensure the safe transport of lithium batteries remains.

In 2006, the NTSB investigated an incident at the Philadelphia International Airport in which a fire suspected to have been caused by lithium batteries destroyed a United Parcel Service cargo aircraft and most of its cargo. The NTSB concluded that flight crews on cargo only aircraft are at risk from in-flight fires involving lithium batteries. Following the incident investigation, the NTSB issued five recommendations to PHMSA.

Of particular concern to the NTSB and the DOT are shipments of small lithium batteries that currently are excepted from certain regulatory requirements. PHMSA and the FAA have been working together with the Committee to address these concerns.

We are working to improve wetline safety. Wetlines are rigid aluminum piping in a cargo tank motor vehicle used to load and unload products such as gasoline and diesel fuel. In 1998, the NTSB recommended the Department prohibit the transportation of hazardous materials in wetlines. The Department recognized the safety risks associated with wetlines and take NTSB's recommendations on wetlines very seriously.

Recently, the Department completed an in-depth, comprehensive review of incident reports and other safety data to determine whether rulemaking action to reduce the risks associated with the transportation of hazardous materials in wetlines are necessary. The review encompassed 6,800 incidents involving cargo tanks transporting flammable or combustible liquids that occurred during a 10-year period, from 1999 to 2009, and identified 184 incidents in which wetlines were determined to be damaged and/or ruptured.

A total of 18 of these incidents involved fires. A total of 13 fatalities and 7 injuries were associated with wetline incidents over a 10-year period. Of these, our initial conclusion is that 6 fatalities and 7 injuries resulted directly from wetlines release. However, we are continuing to review the direct cause of the remaining 7 fatalities.

Based on this incident analysis and our cost-benefit assessment of newly available technologies to remove lading from product lines
and the consequence event, we believe that a rulemaking to prohibit the transportation of flammable liquids in wetlines can reduce safety risks without imposing undue cost burdens on the regulated community. Cost-benefit analysis is important to our consideration for regulatory action, but we will also consider the potential risks and consequences of more severe accidents. We plan to issue a notice of proposed rulemaking in 2010.

Madame Chairman, as you can see, the Department is working diligently to reduce the risks posed by the transportation of hazardous materials in commerce and to improve the effectiveness of PHMSA's safety responsibilities.

Let me close by recognizing the committee's leadership in improving wetline and lithium battery safety in the draft HAZMAT reauthorization bill. We look forward to continuing to work closely with you to improve cargo tank safety and reduce the dangers of transporting lithium batteries on aircraft. Thanks again for the opportunity to testify today at the special field hearing, and I am happy to take any questions.

Ms. BROWN OF FLORIDA. Mr. Chipkevich.

Mr. CHIPKEVICH. Good afternoon, Madam Chairwoman, Ranking Member Shuster, and Members of the Subcommittee and Member Edwards. Thank you for the opportunity to appear on behalf of the National Transportation Safety Board. I would like to highlight NTSB concerns about the hazards of wetlines on cargo tanks and the transport of lithium batteries by air.

Most cargo tanks used to transport fuel are loaded through bottom loading lines and then are operated over roads with fuel present in this piping. Because of their design, location, and vulnerability to being hit by other vehicles, the practice of carrying hazardous materials in wetlines increases the potential seriousness of any accident.

In 1988, the U.S. Department of Transportation's Research and Special Programs Administration found it unreasonable and illogical to allow gasoline to be transported in wetlines. It found that the petroleum industry's unwillingness or inability to drain cargo lines resulted in widespread noncompliance.

In a rule published in 1989, RSPA stated that it strongly believed that the practice of transporting hazardous materials in exposed, unprotected piping, designed to fail if impacted in an accident, was an unnecessary risk. RSPA encouraged the industry to eliminate this hazard.

The industry responded but not with a solution. The American Petroleum Institute replied that the probability was that a fatality would be directly attributed to a wetline failure and therefore did not take any action to eliminate this hazard.

The demand for lithium batteries has skyrocketed, and the popularity of electronic equipment has also grown. As the use of lithium batteries has increased, the number of incidents involving fires or overheating of batteries has also grown.

Fire destroyed two pallets of primary lithium batteries at Los Angeles International Airport after the pallets were removed from an inbound passenger flight from Japan. The batteries were neither identified nor shipped as hazardous materials. Instead, they
were shipped as ordinary freight under an exception to the hazardous materials regulations.

Fire destroyed freight in a cargo container that was being loaded onto a cargo-only aircraft in Memphis, Tennessee. The fire originated in a box that had two rechargeable lithium battery modules that were components for a battery pack for an electric car.

And after an in-flight cargo fire, an aircraft made an emergency landing at Philadelphia International Airport. The aircraft and most of the cargo were destroyed. Although the cause of the fire ultimately could not be determined, the prevalence of electronic equipment in that cargo compartment, where the fire most likely originated, caused us to look closely and examine safety issues involving the transport of rechargeable lithium batteries on commercial aircraft.

The NTSB has recommended action to improve the reporting and analysis of incidents; to eliminate exceptions for packaging, marking, and labeling of lithium battery shipments; to stow shipments where they are accessible to flight crews; to use fire-resistant containers; and to provide guidance and information to the traveling public and flight crews about the safe carriage of lithium batteries and electronic devices aboard aircraft.

Madam Chairman, this concludes my testimony, and I would be happy to answer any questions.

Ms. BROWN OF FLORIDA. Thank you.

I guess I will start with the Secretary.

Getting an accurate number of wetline-related deaths is very important to the Committee and the discussion, and there has been some confusion. Can you tell us me how many people—fatalities have occurred in the last 10 years? I know this is going to be very difficult, but how many can we attribute to the wetlines? In one case, someone was drinking and ran into the truck. So do you have a description of what actually caused the accident?

Mr. PORCARI. Madam Chair, I can describe from our data the consequences of the accident. That is, whether our data shows the release of material from the wetline directly resulted in a death.

Based on that 10-year review of 6,800 incidents, of which there were where 184 wetlines were determined to be damaged or ruptured, we have confirmed that 6 fatalities resulted directly from the wetlines release, rather than some other event, and 7 injuries as well.

There are additional deaths and injuries beyond that, but at this point, based on the data that we have, we cannot directly attribute it one way or the other.

I would also point out that there may be a degree of under-reporting of incidents. In an earlier analysis that we did of wetline incidents, we estimated that 24 percent of wetline incidents were not reported.

Ms. BROWN OF FLORIDA. Can you expound on that a little bit? Because when you say “unreported”, if it is an incident wherein it is a fire in the community or it is an explosion, that is going to be in the paper. That is a reportable incident.

Mr. PORCARI. Yes, ma’am.

We have tried hard to capture accurate data for this. If there is a report from first responders or a media report, we have tried to
capture that in our data. If it was a less serious event or even a serious event that for some reason did not get reported, we cannot be sure we have captured that in our data, and that estimated 24 percent underreporting was from the last rulemaking process related to wetlines.

Ms. Brown of Florida. Well, there is lots of description as to whether it is a new truck or whether we are retrofitting a truck as far as cost is concerned, and I am very interested in figuring out how you are figuring out what is the cost. Because I have gotten from $8,000 to $3,000 to as cheap as $1,500.

Mr. Porcarl. It is an important variable, obviously, in the cost-benefit equation. We are aware of one company currently that is selling wetline purging systems, both manual and automatic ones. The basic equipment for the non-welded manual purging system, we are told, is $2,300, with an estimated $600 additional to install it, to retrofit it.

The manual purging system on a new cargo tank would be an estimated $2,300, and the cost to retrofit an existing cargo tank would be $2,900. The non-welded automated purging system is $3,800, again with an additional $600 beyond that in cost for installation.

That is based on what we know right now. Part of the rulemaking process is to gather current and accurate data regarding the costs.

Ms. Brown of Florida. I am going to let other Members ask questions, but I have a real concern that it is only one company providing that service, so that cost can be a variable. I was told that there is about, I guess, four or five patents pending. Now I don't know exactly what that means, because patent doesn't mean that you are going to actually get the exact thing that we are talking about.

Mr. Porcarl. That is correct, Madam Chair. We have been told as well there are patents pending under the systems. The numbers that I gave you are based on the one company that we know of that currently manufactures and sells the wetlines purging systems.

Ms. Brown of Florida. I am not going to speak for them, because they are going to be on another panel, but their prices were different from the ones you just said, also.

Mr. Shuster.

Mr. Shuster. Mr. Chipkevich, when the NTSB goes through a decision to make a recommendation on banning—when you make the recommendation on banning the carriage of gasoline in wetlines, do you consider the fatalities that occurred in the process of retrofitting trucks with the different systems?

Mr. Chipkevich. We certainly look at the seriousness of the accident and the consequences of the accident. What we do is identify any safety issue that is involved and then look at if there are ways to prevent similar type accidents or similar types of severe consequences from occurring in an accident. So what we do is to look at an actual safety issue and whether there is something that can be done to address that issue.

Mr. Shuster. Well, so then I understand in the last 10 years there were 20 shop workers, folks who retrofit these vehicles have been killed in their retrofitting process. I am not sure I understand
it. Do you consider that at all in your rule making or when you make your recommendation or is that something that falls outside of the NTSB’s——

Mr. CHIPKEVICH. We have not looked at that particular area, but we have made recommendations in the past on the repair of cargo tanks. Shop facilities have to meet certain safety requirements, and the persons doing the repairs have to meet those safety requirements; there are procedures that are set up. We did check with the cargo tank company, Sunoco, who did install the equipment and are aware of any injuries during the installation of that equipment.

Mr. SHUSTER. Well, that is a great concern of mine. We are looking and saying that there were 6 fatalities that we know of for sure and maybe several more—I forget what the number were in injuries, 13, I guess it was.

When you look, nobody is looking at the situation, when there is a retrofit, 20 people have died. I have heard that people say they were in violation of OSHA. And I have heard other stories that the company wasn’t necessarily violating OSHA law. It was the employee doing the work that decided they were going to do something they shouldn’t have been doing.

And so here we have a situation where we are saying we are going to stop these wetlines from causing injuries and fatalities. Yet we may create more deaths and injuries in the process of switching them over; and somebody has to step back and say, we need to take a look at that.

Mr. Secretary, I mean, what are your thoughts on that?

Mr. PORCARI. Well, first, I am not aware of any deaths resulting from welding, for example, of wetline retrofits. We would be very interested in any data that is out there. It is something that we would look at very carefully.

Mr. SHUSTER. Again, that is why I am so concerned about going forward with this mark-up tomorrow with this piece in there, because that is the facts that have been presented over and over to us again, that we are going to save 6 lives and maybe give up 20 lives in the process. That doesn’t seem like that is something we want to do.

And, again, the chairman of the Full Committee points out that those folks were in violation of OSHA, but it is an individual that is not following—just like with some of these wetline incidents, I think the chairwoman asked the question, what was the cause of the accident? We know that the wetlines may have 30 or 20 gallons, caught fire. Someone was killed or injured. What was the reason for it?

And I have seen in a couple instances where people were on their cell phones, there was drunk driving, or they were running stop signs. So once again we come back to the individual. The individual is not following the letter of the law and is not complying with the law. And so they do something stupid or make a mistake and an accident occurs and what we have is a death or fatality.

So, again, I would urge both of you to consider that other side of the equation as we move forward on this. Because I am afraid we will create more deaths and more fatalities when we think we are going to solve a solution. And, again, do you have any thoughts on that? If the evidence is clear, you know, we save 6 people, but
we are going to give up 20 lives, does that come into the equation anywhere in any of your thoughts on this?

Mr. PORCARI. Again, that is something we would carefully consider in the rulemaking process.

Mr. CHIPKEVICH. I would like to note that certainly 20 years ago DOT asked the industry to look at developing technology to address the wetline issue and had plenty of opportunity to develop technology to address it. The technology that is being used today, manufacture is yet improving the technology, has demonstrated that there is another means to install the equipment where you don't have to weld on the cargo tanks or the wetlines. In fact, you would have to drill a hole and tap a fitting into part of the internal valve at the bottom of the cargo tank where you would eliminate the welding hazard.

Mr. SHUSTER. I see my time has expired.

Ms. BROWN OF FLORIDA. We will have another round.

I just have a question for you. I mean, only recently—I am learning a lot more than I knew a couple of days ago—that you were able to unload it on the top, but because of the regulation that we passed with EPA now you have to—you can't do that anymore, so that is why they went to doing the fueling underneath. Is that correct?

Mr. CHIPKEVICH. Yes, ma'am. About 30 years ago, the Clean Air Act was passed; and our carriers were required to capture the hydrocarbon vapors being released. Industry could have developed a system to capture those vapors on the top and, in fact actually chose to look at bottom loading. Part of their reasoning was because of injuries, workers falling off the top of the tank on and things of this nature.

Ms. BROWN OF FLORIDA. That was a good reason, though, don't you think?

Mr. CHIPKEVICH. I think by using the bottom loading method, they have created another hazard. We had bottom loading lines that had shear sections that were designed to break away rather than to pull a big hole in the bottom of the tank. Added to that is the vulnerability of that location for being struck by other automobiles. So what that did was create another hazard.

Ms. BROWN OF FLORIDA. Yeah, but, you know, I am not—we are going to have other testimony, but, depending on the condition of the weather, if they have to go up there, if it is snowing or if it is raining—I mean, those are all factors that you have to consider.

Mr. CHIPKEVICH. You are correct. But, also, if the choice was to use bottom loading, we believe that the industry should also identify a means to empty those loading lines once they finished filling the cargo tank.

Ms. BROWN OF FLORIDA. I am not disagreeing with you, but the point is, if you can't show that this is real hazardous as far as the volume that they carry and the number of accidents, then perhaps they chose a system that is not as safe in comparison to not being safe.

Mrs. Napolitano.

Mrs. NAPOLITANO. Thank you, Madam Chair.

In response to Deputy Secretary Poracri's statement about getting information and input, have any of the agencies such as the
Fire Department, highway patrol, law enforcement been asked to report any of the information they may have when they respond to these accidents?

Mr. PORCARI. Ma’am, part of the data that we gather is those kinds of reports; and we try to do the best job we can. We do think that there is a possibility of underreporting based on what we have seen previously.

Mrs. NAPOLITANO. Underreporting in what areas, sir?

Mr. PORCARI. The incidents may be underreported because the agency didn’t report it to us, the companies may not have reported incidents or, in cases where it might otherwise have been in the media, there wasn’t a media report that we would have picked up. So any of those.

Mrs. NAPOLITANO. Isn’t law enforcement requiring a reporting of accidents?

Mr. PORCARI. Yes, law enforcement is and industry is as well. And, again, I think, based on what we saw in the prior rulemaking process, there is a likelihood of underreporting.

Mrs. NAPOLITANO. On the issue of lithium batteries, the question comes of passenger aircraft. Are they allowed on passenger aircraft or is it just on cargo?

Mr. PORCARI. Metal or primary lithium batteries are not permitted in the cargo areas of passenger aircraft, the belly cargo, in other words, of passenger aircraft. They are permitted on all-cargo aircraft. Cargo only.

Mrs. NAPOLITANO. Reading some of the information, there has not yet been developed a container that would secure these batteries, am I correct?

Mr. PORCARI. That is correct, from what we know today; and the proposed rulemaking would have stowage requirements as a consequence. If there isn’t either automatic fire protection or a container system that would contain the fire, the crew-accessible stowage in that proposed rulemaking would actually provide an opportunity to access the fire.

Mrs. NAPOLITANO. Would this also require the training of the personnel handling not only the loading personnel but also the flying personnel or the off-loading personnel?

Mr. PORCARI. Well, I think in every case there are training needs. The flight crews should actually have some training as part of their background in that. But, clearly, this is a very difficult fire, a metal, lithium battery, if there is one; and what the proposed rulemaking does is provide at least an opportunity, if the crew can get to it, to try and deal with it.

Mrs. NAPOLITANO. Based on transportation—and I worked in transportation for a while—as soon as the cargo is receded by the airline, it becomes the responsibility of the airline for its safety, so that the airline then would then have to ensure that it is handled properly. Does that not require training for their personnel to ensure that the liability isn’t there for any damage, any death, any injuries?

Mr. PORCARI. Yes, it does require training, and it also requires identification, knowing what the cargo is, so that you can respond to it properly.
Mrs. NAPOLITANO. Would that bill of lading be able to determine whether or not that particular plane would be able to carry that cargo? In other words, how are you limiting this so that it is for certain that cargo is not being placed in a place where it is not suitable?

Mr. PORCARI. Well, first and foremost, the proposed rulemaking would have labeling requirements so that you would first know what you have. In other words, that this is a lithium battery that would be required to be placed where it is crew accessible. Then, on the training side, you would have to make sure that you are stowing it correctly so that it is, in fact, crew accessible during flight.

Mrs. NAPOLITANO. To Mr. Chipkevich, apparently, a witness will later state that the alternative purging of the wetlines is to encapsulate the wetline and still keep the liquids in the line. The system would trap the liquid in the line, prevent it from spilling out of the shear section in the accident—in an accident. In the ones that you investigated, did any of them, or how many of them, or did most of them involve a spill from the actual shear section or they involve a rupture or puncture?

Mr. CHIPKEVICH. The accidents we have investigated have involved a ruptured pipe. These accidents, did not involve the breaking away of the shear section. In order to break away the shear section, you have to have the force just exactly right. It is designed so that it doesn’t pull a hole in the bottom of the tank with that valve. In the accidents we have investigated, the piping actually broke. For example, in the last accident we investigated, it broke about 6 feet away from the valve. It was an 18-foot pipe, so that type of a system would not have worked to contain the product.

Mrs. NAPOLITANO. In other words, what is being currently, I would say, touted as a preventable shearing—we look at two types of shearing areas. That does not ensure that it is going to break there. So it could be other structural damage in the rest of the infrastructure.

Mr. CHIPKEVICH. That is correct.

Ms. BROWN OF FLORIDA. We are going to have another round.

Mrs. NAPOLITANO. Okay.

Ms. BROWN OF FLORIDA. I am going to yield to Mr. Petri.

Mr. Secretary, I want to emphasize this is very disturbing to me, that we keep mentioning about the underreporting. And I know that you have only been Secretary for a few months, but perhaps the best thing to do is to do a study and get an independent someone to verify. If we don’t—if we can’t accurately say how many accidents, what caused it, and maybe we need an independent agency if the Department can’t do it.

Mr. PORCARI. Well, Madam Chair, if the information is out there, we think we can capture that information. If it isn’t getting reported for various reasons, I am not sure anybody, independent agency or outside organization, would get it as well. We would like to and are continuing to make every effort to get good data. But, based on what we have seen in the past, we think that it is likely that there is underreporting.

Ms. BROWN OF FLORIDA. Based on what?
Mr. PORCARI. Based on the previous rulemaking. That is where the 24 percent number came from.

Ms. BROWN OF FLORIDA. We will talk about it.

Mr. Petri.

Mr. PETRI. Thank you very much.

There is a lot of things I would like to ask about, but let me just explore one particular area with you. In either legislation or rule making, is it preferable to define a standard other kind of objective or is does it make more sense to tell people how they should reach a particular thing to be in compliance? Especially if, when you tell them how to do it, someone has a patent on it and you give them a competitive advantage.

Mr. PORCARI. Sir, what we try to do——

Mr. PETRI. If you are requiring that people buy something from someone, that is not very good public policy, I wouldn’t think.

Mr. PORCARI. That is certainly not our intention. What we would try to do, sir, is to define a performance standard, and let, in this case the industry, meet that standard. However, any system that is effective in meeting that standard would work.

Mr. PETRI. You think it is best to set a standard or give the Secretary the authority to review different approaches to that, that meet that standard, if someone has a bright idea. I mean, obviously just because they assert it meets some objective doesn’t mean it does. Someone has to be a referee in all of this. But we should not be too prescriptive because we could cut off better ideas or cheaper ideas that achieve the same goal or whatever.

Mr. PORCARI. That is correct. Generally we want to set the standard and any technology or system that meets that standard will work.

Mr. PETRI. One other area, there will be some testimony later, when we get into the wet lines, as to the scope of any law or rule, and there is a difference between 406 and 407 trucks, have you had a chance to review testimony of Mr. Cannon or any of the others?

Evidently, the accidents have actually occurred on the 406 trucks which have a longer wet line and in the 407 it is a very small thing. I mean, would that difference between something like 30 or 15 gallons and 1 gallon of fluid enter into the cost-effectiveness of a rule?

Mr. PORCARI. I have not had a chance to review that testimony. I look forward to it.

Ms. BROWN OF FLORIDA. Mr. Walz.

Mr. WALZ. Thank you, Madam Chairwoman. Thank you both for your service and for being here today.

Mr. Chipkevich, there is a couple of things here I wanted to note in your testimony, about a June 7, 2006, withdrawal notice from PHMSA that stated further regulation—this is dealing with the wet lines issue—further regulation would not produce the level of benefits originally expected and that the quantifiable benefits and proposed regulatory approaches would not justify the corresponding costs.

Then you followed up on July 31, 2007, where PHMSA advised NTSB that they would work on a best-practice outreach to try and do the best possible. What was the outcome of that? What was the outcome of that determination and what changed from 2006 to
2009 that said, yes, we have an issue here but it can be addressed working with industry on best practices to reduce to as small a point possible? If you could elaborate on that I would appreciate it.

Mr. CHIPKEVICH. Yes, sir. RSPA or PHMSA had advised us that rather than move forward with requiring wet lines to be drained, they would work with industry on educating emergency responders about being careful at accident sites and taking certain precautions. It didn't have anything to do with emptying the wet lines or making sure the wet lines were protected. So, it was a matter of post-accident responding rather than addressing the safety issue, and that is why we felt that they didn't actually address the issue that needed to be dealt with.

Mr. WALZ. Okay. On this issue, on the wet lines again, again I am coming back to, is the purging the only possible thing here? Why can't this stuff be flushed back at the point of loading? Is there any way you can do that at the loading terminals?

Mr. CHIPKEVICH. Certainly there are different means that they can look at. Industry has explained that once product is loaded, the remaining product in the lines goes through a meter for taxing purposes. This process creates the problem of draining the product back out of the lines.

The second point is, that there are different grades of gasoline that may be transported on a cargo tank. There are four or five compartments on a cargo tank and, therefore, there are issues if you try to drain it back out, possible contamination from previous loads, and things of this nature that present a new problem.

Mr. WALZ. So the folks at the terminal, because of the tax issue on what has already been metered, don't want it back?

Mr. CHIPKEVICH. That is part of it, yes.

Mr. WALZ. Even though my guess is, am I speculating too much here, that is the most cost-effective manner to do this?

Mr. CHIPKEVICH. I don't know the answer to that.

Mr. WALZ. I don't want you to speculate. I am just trying to get a grasp on this here that I think we are trying to reach a compromise on this. I don't think we doubt the numbers that are coming out here.

I am sure not going to minimize one fatality in this. When we say there were six, there were six families that lost family members, and that is important. But this cost-benefit analysis has to come into this, and that is what I am really trying to get a grasp on.

If these are hazardous to a certain degree, how best do we address that? So that is what I still keep coming back to. I think the question on this that is somewhat challenging for many of us is, is this the best technology that is available out there. All of a sudden if we warrant this or legislate this, what is that going to impact these producers.

That is why I am really interested in the feedback. Maybe I should dig up or have the staff dig up some of this testimony from this best practices exercise that went out there. That might be valuable if it is around. You have seen some of it; correct?

Mr. CHIPKEVICH. Yes, sir. We could certainly provide the Committee the information that was given to us on the best practices.

Mr. WALZ. I would appreciate that if you would. I yield back.
Ms. BROWN OF FLORIDA. Thank you, Mr. Latta.

Mr. LATTA. Thank you, Madam Chair.

Mr. Secretary, has the FAA or FAA certified halon fire suppression equipment to extinguish or contain fires caused by lithium batteries? If not, doesn’t this legislation mean that passenger airlines can no longer carry shipments of lithium batteries?

Mr. PORCARI. My understanding is, and I will get a kick in the back if I am wrong here, that the halon systems, fire suppression systems, are effective in putting out lithium battery fires for lithium ion batteries but not metal lithium batteries.

Mr. LATTA. Okay. If this lithium battery regulation would become law, doesn’t it mean that the United States lithium battery regulations won’t be in harmony anymore with the International Civil Aviation Organization standards?

Mr. PORCARI. It means at least for the time being, that our regulations would be more strict than ICAO. There are other examples where we have done that as well.

Mr. LATTA. Let me ask this then in a follow-up. If the U.S. does adopt those regulations that wouldn’t be consistent with the international regulations, wouldn’t that in turn drive jobs from the United States because the shipments would be flown to either Canada or Mexico and then have to be shipped in from those points, costing U.S. jobs and then also driving up costs to consumers?

Mr. PORCARI. Typically shippers are looking for a logistic solution that is as simple and as cost-effective as possible. I would think it would be much more expensive to transship from aircraft in a foreign country to, for example, truck or rail and then ship into the United States.

It is, I think intuitively, not likely that that would be a viable alternative.

Mr. LATTA. Okay. If you say it is not a viable alternative, how are they going to ship if, under international, the ICAO has one regulation, we have another, wouldn’t a company which shipped to a country that would be under the international regulation, not the U.S.?

Mr. PORCARI. I believe there are other examples out there, actually, where U.S. leadership in ICAO regulations has raised the bar, as it were, for safety. The labeling and stowage requirements in the notice of proposed rulemaking are something that we believe that airlines can comply with and logistics companies can comply with.

Mr. LATTA. We were given a letter today that stated that the hearing or a meeting that was held in Montreal last month, under the ICAO Dangerous Goods Panel, reconsidered those regulations, made a few revisions that explicitly rejected—requested substantial revising.

At this juncture then the United States would have a much stricter regulation out there that would require a lot of these flights then to be rerouted from the U.S. to either Canada or Mexico.

Mr. PORCARI. Yes. Should the rule take effect, that would be the case.

Mr. LATTA. No further questions. I yield back.

Ms. BROWN OF FLORIDA. Mr. Cummings.

Mr. CUMMINGS. Thank you very much.
Mr. Chipkevich, you had indicated two options that would meet the performance standard from PHMSA’s 2004 notice of proposed rulemaking regarding the elimination of flammable fluids from wet lines, the use of external purging systems or the replacement of an existing external piping with shortened or recessed piping.

Are both methods equally effective, and what is the cost of implementing each?

Mr. CHIPKEVICH. It depends on the type of equipment. As we saw today the gasoline tank trucks, for example, the MC-306 and 406 cargo tanks, some of the pipes on that equipment are as much as 18 feet long. So they carry a lot of gasoline and a lot of vulnerability to being hit.

Besides, it was an MC-407 cargo tank, which had a very short 1-foot piece at the end of it which could also be used for different products. DOT currently allows in the regulations an exception, if the cargo tank has substantial protection at the back, for a product such as liquid poisons, corrosives and products of that nature that can be in a pipe that has that very little amount at the end.

Certainly, if you had that type of situation with the gasoline tank truck it would be different. When you have something of that nature, certainly, there is a lot of substantial protection at the end of the tanker, and also there is an opportunity to be able to drain a small amount as opposed to as much as 18 gallons from a large gasoline-type piping. So there is a big difference in the design of that tank and the piping and hanging below the tank that is vulnerable, that was the issue we were trying to discuss.

Mr. CUMMINGS. Do you have any idea what the cost might be?

Mr. CHIPKEVICH. No. While it may be impractical for the typical gasoline tank truck, it might be practical for some other flammable liquids that would be transported in a 407-type tank truck.

Mr. CUMMINGS. You can see what we are struggling with, and I am sure you are struggling with it too, just listening here. All of us are very concerned about the safety but we are also trying to go figure out, just strike that balance. I think Ms. Edwards also mentioned that.

So what we then do is we look at what the American Trucking Association says, right, because they are trying to strike that balance, too, and they say that the risk of a fatal wet line incident is approximately one in 30 million, one in 30 million, which they said is less than a person’s risk of being struck by lightning.

I am just wondering, has the NTSB examined the extent of the risk of involving a fatal wet line incident or in a wet line incident causing a fire, and what is your comment on the American Trucking Association’s viewpoint on that?

You know, one in 30 million is quite a bit, and I would—by the way, if we are going to err, I would rather err on the side of safety. But I am just curious when we look at cost-benefit analysis and all of that, what are we looking at?

Mr. CHIPKEVICH. Well, certainly, we look at the safety issue. We look at a safety situation that has been created that can be fixed. In fact, the solution is there. That risk can be taken away. Any
time you have an accident with a highway cargo tank, in particular the flammable liquid MC-306 and 406 cargo tanks, you really increase the seriousness of the accident by having that exposure.

We looked at it from the standpoint of a safety issue. There is a solution to fixing that problem that would significantly reduce the consequences of an accident and the seriousness of an accident. In these cases, we had individuals in automobiles that had struck the cargo tanks; they were trapped underneath when the fire started. There could certainly be more serious accidents involving vehicles with more passengers aboard or in other circumstances where the accident gets out of control.

So we believe it is a safety issue that needs to be addressed and we think there is a solution there that can be applied to remedy the situation.

Mr. CUMMINGS. Just real quick, Secretary Porcari, I take it you all want to see this resolved as soon as possible; is that right?

Mr. PORCARI. Yes, sir.

Mr. CUMMINGS. You know that the normal thing is you hear people say wait, wait, wait. What would be the disadvantage of waiting, studying it, making sure we have the technology or what have you? I am not promoting that, I am just asking because you know that is the normal response in Washington, the hold up.

So what would be the problem with doing that?

Mr. PORCARI. Well, first, Congressman, I would point out that this has been studied before, this issue has been through extensive review. There is an opportunity cost on any safety issue in waiting. I think you put your finger on the key term here, balance. That is really what we do through the regulatory process, try to balance cost-effectiveness with safety.

I would also point out it is not just a cost-effectiveness issue, consequence matters; in other words, how severe the accident potential is if it happens is something that is not strictly in the numbers but very important in the decisionmaking process.

Mr. CUMMINGS. Thank you, Madam Chair.

Ms. BROWN OF FLORIDA. Ms. Edwards.

Ms. EDWARDS. Thank you, Madam Chairwoman, and thank you to our witnesses. I have a couple of questions.

One, Deputy Secretary Porcari, I keep reading and rereading the legislation where lithium batteries are concerned, and I can’t really see the inconsistency between what we have created legislatively and what you are doing now in engaging a rulemaking process. What wasn’t clear to me in your testimony is the Department, the administration’s position on the legislation.

Mr. PORCARI. An excellent question, ma’am. From what we have seen of the legislation it is not inconsistent with what we are doing. I would point out that the rulemaking process is often long and with an uncertain outcome, but the proposal in H.R. 4016 is not inconsistent with the rulemaking process.

Ms. EDWARDS. I appreciate your clarifying that because also in the provisions related to lithium batteries it says that within 24 months the Department is to come up with those regulations, with the rulemaking, and I think that that leaves, that is 2 years. That leaves a lot of time for the rulemaking process if this were to take effect today.
The requirements in there are guidelines for the Department in terms of doing its rulemaking.

Thank you very much for that clarification.

I also want to ask both of you about, you know, about this question of whether the industry is actually mandated. When I read the section related to external product piping on cargo tanks and transporting flammable liquids, I read under section A, number 2 that the prohibition for existing cargo tank motor vehicles says that no person may offer for transportation or transport a Class 3 flammable liquid in the external product piping of a cargo tank motor vehicle on or before December 31, 2020.

Part of what that is saying to me is that in fact the legislation isn't requiring a particular technology, it is merely saying that the industry would participate in deciding how to meet a standard.

Is that your understanding?

Mr. CHIPKEVICH. Yes, ma'am.

Ms. E DWARDS. Thank you. Then, I want to go back to the question of the lithium batteries, because having had a laptop in my living room on a chair that self-ignited and wasn't plugged in, I know that these things can happen. So I am my own focus group.

I am wondering, though, in the legislation that we have envisioned, how we also get to a place where the crew and where the cargo itself is able to be extinguished. So this question of accessibility is really important because my own personal experience is that when that happens, this was a laptop that wasn't in fact plugged in, that when that happens you have got to deal with it really quickly or you have got a mess on your hands.

Mr. PORCARI. That is absolutely true. What the proposed rule-making would do with the stowage requirements is at least give the crew a fighting chance, as it were, to evaluate what is going on and land as quickly as possible. They can't run this product outside and set it down.

Ms. EDWARDS. Lastly, Mr. Chipkevich.

Mr. CHIPKEVICH. I might add, NTSB had made the recommendation to have lithium batteries in crew-accessible locations until fire suppression systems are required on cargo aircraft. During our investigation of the lithium battery issue, we did take testimony from one of the air carriers, FedEx, who is working very aggressively to develop a fire suppression system for its cargo aircraft. One possible system would have equipment with a nozzle on board that could be directed exactly to a cargo container that is having a problem. Suspected smoke or fire could puncture that container, and therefore put a fire suppression system that sprayed water right into that container to address the issue.

Air carriers and others have also been looking at some other types of fire suppression, such as putting fire resistant drapings and covers over containers to minimize fires. So we think the problem is being addressed, and we think that until they actually get there-- I think they are very close to implementation-- that the best alternative is to put the batteries in a location where they are accessible so that the crew can deal with the fire.

One of the worst situations is a fire on an aircraft and the crew does not know about the fire. You need to be able to deal with the
fire, which will give you some time to get the aircraft on the ground.

Ms. EDWARDS. Or know what is in the containers and know what is in the shipping boxes or know where they are located in the aircraft, isn’t that right?

Mr. CHIPKEVICH. Yes, ma’am.

Ms. EDWARDS. Thank you very much. No further questions.

Ms. BROWN OF FLORIDA. I think that we are going to have another round quickly, and then we will go to the next panel.

Mr. Secretary, I have some real concerns, and I am going to give you my concerns in writing. But can you tell me, first of all, Ms. Edwards asked the question whether or not we were mandating in the legislation exactly what system to use. But, in fact, it is only one system that is certified in the entire country; is that correct?

Mr. PORCARI. I believe that is correct right now.

Ms. BROWN OF FLORIDA. So even though there are, I think, about four or five patents, patents don’t mean anything. Patents mean that you have got an application in and you don’t even know whether your system is going to work; is that correct?

Mr. PORCARI. Yes, I believe those are patents pending.

Ms. BROWN OF FLORIDA. So let’s be clear it is only one company that is manufacturing this system, and I guess my second question, and this is important to me, as we sit here today, the trucking industry is carrying how much every day, how many millions of gallons every day?

Mr. PORCARI. I don’t know offhand, I am sorry. It is a lot.

Ms. BROWN OF FLORIDA. It is a lot, it is a lot. Basically it is a lot and basically the industry is safe. What they are telling me, and you can correct me, is that the major problem is not the one that we are discussing here today, the major problem is that these trucks tilt, you know, and then they may turn over. That is the major problem. Even if we fix the wet lines, if they had a serious accident it would explode.

In addition to that, the second generation of these trucks that they are making now that is four, what, 25 years, they are built, that they are real sturdy, as opposed to when you were talking about 1985 when they were talking about the additional legislation, that these are a better generation of trucks.

Clear that up for me, because I don’t want to sound like I am speaking for the industry, but I have had to go back and read all of this information, I have got a chance to talk to some of the truckers, in the road, you know, while they were out there, not just the owners of the companies, it was just me and the truckers at the service station. No cameras.

Mr. PORCARI. Madam Chair, clearly there are a number of risks. The wetline risk that we are discussing today and addressing in a proposed rulemaking is only one of them. Safety means comprehensively addressing issues. You are hearing two of them today, one related to trucks. There are many more, and we are trying to move forward on a number of fronts simultaneously.

Ms. BROWN OF FLORIDA. Okay. On the battery, I just got one quick question. My understanding is that maybe the technology is not there for the system in the cargo area.

Mr. PORCARI. For the fire protection?
Ms. BROWN OF FLORIDA. Yes, for the fire protection.
Mr. PORCARI. That is correct.
Ms. BROWN OF FLORIDA. So what are we mandating?
Mr. PORCARI. What we are actually mandating is clear labeling of what the product is so that it is properly handled. Proper storage, so that it is crew accessible in flight.
Ms. BROWN OF FLORIDA. Okay. What is going to happen in flight if they can't put it out?
Mr. PORCARI. Well, at a minimum this would give the crew an opportunity to recognize the danger, assess it, and land as quickly as possible.
Ms. BROWN OF FLORIDA. Did you want to talk to either one of those areas?
Mr. CHIPKEVICH. Certainly on the issue of accessibility, we believe that the testing at the FAA tech center did show that halon was effective on passenger planes in a cargo compartment in suppressing a fire. Halon fire suppression works on lithium ion batteries and the rechargeable batteries, but not on primary batteries. Therefore, because halon was not effective on primary battery fires and it was agreed that the primary batteries should not be in the cargo compartments on passenger aircraft.
We believe certainly though that the way to move forward with the primary batteries is through the development of fire suppression systems that can in fact help to extinguish a fire with the primary batteries, the metal batteries. Until we can get it to that point, the batteries need to be identifiable and accessible to flight crews which can, in fact, give the crews some additional time to get the aircraft down.
Ms. BROWN OF FLORIDA. Mr. Shuster.
Mr. SHUSTER. Thank you. Again, in this legislation that we are going to pass—and, again, I think it is pretty clear right now there is only one technology out there. What is the solution if we pass this and people are going to be forced to buy this one type of technology, what do we propose to do if that is the case?
The Department of Transportation says stop, we can't do that? That is the whole concern of this. With the timeframe we have in place, is that technologies aren't going to be developed, people aren't going to have alternative choices there is going to be one system out there. What is the solution to that?
Mr. PORCARI. Well, by defining a performance standard, it does, at least over time, typically spur competition where you would have other systems. It would certainly be our hope that that would be the case here.
Mr. SHUSTER. On DOT 407 tanks, I think we saw one today and that has, that has a little bit of gas, petroleum or product in there. Are those, they are not going to be exempted from this legislation. Is that something that you think should be exempted with that small amount of fuel in there?
Mr. CHIPKEVICH. I think that the current regulations don't identify by a specific tank truck but by product. If you have poison, if you have corrosives or some other hazardous liquid products, you have to provide either adequate protection that is going to protect the piping from a significant accident, or drain the line.
If the legislation did say that flammable liquids, Class 3, that the lines had to be empty, then the issue would be that that particular piece would have to be emptied.

Mr. SHUSTER. I come back to this point again, and I think that is my biggest problem with this legislation is that it is going to force something out there on the industry that by all accounts, and other folks have said it, this is a relative—this is an extremely safe industry.

We certainly would like to see it safer, but still nobody has said that they have taken into consideration the 20 fatalities versus the 6 fatalities when you bring these trucks in to have them retrofitted. You are not just going to bring in the current levels, if this legislation becomes law, it is not going to be the same current levels of trucks coming in to be fixed and worked on and retrofitted. You are going to have every tanker in the industry over a 7 or 10-year period, 100,000 or more are going to be coming into these shops. My concern is once again if you are welding on these things, your fatalities are going to be even greater.

We are solving one problem and potentially causing an even greater problem, and it seems to me that the NTSB has not taken that into consideration, and I really believe that has to be part of it. That is one of the reasons that we go through a rulemaking process with PHMSA. Let them go through and determine what is going to be the best solution for safety as well as cost-benefit analysis.

Again, I come back to that. Have you considered that? That 100,000 tankers are greater than the total—I don't know what the total population is. Go ahead.

Mr. CHIPKEVICH. I think, certainly, there are very strong safety procedures that must be followed when you are doing work on tank trucks. We made recommendations in the past for special qualifications for personnel doing the work and that the tank shops meet certain qualifications, and I think that there are other solutions.

NTSB doesn't say that you need to weld, that you have to weld. I think we would have the opportunity for innovation, as we saw today out at the facility, where there is other valves and other means of installing the safety equipment without having to do welding.

My concern has been with the industry. This has been an issue for 20 years. The DOT has asked the industry to go out and develop the technology and to address it. There has been plenty of opportunity for the industry to do so, and I think there is still plenty of opportunity to improve and to develop technology in this area.

Mr. SHUSTER. You come back to we go back to one supplier, if that is the solution. Again, you are not taking the whole picture into consideration, I believe, when you make these recommendations.

Again, it comes down to if you had one system that doesn’t weld but that that is the other system that is out there you have to weld. There are going to be deaths, there are going to be fatalities. Those are things that, once again, I think you have to take into consideration.

You can say, you can train people and train people we heard today, but the accidents that happened at the shops, they were
complying with OSHA but the worker decided he wasn't going to do—he did something he shouldn't have.

Just like the person who is on the cell phone that runs into the wet lines. I guess we can't legislate to eliminate stupidity, because people are going to do stupid things, and that is why we get in many of these accidents. Again, I think we are going about this in a way that there will be more injuries, more fatalities, because of what this legislation is forcing us to do.

Ms. BROWN OF FLORIDA. I want to thank the panelists. Is there any Member that feels that they would like to ask another question, because I would like to move to the second panel.

Mr. WALZ. If I could make a comment.

Ms. BROWN OF FLORIDA. Yes, sir.

Mr. WALZ. I too many troubled by this. When I look at again the legislation, we are not necessarily mandating a technology, we are mandating a standard. I think the suggestion I said—and the Petroleum Institute folks would say this too—you can dump it back at the loading rack. That requires no fit, no anything.

Is it possible we can improve safety and not add a burden or cost here? Is that the belief that you guys have? I think these are good questions, and both the chairwoman and the Ranking Member brought up concerns that all of us have expressed but I think there may be other options out there.

Would either of you like to comment just quickly on that?

Mr. CHIPKEVICH. I think certainly there are ways to find to do it safely. We believe the wetlines certainly, because of the vulnerability, really present an additional risk and hazard that doesn't need to be there.

Should the industry choose to empty those wet lines in a different manner, that would be perfectly fine. Purging it with either a system that we have seen or a system that is still in development certainly is how we think it should be accomplished.

Mr. WALZ. Thank you, Madam Chairwoman.

Ms. BROWN OF FLORIDA. Thank you all for your testimony.

As I said, there may be some additional questions, and I think we are looking at trying to take this bill up on Thursday. So we will give you any additional questions that we may have between now and Thursday. Thank you very much for your testimony.

Mr. PORCARI. Thank you, Madam Chair.

Mr. CHIPKEVICH. Thank you.

Ms. BROWN OF FLORIDA. We are going to get back to it because we have one more panel. Then we want to open it up for some 1 minutes from people in the audience. I always like to have that as a part of the hearing so we can hear from people who are not on the agenda. We want to leave a little time for them.

Panel II, Mr. Jim Casey, Vice President and the Deputy General Counsel for Air Transport Association of America; Mr. Mark Rogers, Director, Dangerous Goods Program, Air Line Pilots Association, International; Ms. Barbara Windsor, Hahn Transportation, New Market, Maryland, on behalf of the American Trucking Association; Mr. LaMont Byrd, Director of Safety and Health Department of International Brotherhood of Teamsters; Mr. John F. Cannon, Vice President - Sales & Marketing, Walker Group Holdings; and Mr. Ron Andenmatten, owner of Cargo Tank Concepts.
Are you the one with the twin brother?
Mr. ANDENMATTEN. No, my brother is my co-owner with Cargo Tank Concepts.
Ms. BROWN OF FLORIDA. We are going to start with Mr. Casey.

TESTIMONY OF JIM CASEY, VICE PRESIDENT AND DEPUTY GENERAL COUNSEL, AIR TRANSPORT ASSOCIATION OF AMERICA; MARK ROGERS, DIRECTOR, DANGEROUS GOODS PROGRAM, AIR LINE PILOTS ASSOCIATION, INTERNATIONAL; BARBARA WINDSOR, HAHN TRANSPORTATION, NEW MARKET, MARYLAND, ON BEHALF OF THE AMERICAN TRUCKING ASSOCIATION; LAMONT BYRD, DIRECTOR OF SAFETY AND HEALTH DEPARTMENT, INTERNATIONAL BROTHERHOOD OF TEAMSTERS; JOHN F. CANNON, VICE PRESIDENT - SALES & MARKETING, WALKER GROUP HOLDINGS; AND MR. RON ANDENMATTEN, OWNER, CARGO TANK CONCEPTS, LTD

Mr. CASEY. Thank you, Madam Chair. Good afternoon, I appreciate the opportunity to join you this afternoon.

As the Chair said, I am Jim Casey, the Deputy General Counsel and Vice President for Industry Services at the Air Transport Association.

ATA’s members, which are the largest U.S. passenger and all-cargo airlines, strongly support efforts to assure the safe transportation of hazardous materials. As in other areas of civil aviation, success in these efforts depends on the collaborative work of government, labor, manufacturers, shippers, and airlines that are committed to a disciplined data driven approach. No one has a monopoly of knowledge in this area.

We appreciate that the sponsors of H.R. 4016 want to improve the safety of the carriage aboard aircraft of lithium batteries and the electronic devices that use them. Legislation, however, is not the best way to pursue that goal. Instead, a notice and comment rulemaking proceeding is a far better means to examine facts, bring necessary expertise to bear, and develop whatever changes such an empirical focus shows are needed.

The opportunity to do so is before us. A proposed lithium battery rule is under review, as you have heard earlier this afternoon, at the Office of Management and Budget.

Shortly, therefore, all interested stakeholders should have the opportunity to contribute to an examination of the carriage aboard aircraft of lithium batteries. That is the way to proceed and will allow a timely exploration of the subject.

We emphasize this point in our November 4 letter to Chairman Oberstar and Ranking Member Mica. In contrast, the legislation under consideration, which would not be enacted into law for some time and by its own terms, would not require a final rule until 2 years after its enactment but could have the unintended but very real consequence of interrupting the anticipated rulemaking proceeding.

A rulemaking proceeding would enable the various interested parties to participate in assessing the need for and implications of additional regulatory requirements. Such wide-ranging participation is essential. This is a complex area where the benefit of exper-
tise and illuminating its different facets is a critical ingredient in the decisionmaking process.

Safety is a dispositive consideration of any such undertaking. We nevertheless must recognize that government action in this area could have serious effects on airlines and the welfare of their employees, as well as on the manufacturers, shippers, and retailers that depend on air transportation. With respect to airlines, both passenger and cargo airlines transport devices containing lithium batteries.

Moreover, because lithium batteries are indispensable to so much of what today we take for granted, those entities that are involved in the manufacturer, distribution, and sale of electronic devices have an unmistakable stake in the outcome in this legislation and any rulemaking procedure.

This is not, therefore, an insular subject. Ill-conceived requirements could have serious adverse results throughout our economy.

As we also noted in our November 4 letter, maximizing harmonization of any new U.S. requirements with International Civil Aviation Organization standards is an important concern for two reasons. First, most ATA members transport cargo internationally as well as domestically. Neither safety nor efficiency will be advanced if unnecessarily disparate HAZMAT requirements govern their operations.

Second, we believe that the United States must maintain its leadership role in ICAO by advancing harmonized international standards. That role will not be advanced by a legislatively mandated unique U.S. rule, which we fear would signal to ICAO members that they should feel free to take the same approach. That would be a serious blow to what we believe should be a common goal of seamless requirements.

Congress' interest in this important matter is very understandable. It is most helpful response, however, would be to urge the executive branch to accelerate the initiation of expected rulemaking proceeding rather than pursuing this legislation.

Thank you for your attention.

Ms. BROWN OF FLORIDA. Thank you. Before Mr. Rogers begins, let me remind the witnesses that under our Committee rules oral statements must be limited to 5 minutes, but the entire statement will appear in the record.

Mr. Rogers.

Mr. ROGERS. Thank you. Good afternoon, Chairwoman Brown, Ranking Member Shuster, Members of the Subcommittee and Member Edwards.

I am Mark Rogers. I am an airline pilot and Director of the Dangerous Goods Program for the Air Line Pilots Association, International.

ALPA represents nearly 53,000 pilots who fly for 36 passenger and all-cargo airlines in the United States and Canada. On behalf of our members, I want to thank you for the opportunity to provide our perspective on the carriage of lithium batteries on airliners and specifically on H.R. 4016, the Hazardous Material Safety Transportation Act of 2009.

ALPA strongly supports this legislation and believes that it will help enhance safety. If lithium batteries shipped aboard airliners
are damaged, defective or improperly packaged, a fire may occur, leading to potentially catastrophic consequences.

To mitigate this risk, it is necessary to remove the exceptions in place today and regulate lithium batteries as a hazardous material, including provisions for enhanced marking, labeling, testing and packaging requirements. It is also necessary to ensure that if a fire does occur, the results are not catastrophic.

This is accomplished by restricting the loading of lithium batteries to cargo compartments equipped with a fire suppression system capable of extinguishing a lithium battery fire, or when this is not possible, by placing the batteries in the fire-resistant container or in locations accessible to the crew. To further reduce the possibility of an uncontrollable fire, the total quantity of lithium batteries at any one location on the airplane must also be restricted. This bill accomplishes each of those important goals.

I would like to deviate from my prepared statement just a little bit to address some of the things I have heard this afternoon in the opening statements and what I have heard from a few other presenters, and just talk about this idea of crew accessibility and the fire suppression systems on aircraft.

To talk first about the passenger airliners, the under floor cargo compartments have a halon suppression system that the FAA has shown through testing at the Atlantic City fire lab is capable of suppressing a lithium ion battery fire. So that would be all the batteries equipped in things like cell phones, laptops, everything like that. The halon suppression systems on those passenger aircraft are capable of suppressing that fire.

They are not capable of suppressing a lithium metal battery fire. However, those lithium metal batteries are already prohibited on passenger aircraft. So for passenger aircraft there wouldn’t be much of an impact on that particular portion of the regulation.

On cargo aircraft, while they are not required, most cargo aircraft actually do have the halon suppression systems under floor, because these were originally passenger aircraft. Some carriers do remove them because they are not required, but most have them.

The lithium ion batteries on the laptops, the cell phones on cargo airliners, if they were shipped under floor, would be capable of being extinguished by the halon suppression system. For those that don’t have that system, you also have the main deck.

Contrary to what I have heard in some of the statements, it is not just the forward position that can be accessible. Airlines throughout the world use the side of the aircraft to be accessible. So it wouldn’t unnecessarily limit that. Also the NTSB has heard testimony, and the major cargo carrier in the United States, the one that transports the most cargo right now, just recently a few months ago, announced that they are going ahead with the installation of a cargo suppression system that is for the entire main deck and will puncture a cargo container and fill it with a foam that their testing has shown will put out either a lithium ion fire or a even lithium metal battery fire, which is something very new, and they are going ahead with that even though it is not required by regulation.

So in any of those cases where none of that is possible, having crew accessibility is kind of the last line of defense to allow quick
recognition of a fire and at least to have the crew to be able to do something about it by being able to access it and trying to put it out.

In terms of there being no fire resistant containers in the market today, that is true. However, we just enacted legislation following the ValuJet accident 10 years ago for oxygen cylinders, and that mandates packing that can withstand a 1,700-degree fire for 5 minutes, which is the initial fire, and then 400 degrees for 3 hours, which is the diversion time with the halon suppression system in place.

So the rulemaking came about that mandated that, and the industry responded and they are going to build these containers. I think the same thing could happen with lithium batteries. If we put the requirement in place, there will be a market to put these containers and you will be able to have some kind of metal packaging or do testing that would show maybe this would help reduce the risk of a fire. I think ultimately the answer is in the correct fire suppression on the aircraft, but there are other alternatives.

To get back to what I had prepared then, thank you, and it is important to note that the total quantity of lithium batteries at a single location cannot be restricted if the batteries are not first treated as fully regulated hazardous materials. With the exceptions in place today packages containing lithium batteries are handled as general freight and are not subjected to the acceptance check and loading restrictions applicable to other hazardous materials.

The flight crew is currently notified when thousands of batteries are loaded into an airliner cargo compartment, and as a result they are not able to pass that information on to emergency personnel responding to an incident.

ALPA is very pleased this bill will align the regulations regarding lithium batteries with the risks they pose to transportation and restrict the quantity of batteries at any one location.

We are also pleased that the bill addresses the issues of special permits and approvals. These regulations will help ensure that batteries are transported safely aboard airliners. Deviation from these requirements should only be granted when an equivalent level of safety is achieved, and those deviations are clearly in the public interest.

At least 6 additional fires involving lithium batteries aboard aircraft were in packages prepared for transport——

Ms. BROWN OF FLORIDA. Mr. Rogers, are you almost finished?

Mr. ROGERS. I have just about a half page left.

Ms. BROWN OF FLORIDA. We are going to have questions and answers, and we will give you a chance to finish. Thank you.

Mr. ROGERS. Thank you.

Ms. BROWN OF FLORIDA. Ms. Windsor.

Ms. WINDSOR. Thank you, Madam Chairwoman, Ranking Member Shuster, of course, from my home State of Maryland, Congressman Cummings and Congresswoman Edwards and Members of the Subcommittee. Thank you for having this opportunity to be with you.

My name is Barbara Windsor, and I am President and CEO of Hahn Transportation, a trucking company headquartered here in New Market, Maryland. My company hauls petroleum products
and other hazardous materials in bulk. My family built and grew this business over the past 75 years, and today we operate 100 tank trucks and employ over 150 individuals.

I appear before you representing not just my company, but also the American Trucking Association and the National Tank Truck Carriers. Today I will focus my remarks on the provisions of H.R. 4016 that would ban the transportation of flammable liquids and external product piping of cargo tanks, or called wet lines.

We believe that the industry’s safety record clearly demonstrates that a mandate for wet lines purging equipment is not justified. Earlier this year, the DOT examined the HAZMAT incidents database and reported that over the past 10 years there were six fatalities that were directly attributable to wet lines releases.

By contrast, more than 50,000 cargo tank shipments of flammable liquids occur each day and over 180 million shipments have occurred over that same 10-year period. These government statistics indicate that the risk of the fatal wet lines incident is approximately one in 30 million.

We recognize that the NTSB has recommended that wet lines be banned. However, the NTSB recommendations are based upon the review of only three wet lines incidents. The NTSB did not consider the infrequency of wet lines incidents, the risks to workers that would have installed the wet lines purging systems, nor the costs that are involved in the purging of the wet lines.

In light of this, we recommend that Congress require the National Academy of Sciences to conduct an in-depth study of wet lines, the risks that they present, and the costs of addressing these risks, including the viability of having the shipper of the product purge the lines during the loading process rather than putting the purging system on each trailer.

Having discussed a very small risk associated with the wet lines, we now turn our attention to the cost of the wet lines purging system. Perhaps the greatest cost associated with the wet lines ban would be the additional lives lost as a result of retrofitting a large number of tank trucks.

We are aware of the 20 fatalities that have resulted from welding operations performed on cargo tanks during the past 10 years. We believe this number is significantly understated as it is based on the Internet news search that was unlikely to reveal all the cargo tank shop incidents. This rudimentary analysis makes it clear that the mandate to install wet lines purging systems will result in an overall increase of fatalities as even the best repair facilities have experienced these types of accidents.

We also understand that the manufacturer of the only available wet lines purging system is working on a system that does not have to be welded. Unfortunately, this system would still require cutting metal and replacing cargo tank valves.

Putting the human cost factor of retrofit aside, the capital costs associated with retrofitting a cargo tank is approximately $8,000 per tank. This figure does not include the costs associated with down time of the equipment during the retrofit process, the costs associated with the loss of productivity waiting for purging systems to operate on the ongoing maintenance of this system.
The cost of retrofitting of my own fleet would exceed $800,000. This is an enormous expense for a family-owned business such as ours. Given my company’s limited access to capital, the requirement of investment in purging systems would prevent me from deploying other proven safety technologies. By prohibiting the transportation of flammable liquids in the wet lines, H.R. 4016 prevents the development of alternatives to the purging system that could provide an adequate level of safety.

A wet lines ban essentially requires the use of wet lines purging and prevents cargo tank manufacturers from pursuing alternatives such as under ride protection, modification to wet lines that could prevent releases from impact, or other measures to provide an adequate level of safety.

We also believe that any potential wet lines ban should require petroleum terminals’ loading racks to be retrofitted to assure that the product is removed during the loading process. It is much more cost-effective to retrofit a couple hundred petroleum terminals than to require tens of thousands of cargo tanks to be equipped with a purging system.

ATA, NTTC, and Hahn Transportation appreciates this opportunity to offer our insight of these measures to improve the safe transportation of hazardous material. On May 14, ATA testified before the Subcommittee on six key issues for Congress to consider as it reauthorizes the Federal HAZMAT transportation law. In lieu of restating our prior testimony, I ask that the chairwoman incorporate ATA’s prior testimony in the hearing record.

Thank you very much. I look forward to answering any of your questions.

Ms. BROWN OF FLORIDA. Thank you.

Mr. BYRD. Good afternoon. My name is LaMont Byrd, and I am the Director of the Safety and Health Department at the International Brotherhood of Teamsters.

I would like to thank Madam Chairwoman Brown, Ranking Member Shuster, Members of the Subcommittee, and Congresswoman Edwards for the opportunity to comment here today concerning H.R. 4016, reauthorization of the DOT's Hazardous Materials Safety Program.

The Teamsters Union represents approximately 300,000 workers in the United States who handle and transport HAZMAT or respond to accidents that may involve the release of hazardous materials. Today I will briefly comment on transporting lithium batteries on aircraft, external product piping, special permits, and OSHA jurisdiction. My written statement also includes our position regarding training for HAZMAT workers and emergency responders.

The Teamsters Union represents approximately 2,550 cargo air pilots who are employed at 15 different cargo airlines. We are very concerned about transporting lithium batteries on aircraft, but we think that if precautions are taken such transport could be safely accomplished.

The Teamsters Union agrees with the safety recommendations that the National Transportation Safety Board issued regarding this matter. We also strongly support the provisions in section 201
of this legislation that encompasses those recommendations and further addresses the dangers associated with the transport of lithium batteries in aircraft.

Limiting stowage of lithium batteries to crew-accessible locations is essential to protecting crew members from certain disasters should a fire occur on board the aircraft. With no way to access an area where an explosion and or fire could erupt, and no certainty that the crew could land the airplane quickly, we think that it is absolutely necessary that short of a fire suppression system or storage in fire-resistant containers lithium batteries be stored in crew-accessible locations. It is also important to establish load limits for batteries on board aircraft and ensure that batteries are properly labeled and packaged.

Because of the competitive nature of the tank haul industry, the Teamsters Union initially had significant concerns about how some proposed changes in the legislation might affect the job security of our nearly 11,000 members who were employed in this industry.

But we want to make it perfectly clear to every Member of this Subcommittee that we support the provisions outlined in section 202 of the bill. We firmly believe that the Committee has struck a fair balance between the safety of workers and the motoring public and costs to carriers. We agree that prohibiting the transport of Class 3 flammables and wet lines on vehicles manufactured 2 years after the enactment of the legislation and giving the industry 10 years to bring existing vehicles into compliance will be both protective to workers and achievable by industry.

With respect to the concerns expressed for the safety of workers who perform jobs to retrofit vehicles, we support the worker safety provisions in this legislation that require a review and appropriate update of existing worker safety standards by the Department of Transportation and the Labor Department.

With respect to special permits, the Teamsters Union has always been concerned about the issuance of special permits, especially relating to the transport of HAZMAT. In many cases, special permits are routinely renewed or modified without adequate review. In some cases these permits have been granted to umbrella groups for an entire specialized industry without examination of the specific carriers involved.

It is only common sense that the safety history of a carrier be examined and a determination made that they meet the safety standards necessary to qualify to receive a new permit or have an existing permit renewed or modified. Therefore, we strongly support the provisions contained in section 401 of the legislation.

The Teamsters Union is aware of ongoing efforts to eliminate OSHA’s authority to protect workers who load, unload, and handle HAZMAT. This is a critical issue for the Teamsters, and we recommend that any such attempts by industry during this reauthorization period be rejected. Based on our experience working with OSHA on HAZMAT transportation issues, it is our opinion that the agency has the experience, commitment, and track record to effectively protect transportation HAZMAT workers.

The Teamsters Union commends the Committee for having concern about the safety and security of the traveling public and HAZMAT workers. As the amount of HAZMAT being transported
on our Nation's supply chain increases, so does the risk to our safety and security. Enhancing the Federal HAZMAT laws and reauthorizing the Federal safety HAZMAT program are important steps that this Congress can take to protect HAZMAT workers and the general public. We look forward to working with you on this important endeavor.

I am available to answer any questions that you may have. Thank you.


Mr. Cannon. Madam Chairwoman, Ranking Member Shuster, Members of the Subcommittee, I thank you for the opportunity to testify before you on the important subject of wet lines.

My name is John Cannon. I serve as Vice President - Sales & Marketing for Walker Group Holdings. We are a company of over a thousand employees, and in a typical year we produce 3,000 cargo tanks.

I am a professional engineer and a design certifying engineer in accordance with U.S. DOT rules, so I feel I am qualified to testify about some of these matters. Today I speak to you on behalf of not just my company but also the industry. As Congressman Petri pointed out before, I have had the privilege of serving in leadership positions on several industry groups.

Allow me to preface my remarks by indicating that I share concerns that have already been shared here today about whether this wet lines ban can be justified, and I am especially sensitive to the issue as far as the risk of retrofit. My company operates a number of repair facilities across the country. While we would stand to benefit economically from performing this repair, we would rather not, because the risks involved are so great.

For your consideration today, I would like to offer comments on four specific areas, first of all, the scope of any wet lines ban, should your Committee decide to move forward with wet lines legislation.

Secondly, I would like to comment on the need for flexibility.

Third, I would like to offer a few comments on time required for coming up with alternative solutions.

And, fourth, I would like to speak about the importance of allowing alternative solutions on both existing tanks as well as new tanks.

First, regarding scope, I would ask that all of you please know that not all tanks are the same. As many of you may have seen today, a typical DOT 406 tank can have up to 50 gallons of product piping. In contrast, a 407 tank can have less than 1 gallon. So the risks involved with these two different vehicles is considerably different.

Secondly, I ask you to take into account that a DOT 407 by its nature might haul a different chemical every day of the week, one day a Class 3 flammable like xylene, the next day it might haul caustic soda. As a result, this type of trailer is cleaned almost daily. The presence of a purging system or some other internal mechanism would create a serious cleaning issue, a contamination issue, and an unintentional hazard as far as the hazardous material reaction.
The second area I would like to comment about is flexibility. I believe the free market is best served if your Subcommittee will allow for different innovations to be brought to address this potential issue. A strict wet lines ban would stymie innovation, in my opinion. Our industry cannot be limited to just one solution. One feasible alternative approach I would like to discuss today is what we call the encapsulated wet line.

But let me make a very important distinction. This is an encapsulated wet line that would also include piping that is much stronger than the tank itself. The idea behind this is in the event of the extremely rare event of a side impact the piping may be dislodged but no contents would escape and become fuel for ignition.

As far as time, 2 years has already been provided for in H.R. 4016. For various reasons that are outlined in my written testimony, we would respectfully ask that 3 to 4 years be provided. In my experience, developing several products over the last 22 years, all of these steps have to be followed to ensure the best possible products are brought to market.

Finally, I would ask that whatever is allowed on a retrofit basis also be allowed to be applied to new equipment that would allow fleets large and small to have commonality of parts and the same procedures to ensure the safety of their workers.

In conclusion, I ask that you carefully consider what, if any, cargo tanks should be subject to a wet lines ban and, if enacted, a wet lines regulation should allow alternative approaches for both new and retrofitted equipment.

Thank you, and I am available for any questions you may have.

Ms. BROWN OF FLORIDA. All right, Mr. Andenmatten.

Mr. ANDENMATTEN. Good afternoon, Chairwoman Brown and Members of the Subcommittee. Thank you for your gracious invitation for us to testify before you on the hazards of wet lines practices and on our wet line technology that has been proven in the field over the past 11 years to eliminate these risks in a simple, efficient, and an economical way.

My name is Ron Andenmatten. Together with my brother, Roy Andenmatten, we are co-owners of Cargo Tank Concepts and we are the co-owners of the wet lines purging system. This system was demonstrated on the Dateline NBC episode reporting on the hazards of wet lines and entitled Wet Lines Running on Empty. That episode first aired in May of 1999. Shortly thereafter, the U.S. DOT responded to the NTSB that a rulemaking would be shortcoming.

It is a travesty of both public safety and common sense that gasoline tanker trucks continue to transport up to 50 gallons of gasoline and frail 4 inch diameter outlet pipes that are actually designed to fail if impacted in an accident. These pipes, commonly known as wet lines, were never designed to carry gasoline. Thus, with the exception of Sunoco and a few others, gasoline tanker trucks that are daily being operated in a way that they were never originally designed.

You have heard the testimony from the NTSB that wet line incidents are underreported. The opposition has stated that these are rare events, but they continue to base those arguments on a database that the NTSB has shown provides no means for indicating whether or not a wet line incident may have actually occurred.
Many of the noted wet line fatalities were never originally reported as wet line incidents, nor were they uncovered through this very same U.S. DOT database that the opposition uses to compute this alleged rarity.

In light of the foregoing, we believe the burden of proof here should not belong to the public safety.

I would like to ask the Members of Subcommittee to ask themselves this simple and obvious question: Is it logical to assume that outlet piping designed to fail if impacted in an accident will rarely do so?

Of even greater importance than the misrepresentation of the frequency of wet lines incidents are the understatements of the potential consequences. It is important for the Members to understand that wet line hazards are not limited to the gasoline in the wet lines, but rather they also involve the entire load of the cargo tank once the wet line gasoline pool ignites.

An NTSB report concluded that a non-traffic accident resulting in a wet line release of just 28 gallons of gasoline was sufficient to cause the entire tanker to burn out of control and destroy a $7 million thruway overpass. It is absurd that this $7 million figure has been used in cost/benefit analyses as a worst case scenario. This accident could just have easily occurred on a suspension bridge. The heat generated would be more than adequate to compromise the main cable and bring down the bridge. I ask the Members of the Subcommittee to seriously consider how much that might cost.

All too frequently we have seen how regulatory action can stall on a safety issue until the worst finally does happen and the wet line issue has been stalling for decades.

In light of the foregoing and in the interest of public safety and our national infrastructure, I implore the Subcommittee to act now on behalf of public safety where others have failed, to stop the endless cycle of revisiting the same old issues and to address the facts, concerns, and recommendations on wetlines, as addressed by the National Transportation Safety Board.

Sunoco has identified two accidents in the Philadelphia area where it believes purged lines may have prevented the destruction of its trailers. With Sunoco’s estimate of the cost of each combined tractor-trailer exceeding $200,000, the benefits of the system has already potentially paid for the cost of Sunoco’s entire fleet on this basis alone. Remember that this figure has not even factored in the savings of the other costs normally associated with such an incident, such as the cost of emergency response, environmental response, collateral damage to the public infrastructure, injuries, fatalities, lawsuits, etc.

Sunoco has also stated they have reaped substantial serendipitous benefits through increased driver awareness.

One of the biggest complaints voiced by the opponents to a wet line prohibition is the misconception that welding is required for retrofits on existing tank equipment. This is not so. As you should have witnessed earlier this morning, a non welded option is available where a smaller check valve is easily installed by drilling and tapping a small hole through the emergency valve flange.
We also wish to announce to the Subcommittee that we are now offering to any customer, who is willing to convert their fleet, the installation of our automated purging system at their facility absolutely free.

There are two misconceptions I would like to address. The first is that our purging system is the only one available. In the February 2002 edition of Modern Bulk Transporter, one of the most prominent industry journals, the marketing of three different purging systems that were demonstrated at the October 2001 NTTC cargo tank maintenance seminar, were described and compared in detail. In the article they state, "Mechanical purging systems are available from three companies, Civacon, EBW, Incorporated, and Sytline Industries. Representatives from the three companies discussed the features of their products at the cargo tank maintenance seminar."

Another myth is that accidents that show a release of more than 50 gallons of gasoline cannot be considered wet line incidents. One of the biggest benefits of the purging system is that it prechecks the integrity of each emergency valve on each and every load. This is important because the emergency valve is what controls the entire contents of the compartment. When installing our system we have found on average that about 1 in every 10 emergency valves is either leaking or stuck open and needs servicing and/or replacement. That amounts to about one in two trucks having a leaking valve.

One of the reasons for this development is that when the industry switched to bottom loading there was no longer any continual way of telling when the emergency valve was leaking. It is important to understand that an emergency valve that is leaking or stuck open will discharge the entire contents of the compartment if the outlet piping is damaged. Consider the consequences of 2,500 gallons of gasoline pouring out within a city, near any of the many subway ventilation gratings within the subway system and streets. A resulting explosion in this scenario would be catastrophic. It is important to note that no product would be released in this case, had a purging system been installed. The faulty valve would have been discovered before leaving the terminal. Thus this scenario represents a wet line accident with a faulty emergency valve.

Ms. BROWN OF FLORIDA. We have to get into the questioning, and we will give you an opportunity to answer your questions and finish your statement.

Mr. ANDENMATTEN. Thank you, Madam Chair.

Ms. BROWN OF FLORIDA. Ms. Napolitano.

Mrs. NAPOLITANO. Thank you, Madam Chair, and I am still very interested in the lithium battery transportation, and one of the things that was not brought up was any training to personnel, whether loading, off-loading, any of the personnel. Is OSHA involved in being able to establish that or is there anything that protects them and protects the passengers?

Mr. ROGERS. Thank you. We do feel training is a very important part of the issue. And currently no training is required for carriers that accept or transport these batteries because they are not considered as part of the hazardous materials regulations. They are accepted from the majority of the requirements.
Mrs. NAPOLITANO. Wouldn’t the bill of lading be able to deter-
mine or the pilot—you know, trucks have to carry a bill of lading,
trains have to carry a bill of lading. Why wouldn’t there be one af-
forded the pilot so they would know what you have on board?

Mr. ROGERS. We strongly agree with that. What we have is a no-
tice to pilot command of the dangerous goods hazardous materials
that are on the aircraft. Lithium batteries are specifically exempted
from that requirement. So we could have 5 pounds of dry ice——

Ms. NAPOLITANO. And the reason it is exempted?

Mr. ROGERS. Well, it goes back to the history I think a lot, be-
cause batteries, before lithium batteries came into the market, they
generally weren’t a problem with the alkaline batteries.

Mrs. NAPOLITANO. So there hasn’t been an update on the regula-
tions is what you are saying? Because I am concerned, and Ms. Ed-
wards is saying when there is fire in there, there is very little you
can do about it unless you are trained to be able to do something
about it or with it.

Mr. ROGERS. Right. And let me make clear the legislation here
and what is being proposed would require training for people. It
would bring them into the fully regulated dangerous goods scheme,
hazardous materials scheme. So anybody who would transport
these would be required to then have training.

Mrs. NAPOLITANO. On both the lithium and the wet lines is
Homeland Security involved in any of this? Because that could pose
a big problem for any major site where a truck would be taken in
the area, in your area.

Mr. CASEY. Not on lithium batteries.

Ms. NAPOLITANO. No, no, I am talking about the wet lines specifi-
cally.

Mr. CASEY. Don’t know.

Mrs. NAPOLITANO. Anybody?

Mr. BYRD. There is, not wet lines specifically, but for drivers of
HAZMAT laden cargo tanks, they would have to get background
checks per TSA, Homeland Security requirement.

Mrs. NAPOLITANO. That brings the point for the fire protection.
Are the fire departments trained in HAZMAT or the areas where
these trucks may be carrying flammables?

Ms. WINDSOR. I would say most of the time that there is emer-
gency response within an area that would be able to handle any
existing emergency with them.

Mrs. NAPOLITANO. Thank you, Madam Chair. I will save my
questions.

Ms. BROWN OF FLORIDA. Mr. Shuster.

Mr. SHUSTER. The question of the lithium batteries, Mr. Casey
and Mr. Rogers seem to have two very different views on what is
out there. First question is the fire suppression. Mr. Rogers said
that it is on most planes. Can you respond to that, Mr. Casey?

Mr. CASEY. It is in the lower decks of passenger aircraft. And as
he mentioned, many cargo aircrafts there are fire suppression sys-
tems. One of the questions that some of our members raised was
under the legislation would those systems be regarded as meeting
the criteria of the legislation. We know there is suppression sys-
tems, but whether it meets the intent of the legislation, at least for
some of the members, that is a genuine question.
Mr. SHUSTER. The government would say not up to standard, not up to what we would want—you would have to retrofit them.

Mr. CASEY. We don’t know what would emerge from the legislation in a rulemaking proceeding.

Mr. SHUSTER. The other question on true accessibility, I mean I have talked to some folks who say these things are more like a truck, you pack it full of stuff and there is not really an opportunity for the crew to get back into the cargo area.

Mr. CASEY. Well, a narrow bodied aircraft there is obviously a consideration, yes.

Mr. SHUSTER. Say that again.

Mr. CASEY. A narrow bodied aircraft, like 737, something like that.

Mr. SHUSTER. There is not room to get back to——

Mr. CASEY. As I understand it, typically not.

Mr. ROGERS. Can I address that too as well? In the dangerous good scheme there are many, many commodities that are required to be crew accessible. That is not a new provision.

Mr. SHUSTER. Say that again.

Mr. ROGERS. There are many commodities that are required to be crew accessible. That is not a new provision for the HAZMAT regulations. They are applying something that is already in place.

Mr. SHUSTER. For cargo planes?

Mr. ROGERS. For cargo aircraft. And I think it is important to keep in mind that if this fire becomes uncontrolled there is no way to put it out and we risk losing the aircraft. So we need to have some way of addressing the issue, and whether that is a fire suppression system in the lower holds or something they are putting on the aircraft or developing new packaging that would prevent it. The very minimum is at least having the crew be able to access this commodity and fight the fire.

Mr. SHUSTER. And the third question is on the international, the ICAO rejected what we are proposing and the Secretary seemed to say it is not going to affect our industry, our air cargo industry. I can’t imagine that it’s not going to have some kind of impact on it. Could you both talk a little bit about what your view is, what you think is likely to happen?

Mr. CASEY. It clearly will. If you have disparities, that is a problem. Harmonization is a topic that whether it is HAZMAT, whether it is safety, or whether it is security, we keep trying to achieve in the international arena. And the reason for it is both for safety or security, but also because of operational considerations. If you get disparate regimes out there you have got a problem on your hands. Moreover if you have disparate regimes there are other jurisdictions out there that have shown a desire to regulate, a real willingness to regulate, and we don’t want to encourage that kind of individual regulation outside some sort of an international framework.

It is not an easy issue, not easy to achieve, there are frustrations along the way. But from our perspective, whether we are talking about HAZMAT, whether we are talking about aircraft certification issues, or whether we are talking about civil aviation security issues, we want a seamless international environment.

Mr. ROGERS. I think that is an excellent question, and I actually am the panel member for the pilots at the ICAO Dangerous Goods
Panel. I participated fully in those discussions last month. It was our proposal that was ultimately not accepted. I think it is also important to point out that whether we allow this process to go forward though an NPRM or a legislation there will be a lack of harmonization. So that will happen regardless.

The question comes up why didn’t ICAO adopt these provision. Well, one of the reasons is the U.S. has the best reporting system in the world and they would—almost all of the incidents involve U.S. carriers or in the United States. I don’t believe that is because the United States is doing this any worse than anybody else. But one instant came from Macau to Hong Kong and then was picked up by a U.S. carrier. The fire actually occurred on a previous flight, but the Chinese didn’t report it to anybody. It was only the U.S. carrier that picked up the package that was burned and they found it, so they reported it. So the visibility of the problem is much greater in the U.S. and we have had the accidents.

Also a lot of the other ICAO panel members pointed out to the United States that they haven’t even adopted the proposals that were enacted in 2007. So it is difficult to say that they would want to agree to something new. But as the U.S. pointed out at the meeting, the reason why is because PHMSA didn’t believe that they went far enough and they are wanting to create additional regulations here.

So I think to be able to be a leader in the international community this legislation is important because it will put these rules in place in the United States and then the rest of the world will have the ability to follow and come forward.

Mr. SHUSTER. Why did they reject it? I am not quite sure. They rejected it because ours are too strict and they didn’t—I am not sure I follow why they rejected it.

Mr. ROGERS. I am sure there are a lot of different reasons, it is hard to summarize a 2-week meeting in 30 seconds. But basically they are worried about the cost. Since I last testified here in May we have had six fires in the U.S. just involving lithium batteries. And so I think at some point you have to take action to protect the traveling public and not worry quite as much about total cost.

Mr. SHUSTER. We certainly do, but when the international community is rejecting us outright, that says to me that it is going to cost jobs, there will be U.S. pilots that aren’t going to be flying planes because the U.S.—we have imposed a standard on our fleet that they aren’t doing on theirs. So it will cost us jobs, pilots will be out of work and people on the ground will be out of work. So is there some way we can find a compromise that the international community will say, yes, we can go along with that or are you just telling me they don’t—from what it sounds like, they don’t care. It is not that our planes are not falling out of the sky because of this.

Mr. ROGERS. Well, let’s be clear they have adopted some of the proposals, it is not like they rejected everything outright. They just haven’t taken all the steps that we feel are necessary.

This lithium metal battery ban on passenger aircraft, that is clearly something different than the rest of the world, more restrictive, and that hasn’t cost American jobs. I don’t think the market for computers or cell phones in the U.S. is diminishing rapidly because of these.
Mr. Shuster. I am not so much talking about the passengers, because I understand they have a hundred people up there. Every life is precious, but it seems to me that we have to find a balance here again.

Mr. Casey. I am not sure we are even at the point where we have to talk about a balance. We are at the point where we have to acknowledge that we want to be leaders in this effort, number 1, but number 2, we also have to acknowledge among ourselves at least that we don’t have unique insight into these issues. If at least some members in the international community don’t share our views, we ought to sit back and take that into account. It doesn’t mean that the rulemaking isn’t going to proceed along its own way. I don’t mean to suggest that it shouldn’t, but the rulemaking ought to take into account the fact that expertise in this area isn’t limited to those here in the United States. There are some countries out there with very sophisticated expertise in this area, very sophisticated air carriers, and homeland is where people don’t want to be exposed to unnecessary, unsafe conditions. If they don’t share our view at an international forum designed to explore these issues, that is a consideration.

Mr. Shuster. All right. I appreciate that. Thank you.

I yield back.

Ms. Brown of Florida. I think most of the questions are pertaining to the wet lines. Let me just ask the question, because both of you represent the industry and seems like it is a conflict there because Mr. Casey you indicated that you think that we need to stand down and let the rulemaking process go forward. If we pass legislation, then that would throw it behind additional time. So seems like it is a conflict right here.

Mr. Casey. I am not sure it is a conflict and the desire to get the same result, at least from the airlines’ perspective, from ATA members’ perspective. We are familiar with the rulemaking process. We use it in other areas, not just for HAZMAT. We think it is effective because of the involvement of whole spectrum stakeholders, which I think in this area is particularly important.


Mr. Casey. There is an entity, PHMSA in this instance, that has a statutory responsibility to regulate in the public interest. We recognize that. So we are not trying to slow down the process. To do that I suspect we would be advocating that you tell PHMSA not to do a rulemaking right now, but we are not. What we are saying is it is teed up, let’s get on with it, let’s put it in a forum where everybody has access, where it is data driven, where we can go through the record and figure out what has happened and we can formulate, if it is necessary, changes in the regulatory environment that advances safety considerations that have been spoken about this afternoon.

Ms. Brown of Florida. Mr. Rogers, what problem do you have with that? Because if we pass the bill, you know given that I always see a bill passed as amazing and the President sign it. You have to go through the House, the Senate, committees. It may happen 2 or 5 years from now. You know the rule is getting ready to happen.
Mr. ROGERS. I think it is an excellent question. In fact, that sums up the rest of the remarks I was going to make. We think the legislative process is important in this case, mainly because we have known about this problem for over 10 years and PHMSA has still not acted and taken decisive measures. The last time of the issue of lithium battery rulemaking was 2003 and it took over 4 years for that to come into place and then it still didn’t go far enough. It has been over 2 years since the NTSB issued the recommendations and they still haven’t enacted the NPRM process.

So I think with the legislative process it would ensure even with that 2 years a much faster track and would also ensure that there wasn’t such this delay from the issuing of the NPRM through all the comment period lawsuits, everything else, until the actual rule is taken into place. Because when the requirements would be set down here through the legislative process it would be much clearer what had to be done and the process could go forward much more quickly. It would also ensure that the rule that is ultimately published by PHMSA would meet the standards Congress is establishing here.

Ms. BROWN OF FLORIDA. Mr. Walz.

Mr. WALZ. Well, thank you all again for your testimony and your expertise, it is truly appreciated. We have all talked about striking this balance between safety and making sure that we are competitive. But I have to tell you I simply don’t fully embrace this. If others don’t do it, we can’t because we are at a competitive disadvantage. We have child labor laws, and that probably puts us at a competitive disadvantage, but I am not about to roll that back. I have also flown on one of those regional carriers from Guangzhou to Chengdu, and I was never so damn happy in my life to get on the ground.

So there are reasons here and there are things that we can lead on. I don’t want to put an undue burden on this, but I am looking at this legislation again, proper labeling, testing of batteries, proper packaging. Why is that so burdensome, Mr. Casey? Why does that pose a burden? Why shouldn’t we lead on this issue? Because you are hearing from the pilots. I am concerned about this from the pilots perspective. They are saying it is a danger to them and they are in the plane.

Mr. CASEY. I understand the concern. No one is disputing that this is not a serious issue. We think though that the rulemaking proceeding is the best way to get it out on the table, it is transparent as all get out, it is public record.

Mr. WALZ. Mr. Roger’s concern that we are dragging on feet on this is another way to drag it out, do you feel that is warranted.

Mr. CASEY. From our perspective it is just the opposite. What we have heard this afternoon is we are about to see a rulemaking proceeding come out of the OMB process. So it is there.

Mr. WALZ. Okay.

Mr. CASEY. We are all going to be involved in it when it comes out. We don’t have to wait until—no offense, until there is congressional action. It is going to be there.

Mr. SHUSTER. None taken.

Mr. CASEY. It is going to be something that anybody, anybody with an interest, including those who may be very strident on the
issue, have the opportunity to express themselves and try to persuade the decision maker about it. So we don’t have any concern about getting involved in that kind of a process. We think it is the optimum way to proceed, particularly given the concerns that have been expressed this afternoon.

Mr. WALZ. Does it concern you that the lithium manufacturer told Chairman Oberstar that they would get this thing killed at OMB? Does that kind of stuff matter?

Mr. CASEY. I——

Mr. WALZ. I know you can’t speak directly for them. That is one of my concerns. I wouldn’t argue that there is faster ways.

Mr. CASEY. We didn’t try to get it killed, and that is my whole point today. We are not trying to object the rulemaking process. We are willing to accept it.

Mr. WALZ. Well, I appreciate it.

Mr. ROGERS. I would like to point out again that the Department of Transportation indicated that this is not inconsistent with what they are trying to do. We are not interfering with the goals of the rulemaking process, but your concern about what was said to Mr. Oberstar is exactly my concern. The last time any lithium battery regulation was proposed in 2003 it was delayed and delayed through lawsuits and different tactics to from prevent that from ever reaching the light the day. And I think in light of the fact that these are clear safety priorities, we are talking about labeling and limiting the quantity on the aircraft, and that is consistent with what DOT wants to do, then I think this is important and will help the process along and it won’t hinder it.

Mr. WALZ. You mentioned other products. Could you name one for me? Other products that are done that way, that are done that way, things that are shipped and already labeled and already have this.

Mr. ROGERS. Yeah, there has thousands of them, ethanol, fuel cells, hydrochloric acid, all kinds of things. But I will point out that if we have 5 pounds of flammable paint on the aircraft the pilots are notified that it is there, and that 5 pounds of flammable paint could be located next to a thousand computers or a thousand lithium batteries on a pallet and will have no idea that they are even there.

Mr. WALZ. Very good. I am going to switch gears.

Ms. Windsor, thank you for your testimony and your real world experience. This does matter to us and you have heard us all express concerns in trying to get this right. I want to be really, really sensitive to cost, because you have your costs that are already associated with your business.

Any chance we get any savings on insurance by doing this, by putting these purges in there? Is that a silly question dealing with insurance companies?

Ms. WINDSOR. I wouldn’t be able to see it. No.

Mr. WALZ. You quote a number of $800,000, you are figuring $800,000 per retrofit.

Ms. WINDSOR. Correct.

Mr. WALZ. I am hearing from the other industry folks, Sunoco folks, that said it was about 4,000 for them. It matters and I am not saying that is a small—400,000 is still big. How would the
800,000 compare to your general maintenance like tires and other things that you do? Is that a big percentage?

Ms. WINDSOR. It is major, it is a large number, yes.

Mr. WALZ. This is a major purchase.

Ms. WINDSOR. It is a major purchase and then it would give us—we would not be able to put other safety items on there that I would rather invest in.

Mr. WALZ. Is the compromise that everything new because I am assuming you are figuring this retrofitting every one of yours. Some of your trucks will be off the road by 2020, right, new ones will come on?

Ms. WINDSOR. Very few, because cargo tanks last forever. They really start and through the years they go from a gasoline tanker to hauling diesel fuel to jet fuels down to deicer——

Mr. WALZ. So some type of solution with all these others still needs to be there whether it is a mandated standard, not a retrofit, if it is the dumping at the rack or whatever.

Ms. WINDSOR. Right.

Mr. WALZ. But we are still going to have to deal with all those because you very well could have a good percentage of those on.

Ms. WINDSOR. That is right.

Mr. WALZ. So if you are looking out at 2020 and figuring your budget and everything, this is a big hit.

Ms. WINDSOR. It is a major hit, especially for a small company.

Mr. WALZ. Compared to anything else that we have done that looks like this to you?

Ms. WINDSOR. Currently, no, this is major.

Mr. WALZ. I yield back. Thank you.

Ms. BROWN OF FLORIDA. Mr. Cummings.

Mr. CUMMINGS. I just have one or two questions, Mr. Casey—I am sorry, Mr. Cannon. You talked about a year being needed to bring about the manufacturing of alternative approaches. Are there things under development now with regard to wet lines? Do you have something in mind there? I know you talked about 2 years of getting things to market. Do you have something in mind? Is there research being done, alternatives that we need to know about?

Mr. CANNON. Well, Congressman Cummings, there were several different alternatives that were being pursued the last time the U.S. DOT considered a wet lines ban, but all of those were ultimately shelved.

Mr. CUMMINGS. You said shelved?

Mr. CANNON. Shelved. Once it was concluded by the DOT that the cost/benefit analysis did not suggest going forward. That having been said, we think that there has to be at least 1 year for research and development once legislation is enacted and rules are promulgated by the U.S. DOT because we have to know what the standards are before we can actually develop products that are going to meet the various standards, and hopefully it is a performance standard that will allow many different solutions.

Mr. CUMMINGS. When you look back at those things that have been shelved, are you familiar with them?

Mr. CANNON. One of them is what I have described for you here today, Congressman Cummings, the encapsulated wet lines. There
had been quite a bit of work done on that. In fact a prototype valve had been developed and so forth.

Mr. CUMMINGS. That is all I have.

Ms. BROWN OF FLORIDA. Ms. Edwards.

Ms. EDWARDS. Thank you, Madam Chairman. Mr. Casey, I want to go back to your testimony. In your written testimony and also in the presentation you indicate, and I quote, the legislation under consideration which would not be enacted into law for some time and by its own terms would not require a final rule until 2 years after its enactment could have the intended but very real consequence of interrupting the anticipated rulemaking proceeding.

And my question is whether that conclusion changes based on the testimony that you heard from the earlier panel and Deputy Secretary Porcari, who indicated that there was nothing really inconsistent in what they were doing in the rulemaking process and this legislation.

Mr. CASEY. I don't think it does, because if legislation is enacted, they are going to have to refashion whatever the rulemaking looks like to fit into the legislative demands.

Ms. EDWARDS. Well, let me just go to that. Can you just tell me if you would in the process that is going on now whether the list of requirements, as I read the list of requirements in the bill numbers 1 to 8, that those are entirely consistent both with the Deputy Secretary's testimony here in September and what he said today. And so it seems to me—and also the window is not a finite 2 years, it says within 2 years.

Mr. CASEY. Yes, that is true.

Ms. EDWARDS. If that rulemaking is proceeding and we pass legislation, there is nothing at all that says that the rulemaking couldn't proceed or it couldn't be simply refashioned or restructured given that they believe that they are the same requirements. So I am really unclear about your resistance to the legislative process, merely clarifying that the Department has the responsibility to produce rules for the transportation of lithium batteries and also the wet lines issue.

Mr. CASEY. We agree that they do clearly. What we haven't seen is the rulemaking. If that rulemaking is proceeding and we pass legislation, there is nothing at all that says that the rulemaking couldn't proceed or it couldn't be simply refashioned or restructured given that they believe that they are the same requirements. So I am really unclear about your resistance to the legislative process, merely clarifying that the Department has the responsibility to produce rules for the transportation of lithium batteries and also the wet lines issue.

Ms. EDWARDS. Or making sure that is it is consistent, and certainly the Department is aware of this legislation, they have testified before this Subcommittee and the Full Committee about the legislation. You heard the Deputy Secretary say here today that indeed what they are pursuing is really consistent with the legislation.

So again I am really unclear about the resistance. And so I would also—I also want to ask Mr. Rogers if you would. There are instances where the United States in the international environment actually leads and instances where if there are changes that are made to our law then that actually becomes a standard in the international community. And so I just wonder in the process that
you have been involved in, has that been part of the discussion as well?

Mr. Rogers. Oh, absolutely. And I know in speaking with, it was brought up earlier what would happen perhaps with Canada and Mexico, and I know Canada is following extremely closely what is happening in the United States with relation to lithium batteries. Without speaking for the Canadians, I think they would find it very difficult to justify to their constituents why they wouldn’t adopt something that has been proven successful for the United States. And if this rulemaking, as I believe it will, helps result in fewer instances and risk to the traveling public then I think that will serve as a role model and certainly a very strong argument for other states in ICAO to adopt the same provision.

Ms. Edwards. And of course risk to workers as well.

Madam Chair, I just have one last question. It actually goes to Ms. Windsor and Mr. Andenmatten, because I am really curious about the disparity in the dollar figures that are cited for the purging systems. I don’t really know that I quite understand it, it is on one hand $8,000 per and another $4,000 per. I thought I understand from earlier testimony that there was only one system available, but in your testimony, Mr. Andenmatten, you indicate that there are several technologies available.

Mr. Andenmatten. Yes, as I testified, I don’t know what the present status of the technology is but they were certainly demonstrated back in 2001. So it was not just our own purging system, I believe, as they said, Civacon and EBW also had a system. So there are at least three purging systems that were demonstrated at that time.

The other issue regarding this concern is about us being the only manufacturer. In fact this process has dragged on now for so long our patent was filed in 1992, it expires in 2012. So our——

Ms. Edwards. So by 2020——

Mr. Andenmatten. By 2012 I believe—my estimation and I know business fairly well, I can tell you that there are going to be so many people ready to pounce on and just copying our system, I believe, because I think it is a good system, but others will come up with their own systems. They are going to be—it is extremely aggressive in development.

Ms. Edwards. So even for some of us who don’t believe the free market drives everything, in this instance the free market actually could really drive additional technologies and production. Ms. Windsor, and I will conclude.

Ms. Windsor. Again, our numbers are approximate numbers, because we are taking the approximate cost of the product, the only system currently that is on the market, and that we understood was between 3,000 and 3,200 to the shops themselves and then obviously there is a markup. Then the trailer has to be cleaned, which is another cost. We have understood from Superior Tank that they said the average cost is approximately 2,700 to 3,000 for installation. We are talking about approximately 4 days of down time and I am unable to use the equipment at all, and taxes, and then reinforcement of different hoses and gaskets could be another additional thousand dollars. We know seriously there is only one system on the market. The other systems are not yet been mar-
keted. I understand it is only to a private fleet. There is not a common carrier that is using the system.

It adds additional issues that once the system is put on and you have loaded this product and you don't have what we call green light or you haven't purged all the lines and you are at a loading facility, can you go to the street then with one line still having product in it. And if you can't then it has to be pumped off at the loading facility, and then who owns the gas? Do I then own it if they are not going to take it back at the loading facility?

So we are talking about as future times go on there could be additional costs that are going to be put on to the common carrier versus a private fleet who owns the gas the entire time they are transporting it.

Ms. Edwards. And was your $800,000 estimate over a 10-year period?
Ms. Windsor. It was if we did it immediately, yes.
Ms. Edwards. In terms of the lifetime.
Ms. Windsor. Well, our trailers, we keep them in service for well over 10 years.
Ms. Edwards. How long do you keep them in service?
Ms. Windsor. We have some 30 and 40 years old.
Ms. Edwards. Thank you.

Ms. Brown of Florida. Thank you. I have a couple of questions and I think Ms. Windsor and Mr. Cannon——

Mr. Andenmatten. Andenmatten.

Ms. Brown. No, no. Your question is different. You two have some of the same issues, the costs. This is a major issue and I think we can break it down. For example, the cost on a new truck, I think that is one issue. Let's talk about that. If you are going to buy an additional truck and if the wisdom of the Committee is that we want to add the system, would you look at it differently as buying a new truck? I understand the cost on a new truck could be 1,500 to $3,000.

Ms. Windsor. We understand it could be at least that if not more.

Ms. Windsor. On a new trailer, yes. It could be anywhere from 3 maybe up to $5,000 on a new one. And once again if I were to purchase one trailer tomorrow, do I then make a decision if I am going to put that device on or an anti-roll device, because there is more trailers that are rolled——

Ms. Brown of Florida. I understand, the roll is the real issue.
Ms. Windsor. Yes. Again the six deaths that have occurred have—one normal day a tractor and trailer going down the road does not have people running up underneath of them. It is when they are stopped or someone runs a red light or unfortunately drunk drivers. Cars do not end up underneath tractors and trailers under normal operation.

Mr. Cannon. I agree with Ms. Windsor, those figures. New equipment, once Federal excise tax is figured in, the cost would approach $5,000 per unit.

Ms. Brown of Florida. And how many trucks are we talking about? We understand the new trucks, but the retrofitting is the
one that we have the serious issue with and how many trucks are we talking about?

Mr. Cannon. Conservatively as far as gasoline tank trailers, there would be over 30,000 that would have to be retrofit. Our concerns with that again we are a major repairer of cargo tanks. Our concern with that is having to do any work with inside the tank. There are very many cavities that contain vapors within a gasoline tank. Those cavities cannot always be completely purged. And to whatever extent there is any welding arc or any spark from working on metal there is a chance of a catastrophic failure. I would suggest to the Committee the risk is far greater than the 20 deaths that have occurred in the last 10 years.

Ms. Brown of Florida. Mr. Byrd, I find your comment, reading your testimony, at first you were against it because you felt it would affect the job retention in the industry, but—and it might threaten jobs, but now you say your issues have been addressed. By whom? What has changed?

Mr. Byrd. Well, actually I testified before this Subcommittee back in May, as I recall. I think my position was consistent with what I presented today. There was some discussion at the Teamsters Union with our tank haul director and it is my understanding that our tank haul director had had some conversations about some carriers and there was some confusion, misinformation or what have you, and that issue has—after having some discussions with Committee staff those issues were—the concerns were resolved.


Mr. Cummings. Does the chairwoman yield?


Mr. Cummings. Ms. Windsor, I want to go back to something, you said there were—part of the whole balancing act is trying to figure out how to strike a balance, but you said something very interesting. You said that doing this would cause you perhaps not to be able to do other safety things? Other than rollover, what other types of safety things might you be doing?

I am trying to see—if we are trying to do this. In dealing with the wet lines. I am trying to figure out are other things that are just as significant or more significant or more likely that you wouldn't be able to do. So I am just curious—I take it that rollover is a big deal.

Ms. Windsor. Rollover is a big deal. There are numerous items coming out now for tractors and trailers, lane departure warning systems now, systems that tell you when you are getting approximately too close to something that an alarm will go off. So there is multiple safety equipment that is coming out that will assist the driver and help a tractor and trailer, because there are so many issues when they are in that truck around them. And you know again the lane departure and the anti-roll device would be two that I would offhand say that are on the market and could be put on a tractor and trailer.

Mr. Cummings. Thank you, Madam Chair.

Ms. Brown of Florida. I have been pressed that we are going to have to hear from the 1 minutes, because we have to leave about 4 o'clock.
Mr. Shuster. Ms. Windsor and Mr. Cannon and Mr. Byrd have been pretty consistent. There has been a complete disregard for the loss of life that occurs in the presence of these vapors. Three times as many people have left their lives working around the vapors. You said you believe, and Mr. Cannon also, that the deaths in the shops were undercounted or under recorded.

Ms. Windsor. Yes, yes.

Mr. Shuster. What——

Ms. Windsor. We believe there has been 20 because of the welding that we know of.

Mr. Shuster. All right.

Ms. Windsor. That is not welding to put this device on, that is normal every day welding. If we take 30,000 cargo tanks now and have to weld on them, can you imagine the number that would increase?

Why is it understated? Probably Mr. Cannon could say something. You have a welding shop, and I imagine not all of them would be reported.

Mr. Cannon. Right. I don’t have specific knowledge about the extent of the underreporting of the 20, but I would like to echo what Ms. Windsor said, if you have people welding on 30,000 cargo tanks the risk of having much more than 20 deaths is substantial.

Mr. Shuster. Even in light of OSHA coming out with new regulations. I talked to a gentleman today who said we were OSHA compliant, it was the individual did something wrong and then of course OSHA came in and said oh, you are not in compliance and that is what happens on all these deaths. As OSHA rules you think it will make people smarter and follow the rules better.

Ms. Windsor. Well, as Mr. Cannon said, some of these trailers have hauled product and have absorbed the fumes and the vapors for many years. So they could be doing everything by an OSHA regulation, but then all of a sudden there is a pocket or a pit that has absorbed the products or the fumes so when they start the welding it is just enough that it would ignite and explode even following directions.

Mr. Byrd. If I might, in terms of the underreporting of fatalities——

Ms. Brown of Florida. Mr. Byrd, I think you would report it because your drivers are trained, is that correct?

Mr. Byrd. Our drivers are trained as drivers, yes.

Ms. Brown of Florida. That is what I mean, as drivers. If they have an accident or if there is an incident don’t they report it?

Mr. Byrd. Yes, yes. There is a requirement that if you are involved in an accident, so yes, they would report that per regulations and per contract obligations.

Ms. Brown of Florida. Why is it such a concern on the underreporting if the drivers, that is their responsibility; if they are involved in an accident, they report it?

Mr. Byrd. I am not sure that—I am certain that all drivers are not unionized drivers.


Mr. Byrd. They may not have the same—feel the same obligation to report.
But if I might, in terms of underreporting of OSHA of fatalities——

Ms. Brown of Florida. It is not fatalities, it has to be accidents.

Mr. Shuster. Well, we are talking about the shops, the shops.

Mr. Byrd. We are talking about the shops. OSHA has a very, very rigorous reporting system in place in terms of fatalities. So I would find it very, very difficult to believe that there would be fatalities that would go unreported in an OSHA covered facility. I think I needed to make that statement.

The second thing is the Congressman Shuster made the comment that people do dumb things, and that is one of the reasons why. We trying to engineer those human factors out of certain situations to reduce the risk of accident. So I just wanted to state that for the record.

Mr. Shuster. The Teamsters’ view on this is three times as many fatalities in the shops.

Ms. Windsor. And the 20 that we are using came from an Internet based search. It did not come from OSHA because we do not have access to OSHA records.

Ms. Brown of Florida. We have 10 minutes and 10 people. In Congress we have what we call 1 minutes. So anyone that wants to go to that mike you are going to have one minute, that has not gotten a chance to testify may come to the mike right here. 10-minute——

But first Kenan Advantage Group from North Carolina that flew in give him a chance.

Go ahead, sir.

Mr. Moulder. Well, thank you, good afternoon, and thank you for the opportunity to speak on the potential wet lines ban contained in H.R. 4016. My name is R.J. Moulder. I am the Vice President of Fleet Services for the Kenan Advantage Group. The Kenan Advantage Group is the largest petroleum carrier in the United States. We employ 5,500 individuals and operate 2,612 cargo tanks for delivery of gasoline and other flammable liquids in 38 States.

This year we will deliver over 18 billion gallons of refined petroleum products by truck. This equates to a load of fuel delivered every 15 seconds, 24 hours a day, 7 days a week. We currently do not operate any purging systems on any of our transports. However, as we have with other safety devices we may choose to continue to field test observations as technology evolves.

The Kenan Advantage Group has never had a wet lines incident that has resulted in an injury or death. We also invest in the latest safety technologies such as truck and trailer roll stability systems, collision warning technologies, and wheel off prevention devices. Unfortunately, a wheel line retrofit requirement, which will cost this company over $18 million, will divert funding and delay the deployment of these already safe proven safety technologies which are far more likely to save lives than a wet lines purging system.

Thank you, and I will be able to answer any questions.


Mr. Moulder. Yes, I will provide that.

Ms. Brown of Florida. Thank you very much for coming, too.

Yes, sir.
Mr. BOLLING. Glen Bolling, and I am from the battery industry representing SAFT. I think the reason we would like to see the section 201 either deleted or modified is because today it only represents only one side of the situation, and the rulemaking process allows all sides to present themselves.

I will save the rest.

Ms. BROWN OF FLORIDA. Thank you very much.

Mr. COSTER. Welcome to Maryland. I am Dennis Coster, Fireworks Productions, Incorporated from Maryland Line, Maryland. For the past 20 years I run a small family owned fireworks display company which puts on fireworks displays primarily to celebrate our Nation’s independence on July 4 throughout the State of Maryland, but also Pennsylvania, Virginia, Delaware, West Virginia, and New Jersey.

Our company business, like many across America, is facing tough economic times. We struggle constantly to keep up with the ever changing regulatory burdens imposed on our small company. We have an impeccable safety record with regard to the 300 displays we conduct annually as well as during the transportation process. We are pleased that we have had no serious injuries or deaths in our company operations, and we wish to emphasize that we have approximately 2,500 different types of fireworks products in our current inventory, each of which requires a DOT approval before it may enter commerce.

My company, the fireworks industry as a whole, and many more industries across the country have been heavily impacted by the disfunction in DOT’s special permits and approvals program. Section 401 of H.R. 4016 takes steps to remedy some of the deficiencies. However, the remedies do not go far enough.

I have a statement of concern from a coalition of associations, including the America Pyrotechnic Association that I am an active member of, which recommends several perfecting amendments to section 401. I am requesting it to be included in the official record on this hearing. We urge you to incorporate these amendments into H.R. 4016 before the committee’s upcoming markup.

Thank you for providing me with the opportunity to participate today.

Ms. BROWN OF FLORIDA. Thank you.

Mr. TRAYLOR. Sam Traylor, Eastern Petroleum Corporation in Annapolis, Maryland. I have been a fleet manager and safety director there for 20 years. Of those 20 years our trucks have traveled probably 40 million miles on Maryland roads and never once have we had an under ride collision that has involved anything other than a small spill in one of our trucks. To implement of this evacuation thing under the trucks would cause welding, drilling, lines, fitting hoses. And through the course of those 20 years had we had all of that on there, when they weld and they drill, it affects the integrity of the tank. You have got hoses that could leak when the pump kicks in. We are going to have products spewing all over the place. Just for the bang and buck. At Eastern Petroleum we do everything we can to be as safe as absolutely possible. And the roll-over stability systems are 500 bucks a piece or so, and these will dramatically increase the safety of our fleet. Not only will you sense when you are going around a roll, that the truck is going to
roll and pulsate your brakes to bring your trailer back down. We can also record that engine and we can take that with our GPS and see where that incident happened, what curve it was on and know where we have dangerous curves. We can know what drivers are giving us problems. There are many things that we can do to make us much more safer than the outrageous amount of money we are going to spend on this system.

Ms. Brown of Florida. Sir, let me ask you a quick question. The rollovers I understand is the major problem in the industry, 725 a year. How much did you say it would cost to install that system?

Mr. Traylor. The rollover systems? I think they are like 5 to 700 bucks per trailer.

Mr. Cannon. On the trailer they are just under a $1,000.

Mr. Traylor. I want to say one more thing before you kick me out here.

Let's put the under ride protection, let's keep the cars out from underneath the trailers.


Mr. Traylor. That is right. We can do that a lot cheaper. That will give you safety not only when they are loaded but also when they are unloaded.

Ms. Brown of Florida. How do you keep——

Mr. Traylor. A lot of things we can do. There are a lot of things we can do. They say about weight and all that on here. But we can put some hose tubes on the other side of the trailer, put some hoses in them tubes that will absorb the impact and the energy from the car going underneath the trailer, and we easily protect under ride, all around the trailer, and all the spots where the valves are. It would be a little tricky to protect that one area, you would have to have a bull's eye to get it.

Let's keep the cars out from underneath of it. This is very cheap, low maintenance, no problem. Put it on there once, you are done. This is just completely outrageous, the amount we are going to spend, the effort that we are going to have to put into this, the problems we are going to have with this system. It really baffles me. There are so many things we can do to be much more safer, much more cost efficient. Make the rollover stability—that is bang for your buck, that is bang for your buck. Make them get under rider protection.

Ms. Brown of Florida. You stay around. I want to talk to you when we finish.

Mr. Cobbs. Drew Cobbs. I am the Executive Director of the Maryland Petroleum Council, which is an arm of API which represents 400 companies and all aspects of petroleum industry. API members own less than a thousand tanker trucks and trailers. This number is shrinking as trends and industry change. Most of these vehicles are owned by smaller companies, by trucking companies, which you have just testified, by jobbers and distributors, which also have testified, and smaller local companies that really operate these.

Obviously there are concerns about what is being proposed in House bill 4016. We are concerned about a number of issues, but we think the points that were raised today about the reporting
issues, and it is interesting your own bill, this bill section 203 addresses reporting issues that you guys try to grapple with today, as far as what the figures really are. I think long term that a very important element that is supposed to provide you all with information and these Federal agencies as we go forward.

The under ride protection as we just mentioned obviously of concern that Congressman Cummings, who snuck out, in our former lives with the Maryland General Assembly we dealt with this issue, and there was a big concern about the safety. As we move forward there is just concern and stress that the balance it is a fact based process as you go forward.

Thank you very much.

Ms. Brown of Florida. Last person.

Mr. Molner. My name is William Molner. I am President of Baltimore Tank Lines, also Chairman of the Tank Council of the Maryland Motor Truck Association. I have with me gentlemen in the back, if they could stand up. These gentlemen represent tank carriers and distributors in the State of Maryland from the Eastern Shore to around Baltimore and out into western Maryland.

We obviously stand in support of ATA's and National Transport Carriers' position on the wet lines issue. I feel that the Committee here, the Subcommittee here, has brought up very interesting points today and asked some really good questions in regard to our particular issue.

One of the things that I guess we haven't pushed as hard as we should have pushed and that is why isn't this being done at the terminal level rather than having to equip at least 30,000 trailers and maybe more with equipment that may or may not work as it should. It kind of reminds me a little bit when we talk about equipment for the trucks of the anti-skid devices that were placed on trucks back in 1973 that for the most part the mechanical stuff worked but the computer things didn't work. So they finally had to be unplugged, they had to be put away.

In 1977, industry went out, we developed what was good for the industry, we came back in the early 90s, just about every trailer has them on right now, they work great, they have spawned antirollover, one has built on the other, and we have some really good systems out there. But I don't think we are at that point right now. There are other things we can do.

Ms. Brown of Florida. Thank you very much. It was a great hearing and it is officially over.

[Whereupon, at 4:05 p.m., the Subcommittee was adjourned.]
The Subcommittee on Railroads, Pipelines, and Hazardous Materials will come to order.

The Subcommittee is meeting today to hear testimony on the Reauthorization of the Department of Transportation’s Hazardous Materials Safety Program.

Earlier today we had an opportunity to visit a cargo tank repair station and see a trailer with purging equipment, and I think it helped us understand what is involved with retrofitting these vehicles, and what safety advantages it provides.

I don’t believe anyone on our Committee wants to compromise the safety of the traveling public or American
workers, but we need to implement this legislation in a common sense manner that doesn’t harm the same businesses that we are relying on to improve the current economy.

H.R. 4016, the Hazardous Material Transportation Safety Act of 2009, includes important safety provisions that enhance training for emergency responders and hazardous materials inspectors; strengthen enforcement of hazardous materials regulations; and improve the performance of the Pipeline and Hazardous Materials Safety Administration.

However, I felt that we needed additional time to look into some issues in H.R. 4016 going into last week’s mark-up, so I decided to hold this field hearing to enable Members of Congress to hear from all sides of the issues, including wet lines and lithium battery safety.
Like many Members I spoke to, I do have some concerns with the changes affecting wet lines and their impact on the trucking industry. Currently, there is only one manufacturer in the United States that has a system to make cargo tank trucks compliant with the new law we are creating. I know that there are patents pending on similar technology, but I believe we need to ensure that the equipment is available and that there is a robust industry that will spur innovation and competition. Manufacturers and repair shops must be given time to perfect their products and procedures which in turn will bring down the cost during these tough economic times.

Similarly, as more and more lithium batteries are transported in the United States, we must ensure that there are adequate protections in place to ensure safety. But some have raised concerns about provisions in the bill relating to lithium batteries and I'm sure today's witnesses will be able to answer any questions that we have.
With that, I want to welcome today’s panelists and thank them for joining us. I look forward to hearing their testimony.

Before I yield to Mr. Shuster, I ask unanimous consent that Members be given 14 days to revise and extend their remarks and to permit the submission of additional statements and materials by Members and witnesses.

Without objection, so ordered.

I also ask unanimous consent for other Members who are not on the Subcommittee to participate in today’s hearing and ask questions of the witnesses.

Without objection, so ordered.

I now yield to Mr. Shuster for his opening statement.
Testimony of
Ron and Roy Andenmatten
Owners, Cargo Tank Concepts, Ltd.
Before the
Subcommittee on Railroads, Pipelines, and Hazardous Materials
Committee on Transportation and Infrastructure
November 16, 2009

Good afternoon Chairwoman Brown and Members of the Subcommittee. Thank you for your gracious invitation for us to testify before you on the hazards of wetline practices and on our wetline technology that has been proven in the field over the past 11 years to eliminate these risks in a simple, efficient and economical way.

My name is Ron Andenmatten and seated next to me is my brother, Roy Andenmatten. We are co-owners of Cargo Tank Concepts, Ltd. and we are the co-inventors of the wet line purging process that uses a compressed gas to return the gasoline in the wet line back into its corresponding compartment. We have been involved in the invention, development, manufacture, testing and repair of petroleum tanker trucks and affiliated equipment for all of our lives. We also represent part of a continuing family tradition, dating back to our Great-Grandfather, George B. Marx, who founded the George B. Marx and Sons Carting Company 150 years ago in 1859. Back then we manufactured, among other things, horse-drawn coal delivery carts. Today we are best known in the industry for our Automated Wet Line Purging System. This system was demonstrated on a Dateline NBC episode reporting on the hazards of wetlines and entitled: “Wetlines; Running on Empty”. That episode first aired in May of 1999. Shortly thereafter, the USDOT responded to the NTSB that a rulemaking would be shortcoming.

Wetline Hazards and the Wetline Issue

It is a travesty of both public safety and common sense that gasoline tanker trucks continue to transport up to 50 gallons of gasoline in frail, 4” diameter aluminum outlet pipes that are actually “designed to fail, if impacted in an accident”¹. These pipes, commonly known as “wetlines”, were never designed to transport gasoline. Thus, with the exception of SUNOCO

¹ Comment made by RSPA, now PHMSA.
and a few others, gasoline tanker trucks are daily being operated in a way that they were never originally designed.

You have heard testimony from the NTSB that wetline incidents are underreported. The opposition has stated that these are “rare” events, but they continue to base their arguments on a data base that the NTSB has shown provides no means for indicating whether or not a wetline incident may have actually occurred. Most of the noted wetline fatalities were uncovered during NTSB investigations and were never originally reported as wetline incidents nor were they uncovered through this very same US DOT data base that the opposition uses to compute this alleged “rarity”. In light of the foregoing, the burden of proof here clearly does not belong to the public safety, but to the industry. I would like to ask the members of the subcommittee to ask themselves this simple and obvious question: Is it logical to assume that outlet piping, designed to fail, if impacted in an accident, will rarely do so?

Of even greater importance than the misrepresentation of the frequency of wetline incidents are the understatements of the potential consequences. It is important for the members to understand that wetline hazards are not limited to the gasoline in the wetlines, but rather, they also involve the entire load of the cargo tank. When a wetline spill ignites, the pool of gasoline directly underneath the cargo tank heats and expands the gasoline and vapors contained inside. The resultant increase in pressure causes vapors to discharge through the vents on the top of the tank which also ignite. Since the tank is made of aluminum and the top of the tank is not being cooled by contact with the liquid lading, the top melts away quickly. This leaves the fire completely open and uncontained, generating an enormous amount of heat. An NTSB investigation concluded that a minor traffic accident, resulting in a wetline release of just 28 gallons of gasoline, was sufficient to cause the entire tanker to burn out of control and destroy a 7 million dollar thruway overpass. They also concluded that the driver of the car, whose body was found in the rear seat, would probably have survived the accident had the outlet pipes not contained product. It is absurd that this 7 million dollar figure has been used in cost/benefit analyses as a worst case scenario. This accident could just have easily occurred on a suspension bridge. The heat generated would be more than adequate to compromise the main cable and bring down the bridge. I ask the members of the subcommittee to seriously consider how much that might cost and to remember that on 9/11 it was the heat of the fuel and not the impact of the
planes that brought down the World Trade Center. All too frequently, we have seen how regulatory action can stall on a safety issue until the worst finally does happen and the wetline issue has been stalling for decades. We recently sold a system to a company in South America, who stated that there was an accident and that their customers wanted to know if there was a way to get the product out of the outlet piping. It appears that a school bus had collided with a tanker truck killing 20 children in the ensuing fire. Let's pray that never happens here.

In light of the foregoing and in the interest of public safety and our national infrastructure, I implore the subcommittee to act now for our common welfare where others have failed, to ignore the spin of special interest, to stop the endless cycle of revisiting the same old issues and to address the facts, concerns and recommendations on wetlines as addressed by the National Transportation Safety Board.

I would now like to address our system and its costs and benefits.

Status and Proven Reliability of the Wet Line Purging System

I would first like to bring you up to date on the status of the system in the field. The first purging system went into operation more than 11 years ago in June of 1998 on a trailer owned and operated by SUNOCO. Over the next 3-4 years SUNOCO retrofitted their entire fleet of approximately 120 gasoline tanker trailers. We estimate that over 7 million purges have been conducted by their systems over this period of time. The system has been very maintenance friendly, mostly due to its simplicity in design. The only real moving parts are the solenoids and check valves and these are readily replaceable, as are the LEDs and relays. We have made some slight modifications and enhancements to the system over the last decade, but overall the system has essentially remained the same and has proven to be very reliable.

The viability of the system was recently acknowledged at the recent National Tank Truck Carriers seminar last month where the NTTC stated that the system had been seen in operation, that it works, that the SUNOCO drivers all seemed to love the system and that the NTTC had no problem with the system. The reliability and benefits of the system has also been acknowledged
by others in the industry. To quote the recent NTSB testimony given to the subcommittee on May 14, 2009:

"Sunoco, Inc., on the other hand, was very proactive and made a decision to equip all of its fleet of 120 cargo tanks with purging systems. Sunoco advised that its vehicles have been equipped for several years and that the systems have worked well. Sunoco identified two accidents in the Philadelphia area where it believes purged lines may have prevented the destruction of its trailers."

With SUNOCO's estimate of the cost of each combined tractor/trailer exceeding $200,000, the benefits of the system has already potentially paid for the cost of SUNOCO's entire fleet on this basis alone. Remember that this figure has not even factored in the savings of the other costs normally associated with such an incident, such as the costs of emergency response, environmental response, collateral damage to the public infrastructure, injuries, fatalities, lawsuits, etc. SUNOCO has also stated that they have reaped substantial serendipitous benefits, through increased driver awareness.

**Costs and Options of the Wet Line Purging System**

One of the biggest complaints voiced by opponents to a wet line prohibition is the misconception that welding is required for retrofits on existing tank equipment. This is not so.

As you should have witnessed earlier this morning, a non-welded option is available where a smaller check valve is easily installed by drilling and tapping a small hole through the emergency valve flange. Welding is also eliminated on the outlet piping, by drilling the outlet pipe to accommodate the pipe components through the use of a pre-fabricated collar clamp and gasket. Thus this non-welded style of the system can be installed on existing tank equipment without the need for any welding or any additional cost other than the labor for installation.

The system that SUNOCO uses is the fully automated system and this has seemed to be the preferred system. A manual version of the system is also available for about $1,500 less, by eliminating the cost of optic sensors, solenoids and other components. There is no difference in
price between welded and non-welded styles of either system. For the record, here is the pricing and the projected labor time for installing each system on new and existing equipment:

Cost of the Automated Wet Line Purging System (Welded or Non-Welded Style):
4 Compartment: $3,800;
5 Compartment: $3,950
Labor for above:
Existing Tanks: Welded Style 12-16 Man Hours; Non-Welded Style 8-12 Man Hours.
New Tanks: Welded Style 8-12 Man Hours; (Note: We only foresee Welded Styles on new tanks, as the tank is being welded during fabrication.)

Cost of the Manual Wet Line Purging System: (Welded or Non-Welded Style):
4 or 5 Compartment: $2,300;
Labor for above:
Existing Tanks: Welded Style 10-14 Man Hours; Non-Welded Style 6-10 Man Hours.
New Tanks: Welded Style 6-10 Man Hours.

We also wish to announce to the subcommittee that we are now offering to any customer, who is willing to convert their fleet, the installation of our automated purging systems at their facility, absolutely free.

Two Opposition Arguments and Myths

1) Myth: That our purging system is the only one available.

Facts: In the February 2002 edition of Modern Bulk Transporter, one of the most prominent industry journals, the marketing of three different purging systems that were demonstrated at the October 2001 NTTC Cargo Maintenance Seminar, were described and compared in detail. In the article they state:
“Mechanical purging systems are available from three companies – Civacon, EBW, Inc, and Sytonte Industries. Representatives from the three companies discussed the features of their products at the Cargo Tank Maintenance Seminar.”

The article also discussed six options:

“Six options have been studied for wetlines elimination, according to Bill Boyd, Heil Trailer International. The industry could return to top loading for all of the affected products. Wet lines can be drained back to the source at loading terminals, or the lines can be drained into slop tanks. Guards or shields can be installed to protect the lines. Product piping could be shortened significantly. And lastly, product can be pushed out of the lines, back into the tank. The two options that seem to be getting most of the attention are shortened wet lines and purging systems that push product back into the cargo tank.”

It is important to note here that all of these options have been extensively investigated over the last 20 years and all research has led to the same two viable options, namely short loading lines and these various purging systems. For example, during the course of numerous USDOT rulemaking procedures, appropriate guards or shields were dismissed as a viable option because they would weigh too much, while never really eliminating the hazard.

It should also be noted that after decades of delay, our patent will currently expire just weeks before the first purging system will ever be mandated. It is obvious that there will be plenty of other manufactures with fully developed systems ready before then.

2) Myth: Accidents that show a release of more than 50 gallons of gasoline cannot be considered wetline incidents.

Facts: One of the biggest benefits of the purging system is that it pre-checks the integrity of each emergency valve on each and every load. This is important because the emergency valve is what controls the entire contents of the compartment. When installing our system, we have found on average that about 1 in every 10 emergency valves is either leaking or stuck open and
needs servicing or replacement. That amounts to about 1 in 2 trucks having a leaking valve. One of the reasons for this development is that when the industry switched to bottom loading, there was no longer any continual way of telling when the emergency valve was leaking. It is important to understand that an emergency valve that is leaking or stuck open will discharge the entire contents of the compartment if the outlet piping is damaged. Consider the consequences of 2,500 gallons of gasoline pouring out within a city, near any of the many subway ventilation gratings within the subway system and streets. A resulting explosion in this scenario would be catastrophic. It is important to note that no product would have been released in this case, had a purging system been installed. The faulty valve would have been discovered before leaving the terminal. Thus, this scenario represents a wetline accident with a faulty emergency valve.

Closing Comments

We would like to make a few statements regarding the wetline legislation, before closing. We feel that the elimination of combustibles from the rulemaking is prudent and that it is flammables that pose the dangers associated with wetline practices. We feel, however, that an exemption for straight body trucks is ill conceived. Most wetline spills occur from the rupture of the loading valve or piping directly behind it and not from the sacrificial weak point located on the emergency valve. The loading valves on straight units are located near the same outer extremity of the tank width as are trailers. The chassis of the straight body units in this case offers little, if any, additional protection to the wetline hazard. For this reason, we feel public safety would be best served if all flammable cargo tanks were prohibited from continuing wetline practices.

Attempting to resolve the wetline dilemma has proven to become a lifelong endeavor for me and my brother Roy. Twenty years ago, in 1989, the USDOT stated the following regarding wetlines: “However, we encourage the petroleum industry to consider the risks they take in employing this practice and work to eliminate it.” On January 14, 1992, the American Petroleum Institute issued a “Request for Proposal” where it was stated: “It is apparent from the regulatory record that RSRA expects industry to move forward toward eliminating the practice of carrying hazardous materials in lines external to the cargo tank.” Taking both government and industry seriously in their common pursuit of resolving the wetline dilemma, we developed, patented and
demonstrated our purging process in November of that same year and in May of 1993. The issue dragged on with no action until the 1997 Yonkers accident destroyed the NY State Thruway overpass, which was investigated by the NTSB and resulted in its recommendation to eliminate wetline practices. We believe the recent NTSB testimony has already illustrated the sequence of events taken through the rulemaking processes over the subsequent 12 years that have followed.

Under the circumstances, we do not understand why the subcommittee feels it is necessary to grant so much more time to enforce this prohibition, when it is clear that the time will only be used by the opposition to delay the process further again. SUNOCO has been installing and using purging systems for over a decade now with many benefits that we have illustrated. The USDOT had proposed that a 5 year period be granted for existing cargo tanks so that the welded style installations could be done in conjunction with the next upcoming 5 year pressure test. Under the circumstances, I respectfully ask the subcommittee why they would want to more than double that time, especially when the true risks and benefits have been properly illustrated.

The granting of 2 years rather than the usual 1 for new cargo tanks to comply is particularly alarming and damaging to us, as it will guarantee that our patent will expire weeks before any systems are mandated. That is not only bad news for us. It will also clearly undermine the government’s ability to encourage entrepreneurs such as ourselves from seriously considering in investing in new safety technologies that the government would like to see developed. Government would then have to rely on the few major players in industry to come up with these new safety technologies. As we have seen, that might prove to be a very, very, very long wait.

In consideration of the foregoing and in the interest of public safety and national security, I respectfully petition the subcommittee to draft legislation that would provide a six month period for compliance with respect to new units and a 5 year period for existing units.

Madam Chairwoman, this will conclude our prepared testimony. I wish to thank you again and all the subcommittee members for the honor of your gracious invitation.
We will be happy to answer any questions you or the members may have at any time.
The International Brotherhood of Teamsters

Testimony before the

Committee on Transportation and Infrastructure’s

Subcommittee on Railroads, Pipelines, and Hazardous Materials

On

“Reauthorization of the Department of Transportation’s Hazardous Materials Safety Program”

November 16, 2009

Prepared by:
LaMont Byrd, Director
Safety and Health Department
Introduction

Madam Chairman, Ranking Member Shuster, and Members of the Subcommittee:

My name is LaMont Byrd, Director of Safety and Health for the International Brotherhood of Teamsters (IBT). We welcome the opportunity to comment before the Committee on Transportation and Infrastructure’s Subcommittee on Railroads, Pipelines, and Hazardous Materials concerning H.R. 4016, the “Reauthorization of the Department of Transportation’s Hazardous Materials Safety Program”. We recognize the need for comprehensive hazardous materials regulations that include language that ensures the strong enforcement of the rules, clearly defines regulatory jurisdiction, and provides for safety and security training of workers who are involved in hazardous materials transportation activities. We commend the Subcommittee for strengthening hazardous material transportation safety in the tank haul and airline industries by proposing new safety regulations to address hazmat left in wet lines and the transport of lithium batteries in aircraft, respectively.

The IBT represents approximately 300,000 workers in the United States who are involved in the transportation of hazardous materials including: tank truck drivers who transport bulk shipments of hazardous materials in quantities of up to 10,000 gallons; drivers and dock workers in the freight industry; drivers and warehouse workers in the hazardous waste transport industry; solid waste drivers; drivers and workers in the building and construction materials industry; airline pilots; and members who are employed in the public sector, including law enforcement and emergency medical personnel, who are responsible for responding to traffic accidents that could involve the release of a hazardous substance.
This International Union is very concerned about the health, safety, and security of our membership and that of the general public that shares the roads and highways with our members. Our comments will focus on the following areas:

- Training for Hazardous Materials Workers and Emergency Responders
- OSHA Jurisdiction
- Transportation of Lithium Batteries on Aircraft
- External Product Piping on Cargo Tanks
- Requirements for Special Permits

Training for Hazardous Materials Employees and Emergency Responders

It is critical that hazardous materials workers be provided with comprehensive worker safety and security training to enable these workers to protect themselves from the hazards that are inherent in handling, loading, and unloading hazardous materials. Likewise, it is essential that emergency responders, who may be called to the scene of a hazardous substance release, should receive a level of training that allows them to protect nearby persons, property and the environment. Therefore, the Teamsters Union supports Operations Level Training for emergency responders. The Union with the assistance of our training centers, and funding from several sources, developed a comprehensive hazardous materials / hazardous waste training program for our members and other transportation workers. This program is discussed in greater detail below. As we have worked with many of our members who are regularly involved in loading, unloading, handling, and transporting hazardous materials as part of their normal work
responsibilities, it is clear that many employers are providing training that may technically comply with the minimal training requirements as set forth by the DOT. However, the training does not provide the workers with the necessary information and understanding to enable them to protect themselves, their coworkers, and the environment from the hazards associated with working with hazardous materials. Our members report that the training provided by their employers may consist simply of providing the workers with handout materials or a short video that they must review on their own time with no opportunity for questions and answers. In addition, the training may be generic so as to not address the site-specific needs of workers to avoid hazards in a particular workplace. We think that many employers, faced with a severe economic crisis are opting to either eliminate training programs or do the absolute minimum with respect to providing hazardous materials safety training. Management’s position is that the workers should feel fortunate to have a job.

The IBT provides hazardous materials training to our members and other workers through the Safety and Health Department’s Worker Training Program in conjunction with Teamster Training centers that are located throughout the United States. The target audience for training provided through this program includes truck drivers in tankhaul and freight operations, dock workers, construction workers, and warehouse workers. The training is funded by training grants that the IBT receives from the DOT Pipeline and Hazardous Materials Safety Administration (PHMSA), National Institute of Environmental Health Sciences (NIEHS), and from cent-per-hour contributions that are obtained through collective bargaining with employers that are signatory to joint labor – management training trusts.
The DOT PHMSA awarded the IBT $1.3M to conduct a Hazardous Materials Instructor Training (train-the-trainer) program for hazardous materials employees. This training is conducted by IBT Master Trainers (Mentors) who were familiarized with the program’s goals and objectives, curricula, and administrative procedures prior to commencing the train-the-trainer sessions. To successfully complete the train-the-trainer course, aspiring trainers must complete a pre-requisite 8 hour course to familiarize the participants with the hazardous materials regulations and requirements. The trainers must then successfully complete a 48-hour Train-the-Trainer course that is classroom based and subsequently teach at least one 8-hour basic course while being monitored and evaluated by Mentors and IBT Worker Training Program staff. The target audience for the 8-hour basic course is typically rank-and-file co-workers of the new instructor, supervisors, or other management personnel, and the course is normally held at either a local union hall or at a site provided by a hazardous materials employer. To date, the DOT HMIT program has trained 507 trainers and 1005 rank-and-file hazardous materials employees. It should be noted that the rank-and-file employees who receive training in the program will do so as students of the new instructors who are completing their practical training prior to becoming a fully certified instructor.

The response that the program has received from the new instructors and from employers who have either participated in the program or allowed their hourly hazmat employees to be trained in the program has been very positive. We also see an increasing demand for the training. The IBT is very pleased with the program and strongly recommend that additional funding be provided and that it be expanded to allow more training of rank-and-file hazardous materials employees.
The NIEHS funded program is primarily focused on training workers who are responsible for remediating hazardous waste sites, transporting hazardous waste and hazardous materials to disposal sites, and responding to emergency releases of hazardous materials. This program includes a (4-hour hazardous materials transportation course) that is conducted as a module in a comprehensive 40-hour course that complies with the training requirements for the OSHA HAZWOPER Standard and DOT hazardous materials regulations and an 8-hour safety and security course for drivers who transport hazardous materials and other products to and from ports. During the current grant year that commenced on September 1, 2009, the program trained 126 workers in the 4-hour awareness level course and 341 workers in the 8-hour safety and security course.

The Teamsters Union does administer an Operations level course for emergency responders. Our training course is 16 hours rather than the 8 hours required by regulation. However, since our public services workforce is very dispersed, it has been difficult to recruit members to participate. We are currently exploring ways to train more emergency responders at the operations level.

**OSHA Jurisdiction**

The IBT is aware of previous industry efforts to eliminate OSHA authority to protect workers who load, unload, and handle hazardous materials as part of their job responsibilities. This is an extremely critical issue for the Union as we recommend that any such attempts by industry during this reauthorization process be rejected. OSHA is clearly best suited to protect the health and safety of workers who perform the previously mentioned work activities.
It should be noted that in 1994, Yellow Freight Systems (now Yellow-Roadway), our largest LTL carrier, which employed up to 40,000 Teamster members before the economic downturn, was involved in a case that went to the Occupational Safety and Health Review Commission regarding hazardous materials related citations, that OSHA issued to the carrier. In that case, OSHA concluded that the carrier did not comply with the standards concerning emergency response procedures for emergency releases of hazardous materials, including those related to providing personal protective equipment and training to employees who were involved in the response to such incidents. The carrier argued that OSHA did not have jurisdiction due to 4(b)(1) provisions pursuant to the Occupational Safety and Health Act of 1970, concerning preemption. However, the Commission ruled that OSHA did, in fact, have the authority to enforce its regulations and standards to regulate safety and health in the trucking industry.

This decision provided the Union with leverage and the carrier with the impetus to incorporate comprehensive language into the National Master Freight Agreement (NMFA), and other carriers that were signatory to the agreement concurred. Consequently, the IBT and the carriers that are signatory to the NMFA are bound by both regulatory requirements and contractual requirements to comply with the safety and health provisions regarding hazardous materials, as promulgated by both OSHA and the Department of Transportation.

A similar situation occurred involving our members who are employed at United Parcel Service (UPS). There were several incidents involving drivers and package handlers who encountered unlabelled or improperly labeled packages and consequently experienced serious
injuries. Although the quantities of hazardous materials being transported through the UPS system did not require placarding per DOT regulations, there was sufficient materials present to cause injuries to workers and in some instances, evacuation of work areas and facilities. OSHA cited the company for failure to comply with the hazardous materials handling and spill response requirements. The parties were able to resolve the citations by signing a settlement agreement that required UPS to implement a comprehensive hazardous materials handling and hazardous materials spill response procedures in their facilities. Again, the IBT worked with the employer to incorporate provisions within the settlement agreement into the National Master UPS Agreement that currently covers 210,000 members). This language, in addition to rules enforced by OSHA, provides our members with needed protection during their hazardous materials loading, unloading, and transporting activities.

Earlier this year, OSHA cited one of our employers for failure to provide training and personal protective equipment to transportation workers who were involved in the handling and shipping of packages that contained mercury. During the transport process, packages were damaged and mercury spilled in the facility. Although OSHA determined that the hazardous materials workers involved experienced minimal exposures, and likely had no adverse health consequences, the incident could have been much worse and resulted in injuries or occupational illnesses to those exposed workers. Consequently, OSHA penalized the carrier for failure to comply with applicable rules governing training, personal protective equipment, and spill response.
Therefore, based on our experience working with OSHA concerning hazardous materials related issues, the agency has the experience, commitment and track record to effectively protect transportation workers who are involved in the movement of hazardous materials. We would unequivocally recommend to the Subcommittee that OSHA retain its jurisdiction to protect these workers, our members.

**Lithium Batteries**

There is much concern about the hazards associated with transporting lithium batteries on aircraft. In 2005, the Department of Transportation promulgated a rule that prohibits the bulk shipment of lithium batteries in the cargo hold of passenger aircraft. The National Transportation Safety Board, in 2007 and 2008, issued a total of eight safety recommendations subsequent to a hazardous materials incident involving a cargo aircraft that was transporting bulk lithium batteries. The IBT agreed with the NTSB recommendations at that time and strongly support the provisions in Section 201 of H.R. 4016 that encompass those recommendations and further address the dangers associated with the transport of lithium cells and batteries in aircraft. The Teamsters Union currently represents 2350 air cargo pilots at 15 different cargo airlines throughout the United States and is particularly concerned about the stowage of lithium cells and batteries aboard aircraft. Limiting stowage to crew-accessible locations is essential to protecting the crew members from certain disaster should a fire occur onboard the aircraft. With no way to access an area where an explosion and/or fire could erupt, and no certainty that the crew could land the airplane quickly, we think it is absolutely necessary that short of a fire suppression system or storage in fire resistant containers, lithium batteries be stored in crew-accessible
locations. It is equally important to establish load limits on board the aircraft. The proper identification, labeling and packaging requirements for lithium cells and batteries are also very important in protecting transportation workers, airline crews and the traveling public from these potential dangers.

External Product Piping (Wet Lines)

Because of the competitive nature of the tank haul industry, the Teamsters Union initially had concerns about how some proposed changes in the legislation might affect the job security of our members. Those issues have been addressed, and we want to make it perfectly clear to every member of this Subcommittee, that we support the provisions outlined in Section 202 of the bill. We firmly believe that the Committee has struck a fair balance in prohibiting the transport of Class 3 flammable liquids in external product piping of tank haul trucks manufactured on or after two years after enactment of this legislation and giving the industry 10 years to meet this prohibition in existing vehicles. It is important to note that no specific technology is mandated by H.R. 4016; rather this is a performance standard that must be met, and it is our understanding that there are several promising technologies that might compete with the current purging method. Further, the cost of current equipment, $2000 to $4,000, is a small percentage of the total cost, $80,000 to $100,000 for a new vehicle, especially when that vehicle is typically financed over a multi-year period.

There has been much debate focused on the need for this legislation based on the number of apparent fatalities resulting from accidents involving the integrity of wet lines and resulting spills. Your own committee staff has confirmed that the Pipeline and Hazardous Materials
Safety Administration (PHMSA) data is inaccurate and incomplete. But based on National Transportation Safety Board investigations, it is clear that these wet lines present a real danger when tank haul trucks are involved in accidents to not only the traveling public, but to the drivers of these vehicles as well. As a union representing almost 11,000 workers in the tank haul industry, we believe that these requirements are worth the cost.

While some concern has been expressed for the safety of workers who might perform welding activities relating to the retrofit of vehicles, we are especially pleased to support the worker safety provisions of this legislation that require a review and appropriate update of existing worker safety standards by the Labor and Transportation Departments.

Special Permits

The Teamsters Union has always been concerned about the issuance of special permits, especially relating to the transport of hazardous materials. In many cases, special permits are routinely renewed or modified without adequate review. In some cases, these permits have been granted to umbrella groups for an entire specialized industry (party status), without examination of specific carriers involved. It is only common sense that the safety history of a carrier should be examined and a determination made that there is not a history of accidents or incidents that would preclude the carrier from initially receiving a permit or obtaining a renewal or modification. For these reasons, we strongly support the provisions contained in Section 401 of the legislation.
The IBT commends this Committee’s concern about the safety and security of the travelling public and hazardous materials workers. As the amount of hazardous materials being transported in our Nation’s transportation supply chain increases, so does the risk to our safety and security. Enhancing the federal hazardous materials laws and reauthorizing the DOT’s Hazardous Materials Safety Program are important steps that this Congress can take to protect hazardous materials workers, the general public, and the environment. We look forward to working with you on this important endeavor.
Before the
United States House of Representatives
Committee on Transportation and Infrastructure’s
Subcommittee on Railroads, Pipelines and Hazardous Materials

Statement of John F. Cannon
on behalf of
Walker Group Holdings (WGH)

Reauthorization of the Department of Transportation’s
Hazardous Material Safety Program

November 16th, 2009

Madam Chairwoman, Mr. Shuster and Members of the Committee:

I thank you, Madam Chairwoman, Mr. Shuster and members of the House Transportation and Infrastructure Subcommittee on Railroads, Pipelines and Hazardous Materials for the opportunity to testify on the reauthorization of the Department of Transportation’s (DOT) hazardous materials safety program. My comments are specifically addressed to the contemplated new requirements within HR 4016 relating to external product piping on cargo tanks transporting flammable liquids.

My name is John F. Cannon, and I serve as Vice President of Sales and Marketing for the Fond du Lac, WI plant of Walker Group Holdings, a US DOT registered cargo tank manufacturer. I am a licensed professional engineer, and a design certifying engineer in accordance with US DOT rules. Walker is among the largest manufacturers – and repairers - of US DOT specification cargo tanks intended to transport hazardous materials, and employs about 1000 individuals. In a typical year, our companies manufacture 3000 new cargo tanks.

Today, I appear before you representing not just my company, but also, the National Tank Truck Carriers (NTTC) and the Truck Trailer Manufacturers Association (TTMA). I have been honored to serve as chairman of the Tank Conference Engineering and Executive Committees at TTMA, and as a frequent speaker at NTTC Conventions on cargo tank matters. Also, I contributed to efforts of the American Society of Mechanical Engineers (ASME) to develop the new Section XII of their Boiler and Pressure Vessel Code relating to cargo tank design.
Today, for your consideration, I offer comments in four areas related to HR 4016:

1. The practicality of limiting the scope of a possible ban on wetlines to only DOT 406
cargo tanks transporting gasoline and similar fuels.

2. The need for Congress and the US DOT to extend flexibility in developing alternative
approaches to mitigate the risk of a wetlines incident.

3. The need for Congress and the US DOT to allow sufficient time to engineer alternative
approaches to mitigate the risk of a wetlines incident.

4. The appropriateness of allowing alternative approaches to mitigate the risk of a wetlines
incident to both new construction and a future retrofit.

1. The practicality of limiting the scope of a possible ban on wetlines to only DOT 406
cargo tanks transporting gasoline and similar fuels.

A. I have served the cargo tank industry for over 22 years and am not aware of a single
wetlines incident involving a cargo tank other than a DOT 406. Therefore, such a
possible ban on non-DOT 406 cargo tanks does not appear warranted.

B. One of the most ubiquitous cargo tanks permitted to transport Class 3 Flammables – the
DOT 407 variant - typically includes less than two gallons of product in external piping
when bottom loaded. See Figures 1 and 2, below. In contrast, the wetlines of a DOT
406 multi-compartment cargo tank can hold up to 50 gallons of gasoline, or other Class 3
Flammables. See Figure 3, below.

Less than ½ gallon of total capacity
available between emergency valve
and outlet valve.

Figure 1. Typical Center Unload DOT 407
Figure 2. Center Unload DOT 407 Outlet Piping - Extreme Case

Less than 1 gallon of total capacity available between emergency valve and outlet valve.
C. Many large fleets use DOT 407 cargo tanks to transport Class 3 Flammables. These products include alcohols, aromatic hydrocarbons, and solvents. Thus, the possible ban of wetlines on such motor vehicles would cause a significant operational and economic burden.

D. Most DOT 407 cargo tanks haul different products in succession and are cleaned regularly – sometimes, daily. Therefore, the mandate of a standard leading to a purging system (or similar approach) would create cleaning, contamination and corrosion issues. At the very least, cleaning costs would increase. More concerning, contamination challenges could lead to rejected loads – and substantial economic impact – or, unintended hazardous material reactions. In contrast, most DOT 406 aluminum cargo tanks are generally dedicated to gasoline service, and cleaned less frequently.
2. The need for Congress and the US DOT to extend flexibility in developing alternative approaches to mitigate the risk of a wetlines incident.

A. The free market is better served if several feasible approaches are allowed. If a wetlines ban is enacted on DOT 406 cargo tanks, companies like WGH would be prevented from offering options delivering optimal results. Our industry cannot afford to be constrained to one "solution".

B. At least one feasible alternative exists. This alternative approach is 'the encapsulated wetline', where the external product piping of a DOT 406 unit is at least as strong as the cargo tank. When a side impact (or similar disruptive event occurs) the line may be sheared away from the vehicle, but the product in the external piping would remain sealed. Further, this approach does not require any welding during retrofit, thereby eliminating a serious hazard. See Figures 4 through 7, below.

![Diagram](image)

Figure 4: Dual-Poppet Valve - Section View
Figure 5: Dual-Poppet Valve - Post-Accident

Figure 6: Dual-Poppet Valve - Physical Prototype
Figure 7: Diagram of an Encapsulated Wetline with a Dual-Poppet Valve before and after an Event.

C. Adjustments to DOT 406 aluminum cargo tank loading procedures to evacuate wetlines prior to transport might be encouraged, too.

D. Consideration should be given to allowing structural guards to protect the wetlines, and a corresponding increase in maximum allowable weight over the standard levels.

3. The need for Congress and the US DOT to allow sufficient time to engineer alternative approaches to mitigate the risk of a wetlines incident.

A. At least one year is required to develop alternative approaches once regulatory guidelines are published (if legislation is created addressing Class 3 Flammable products in external piping of cargo tanks). This time is required to afford engineers and other technical staff sufficient time to brainstorm solutions, meet with all stakeholder groups about potential solutions, develop prototypes, and test concepts – in a laboratory and field setting. Our experience suggests the most successful product development and innovations follow at least all of these steps.

B. At least one additional year is required to commence manufacturing and bring alternative approaches to market. To ensure commonality of parts throughout the industry and manufacturing economies, adequate time is required to ensure industry groups set standards surrounding alternative approaches and proper tooling is developed and constructed for each variant.
4. The appropriateness of allowing alternative approaches to mitigate the risk of a wetlines incident to both new construction and a future retrofit.

A. By allowing alternative approaches to both retrofit and new construction (if legislation is created addressing Class 3 Flammable products in external piping of cargo tanks) owners of such units will be able to choose the manner of compliance that best works for their fleet, and assure standardization of parts inventories and work processes.

In conclusion, I encourage your subcommittee to carefully consider the application of a wetlines ban, if enacted. Also, I feel public interest is best served if alternative solutions are allowed for new and existing DOT 406 aluminum cargo tanks.

Again, I thank you for affording me the opportunity to testify before your subcommittee. I will attempt to answer any questions you may have regarding this important matter.
The Air Transport Association of America’s members, which are the largest U.S. passenger and all-cargo airlines, strongly support efforts to assure the safe transportation of hazardous materials. As in other areas of civil aviation, success in these efforts depends on the collaborative work of government, labor, manufacturers, shippers and airlines that are committed to a disciplined, data-driven approach. No one has a monopoly of knowledge in this area.

We appreciate that the sponsors of H.R. 4016 want to improve the safety of the carriage aboard aircraft of lithium-batteries and electronic devices that use them. Legislation, however, is not the best way to pursue that goal. Instead, a notice-and-comment rulemaking proceeding is a far better means to examine the facts, bring necessary expertise to bear and develop whatever changes such an empirical focus shows are needed.

The opportunity to do so is before us. A proposed lithium battery rule is under review at the Office of Management and Budget. Shortly, therefore, all interested stakeholders should have the opportunity to contribute to an examination of the carriage aboard aircraft of lithium batteries. That is the way to proceed and will allow a timely exploration of this subject. We emphasized this point in our November 4th letter to Chairman Oberstar and Ranking Member Mica. In contrast, the legislation under consideration, which would not be enacted into law for some time and by its own terms would not require a final rule until two years after its enactment, could have the unintended but very real consequence of interrupting the anticipated rulemaking proceeding.

A rulemaking proceeding would enable the various interested parties to participate in assessing the need for and implications of additional regulatory requirements. Such wide-ranging participation is essential. This is a complex area where the benefit of expertise in illuminating its different facets is a critical ingredient to the decisionmaking process.
Safety is the dispositive consideration in any such undertaking. We, nevertheless, must recognize that government action in this area could have serious effects on airlines and the welfare of their employees, as well as on the manufacturers, shippers, and retailers that depend on air transportation. With respect to airlines, both passenger and cargo airlines transport devices containing lithium batteries. Moreover, because lithium batteries are indispensable to so much of what today we take for granted, those entities that are involved in the manufacture, distribution and sale of electronic devices have an unmistakable stake in the outcome of this legislation and any rulemaking proceeding. This is not an insular subject. Ill-conceived requirements could have serious, adverse results throughout our economy.

As we also noted in our November 4th letter that maximizing harmonization of any new U.S. requirements with International Civil Aviation Organization (ICAO) standards is an important concern for two reasons.

First, most ATA members transport cargo internationally as well as domestically. Neither safety nor efficiency will be advanced if unnecessarily disparate hazmat requirements govern their operations.

Second, we believe that the United States must maintain its leadership role in ICAO by advancing harmonized international standards. That role would not be advanced by a legislatively mandated, unique U.S. rule, which would signal to other ICAO members that they should feel free to take the same approach. That would be a serious blow to what should be a common goal of seamless requirements.

Congress’ interest in this important matter is very understandable. Its most helpful response, however, would be to urge the executive branch to accelerate the initiation of the expected rulemaking proceeding, rather than pursuing this legislation.
National Transportation Safety Board
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Washington, D.C. 20594
(202) 314-6000

Bob Chipkevich, Director
Office of Railroad, Pipeline and Hazardous Materials Investigations
Good afternoon, Chairwoman Brown, Ranking Member Shuster, and the Members of the Subcommittee. Thank you for the opportunity to appear before you today on behalf of the National Transportation Safety Board (NTSB) regarding the safe transportation of hazardous materials. Today, I would like to highlight specific issues of concern to the NTSB, involving the hazards of wet lines on highway cargo tanks and the air transportation of lithium batteries.

Wet Lines on Highway Cargo Tanks

Issue

Gasoline and other hazardous materials can be transported in piping below cargo tanks that can be released onto vehicles in accidents.

Background

Most MC-306 and DOT-406 highway cargo tanks used to transport petroleum distillate fuels are loaded through bottom loading lines and then operated on the roads with cargo in these lines. However, because of their design, location, and vulnerability to being hit by other vehicles on the road, the practice of transporting hazardous materials in loading lines increases the potential seriousness of any accident.

These external pipes or wet lines on a cargo tank semitrailer transporting flammable liquid may contain as much as 50 gallons of product underneath a fully loaded cargo tank. Because the wet lines are designed to break away in order to prevent damage to the tank shell, the wet lines could release a substantial amount of product on a striking passenger vehicle, which may be trapped beneath the cargo tank and engulfed in a fire. This issue predominately applies to tank trucks delivering gasoline to local gas stations.
In 1978, the Office of Motor Carrier Safety within the Federal Highway Administration established a policy allowing gasoline to be carried in wet lines because of “economic and practicality considerations.” In 1985, the Pipeline and Hazardous Materials Safety Administration (PHMSA), then known as Research and Special Programs Administration (RSPA), published a notice of proposed rulemaking (NPRM) (Docket Numbers 183 and 183A) that increased the bottom accident damage protection for cargo tanks, including the wet lines. In 1988, in the process of developing the final rule, PHMSA staff prepared an issue outline memorandum that discussed the external piping issue. The memorandum noted:

It is unreasonable and illogical to allow the piping to be considered as an acceptable container for the transport of gasoline. Therefore, the petroleum industry’s decision to bottom load in compliance with the Clean Air Act and their unwillingness or inability to drain the cargo lines has resulted in widespread non-compliance with the intent and letter of the Hazardous Materials Regulations as interpreted by RSPA [PHMSA] for the transportation of gasoline.

In the final rule published in 1989, PHMSA noted that wet lines were not appropriate packaging for hazardous materials:

Bottom loading and unloading outlets on cargo tanks, although very useful, present the inherent risk that if damaged the entire contents of the tank may be released. Piping attached to the outlet valve is provided with a sacrificial device that is designed to break under accident loads.... Because such piping under the current regulation is not specifically a part of the product containment vessel and is designed to fail in an accident, RSPA’s [PHMSA’S] position is that piping between the tank outlet valve and any loading valves is not an appropriate packaging for the transportation of hazardous materials... RSPA [PHMSA] strongly believes that the practice of transporting hazardous materials in exposed unprotected piping designed to fail, if impacted in an accident, is an unnecessary risk.
In addressing comments from the petroleum industry regarding data supporting the infrequency of accidents resulting in damage to the wet lines and the loss of lading, PHMSA responded that although such accidents were infrequent, the consequences of such accidents could be substantial. PHMSA encouraged the petroleum industry to consider and evaluate all possible ways to eliminate this risk in the most cost effective manner. The industry responded but not with a solution. The American Petroleum Institute (API) replied that the analysis of wet line accident statistics indicates that the probability is quite low that a fatality will be directly attributed to a wet line failure. Based on the results of its analysis, API cancelled a study to evaluate alternate means of loading cargo tanks that would result in dry loading lines. Consequently, PHMSA prohibited the transportation of poison B liquids, oxidizer liquids, liquid organic peroxides, and liquid corrosives in wet lines, but allowed gasoline and petroleum products in external unprotected wet lines. PHMSA justified the exception for gasoline by the lack of sufficient accident data and the inadequacy of information concerning possible alternative procedures and/or equipment.

Accidents

Subsequent to this rulemaking activity, the NTSB investigated several accidents in which wet lines were damaged, and gasoline in the wet lines was released and ignited. On October 9, 1997, a tractor/cargo tank semitrailer transporting 8,600 gallons of gasoline was struck by a car in Yonkers, New York. The car hit the right side of the cargo tank in the area of the tank's external wet lines, releasing the gasoline in them. The ensuing fire destroyed both vehicles, and the driver of the car was killed. Five months after this accident, the NTSB investigated a similar accident that happened on February 15, 1998, in Wilmington, Delaware. A tractor/cargo tank semitrailer transporting 8,900 gallons of gasoline struck the left rear of a car parked on the right shoulder of a bridge. The truck pushed the car into a concrete barrier bordering the bridge. A fire ensued, destroyed the car, and moderately damaged the truck.
The NTSB determined that three of the four wet lines on the cargo tank fractured during the collision, releasing about 12 gallons of gasoline. As a result of these investigations, the NTSB recommended that PHMSA prohibit the carrying of hazardous materials in external piping of cargo tanks, such as wet lines, which may be vulnerable to failure in an accident (Safety Recommendation H-98-27).

In another accident in Mustang, Oklahoma, in July 1998, local authorities attributed the severity of the accident to the failure of wet lines after an automobile hit a cargo tank and broke the wet lines. The gasoline in the wet lines was released and ignited, engulfing the automobile and cargo tank in fire.

On July 1, 2009, an automobile collided with a cargo tank semitrailer in Upper Pittsgrove Township, New Jersey. The automobile struck a wet line on the cargo tank truck and about 13 gallons of gasoline were released onto the automobile. The wet line did not sever at the point where it is connected to the cargo tank. The wet line was originally about 18 feet long and 4 inches in diameter. Approximately 6 feet of the wet line remained attached to the cargo tank after the accident, extending from where it was attached to the number 4 cargo compartment forward towards the piping manifold. The automobile became wedged beneath the cargo tank truck and a postcrash fire consumed the automobile. The Gloucester County Medical Examiner’s Office postmortem report indicated that the cause of death of the automobile driver was smoke and soot inhalation and severe thermal burns. NTSB investigated the accident and determined that the probable cause of the accident was the failure of the automobile driver to obey a stop sign equipped with flashing red lights. Contributing to the severity of the accident was a fire that resulted from the release of gasoline from a cargo tank loading line that was ruptured during the collision.
This recent accident illustrates once again why the NTSB strongly believes that PHMSA should prohibit the unsafe practice of transporting hazardous materials in the external loading lines of cargo tanks.

Action to Date

In December 2004, PHMSA published an NPRM addressing the transportation of flammable liquids in external wet lines. PHMSA noted in the NPRM that 190 accidents involving wet lines were reported in the 12-year period from January 1, 1990, through December 31, 2001, and included at least 7 fatal accidents in which unprotected wet lines were damaged and gasoline was released. PHMSA acknowledged that there was underreporting of hazardous materials transportation accidents of all types. Since this rulemaking activity, the accuracy and adequacy of PHMSA’s database has been questioned.

To improve the safety of wet lines, PHMSA proposed to prohibit flammable liquids, including gasoline, in external product piping (that is, wet lines) unless the piping was protected from impact. Two options that would meet this performance standard would be the use of purging systems for existing external piping, or replacing the existing external piping with shortened or recessed piping.

The petroleum industry strongly opposed the NPRM and resisted initiatives to require purging of the wet lines. The API and the National Tank Truck Carriers estimated that 26,000 trailers would be affected.

Sunoco, Inc., on the other hand, was very proactive and made a decision to equip all of its fleet of about 120 cargo tanks with purging systems. Sunoco advised that its vehicles have been equipped for several years and that the systems have worked well. Sunoco identified two accidents in the Philadelphia area where it believes purged lines may have prevented the destruction of its trailers.

In its March 5, 2005, comment letter to PHMSA on the NPRM, the NTSB stated (1) that it did not believe that reliance upon impact damage protection devices for wet lines would provide the greatest level of safety and (2) that the hazards from wet lines full of a hazardous cargo can be more effectively eliminated if the wet lines are purged of the cargo.

On June 7, 2006, PHMSA published a notice withdrawing the NPRM. PHMSA stated in the withdrawal notice that it had concluded that “further regulation would not produce the level of benefits ... originally expected and that the quantifiable benefits of proposed regulatory approaches would not justify the corresponding costs.”

On July 31, 2007, PHMSA advised the NTSB that while it would not eliminate wet lines, it developed an outreach program focused on best practices for fueling operations, maintenance procedures, and other safeguards. PHMSA also advised that it was working with industry to refine data on the wet line issue. While recognizing these increased activities, the NTSB advised PHMSA on September 4, 2008, that these actions still do not address the need to eliminate wet lines and that they did not satisfy the NTSB’s 1998 recommendation.
On October 16, 2009, PHMSA advised the NTSB that it is completing an in-depth comprehensive review of incident reports and other safety data to determine whether rulemaking action to reduce the risks associated with the transportation of hazardous materials in wet lines is necessary. PHMSA also advised that it is evaluating the effectiveness of existing or emerging technologies to address the risk.

**Action Needed**

The hazard posed by wet lines on cargo tanks making gasoline deliveries has been recognized for 30 years. NTSB believes that PHMSA needs to prohibit this practice. Further, PHMSA acknowledged the underreporting of accident data in its NPRM, and the NTSB believes that PHMSA should take action to improve the accuracy and completeness of the data.

**Safety Recommendation**

--to the U.S. Department of Transportation:

Prohibit the carrying of hazardous materials in external piping of cargo tanks, such as loading lines, that may be vulnerable to failure in an accident. (H-98-27);
Current classification: Open—Acceptable Response

**Air Transportation of Lithium Batteries**

**Issues**

*Inadequate understanding of the cause of fires involving lithium batteries and inadequate public awareness about safely carrying lithium batteries on aircraft.*

**Background**

There are two types of lithium batteries: primary and secondary. Primary lithium batteries are non-rechargeable, and they are commonly used in items such as watches and pocket calculators. They contain metallic lithium that is sealed in a metal casing. The metallic lithium will burn when exposed to air if the metal casing is damaged, compromised, or exposed to sustained heating.

Secondary lithium batteries, also known as lithium-ion batteries, are rechargeable and are commonly used in items such as cameras, cell phones, laptop computers, and hand power tools. The secondary lithium batteries contain electrically charged lithium atoms, or ions, in a flammable liquid electrolyte. Overheating of the battery can result in the ignition of the flammable electrolyte. Halon suppression systems (the only fire suppression systems certified for aviation) are not effective in extinguishing fires involving primary lithium batteries, but can be effective in extinguishing fires involving secondary lithium batteries. Between December 2007 and November 2008, the Consumer Product Safety Commission issued 5 recalls of nearly 800,000 secondary lithium batteries because of overheating, melting, or creating a fire hazard.

The demand for primary and secondary lithium batteries has skyrocketed since the mid-1990s as the popularity and use of electronic equipment of all types has similarly grown. As the
use of lithium batteries has increased, the number of incidents involving fires or overheating of lithium batteries, particularly in aviation, has likewise grown. The NTSB has investigated three such accidents, which I would like to review for the Committee.

Los Angeles International Airport, Los Angeles, California

On April 28, 1999, a fire destroyed two cargo pallets that included boxes of primary lithium batteries at Los Angeles International Airport. The pallets had been taken off an inbound passenger-carrying flight from Japan. During the movement of one of the pallets by a forklift within the cargo facility, the pallet fell off the forklift and rolled onto its side against another pallet. The pallet of primary lithium batteries was moved a second time and placed next to another pallet of primary lithium batteries. Three minutes later, smoke and a small fire were observed on the previously overturned pallet. The fire spread to the adjoining pallet of batteries, and both pallets erupted in flames. The fire department extinguished the fire in about 25 minutes only after separating the packages on the pallets and deluging them with water.

Interviews with the air carrier's employees revealed that it was not uncommon to overturn a pallet and that other loads of batteries had been damaged and sometimes resulted in spillage of the batteries.

The lithium batteries on the two pallets were neither identified nor shipped as hazardous materials. Instead, they had been shipped as ordinary freight under an exception to the Hazardous Materials Regulations. At the time of this incident, lithium batteries containing limited amounts of lithium and meeting certain packaging requirements were “excepted” (excluded) from all regulations. Lithium batteries not meeting the exception criteria had to be transported as a regulated hazardous material, be identified on the shipping documents, and have appropriately marked and labeled packaging. The batteries involved in this incident met the criteria for the exceptions.
The NTSB’s investigation of this incident revealed that these batteries presented an unacceptable risk to aircraft and passengers. The NTSB recommended that PHMSA, with the Federal Aviation Administration (FAA), evaluate the fire hazards posed by lithium batteries in an aviation environment and require that appropriate safety measures be taken to protect the aircraft and occupants. The NTSB also recommended that packages containing lithium batteries be identified as hazardous materials, including appropriate marking and labeling of the packages and proper identification in shipping documents when transported on aircraft.

Memphis, Tennessee

On August 4, 2004, fire destroyed freight in a unit load device (a cargo container configured for aircraft) that was being loaded on a cargo-only aircraft in Memphis, Tennessee. As the unit load device was about halfway onto the aircraft, loading personnel smelled smoke and lowered the device to the ground. When fire responders arrived and opened the unit load device, a fire flared inside it.

The fire originated in a cardboard box that held two secondary lithium battery modules that were components of a prototype battery pack for an electric car. The package also contained metal tools taped to a cardboard lining in the top of the box. The accident package was identified on shipping documents as “lithium batteries” and class 9 miscellaneous hazardous materials. The package was shipped under a U.S. Department of Transportation (DOT) “competent authority approval,” a formal written authorization for the limited shipment and transportation of a specific hazardous material in specially designed containers or packaging. The DOT approval applied to the complete battery pack and not the individual battery modules. The DOT approval further stipulated that the battery pack was to be secured in an insulated fiberboard case. The fiberboard case was to be enclosed and secured in a wooden crate.

On the basis of this evidence, the NTSB determined that the fire was caused by the failure of unapproved packaging to adequately protect the secondary lithium batteries from short-circuiting during transportation.

In conjunction with its investigation of the Memphis incident, the NTSB requested accident data from PHMSA about other reported incidents involving lithium batteries. According to PHMSA, six other incidents involving lithium batteries in air transportation were reported from January 1989 through May 2005. In five of these incidents, the batteries caused fire or charring of the packaging. During the same period, six incidents involving lithium batteries in other modes were reported, but only one included a fire directly related to the transport of lithium batteries.

The NTSB did not issue any additional safety recommendations as part of its investigation of the Memphis incident. The safety recommendations to evaluate the fire hazards of lithium batteries issued following the 1999 incident in Los Angeles addressed lithium batteries in general. The NTSB believed these recommendations also applied to secondary lithium batteries, and that PHMSA should evaluate the fire hazards of secondary lithium batteries.
Philadelphia, Pennsylvania

The most recent accident that involved lithium batteries and was investigated by the NTSB occurred on February 7, 2006. After an in-flight cargo fire, a cargo aircraft made an emergency landing at its destination airport, Philadelphia International Airport. The aircraft and most of the cargo were destroyed by fire after landing.

The NTSB examined the contents of the cargo containers where the fire most likely originated and found that several electronic devices containing secondary lithium batteries were shipped in these containers. No batteries were found that exhibited any damage identifying a source of ignition, nor could any determination be made that secondary batteries found in the debris had been subject to recalls.

Although the cause of the in-flight fire ultimately could not be determined, the prevalence of electronic equipment in the main cargo compartment caused the NTSB to closely examine safety issues involving the transportation of secondary lithium batteries on commercial aircraft, including batteries in airline passengers’ laptop computers and other personal electronic devices. The NTSB concluded from its investigation that testing and incident data indicated that both primary and secondary lithium batteries pose a fire hazard, and that an in-depth analysis of the causes of primary and secondary lithium battery failures would improve the safe transportation of these batteries.
The NTSB issued safety recommendations to PHMSA in December 2007 to address growing concerns about the increasing frequency of rechargeable and non-rechargeable lithium batteries overheating and igniting when transported on aircraft, either as cargo or as items in passenger baggage or carry-on items. Because the causes of these battery failures in many cases remain unknown, the NTSB issued multiple safety recommendations urging PHMSA to address the problems with lithium batteries on a number of fronts, including:

- reporting all incidents,
- retaining and analyzing failed batteries,
- researching the modes of failure, and
- eliminating regulatory provisions that permit limited quantities of these batteries to be transported without labeling, marking, or packaging them as hazardous materials.

In January 2008, the NTSB issued additional recommendations to PHMSA and the FAA to address the NTSB's concerns about the lack of public awareness about issues involving the overheating and ignition of lithium batteries.

**Action to Date**

In December 2004, PHMSA published an interim final rule that addressed the safety recommendations issued following the 1999 incident in Los Angeles. This rule prohibited the transportation of most cargo shipments of primary lithium batteries on board passenger-carrying aircraft. Cargo shipments of equipment containing small- and medium-sized primary lithium batteries (containing less than 25 grams of lithium) were still permitted on passenger-carrying
aircraft, as were shipments of secondary lithium batteries, including those in equipment and within specified weight restrictions.

On August 9, 2007, PHMSA issued a final rule on the transportation of lithium batteries that became effective on January 1, 2008. The 2007 rule permanently adopted the amendments contained in the December 2004 interim final rule. The 2007 rule also included the following new requirements:

- Testing of the packaging for small lithium batteries;
- Labeling, marking, and packaging for single packages containing 12 or more small lithium batteries;
- Shipments of medium-sized lithium batteries to be transported and identified as class 9 hazardous materials when transported by air (and vessel); and
- Permitting airline passengers and flight and cabin crew to carry spare lithium batteries on aircraft as carry-on items only.

On January 14, 2009, PHMSA published another final rule concerning the transportation of batteries and battery-powered devices on aircraft. This final rule addressed the harmonization of the U.S. Hazardous Materials Regulations with international standards for transporting hazardous materials, including lithium batteries, by air. This rule did not address the NTSB’s 2007 and 2008 recommendations other than by enhancing the incident reporting requirements for battery failures.

PHMSA Letter to NTSB

On October 16, 2009, PHMSA advised NTSB that it was taking several actions in response to safety recommendations issued in 2007 and 2008. PHMSA stated that they agreed with NTSB that air carriers should be required to report all incidents involving lithium batteries, as evidenced by the final rule issued on January 14. PHMSA advised that incidents involving batteries and battery-powered devices that result in a fire, violent rupture, explosion, or dangerous evolution of heat must be reported, and that immediate telephonic notification is required for incidents involving air transportation. PHMSA also agreed with NTSB that an examination of failed batteries and electronic devices and equipment will provide valuable data and information. Therefore, it developed a standard protocol to be used by aircraft operators in the event of an incident for (1) immediately reporting the incident, (2) preserving the batteries and/or electronic equipment that failed, and (3) obtaining relevant information from passengers and crewmembers.

PHMSA further advised in its letter that it had completed an analysis of the causes of lithium battery incidents, consistent with NTSB’s recommendation. PHMSA noted that data suggest that the most likely causes of lithium battery incidents are (1) external short circuiting, (2) improper charging and/or discharging conditions associated with equipment use, (3) non-compliance (faulty design of the battery, false certification with regulatory testing/classification requirements, improper packaging and handling including some counterfeit batteries), and (4) internal short circuiting which can be caused by foreign matter introduced during the manufacturing process or when a battery is physically damaged, such as dropped or punctured.
PHMSA stated that it intends to issue a rulemaking this fall to impose more effective safeguards, including design testing, packaging, and hazard communication measures for various types and sizes of lithium batteries in specific transportation contexts. Specifically, PHMSA advised NTSB that it plans to:

- eliminate current exceptions for small lithium batteries;
- consider requiring manufacturers to provide evidence of satisfactory completion of the UN design type tests for each lithium battery and cell that is offered for transportation;
- revise current shipping descriptions to account for different battery types and chemistries and for consistency with shipping descriptions in international standards and regulations;
- restrict stowage of lithium batteries on an aircraft to crew accessible locations to permit immediate investigation and response to smoke or fire; and,
- consider development of appropriate safety measures for the air transport of lithium cells or batteries identified as defective for safety reasons or damaged.

PHMSA further advised that it and FAA plan to continue to evaluate the risk posed by all types and sizes of lithium batteries with a view toward risk reduction; however, the work will depend on the availability of resources. These areas would include test fire behavior of lithium batteries of various size and packaging configurations; fire resistant containers; analysis of cargo compartment configuration; and fire detection and suppression system methods.

Finally, PHMSA stated that it agrees with NTSB recommendations to establish a process to ensure wide, highly visible, and continuous dissemination of information to the air-traveling public, including flight crews, about the safe carriage of secondary (rechargeable) lithium batteries or electronic devices containing these batteries on board passenger aircraft. It has described to NTSB an education program that involves airlines, associations, and manufacturers to address the issue. NTSB believes that a process for measuring the effectiveness of educational programs is needed before an assessment of success can be accomplished.

Action Needed

NTSB is currently assessing PHMSA's October 16, 2009 response to actions that it is taking to address safety recommendations. However, action is needed to timely complete rulemaking and research commitments that it has made.

Safety Recommendations

--to the Pipeline and Hazardous Materials Safety Administration:

Require aircraft operators to implement measures to reduce the risk of primary lithium batteries becoming involved in fires on cargo-only aircraft, such as transporting such batteries in fire resistant containers and/or in restricted quantities at any single location on the aircraft. (A-07-104); Current classification: Open—Acceptable Response
Until fire suppression systems are required on cargo-only aircraft, as asked for in Safety Recommendation A-07-99, require that cargo shipments of secondary lithium batteries, including those contained in or packed with equipment, be transported in crew-accessible locations where portable fire suppression systems can be used. (A-07-105); Current classification: Open—Acceptable Response

Require commercial cargo and passenger operators to report to the Pipeline and Hazardous Materials Safety Administration all incidents involving primary and secondary lithium batteries, including those contained in or packed with equipment, that occur either on board or during loading or unloading operations and retain the failed items for evaluation purposes. (A-07-107); Current classification: Open—Acceptable Response

Analyze the causes of all thermal failures and fires involving secondary and primary lithium batteries and, based on this analysis, take appropriate action to mitigate any risks determined to be posed by transporting secondary and primary lithium batteries, including those contained in or packed with equipment, on board cargo and passenger aircraft as cargo; checked baggage; or carry-on items. (A-07-108); Current classification: Open—Acceptable Response

Eliminate regulatory exemptions for the packaging, marking, and labeling of cargo shipments of small secondary lithium batteries (no more than 8 grams equivalent lithium content) until the analysis of the failures and the implementation of risk-based requirements asked for in Safety Recommendation A-07-108 are completed. (A-07-109); Current classification: Open—Acceptable Response

—to the Federal Aviation Administration and the Pipeline and Hazardous Materials Safety Administration:

In collaboration with air carriers, manufacturers of lithium batteries and electronic devices, air travel associations, and other appropriate government and private organizations, establish a process to ensure wider, highly visible, and continuous dissemination of guidance and information to the air-traveling public, including flight crews, about the safe carriage of secondary (rechargeable) lithium batteries or electronic devices containing these batteries on board passenger aircraft. (A-08-1); Current classification: Open—Acceptable Response

In collaboration with air carriers, manufacturers of lithium batteries and electronic devices, air travel associations, and other appropriate government and private organizations, establish a process to periodically measure the effectiveness of your efforts to educate the air-traveling public, including flight crews, about the safe carriage of secondary (rechargeable) lithium batteries or electronic devices containing these batteries on board passenger aircraft. (A-08-2); Current classification: Open—Acceptable Response
Madam Chairwoman, this concludes my prepared testimony, and I would be happy to answer questions at the appropriate time.
UNITED STATES DEPARTMENT OF TRANSPORTATION
Pipeline and Hazardous Materials Safety Administration

Field Hearing on
Reauthorization of the Department of Transportation's
Hazardous Materials Safety Program

Before the
House Committee on Transportation and Infrastructure
Subcommittee on Railroads, Pipelines, and
Hazardous Materials

Written Statement of the
U.S. Department of Transportation

November 16, 2009
Written Statement

John D. Porcari
Deputy Secretary
U.S. Department of Transportation

Before the
Committee on Transportation and Infrastructure
Subcommittee on Railroads, Pipelines, and Hazardous Materials
U.S. House of Representatives
Field Hearing on
Reauthorization of the Department of Transportation’s
Hazardous Materials Safety Program

November 16, 2009

Introduction

Chairwoman Brown, Ranking Member Shuster and distinguished Members of the Subcommittee, thank you for the invitation to appear today.

Secretary LaHood and I regard the safety of America’s transportation system as our highest priority. When I last testified before the full Committee on September 10th on PHMSA’s Special Permit Program, I made a commitment to the Pipeline and Hazardous Materials Safety Administration’s (PHMSA) mission to put safety first in its duty to protect people and the environment from the risks inherent in hazardous materials and pipeline transportation. As you know, we developed a step by step plan to aggressively address the issues raised by the Committee and the OIG Advisory on Special Permits. I can report that the agency is making great strides in completing each action item.

Most recently, we developed an Action plan for IT Modernization and Data Collection and Analysis. This plan will modernize our IT hardware and software and develop the capacity to effectively collect and analyze data.
Today, I would like to address two safety issues highlighted by the National Transportation Safety Board (NTSB) and members of this committee – the risks posed by the transportation of lithium batteries, particularly on board aircraft, and safety problems associated with the transportation of flammable liquids in unprotected product piping on cargo tank motor vehicles, known as wetlines.

**Lithium Battery Regulation**

In 2008, an estimated 3.3 billion lithium batteries were transported worldwide by all modes of transportation, including passenger and cargo aircraft. Lithium batteries are regulated as hazardous materials because they can overheat and ignite in certain conditions and, once ignited, can be especially difficult to extinguish. Moreover, a lithium battery is susceptible to thermal runaway, a chain reaction leading to self-heating and release of its stored energy.

Incident information gathered by the Federal Aviation Administration (FAA) on 90 incidents occurring from 1991 to 2008 indicates that over a quarter (27 percent) of these incidents involved lithium batteries. Of the lithium battery incidents, 73 percent resulted from internal or external short-circuiting; 12 percent from charging/discharging; 6 percent from unintentional activation of devices; and 9 percent from causes such as malfunction of devices or improper handling of cargo.

Most types and sizes of lithium batteries are currently regulated as Class 9 materials under the DOT Hazardous Materials Regulations. The batteries themselves must pass a rigorous set of performance tests intended to demonstrate that the battery can withstand conditions encountered during transportation and can also withstand certain types of abuse. In addition, most lithium battery shipments are subject to stringent packaging and hazard communication requirements. Further, the regulations prohibit the transportation of most metal lithium batteries as cargo on passenger aircraft. The prohibition resulted from FAA testing indicating that current aircraft cargo fire...
suppression system would not be capable of suppressing a fire if a shipment of metal lithium batteries were ignited in flight.

The NTSB investigated a February 7, 2006 incident at the Philadelphia International Airport in which a fire—suspected to have been caused by lithium batteries—destroyed a United Parcel Service cargo aircraft and most of its cargo. While the captain, first officer, and a flight engineer evacuated the airplane after landing, sustaining only minor injuries, the NTSB concluded that flight crews on cargo-only aircraft are at risk from in-flight fires involving lithium batteries. Following the incident investigation, the NTSB issued five recommendations to PHMSA. Of particular concern to the NTSB and to DOT are shipments of small lithium batteries that currently are excepted from certain regulatory requirements.

**Wetlines**

Wetlines are rigid aluminum piping on a cargo tank motor vehicle used to load and unload products such as gasoline, diesel fuel, and other petroleum or medium-risk flammable liquid products. Because of their location, wetlines are extremely vulnerable to damage in a crash and are designed to shear off at the emergency valve in order to protect the integrity of the tank. Typically, if the product piping is empty there is no release of flammable product. Problems are usually encountered if the lines are “wet,” potentially leading to dangerous amounts (about 30-50 gallons) of spilled flammable liquids at the accident scene.

In 1998, the NTSB recommended the Department prohibit the transportation of hazardous materials in wetlines. The Department recognizes the safety risks associated with wetlines and we take the NTSB’s recommendation on wetlines very seriously.

Recently the Department completed an in-depth, comprehensive review of incident reports and other safety data to determine whether rulemaking action to reduce the risks associated with the transportation of hazardous materials in wetlines is necessary. The
review included a detailed examination of incident reports over the last 10 years involving cargo tanks transporting flammable liquids to assess the severity of the risk and determine whether there are safety problems that warrant rulemaking or other action.

The review encompassed 6,800 incidents involving cargo tanks transporting flammable or combustible liquids that occurred during the 10-year period from 1999-2009 and identified 184 incidents in which wetlines were determined to be damaged and/or ruptured. A total of 18 of these incidents involved fires. A total of 13 fatalities and 7 injuries were associated with wetline incidents over the ten-year period. Of these, our initial conclusion is that 6 fatalities and 7 injuries resulted directly from the wetlines release. However, we continue to review the direct cause of the remaining 7 fatalities.

Based on this incident analysis, our assessment of newly available technologies to remove lading from product lines after loading and the consequence of event, we now believe that a rulemaking to prohibit the transportation of flammable liquids in wetlines can reduce the safety risks associated with such transportation without imposing undue cost burdens on the regulated community. Cost benefit analysis is important to our consideration for regulatory action, but we will also consider the potential risk and consequences of more severe accidents. We plan to issue an NPRM in 2010.

Conclusion

Madame Chairman as you can see, the Department is working diligently to reduce the risks posed by the transportation of hazardous materials in commerce and to improve the effectiveness of PHMSA’s safety oversight responsibilities.

Let me close by recognizing this Committee’s leadership, particularly Chairman Oberstar and you, Madame Chair, in improving wetline and lithium battery safety in the draft Hazmat reauthorization bill. We look forward to continuing to work closely with
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you to improve tanker truck safety and reduce the dangers of transporting lithium batteries.

Thank you again for the opportunity to testify at today's special field hearing and I am happy to take your questions.

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QFRs for Porcari

Q1. Halon fire suppression systems capable of extinguishing a fire involving lithium-metal and lithium-ion batteries?

A1. FAA does not certify halon fire extinguishment effectiveness for specific materials. However, halon is recognized as an effective fire extinguishing agent against Class A (solid materials), Class B (flammable liquids) and Class C (electrical) fires. Thus, halon will extinguish the vast majority of materials expected to be transported in an aircraft cargo compartment. Halon 1301, because of its total flooding characteristics, is the halon agent of choice in inaccessible aircraft cargo compartment fire suppression systems. A Halon 1301 aircraft cargo compartment fire suppression system is certified to produce an initial extinguishing concentration of 5% and to maintain an inerting concentration of 3%. The latter 3% concentration will prevent flammable vapors from igniting from a deep-seated fire.

FAA tests have shown that halon is effective against lithium-ion (rechargeable) battery fires ("Flammability Assessment of Bulk-Packed, Rechargeable Lithium-Ion Cells in Transport Category Aircraft", Report DOT/FAA/AR-06/38). It was concluded in this study that "Halon 1301 is effective in suppressing the electrolyte fire, extinguishing the fire, and preventing any additional fire from subsequent venting. Cells will continue to vent due to the air temperature, but will not ignite in the presence of Halon 1301." The electrolyte fire is a Class B (flammable liquid) fire. Halon is not effective against lithium-metal (one time use) battery fires which involve burning lithium metal.

Q2. Are Halon fire suppression systems capable of controlling a fire involving lithium-metal and lithium-ion batteries to allow the crew enough time to suppress it and land the plane safely?

A2. A Halon 1301 aircraft cargo compartment fire suppression system is certified to produce an initial extinguishing concentration of 5% and to maintain an inerting concentration of 3%. The latter 3% concentration will prevent flammable vapors from igniting from a deep-seated fire. With the 3% concentration present in a cargo hold, the crew will have additional time allocated to them to continue with their emergency operations for landing their aircraft as quickly as possible.

Q3. Do you have any idea on the timeframe of when an NPRM will be published? Has OMB cleared the draft?

A3. We hope to publish an NPRM by the end of 2009. OMB is currently reviewing the draft NPRM; DOT requested an expedited review.
Q4. Do you believe the legislation (and thus your rule) will prohibit passenger airlines from transporting lithium batteries? Do you believe the legislation will prohibit cargo airlines from transporting lithium batteries?

A4. The answer to both questions is no. The legislative language we have seen addresses the transportation of lithium batteries as cargo on aircraft. It does not require DOT to issue a regulation prohibiting cargo airlines from transporting lithium batteries nor does it require DOT to revise currently regulations that permit airline passengers to carry lithium-battery powered devices and spare batteries for the devices in carry-on baggage.

Each air carrier makes a business decision to operate as a “will-carry” or a “will-not carry” certificated airline. If the air carrier decides to accept hazardous materials for transportation, it must submit its hazardous materials training program and hazardous materials operations specifications to FAA for approval. This ensures that appropriate training, operational standards, and guidance will be provided to air carrier employees who handle hazardous materials.

Q5. Please provide three examples of where the US is stricter than ICAO regs (doesn’t have to be related to lithium batteries).

A5. The United States prohibits the transportation of lithium metal batteries as cargo on passenger aircraft. The ICAO regulations do not include such a prohibition.

The United States requires carriers to report incidents involving shipments of all types of batteries. The ICAO regulations do not include this incident reporting requirement.

The United States requires chemical oxygen generators to meet more stringent classification and packaging requirements than the ICAO regulations and prohibits the transportation of spent chemical oxygen generators on both passenger and cargo aircraft.

The United States requires poison-inhalation-hazard (PIH) materials to meet stringent packaging and hazard communication requirements; the ICAO regulations applicable to PIH materials impose less stringent requirements.

The United States requires shippers and carriers of certain types of hazardous materials to develop and implement security plans. The ICAO regulations do not include security planning requirements.

The United States requires cylinders and lighters transported by air to meet more stringent requirements than do the ICAO regulations, particularly test requirements that demonstrate that the cylinder or lighter can withstand conditions normally encountered in transportation.
The United States generally regulates the transportation of radioactive materials by aircraft more strictly than does ICAO. For example, the United States prohibits the transportation of plutonium by aircraft, except for certain very narrow exceptions, while ICAO permits such transportation. Similarly, the United States restricts the transportation of radioactive materials by passenger aircraft where ICAO permits broader latitude for this type of transportation.

Q6. Mr. Latta asked: “If the U.S. does adopt those regulations that wouldn't be consistent with the international regulations, wouldn't that in turn drive jobs from the United States because the shipments would be flown to either Canada or Mexico and then have to be shipped in from those points, costing U.S. jobs and then also driving up costs to consumers?

You stated: “Typically shippers are looking for a logistic solution that is as simple and as cost-effective as possible. I would think it would be much more expensive to transship from aircraft in a foreign country to, for example, truck or rail and then ship into the United States. It is, I think intuitively, it is not likely that that would be a viable alternative.”

Do you believe that the legislation will have the effect of transferring shipments of lithium batteries from the air mode to rail or truck modes?

Do you believe that if there are different US standards than ICAO standards that this will have the effect of eliminating US jobs?

A6. We do not believe that the effect of the lithium battery provisions of the legislation would be to shift significant numbers of shipments from air to surface modes through Canada or Mexico. The United States imports virtually all lithium cells and batteries used in consumer electronic devices and batteries packaged for retail sale from overseas sources. The major cost impact of the legislative provisions would be an incremental increase in packaging costs of 2 to 9 cents per cell for shipments of small lithium batteries, which currently are excepted from the more stringent packaging requirements that apply to medium and large batteries. We believe that the costs to transport lithium batteries to Canada and Mexico and then transport them into the United States by truck or rail would be greater than the minimal cost increases resulting from the proposed legislative requirements. For these reasons, we do not believe that the effect of differing ICAO and U.S. requirements for lithium batteries will have the effect of eliminating U.S. jobs.

Q7. Do you believe the airlines can comply with crew accessibility requirements? Are other dangerous goods required to be crew accessible? If so, please provide some details here.
A7. Yes, we believe the airlines will be able to comply with requirements to stow lithium batteries in crew accessible locations. Stowage requirements will differ depending on the configuration of the aircraft. For example, a wide-bodied aircraft permits stowage of cargo along the complete length of the aircraft, with aisles that permit access to the cargo. On a narrow-bodied aircraft, the stowage options may be limited to areas near the front of the aircraft.

The Hazardous Materials Regulations include general stowage requirements for the transportation of hazardous materials on board aircraft. On a passenger-carrying aircraft, no more than 25 kg net weight of hazardous materials may be stowed in an inaccessible manner on an aircraft. In other words, no more than 25 kg net weight of hazardous materials may be stowed in a manner that precludes crew members from handling and, when size and weight permit, separating hazardous materials from other packages in flight. On a cargo-only aircraft, each package containing a hazardous material must be loaded so that a crew member can access, handle, and when size and weight permit, separate hazardous materials packages from other cargo during flight. The regulations include some exceptions from these stowage requirements for cargo-aircraft shipments for certain types of relatively low-hazard materials, materials transported in a compartment or freight container equipped with an FAA approved smoke and fire detection and suppression system and where other means of transportation are impractical or unavailable.
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STATEMENT OF

FIRST OFFICER MARK ROGERS

AIR LINE PILOTS ASSOCIATION, INTERNATIONAL

BEFORE THE

SUBCOMMITTEE ON RAILROADS, PIPELINES, AND HAZARDOUS MATERIALS

COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE

UNITED STATES HOUSE OF REPRESENTATIVES

BALTIMORE, MD

NOVEMBER 16, 2009

“REAUTHORIZATION OF THE DEPARTMENT OF TRANSPORTATION’S
HAZARDOUS MATERIALS SAFETY PROGRAM”
STATEMENT OF FIRST OFFICER MARK ROGERS
AIR LINE PILOTS ASSOCIATION, INTERNATIONAL (ALPA)
BEFORE THE
SUBCOMMITTEE ON RAILROADS, PIPELINES, AND HAZARDOUS MATERIALS
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE
U.S. HOUSE OF REPRESENTATIVES
ON
"REAUTHORIZATION OF THE DEPARTMENT OF TRANSPORTATION'S
HAZARDOUS MATERIALS SAFETY PROGRAM"
NOVEMBER 16, 2009

Good afternoon Chairwoman Brown, Ranking Member Shuster, and distinguished members of
the Subcommittee. I am Mark Rogers, a commercial airline pilot and director of the dangerous
goods program for the Air Line Pilots Association, International (ALPA). ALPA represents more
than 33,000 pilots who fly for 36 passenger and all-cargo airlines in the United States and
Canada. On behalf of our members, I thank you for this opportunity to testify regarding
immediate safety deficiencies related to the carriage of lithium batteries as cargo on passenger
and all-cargo aircraft.

ALPA has long advocated for improved transport requirements for lithium-ion and lithium-metal
batteries and we are pleased that your version of the HAZMAT Reauthorization bill mandates
strict new requirements. By letter dated November 4, 2009, ALPA president, Captain John
Prater, urged Chairman Oberstar to support the positions contained within the bill and requested
that its language not be weakened. We believe that the actions we have recommended for
incorporation into the reauthorization bill will greatly enhance the overall safety of the air-cargo
transportation system.

On May 14, 2009, I appeared before this committee and cited numerous incidents wherein
lithium batteries, carried either in the cabin of passenger aircraft or shipped as air-cargo,
misfunctioned and resulted in fires. On that occasion, I presented a video of a fire spontaneously
igniting in a laptop computer's lithium battery, demonstrating that once a single cell in a lithium
battery ignites, the generated heat can cause surrounding cells to ignite as well.

Since then, six (6) more fires involving lithium batteries have been reported to the FAA. I
reiterate that ALPA is not advocating for enhanced restrictions on the types of items individuals
may personally carry on board aircraft. Our attention and concern remains focused on lithium
batteries transported as air cargo. If these commodity shipments either initiate or become
involved in a fire, they pose a significant risk to the safety and well-being of an aircraft and its
occupants.

While it is true that a fire involving a limited number of lithium-ion batteries may be controlled
by the active fire suppression system on an aircraft, FAA testing has shown that lithium-metal
batteries are unresponsive to Halon, the traditional extinguishing agent used aboard aircraft.

Unfortunately, lithium-ion and lithium-metal batteries remain exempt from many of the Federal
hazardous material regulations, such as the requirement to place a dangerous goods label on the
package, the requirement to notify the pilot in command of their presence, the requirement for airline personnel to perform an acceptance check of the package, or any of the cargo compartment quantity limitations normally applied to hazardous materials. Under existing regulations, a flight crew would not be made aware of a pallet containing thousands of lithium batteries, yet a five-pound package of flammable paint or dry ice would be subject to the full scope of the dangerous goods provisions. These exceptions are clearly inappropriate for any commodity having a significant history of fire incidents aboard aircraft, as do lithium batteries.

The full regulation of lithium batteries as dangerous goods would have a significantly positive impact on the safety of the air cargo supply chain. Improved packaging standards would help prevent damage to shipped batteries. Dangerous goods labels would ensure worldwide recognition that shipments have the potential to cause an incident if mishandled. An acceptance check would provide an opportunity to detect package damage or non-compliance with the regulations. Pilot notification would increase the awareness of flight crewmembers and allow them to communicate hazard information to emergency responders in the event of an incident.

Because of the inability of aircraft fire suppression systems to extinguish a fire involving lithium metal batteries, the current ban on bulk shipments of these items on passenger aircraft should be extended to all-cargo aircraft until adequate packaging materials can be developed which will protect these batteries both from damage and from external heat sources. ALPA has long been an advocate of one level of safety and security for cargo and passenger aircraft, and we find it particularly troubling that a commodity which is completely prohibited from shipment on passenger aircraft may be transported, nearly unregulated, on all-cargo aircraft.

We recognize that the risk associated with a single battery in a shipped package is low. We caution, however, against providing exceptions to the dangerous goods regulations for shipping small batteries based on this logic, as there is nothing to prevent hundreds or even thousands of these items from being consolidated in a single shipment. It is only through full regulation of the shipment of small batteries that the quantity of batteries stored at a single location in an aircraft or in a single cargo compartment can be addressed. In the absence of such regulations, the batteries are handled as general freight and airline employees are often unaware of the total quantity of batteries offered for shipment or the risk that they pose to the aircraft.

The Pipeline and Hazardous Materials Safety Administration (PHMSA) has testified before this Committee that pending, draft rulemaking will improve lithium battery safety in air transportation. However, despite National Transportation Safety Board (NTSB) recommendations, ALPA’s urging and FAA encouragement, PHMSA has not published any significant lithium battery rulemaking since 2003 and even then the resulting final rule did not take effect until 2007.

Given that FAA has received six reports of fires related to lithium batteries since we last testified, it is clear that we cannot afford to wait several years or longer for the NPRM process to bring about the implementation and enforcement of improved lithium battery regulations. Every day we delay, people and property are being exposed to the potential danger of an in-flight fire that neither the aircraft’s fire suppression system nor the flight crew can extinguish. Expeditious approval of the legislation before this Committee is necessary to ensure the safety of lives and property involved in air cargo operations.
An objection has been raised that if these needed regulatory improvements are made via the legislative process, the U.S. will not be in harmonization with the international aviation community. In fact, those with a financial interest in the outcome of this debate—the airlines, battery and electronic equipment manufacturers—have been allied against harmonization which would result in safety improvements. Due to their objections, the Dangerous Goods Panel of the International Civil Aviation Organization (ICAO) has failed to act decisively on this issue at two separate panel meetings over two years. As a consequence, shipments of lithium batteries continue to be excepted under ICAO rules with no change possible for at least two more years.

At a recent meeting of the ICAO Dangerous Goods Panel we made the following recommendations which the airlines, and battery and electronic equipment manufacturers opposed:

1. Eliminate exceptions for lithium batteries shipped as cargo aboard aircraft. Although lithium batteries have been involved in dozens of fires aboard aircraft, the Technical Instructions provide relief from the packaging, testing, labeling, training, acceptance check and pilot notification requirements of fully regulated dangerous goods.

2. Restrict the quantity of lithium-ion batteries at a single location on the aircraft. While ICAO limits the quantity of lithium-ion batteries per package, an unlimited number of packages are allowed on both passenger and cargo aircraft, increasing the risk that a fire involving these batteries will overwhelm a cargo fire suppression system.

3. Prohibit cargo quantities of lithium-metal batteries on all aircraft. Following a fire in 1999, the U.S. Federal Aviation Administration (FAA) determined that a fire involving a single lithium-metal battery would spread to an entire shipment, and that the aircraft fire suppression agent Halon would have no effect on the fire. PHMSA banned bulk shipments of lithium-metal batteries on passenger aircraft in 2004. We proposed to extend this ban to both passenger and cargo aircraft worldwide.

4. Require the full regulation of lithium batteries, thereby alerting the acceptance and loading personnel to the presence of lithium battery shipments at cargo acceptance points.

Because the international community has failed to take needed remedial action, ALPA believes this Committee should act now to protect the public, flight crewmembers and other individuals directly involved in the air-cargo transportation system. The U.S. continues to be regarded as the world’s leader in regulating the safe carriage of hazardous materials in air transportation. We submit that passage of this proposed legislation will enhance that status within the ICAO community. By pointing to this legislation, U.S. representatives will be positioned to propose their adoption on a worldwide basis. It should be noted that whether enhanced regulations governing the handling of lithium batteries are adopted via legislation or NPRM, they will differ from existing ICAO rules. Consequently, for a time, there will be a lack of harmonization with ICAO practices, regardless of the way the rules are adopted.

Compliance with provisions in the Department of Transportation’s hazardous materials regulations will ensure that each shipment by air cargo of lithium batteries is subjected to the following conditions:

A. Design testing of each battery according to the UN Manual of Tests and Criteria
B. Each cell or battery must be protected from short circuit
C. Packaging in strong outer UN Specification Packaging
D. A dangerous goods transport document must be provided
E. The package must be marked with a Class 9 Dangerous Goods Label
F. An acceptance check is required to be performed by the operator
G. A pilot notification form must be provided to the pilot in command
H. Training must be provided to persons preparing batteries for shipment

ALPA believes it is critical that the total quantity of lithium-ion batteries stored at any single location or in a single cargo compartment must be limited. While the risk of a fire initiating in a single battery can never be completely eliminated, by limiting the number of batteries stored at a single location, the severity of a fire can be reduced. A conservative approach to the number of batteries permissible at a single location must be adopted until testing is performed to determine the quantity of batteries that can be successfully extinguished using aircraft fire suppression systems.

In conclusion, I want to express ALPA's appreciation for this Committee's interest in the safe transport of lithium batteries as cargo on passenger and all-cargo aircraft and for the leadership which you have provided by ensuring that PHMSA promulgates regulations mandating the safe transportation of lithium batteries. The language that you have added to the HAZMAT reauthorization bill will greatly enhance the overall safety of air cargo operations and protect lives and property whenever lithium batteries are moved through the air transportation system.

Thank you for the opportunity to testify today. I would be pleased to address any questions that you may have.
Before the
United States House of Representatives
Committee on Transportation and Infrastructure's
Subcommittee on Railroads, Pipelines and Hazardous Materials

Statement of Barbara Windsor
on behalf of the
American Trucking Associations, Inc. (ATA)
and
National Tank Truck Carriers (NTTC)

Reauthorization of the Department of Transportation's
Hazardous Materials Safety Program

November 16, 2009

Madam Chairman, Ranking Member Shuster, and Members of the Subcommittee:

Thank you, for the opportunity to testify on the reauthorization of the Department of Transportation's (DOT) hazardous materials safety program.

My name is Barbara Windsor, and I am the President of Hahn Transportation, a trucking company headquartered in New Market, Maryland. My family built and grew this business over the past 75 years and today we operate more than 100 trucks and employ over 150 individuals. My company hauls petroleum and other hazardous materials in bulk. As a trucking company, we are proud of our safety record and strive to operate in full compliance with the federal hazardous materials safety regulations.

Today, I appear before you representing not just my company, but also the American Trucking Associations (ATA) and the National Tank Truck Carriers (NTTC). I am proud to serve as ATA's First Vice Chairman and I am a past Chairman of NTTC. ATA is the national trade association of the trucking industry. Through its affiliated state trucking associations, affiliated conferences and other organizations, ATA represents more than 37,000 trucking companies throughout the United States. NTTC represents for hire bulk carriers and has over 300 members in this segment of the trucking industry.
The trucking industry is the backbone of this nation's economy accounting for more than 80% of the nation's freight bill with nearly 9 million Americans working in trucking-related jobs. The trucking industry delivers virtually all of the consumer goods in the United States and the lion's share of essential hazardous materials, such as pharmaceuticals to treat the ill, chemicals to purify water, military supplies to protect our troops, pesticides and fertilizers to help feed the world, and fuel to power our cars and heat our homes. These hazardous materials are essential to support our quality of life and their safe and efficient transportation is critical to this Nation's economic well being.

The safety and security record for the transportation of hazardous materials is impressive. Each day there are approximately 1,000,000 shipments of hazardous materials in the United States. 1 94% of these shipments move by truck. 2 The rate of serious incidents involving the transportation of hazardous materials by motor carrier is just 0.0001%, and the percentage of incidents involving injuries is 0.00002% or two one-hundred thousandths of one percent. 3

I note that on May 14, 2009, ATA testified before this Subcommittee on its hazardous materials safety priorities. That testimony highlighted the following six key issues for Congress to address as it considers the reauthorization of the federal hazardous materials transportation law:

- Eliminating duplicative and redundant security background checks;
- Improving state hazmat permitting systems;
- Ensuring equitable enforcement of the hazmat regulations;
- Enhancing safety by increasing DOT's preemption authority; and
- Resolving jurisdictional issues concerning the Occupational Safety and Health Administration (OSHA) and DOT's regulation of hazmat handling; and
- Regulating the transportation of flammable materials in cargo tank wetlines.

In lieu of restating our prior testimony, I encourage Committee members to review that testimony and will now focus the remainder of my remarks upon the provisions of H.R. 4016 that would ban the transportation of flammable liquids in external product piping of cargo tanks.

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3 See U.S. Department of Transportation, Hazardous Materials Information System (May 1, 2009). Note many "serious incidents" do not involve injuries, as highway closures and certain releases of hazardous materials are classified as "serious incidents" even though no one is injured.


A. **Wetlines Background**

Wetlines refer to the product piping underneath cargo tank trucks that transport gasoline and other flammable liquids. ATA and NTTC oppose a legislative mandate to purge residual product from wetlines for the reasons discussed below.

In 1998, following a fatal accident involving a cargo tank, the National Transportation Safety Board (NTSB) issued a recommendation to DOT to prohibit the transport of flammable materials in wetlines to reduce the risk of serious injuries from the release of product in the event that a car crashes into a tank truck (NTSB Safety Recommendation H-98-27). In 2004, the Research and Special Programs Administration (RSPA), predecessor to the Pipeline and Hazardous Materials Safety Administration (PHMSA) proposed a rule to prohibit the transport flammable liquids in wetlines. The proposed rule would have required tank trucks to install a device that pumped any residual liquid back into the tank prior to transportation. Based upon its analysis of data from incidents attributable to wetlines and the costs associated with requiring equipment to evacuate product from wetlines, PHMSA concluded that the costs of the proposed regulation exceeded its benefits and properly withdrew the proposed rule.  

B. **Data Demonstrate that Wetlines do not Pose a Significant Safety Risk**

We believe that the industry’s safety record demonstrates that a mandate for wetlines-purging equipment is simply not justified. Earlier this year, Subcommittee staff conducted an exhaustive examination of DOT’s hazmat incident database. The results of that examination revealed that over the past ten years there have been six fatalities that are directly attributable to wetlines releases.  

By contrast, more than 60,000 cargo tank shipments of flammable liquids occur each day and over 180 million shipments have occurred over that same time period. These government statistics indicate that the risk of a fatal wetlines incident is approximately 1 in 30,000,000. In fact, the odds of being struck by lightning during your lifetime are 6,000 times greater than the odds of being killed in a wetlines incident.  

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4 RSPA responded to an NTSB recommendation, proposed a solution to a perceived problem, accepted comments, analyzed the data, and then properly concluded that the costs of the proposed solution far exceeded its benefits.


6 According to the National Weather Service the odds of being struck by lightening during your lifetime are 1 in 5,000. [http://www.weather.gov/ow/llightning/medial.htm](http://www.weather.gov/ow/llightning/medial.htm)
We recognize that the open NTSB recommendation makes it difficult to dismiss the potential, albeit small, risk created by wetlines; however, NTSB's recommendation is based upon limited data. The NTSB recommendation stems from a specific accident investigation. Nowhere in NTSB's analysis is there a discussion of the actual risk to the public from the transportation of flammable liquids in wetlines. NTSB does not consider the frequency with which petroleum tankers operate, and most importantly does not consider the actual likelihood that a cargo tank motor vehicle will be involved in a fatal wetlines accident. Finally, the NTSB recommendation does not consider the costs involved in purging wetlines, nor the human lives that will be lost as a result of a retrofit requirement, wherein the frequency of welding on existing gasoline tankers is dramatically increased.

In light of this, we recommend that Congress require the National Academies of Sciences to conduct an in-depth study on the transportation of flammable liquids in cargo tank external piping. This report should at a minimum quantify the risks posed by wetlines and analyze the costs and feasibility of eliminating the transportation of flammable materials in wetlines. Upon completion of the study, Congress should require the Secretary to address the conclusions in an appropriate manner.

C. Costs and Risks of Wetlines Purging Systems

While H.R. 4016 does not specifically mandate the installation of a wetlines purging system, these types of systems are the only ones currently available to satisfy the legislation's requirement that no flammable liquids be transported in the external product piping of a tank truck. We discuss the need for greater flexibility in this area in Section D, below.

Perhaps the greatest cost associated with a Congressional mandate to ban the transportation of flammable liquids in cargo tank external piping will be the additional lives lost as a result of bringing a large number of used cargo tanks into a shop environment for welding operations. According to a newspaper search conducted by NTTC, during the past 10 years there have been 20 fatalities that have resulted from welding operations performed on cargo tanks. We believe that this number is significantly understated, as an internet newspaper search is unlikely to uncover all of the cargo tank shop incidents that have occurred over the past 10 years. Even using this rudimentary analysis, however, it is clear that the mandate to install wetlines purging systems will result in an increase in fatalities; especially considering the fact that many more cargo tanks will be required to visit maintenance facilities than currently occur under typical maintenance cycles.
We recognize that H.R. 4016 attempts to address the risks created by increased welding activity on cargo tanks by requiring the Occupational Safety and Health Administration (OSHA) to review and update existing standards to ensure that personnel conducting welding activities are adequately protected. Unfortunately, welding performed upon gasoline tankers that have been previously used is an inherently dangerous activity. Regardless of the precautions taken to clean out the tank prior to performing maintenance activities, there are too often situations where gasoline vapors remain. Even the best cargo repair facilities have these types of accidents, and they are already well aware of the potential for vapors to remain in valves, baffles and other appurtenances to the cargo tank. As such, we do not expect the updating of an OSHA standard to reduce the danger associated with these types of cargo tank maintenance operations.

We also understand that the manufacturer of the only available wetlines purging system is working on developing a system that does not have to be welded to the tank. Unfortunately, this system would still require replacement of cargo tank valves. Moreover, the system has not yet been tested and its commercial viability is still uncertain.

Putting the human cost of retrofit aside, the capital cost associated with retrofitting a cargo tank is approximately $8,000 per tank, or almost $200 million for the entire existing fleet. This figure does not include the costs associated with the "downtime" of the equipment during the retrofit process and does not include the ongoing maintenance costs.

In addition to the equipment, installation, and maintenance costs, there is a cost associated with lost carrier productivity that will result from delays at loading facilities waiting for the purging system to completely evacuate the wetlines prior to moving the cargo tank. System malfunctions would further erode carrier efficiency.

The costs of retrofitting my own fleet likely would exceed $800,000. This is an enormous expense for a family-owned business such as mine. Given my company's limited access to capital, the required investment in purging systems could prevent me from deploying other proven safety technologies, such as lane departure warning systems, truck and trailer stability systems, and collision warning technologies. Even the cost of installing a wetlines purging system upon new equipment only could affect the ability of tank truck fleets to install proven safety technologies. A wetlines purging system would likely add about $5,000 to the cost of a new gasoline cargo tank (i.e., 8%).

We urge Congress to require a study of this contentious issue and to allow the experts at PHMSA to determine the most appropriate course of action. A ban on transporting flammable liquids in cargo tank piping would create additional safety risks for cargo tank maintenance facilities and impose significant costs on an industry that is struggling in this difficult economic environment.
D. Alternatives that Provide an Adequate Level of Safety

By prohibiting the transportation of flammable liquids in wetlines, H.R. 4016 prevents the development of alternatives that could provide an adequate level of safety. In order to address this concern, the legislation should be amended to allow the Secretary to review various cargo tank designs and authorize the transportation of flammable liquids in wetlines where the Secretary determines that such transportation does not present an unreasonable safety risk. This modification would encourage cargo tank manufacturers to develop alternatives such as under-ride protection, relocation of wetlines to make them less vulnerable in an accident, or other measures that provide an adequate level of safety. While the risk of a wetlines incident remains too small to warrant these types of modifications, we believe that it may be possible to address this issue in a more cost effective manner.

The legislation, as written, effectively requires the modification of a large fleet of cargo tanks. Perhaps a more efficient way to address this concern is to require petroleum terminals to remove flammable liquids from cargo tank wetlines during the loading process. It seems much more reasonable to require modification of a couple of hundred petroleum loading racks, than to require tens of thousands of cargo tanks to be retrofitted and redesigned. Should Congress wish to pursue this alternative, it will be necessary to recognize that a large petroleum terminal has significant leverage over an individual for-hire motor carrier that loads gasoline at its facility. As such, a requirement for the petroleum terminal to evacuate product from a cargo tank wetline must be combined with a requirement that this activity be accomplished through a modification to the loading rack. In the absence of such a requirement, petroleum terminals will simply require motor carriers to retrofit their tanks with purging systems as a precondition to loading at their facilities.

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Thank you for allowing me to testify. ATA, NTTC and Hahn Transportation greatly appreciate this opportunity to offer our insight into measures to improve the safe, secure and efficient transportation of flammable liquids in cargo tanks. I am pleased to answer any questions you and the other members of the Subcommittee may have.