



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

Written Statement of

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presented to the

**SUBCOMMITTEE ON RAILROADS,
PIPELINES, AND HAZARDOUS MATERIALS**

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Good afternoon, Chairwoman Brown, Ranking Member Shuster and distinguished members of the subcommittee. I am Jeff Johnson, First Vice President of the International Association of Fire Chiefs (IAFC), and fire chief of Tualatin Valley Fire and Rescue, which is located in Beaverton, Oregon.

The IAFC represents the leadership of over 1.1 million firefighters and emergency responders. IAFC members are the world's leading experts in firefighting, emergency medical services, terrorism response, hazardous materials spills, natural disasters, search and rescue, and public safety policy. Since 1873, the IAFC has provided a forum for its members to exchange ideas and uncover the latest products and services available to first responders.

The Fire and Emergency Service Community

America's fire and emergency services are the only organized group of American citizens that is locally situated, staffed, trained, and equipped to respond to all types of emergencies. There are approximately 1.1 million men and women in the fire and emergency services – approximately 300,000 career firefighters and 800,000 volunteer firefighters – serving in over 30,000 fire departments around the country. They are trained to respond to all hazards ranging from earthquakes, hurricanes, tornadoes and floods, to acts of terrorism, hazardous materials incidents, technical rescues, fires and medical emergencies.

The fire service protects America's critical infrastructure – the electrical grid, interstate highways, railroads, pipelines, petroleum and chemical facilities – and is, in fact, even considered part of the critical infrastructure. The fire service protects federal buildings, including military installations, and interstate commerce. No passenger airliner takes off from a runway that is not protected by a fire department.

New Challenges in Hazardous Materials Transportation

The transportation of hazardous materials is an integral part of the U.S. economy. According to the U.S. Department of Transportation (DOT)'s Pipeline and Hazardous Materials Safety Administration (PHMSA), there are close to a million daily shipments of hazardous materials. In most cases, these hazardous materials reach their destination safely. However, there are approximately 250,000 incidents each year. When these incidents occur, the local fire and emergency services will respond to protect the public.

At the dawn of the new century, the fire and emergency services face a number of new challenges in the field of hazardous materials. Due to both federal legislation and new technologies, a number of alternative fuels power our nation's economy. In the past two years, ethanol production and use has skyrocketed and fuel-grade ethanol is the number-one freight rail commodity, by volume, in the country. Shippers are sending various types of ethanol (fuel-grade, beverage-grade, and various flex-fuel blends) by pipeline, rail, barge, and truck through America's cities and communities. In addition, more than 250 million gallons of biodiesel are being produced annually in the U.S., and these are being shipped at different concentrations. Because of the different chemical properties of these alternative fuels, fire departments cannot use the same tactics and equipment that

they used for traditional petroleum-based fuels. Instead, fire departments must be equipped with the right equipment, including alcohol-resistant foams, and tactics to respond to incidents involving these alternative fuels.

The terrorist attacks on September 11, 2001, raised the specter of terrorism as a new threat for the fire and emergency services and their hazmat teams. Local first responders will be the first on scene at a chemical, biological, radiological, nuclear, and high-yield explosives (CBRNE) incident. While a CBRNE event is basically a “hazmat incident with attitude,” it involves a larger affected area, more casualties, and longer recovery duration than a more conventional hazmat incident. The fire and emergency services have spent the past eight years preparing themselves for a future incident through improved training and equipment. However, these preparations demand ever increasing amounts of time and resources, and the development of new skills.

New technology can be both a help to deal with these challenges, and a challenge in its own right. The Internet offers a wide variety of resources for hazmat teams to access information, share information about new trends in hazmat response, and report lessons learned from major incidents. For example, training can be downloaded from the web and shared at the fire station with an ease that has been hitherto unknown. However, technology also can create challenges. Information found on the Internet has to be validated and come from a trusted source. New equipment can be expensive and require specialized training.

In order to deal with these new challenges, the IAFC is working with its partners in the federal government, including the PHMSA, state and local agencies, and the private sector to develop solutions using new and innovative training methodologies and harnessing new methods of getting information out to the nation’s fire and emergency services. By continuing to work in a collaborative manner, we can develop solutions that will ensure the safety of the American public.

Training

The IAFC is taking the lead on educating the fire service on how to respond to incidents involving ethanol-blended and biodiesel fuels. In 2006, the IAFC joined with the Renewable Fuels Association, the International Liquid Terminals Association, Ansul, Williams Fire and Hazard Control, and Industrial Fire World to create the Ethanol Emergency Response Coalition (EERC). Using funding from the PHMSA and the U.S. Fire Administration, the IAFC worked with the EERC to develop training material and videos to educate the fire service about the specific type of foam and tactics needed for responding to ethanol incidents.

The IAFC also worked with the National Biodiesel Board, using a grant from the U.S. Department of Energy, to develop a training package and accompanying video for responding to biodiesel incidents. This training material is designed to help local fire departments understand the process of manufacturing biodiesel fuels, and how to respond to incidents at these locations.

Besides supporting efforts to educate the fire service about these new threats, PHMSA plays an important role in making sure that the fire and emergency services have basic hazmat response capabilities through its Hazardous Materials Emergency Preparedness (HMEP) grants. Authorized at \$28.8 million each year, the HMEP grants provide financial and technical assistance and national direction and guidance for state and local hazardous materials emergency planning and training

The IAFC encourages this subcommittee to make sure that this funding is used to train first responders to the Operations Level requirements, so that they are better prepared to deal with a hazmat incident. The current federal standard for hazmat response is the Occupational Safety and Health Administration's OSHA 1910.120, "Hazardous Waste Operations and Emergency Response" standard. However, the IAFC urges this subcommittee to make sure that HMEP funding is used to train local first responders to the Operations level using both the OSHA 1910.120 standard and the National Fire Protection Association's NFPA 472, "Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents." The NFPA 472 standard was updated in 2008 to include the threat of weapons of mass destruction (WMD), while the OSHA 1910.120 standard has not had a serious update for at least 15 years. By mandating that HMEP funds be used to train firefighters to both the OSHA 1910.120 and NFPA 472 standards, the PHMSA can ensure that firefighters have the required skills to respond to all types of hazardous materials emergencies, including those that might involve CBRNE.

Utilizing the Information Revolution

The information revolution and the Internet present the fire and emergency services with an unprecedented opportunity to improve the nation's hazmat response capability. In 2007, the PHMSA partnered with the IAFC to develop the National Hazardous Materials Fusion Center. This program is designed to link hazmat teams around the country through a data and information network that will allow them to share lessons learned from their experiences. The National Hazardous Materials Fusion Center is budgeted at roughly \$2 million per year to identify the hazmat teams around the country, connect them through a web portal and data network, and allow the teams to access state-of-the-art training about new challenges in the hazmat field. One of the major strengths of the fusion center is that it will be a trusted source for information and allow local first responders, federal and state agencies, and the private sector all to come together to share experiences and information in order to learn from each other how to address new and emerging challenges in the hazmat field.

The National Hazardous Materials Fusion Center also established Regional Incident Survey Teams (RISTs) in every PHMSA region to gather information and lessons learned from major hazmat incidents. The RISTs are composed of skilled and experienced hazmat responders who will be invited by local jurisdictions to hear directly from the responders about lessons learned. Then the teams will develop best and effective practices learned from these events. Currently, the RISTs are operational in all of the PHMSA regions. Already two incidents have been surveyed and a chlorine training package was developed with the assistance of the Texas Engineering Extension Service to help ensure educational consistency.

While the National Hazardous Materials Fusion Center uses technology to better train and prepare the fire and emergency services, other forms of technology should be examined carefully before deployment. For example, there is a proposal for the PHMSA to develop a new, paperless system for communicating hazards and shipping information. This new system would harness new communications technologies and wireless data systems to document transactions, trace shipments and exchange commercial information.

The IAFC welcomes this initiative, but urges this subcommittee to make sure that it is thoroughly vetted and tested before being adopted. Basic questions still need to be answered, such as how would a fire department access this wireless information, what type of technology would be required, how much would it cost, and how reliable is it during a major fire or spill? Today, fire departments have to rely on DOT placards, shipping papers, manifests, and other shipping documents to determine what type of hazmat is present. This system is old-fashioned, but effective, especially for volunteer fire departments in rural areas that cannot afford expensive new technology. We urge the subcommittee to make sure that a paperless system is piloted in a cross-section of jurisdictions, including both major metropolitan and rural areas, before it is fully deployed. We also urge the subcommittee to continue to support the current hazmat placarding system, which effectively communicates to firefighters on scene the hazards that they may be facing.

The IAFC also supports a proposal to allow the PHMSA to regulate and set standards for emergency response consulting services. According to existing federal hazmat regulations, a carrier or person who offers hazmat for transport is required to provide a 24-hour emergency telephone number that will be answered by someone who can provide immediate emergency response information or has immediate access to this information. In many cases, these “offerors” will utilize a third-party emergency response consulting service to provide this information. These services, like CHEMTREC, are tremendous assets to firefighters that are trying to respond to a serious incident. However, there has been an increase in third-party emergency consulting services in recent years, and not all of these services are as timely and accurate as is necessary. To ensure that first responders are able to access the information that they need when they need it, the IAFC recommends that the PHMSA be authorized to have oversight authority over these third-party services and to work with emergency responders in developing performance criteria and minimum baseline standards for these services.

In addition, the IAFC recommends that shipping documents also identify the original producer and shipper of a hazardous material. With the increase in third-party logistics agents, the shipping papers for a container or tanker may only contain the third-party agent or the freight forwarder as the shipper of record. Because the third-party agent did not produce the material, the emergency contact number may not be able to provide the assistance required during an incident. The IAFC would like the PHMSA and the subcommittee to examine this issue for a solution to this problem.

Rerouting of Hazardous Materials Transportation

Over the past few years, Congress has wrestled with the issue of how to route hazardous materials. The IAFC supports current Federal Railroad Administration (FRA) regulations that require railroads transporting security-sensitive hazardous materials to annually perform a comprehensive analysis that will enable it to select the safest and most secure routes. The safe and secure transportation of hazardous materials should be a clear objective of the DOT. However, the IAFC historically has had concerns with some proposals to re-route hazardous materials away from major urban areas. Realizing the importance of protecting major population centers, we would like to remind the subcommittee that most major metropolitan fire departments have experienced and well-equipped hazmat teams that are better prepared for a serious hazmat incident than volunteer fire departments in the surrounding rural areas might be. In addition, an ambitious re-routing plan creates a situation where the hazardous material in question is in transit longer, which increases the odds of an incident. In light of these concerns, we would urge the subcommittee to support the existing regulations.

In support of the current FRA regulations' focus on safe and secure hazmat transportation, the IAFC is working with both the FRA and the PHMSA to improve rural emergency response capabilities. The National Hazardous Materials Fusion Center is planning to work with communities in Massachusetts, Maryland, and Louisiana to develop and conduct rural emergency response planning surveys. These surveys will be used to assist rural fire and emergency services in developing a comprehensive strategic and tactical approach for hazardous materials preparedness, including transportation risk assessments and gap analysis. This program should improve the safety of hazardous materials that are transported through our rural communities.

Conclusion

In conclusion, I would like to thank the subcommittee for its focus on the PHMSA and hazardous materials transportation. As my testimony demonstrates, the IAFC considers the PHMSA a valued partner in the development of new resources and programs that harness the power of the Internet and other technology to educate and prepare the nation's firefighters and EMS personnel for the challenges that await them. On behalf of the nation's fire and EMS chiefs, I also would like to express our appreciation to this subcommittee for its continued dedication to ensuring the safety and security of the nation's hazmat transportation system.



Jeff Johnson, Fire Chief and Chief Executive Officer of Tualatin Valley Fire and Rescue (TVF&R), joined the fire district in 1989, following an 11 year fire service career in Douglas County, Oregon. Chief Johnson served as Division Chief and Assistant Chief at TVF&R prior to becoming Fire Chief in 1995.

Serving a resident population of more than 432,500 in nine cities and portions of three counties in the Portland (OR) metropolitan area, TVF&R is a fire district with approximately 500 members providing fire, EMS, and specialty rescue response along with prevention services. While under Chief Johnson's leadership, TVF&R has twice received the International Association of Fire Chiefs (IAFC)/U.S. Safety and Engineering Fire Service Excellence Award, the nation's top award for organizational excellence in the fire service. TVF&R is accredited by the Center for Public Safety

Excellence Commission on Fire Accreditation International CPSE/CFAI).

Chief Johnson is an ambassador for excellence and innovation in our service to the community. Additionally, he advocates for cooperative initiatives and other business practices that achieve efficiencies and demonstrate smart government and value for the citizens' investment. He has authored two fire service books and is a featured guest lecturer across the nation.

Chief Johnson is the Vice President of the International Association of Fire Chiefs (IAFC) and holds membership in the Metropolitan Fire Chiefs Association and the various IAFC Sections. He is the IAFC's alternate representative to the SAFECOM Executive Committee and a member of the SAFECOM Emergency Response Council. Additionally, he is a member of the USA Delegation to the Comité Technique International De Prevention Et D'Extinction Du Feu (CTIF), also known as the International Association of Fire and Rescue Services.

By gubernatorial appointment, he is the Chair of Oregon's State Interoperability Executive Council and a member of the Oregon Governor's Homeland Security Council. He is Past President of both the Western Fire Chiefs Association (WFCA) and the Oregon Fire Chiefs Association (OFCA), the Past Chair of the Oregon Governors' Fire Service Policy Council, and a charter member of Oregon's Meritorious Service committee. Locally, he is a board member for both the Washington County Office on Consolidated Emergency Management (OCEM) and for the Washington County Consolidated Communications Agency (WCCCA), the 911/dispatch center.

In the corporate environment, Chief Johnson sits on the boards of two private companies, specifically as a member of the Informed Corporation Board and as the Chairman of the Global Public Safety Solutions (GPSS) Board. He also is on the Editorial Board of FireRescue Magazine.

Chief Johnson holds a Bachelor of Science Degree in Business and Associate Degrees in Fire Science and Criminal Justice Administration. He is a graduate of the National Fire Academy's Executive Fire Officer (EFO) Program and achieved the CPSE Chief Fire Officer (CFO) Designation. During his leisure time, Jeff enjoys spending time with his wife Kay and their two children. An avid outdoorsman and student of Oregon history, he enjoys camping, fishing and motorcycling in Oregon's back country.