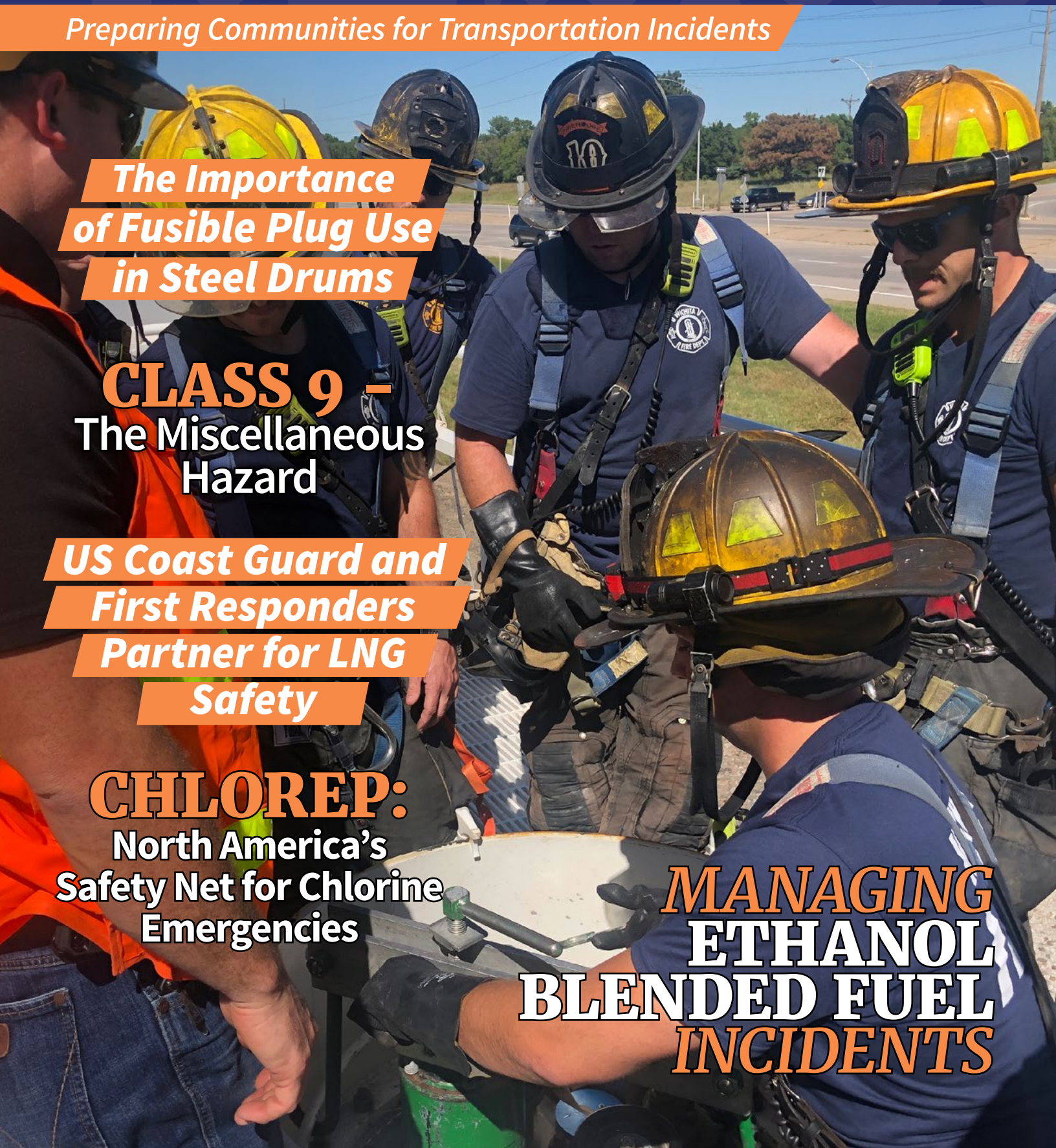
TRANSCAER® today 2019

Preparing Communities for Transportation Incidents



The Importance of Fusible Plug Use in Steel Drums

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CHLOREP: North America's Safety Net for Chlorine Emergencies

MANAGING ETHANOL BLENDED FUEL INCIDENTS

NOTES *from the* CHAIRMAN

KEITH SILVERMAN, PhD, MPH
Chairman of the National TRANSCAER® Task Group
Vice President, EHS, Quality & Regulatory Affairs, Ashland
ksilverman@ashland.com

Welcome to the new TRANSCAER® magazine. I have had the distinct honor of being Chair of the Executive Committee of the National TRANSCAER Task Group (NTTG) for the past three years. I have had an amazing time working with one of the most diverse teams I have ever met. Since 1986, when TRANSCAER was founded by Union Pacific Railroad and the Dow Chemical Company, our mission has been clear – to assist communities in preparing for and responding to a possible hazardous materials transportation incident. Today, TRANSCAER members consist of volunteer representatives from the chemical manufacturing, the railroads, chemical transporters and distributors, the emergency response community, as well as the government. In addition, TRANSCAER has sponsoring organizations which support the goals and objectives of TRANSCAER through member resources and monetary contributions. We work across boundaries and across borders and we keep extending our reach further and further.

During the past year, TRANSCAER has undergone a lot of changes, all of which are designed to improve how we serve you and meet your needs. Everyone has expectations they want met. Some are easy, some are not that easy. The one thing I can tell you is the TRANSCAER executive committee is listening to your ideas and is committed to working hard to improve upon how we deliver on our mission. Early in the year, Ms. Erica Bernstein joined TRANSCAER as the new Director. With Erica's leadership we accomplished a lot this year. We updated our operational guidelines, we launched a new website, we launched a new magazine, we took steps to better serve our customers and to reach new audiences. As Chair, I can tell you, 2020 holds many more new and exciting changes. We will keep moving forward, listening, learning, and doing new things, because we want to keep getting better at assisting emergency responders and communities.

During the past year, we added new members to the team and we said goodbye to others. I wanted to take a moment to recognize one very important goodbye. Mr. Rollie Shook, of the Dow Chemical Company stepped down from the TRANSCAER executive committee and the NTTG. Rollie has been a leader in TRANSCAER for decades and his pride in, dedication to, and hard work has made a difference for so many of us. So, Rollie, thanks for your service brother!

As you read through the magazine, take time to think about the people. Each author, each instructor, each member, and each student bring something to the table. At every event I attend, I learn something new. That diversity of thought and experience is probably TRANSCAER's biggest strength. In addition, the pride in and dedication to TRANSCAER that every NTTG member, every regional and state coordinator, and every instructor demonstrates is off the charts. To them I say "thank you" because TRANSCAER is you and would not exist without you.

I'll close with a quote from Walt Disney because he said it best – "whatever we accomplish belongs to our entire group, a tribute to the combined effort".

Keep learning new things and be safe.

"We will keep moving forward, listening, learning, and doing new things, because we want to keep getting better at assisting emergency responders and communities."

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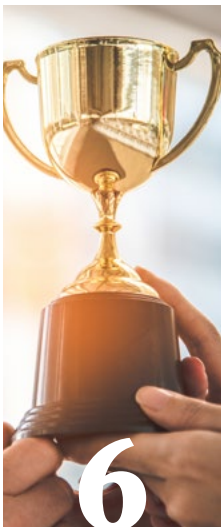

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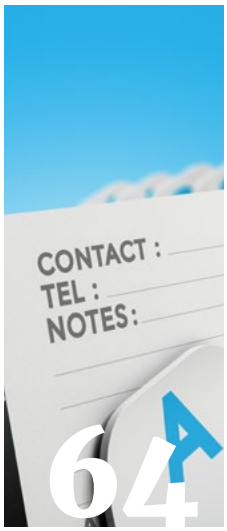

DISCLAIMER

TRANSCAER® *today* magazine is published by TRANSCAER through the American Chemistry Council (ACC). It is intended to provide general information to persons interested in TRANSCAER's mission and its outreach efforts. It is not intended to serve as a substitute for in-depth training or specific handling, emergency response or storage related to hazardous materials, nor is it designed or intended to define or create legal rights or obligations. All persons involved with hazardous materials transportation or response have an independent obligation to ascertain that their actions are in compliance with current federal, state and local laws and regulations and should consult with legal counsel concerning such matters. This publication is general in nature and individuals and companies may vary their approach with respect to particular practices based upon specific factual circumstances, the practicality and effectiveness of particular actions, and technological feasibility.

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Benefits of TRANSCAER® Sponsorship

Mission Support

TRANSCAER's Sponsorship Program is designed to visibly enhance your support of TRANSCAER's mission of assisting communities to prepare for and respond to a possible hazardous material transportation incident.

Partnership Opportunities

Companies vitally important in promoting the safe handling and transportation of hazardous materials can access many benefits through direct connection with TRANSCAER. There are valuable partnership opportunities as a Sponsor to connect with chemical manufacturers, transportation carriers, distributors, and emergency response companies and agencies.

High Profile Branding

Co-branding opportunities are available at national-level hazmat conferences, as well as at state-level hazmat conferences, seminars, and training events throughout the year. All sponsoring companies benefit from logo placement in TRANSCAER's brochures, programs, yearly magazine, and monthly e-newsletter.

Why **Sponsor TRANSCAER?**

TRANSCAER continues to train over 40,000 emergency responders each year for FREE! Since we are a voluntary national outreach program, we depend on our Sponsors to financially support our training and outreach initiatives.

Sponsorship benefits your company with new channels to promote your brand and visibly promote the safe transportation and handling of hazardous materials.

Sponsorship both supplements and reinforces traditional training initiatives. Your sponsorship support enables TRANSCAER to provide quality training programs for emergency responders throughout the year.

TRANSCAER offers two levels of sponsorship, Champion and Supporter. Visit transcaer.com/sponsorship-opportunities to download the Sponsorship Brochure. When ready to pledge your support, you can complete the sponsorship application online.

Sponsorship Highlights

SPONSORSHIP BENEFITS	Supporter ($7,500)	Champion ($10,000)
Vote & Representative on NTTG	✓	✓
Company logo on TRANSCAER® homepage	✓	✓
Access to TRANSCAER Coordinator Portal	✓	✓
Ability to promote your support of TRANSCAER with the use of the "Proud Supporter of TRANSCAER" logo	✓	✓
Company description and website link on TRANSCAER Sponsorship webpage	✓	✓
Acknowledgement of Sponsorship & Training Program in a dedicated slide of TRANSCAER Overview Presentation	✓	✓
Supporting emergency responders and communities across North America through the TRANSCAER Program	✓	✓
TRANSCAER Champion Challenge Coins (10)	-	✓
Company logo on TRANSCAER Champion Sponsor banner utilized at all national-level hazmat conferences where TRANSCAER attends with an exhibit booth	-	✓
Promotion of your company logo and yearly training recap in TRANSCAER Fact Sheet (distributed at all national-level Conferences that TRANSCAER attends and in the TRANSCAER Outreach Package)	-	✓
Yearly metrics report on your individual training events, *Seconds Count* videos, and online learning videos	-	✓
Ad in the *TRANSCAER Today* Magazine (issued annually)	Half Page	Full Page
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Training event support (direct community outreach, social media highlights pre-event and post-event, on-site support as needed)	-	4

Congratulations

2018 TRANSCAER® Award Recipients

The TRANSCAER Awards Program recognizes the achievements of individuals, companies and organizations that exceed in advocating, demonstrating and implementing the principles of TRANSCAER. We appreciate all of the time, energy and efforts each of you have made and thank you for your outstanding commitment to helping communities across North America.

CHAIRMAN'S AWARD

Missy Ruff, Renewable Fuels Association

DISTINGUISHED SERVICE AWARD

Kim L. Keeling, Union Pacific Railroad (In Memoriam)

NATIONAL ACHIEVEMENT AWARD

BNSF Railway
Canadian National Railway
CP
CSX Transportation
DANA Transport Inc.
Norfolk Southern Corporation
Renewable Fuels Association
Tanner Industries, Inc.
The Chlorine Institute
The Dow Chemical Company
Union Pacific Railroad

REGIONAL ACHIEVEMENT AWARD

John Vergis, Wheeling & Lake Erie Railway
Kansas City Southern Railway (KCS) & Kansas City Southern de México (KCSM)

TORCH AWARD

John Lerner, Norfolk Southern Corporation
David Schoendorfer, Norfolk Southern Corporation

CHAIRMAN'S AWARD

The Chairman's Award is given by and at the discretion of the TRANSCAER Chairman to recognize an individual who has contributed above and beyond to the TRANSCAER program.

Missy Ruff

Renewable Fuels Association

(Left to Right) Missy Ruff (Director of Safety and Technical Programs, Renewable Fuels Association) receives the 2018 TRANSCAER Chairman's Award, presented to her by Kelly Davis (Vice President, Regulatory Affairs, Renewable Fuels Association).

The Chairman's Award recognizes a TRANSCAER team member who has contributed above and beyond the normal call of duty to advocate, demonstrate and implement TRANSCAER's principles. Missy Ruff's accomplishments and contributions deserved our recognition.

"She is efficient, organized, and works hard".

The award reflects the endless hours that she has personally contributed to plan, organize and implement TRANSCAER training dedicated to the safe handling of ethanol and awareness response training for emergency responders across the U.S.

Missy is a valued member of the National TRANSCAER Task Group and the Executive Committee. Other team members have said that she is efficient, organized, and works hard. It's her work ethic and dedication that makes her stand out and the input she provides both as an Executive Committee Member and as a TRANSCAER Sponsor are essential to the growth of the TRANSCAER program. **Congratulations Missy!**■

DISTINGUISHED SERVICE AWARD

The TRANSCAER Distinguished Service Award is given in recognition of exceptionally meritorious service to the public in a TRANSCAER capacity.

Kim L. Keeling

Union Pacific Railroad

Kim Keeling (Union Pacific Railroad) instructing on Railroad 101 for emergency responders in Pocatello, ID, May 2017.

In his 26 years of service to the Union Pacific Railroad, Kim Keeling spent 21 years in the Environmental Group doing environmental field operations and hazmat response. Kim believed that community outreach training was paramount in safety with the day-to-day operations working in close proximity with communities and the railroad, and TRANSCAER® was at the center of that mission. Through TRANSCAER he believed we could all learn something from each other in the community by using the assets designed by TRANSCAER members. Kim was a strong believer in taking care of the community, environment, but most of all people; fostering those relationships to ensure a safe response with the knowledge and tools to prevent future incidents. On the Union Pacific Hazardous Materials Management Team, Kim was the Program Manager of Preparedness Mission, he managed this program with the main goal of promoting TRANSCAER in UP outreach. Kim L. Keeling passed away on April 30, 2018. The members of the Union Pacific Hazmat Team are left with his memory and legacy of commitment towards stewardship within the community. The 2018 TRANSCAER Distinguished Service Award is awarded to Kim L. Keeling as a tribute for his service and dedication to the TRANSCAER program.

"Kim was a strong believer in taking care of the community, environment, but most of all people"

The award was presented to Kim's son, Kyle Keeling, who took his place and is now the Hazmat Manager for Union Pacific Railroad in North Platte, Nebraska. ■

Kim Keeling holding his grandson Kaxtin Keeling. Photo provided by the Keeling Family.

In Memory of Kim L. Keeling

Kim Keeling (Union Pacific Railroad) instructing at The Chlorine Institute Rail Safety and Emergency Response Training Event in Pocatello, ID, May 2017.

Kim Keeling (left) with his son Kyle Keeling (right). Photo provided by the Keeling Family.

(Left to Right) Tyler Parker (Union Pacific Railroad) presenting Kyle Keeling (Union Pacific Railroad) with his father's 2018 Distinguished Service Award.

NATIONAL ACHIEVEMENT AWARD

The National Achievement Award is given in recognition of extraordinary achievement in support of TRANSCAER initiatives extending beyond the geographic boundaries of any one TRANSCAER region.

Canadian National Railway

John Day, Senior Dangerous Goods Officer, CN Railway

Keith Silverman, NTTG Chairman

Renewable Fuels Association

Geoff Cooper, President/CEO, Renewable Fuels Association

The Dow Chemical Company

Pete Kirk, Emergency Response Coordinator, The Dow Chemical Company

Keith Silverman, NTTG Chairman

CP

Jim Kozey, Director of Hazmat Programs, CP

DANA Transport Inc.

Gene Patten, VP, Safety & Compliance, Dana Transport, Inc.

Erica Bernstein, TRANSCAER Director

Tanner Industries, Inc.

David Binder, Director, Quality, Safety and Regulatory Affairs, Tanner Industries Inc.

Keith Silverman, NTTG Chairman

Union Pacific Railroad
Members of the Union Pacific Hazmat Team proudly holding their TRANSCAER® National Achievement Award.

Norfolk Southern
(Left to Right) James Bryan (Norfolk Southern), David Schoendorfer (Norfolk Southern), Jason Morris (Norfolk Southern), Keith Silverman (NTTG Chairman), and Justin Hahn (HEPACO, LLC).

CSX Transportation
CSX Transportation is a recipient of the TRANSCAER® National Achievement Award for their efforts in training emergency responders.

BNSF Railway
Members of the BNSF Railway Hazmat Team with their TRANSCAER® National Achievement Award.

REGIONAL ACHIEVEMENT AWARD

The Regional Achievement Award is given in recognition of extraordinary achievement in support of TRANSCAER initiatives within one TRANSCAER region.

Kansas City Southern Railway (KCS) & Kansas City Southern de México (KCSM)

Danny Canino, Hazardous Materials Coordinator, KCSM

Keith Silverman, NTTG Chairman

John Vergis, Wheeling & Lake Erie Railway

John Vergis, Hazardous Materials/ Environmental Officer, Wheeling & Lake Erie Railway

Keith Silverman, NTTG Chairman

Award recipients at the June 11th National TRANSCAER Task Group Meeting held in Washington, D.C.

TORCH AWARD

The Torch Award is given to TRANSCAER team members who have actively dedicated a portion of their professional career to the TRANSCAER mission, but are either retiring, leaving for a new job/ industry, or are leaving the program due to another unforeseen situation.

JOHN LERNER
Norfolk Southern Corporation

DAVID SCHOENDORFER
Norfolk Southern Corporation

The TRANSCAER® Awards Program is designed to:

- Recognize the achievements of individuals, companies, and organizations which have gone beyond the normal call of duty to advocate, demonstrate, and implement the TRANSCAER mission
- Enhance the public recognition of TRANSCAER
- Increase participation in the initiative

TO LEARN MORE ABOUT TRANSCAER AWARDS, VISIT TRANSCAER.COM/AWARDS

The nominations for the 2019 TRANSCAER Awards are open from Friday, December 6, 2019 until March 6, 2020.

ADDITIONALLY

44 Individual Recognition Awards

113 Certificates of Appreciation

WERE AWARDED FOR OUTSTANDING EFFORTS IN 2018.

CHLOREP: North America's Safety Net for Chlorine Emergencies

Article By: Robyn Kinsley, Vice President of Transportation & Emergency Preparedness, The Chlorine Institute

Chlorine manufacturing, transportation and use are conducted under controlled circumstances with numerous safety precautions designed to prevent an unintended release. An important component of chlorine stewardship is developing and maintaining response plans in the event of an emergency. One of the key missions of The Chlorine Institute (CI or the Institute)[1] is to assure that systems and procedures are in place to minimize the impact on the public should a release occur. In 1972, The Institute formalized the CHLOREP network to accomplish this task.

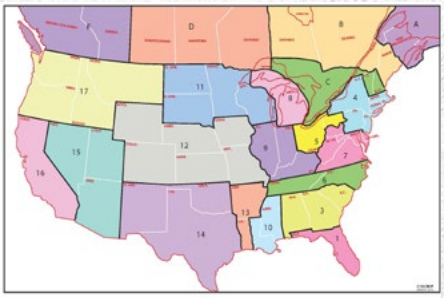
CHLOREP (the Chlorine Emergency Plan) is a 24/7 mutual aid program that is recognized today as the premier emergency response mutual aid network among chemical shippers.

CHLOREP's mission is to:

1. Prepare and educate its participants to assure effective emergency response preparedness, prevention, and mitigation of chlorine incidents; and
2. Ensure timely and professional response to chlorine emergencies in transportation and smaller end-user facilities.

CHLOREP achieves its mission by providing complete coverage in the U.S. and Canada, which is divided into 21 different regions (called CHLOREP Sectors), with support from a total of 90 expert response teams across 21 companies that produce, package or use chlorine. When called upon, these teams respond to chlorine emergencies within their designated sectors, regardless of whether they are the shipper/owner of the package or not. The CHLOREP network is also supported by ten hazmat emergency response contractors that are periodically verified by CI and meet stringent industry requirements. These contractors supplement the network when responses require more advanced emergency response capabilities or are located in remote areas.

The primary mechanism for activating assistance from a CHLOREP Team in a chlorine emergency is by calling CHEMTREC® (1-800-424-9300). The dispatchers at CHEMTREC will identify and immediately call the assigned primary CHLOREP Team in the particular CHLOREP Sector where the incident is occurring.



The Chlorine Institute CHLOREP Sector Map

[1]CI is a not-for-profit trade association that exists to support the chlor-alkali industry in advancing safe, secure, environmentally compatible, and sustainable production, distribution, and use of its mission chemicals.

The primary team will reach out to the on-site incident contact to gather details about the chlorine emergency. In many cases, only phone support is required. However, for more involved emergencies, the CHLOREP Team is ready to depart at anytime to provide hands-on assistance.

The program's unparalleled reputation is due to several factors, including the high level of training and experience each CHLOREP response team possesses. To enable expert-level responses, the Institute conducts an annual, week-long training for CHLOREP emergency response teams and contractors, as well as industry partners such as railroad personnel. This highly regarded training provides opportunities to practice installing chlorine emergency response kits, donning appropriate personal protective equipment, performing proper decon procedures, and responding to multiple types of chlorine emergencies through hands-on scenario-based exercises.

To further ensure preparedness, CI and its expert CHLOREP Team and Contractor members conduct hands-on hazmat training throughout North America for first responders, which has a heavy focus on rail safety and chlorine emergency response. Information on this free training can be found through the TRANSCAER® website. All first responders are encouraged to check the website periodically and take advantage when CI's training is in your area! The chlor-alkali industry and our local responders, together, can reduce the risk to the public in the rare event a chlorine release occurs.

The CHLOREP network is part of the chlor-alkali industry's commitment to responsible stewardship. Chlorine shippers take their responsibility seriously and have implemented this mutual aid system as one important element of advancing chlorine safety from cradle to grave. While it is our hope to never have to activate CHLOREP, it is important that these resources be in place in order to minimize any impact should a chlorine incident occur. ■

Who's On First?

Article By: Joseph Taylor, Senior Manager Hazardous Materials, CSX Transportation

First responders answering calls for hazardous materials incidents are often faced with immediate, dynamic, and complex problems during the initial assessment….What is the material involved? What is the container? What is the potential impact to target hazards? As dispatchers feverishly work to answer many of these questions for responders prior to arrival, one of the most important pieces of pre arrival information is the occupancy type. For example a residential location could pose hazards of household chemicals or even illicit activity, or a known commercial facility with preplanned information regarding raw materials stored or manufactured. Whereas a response to a highway or pipeline incident would provide first responders with an idea of what to expect upon arrival such as the vehicle type or potential large volumes of materials involved.

In a general sense, the same applies to a hazardous materials incident involving railroad operations. Basic instruction of emergency response to railroad incidents allows first responders to understand the types of equipment, potential for hazardous materials, and general safety practices when mitigating simple to complex incidents. However, before a first responder can dive into translating the shipping documents, or performing damage assessment on a locomotive or tank car, there is one simple piece of information that is often overlooked although is absolutely critical to the safety of all personnel…who owns the site where the incident has occurred? Who owns that railroad?

Although a simple question, it is not always the easiest to answer. Failure to answer this question could result in a recreation of the famous Abbott & Costello bit, Who's On First? First, it is important to understand that while all railroad property looks alike, it is essential to know who the owner / operator of the property is – whereas this is who the first arriving responders should contact. By contacting the responsible railroad, a request can be fulfilled to stop train traffic, notify railroad personnel to respond, and in some cases even provide shipping documents and guidance to hazardous materials incidents. It is critical however, to ensure you are contacting the correct railroad, and therefore it is important to review how this is determined.

First, nothing could be more valuable than preplanning. Contact the railroads operating in your communities before an incident occurs and request information regarding emergency contacts, access to main line and terminals, and identifying crossings. Maps can be obtained online through public access and government websites. For those who are tech-savvy, crossing locator applications are available for mobile devices. AskRail, a free mobile application for first responders maintained by the Association of American Railroads lists emergency contact information to all Class I Railroads. Lastly, an effective method during a response is to access the closest public crossing, and identify the post mounted sign where information included will be the controlling railroad, railroad milepost, USDOT crossing identification number, and a twenty-four hour emergency response telephone number (See Figure 1).

There are several factors that could lead to confusion for first responders trying to identify the owner / operator of the railroad incident. A common point of confusion is the paint scheme of the locomotives in a train. If a train is involved in an incident, the first responder should always verify the owner / operator of the railroad property for assistance. Class I railroads commonly share locomotive power with each other, and is common to see different locomotives paired together. It is possible to see a Canadian National locomotive pulling a train on CSX

owned railroad tracks…and should an incident occur on CSX owned tracks then CSX Transportation should be contacted immediately for assistance.

Terminals, however are pretty straight forward. Terminals are where freight cars are taken to switch and organize for delivery by other trains. Generally, only one company owns and operates a railroad terminal. Freight cars are sometimes taken to handoff points, known as interchange locations where multiple railroads will exchange freight cars. Interchange points are also only owned by one of the participating railroads, and should be contacted in the event of an emergency. It is understood that first responders may not always be responding to railroad property or involving railroad operations, but would still need to notify a controlling railroad. For example, a large commercial fire where units would be staged near the tracks, or commonly respond to a motor vehicle accident that lands on railroad property. In these instances it is still necessary to notify the railroad so that traffic can be stopped, and responsible personnel can respond to scene if needed.

One of the higher risk situations a responder may encounter is multiple main line tracks that are adjacent to each other. Many places may have two, three, up to eight or even ten main line tracks next to each other. In this situation if only one railroad owns all of the tracks, first responders will unlikely know the names of each track, and as such request all traffic on all tracks be held until it is deemed safe. Another possibility is that multiple tracks adjacent to each other are owned by different railroads, and in this case each different company will need to be contacted to ensure train traffic is stopped.

Figure 1: CSX ENS Sign
Photo by CSX Transportation

One possible scenario could be a Fire, EMS, and Law Enforcement response to a medical emergency where personnel would park their apparatus on one side of two side-by-side main line tracks, and would need to walk across both to access a patient. As is often done, a request is made by radio by on scene personnel to a central dispatch to contact a railroad and request train traffic be halted. If the request is only made to one railroad, while train traffic will be stopped on one track, because the second railroad was not contacted on scene responders are at risk operating on the live second track.

So goes the incident is the first arriving companies is an old adage. Ensure all personnel responding to or adjacent to railroad property understand the importance of identifying and contacting the correct owner / operator in order to affect an efficient and most importantly, a safe response. ■

PIPELINE AND HAZARDOUS MATERIALS SECURITY ADMINISTRATION PROVIDES GRANT FUNDING

TRANSCAER® recently received grant funding through the U.S. Department of Transportation's Pipeline and Hazardous Materials Security Administration - Assistance for Local Emergency Response Training (ALERT) Grant.

The ALERT grant is competitively awarded to nonprofit organizations capable of delivering an established curriculum to emergency responders.

U.S. Department of Transportation

Pipeline and Hazardous Materials Safety Administration

THE IMPORTANCE of Fusible Plug Use in Steel Drums

Article By: Susan Nauman, Executive Director, Industrial Steel Drum Institute

Steel drums are the most widely used industrial package in the world for the shipment and storage of hazardous goods. This type of container is a smart choice given its consistent strength and durability, as well as its unparalleled safety record.[1] This is why steel drums safely transport approximately 50 million tons of both hazardous and non-hazardous materials around the world each year.[2]

First responders know better than most that even the safest products can be dangerous under certain circumstances. However, steel drums, when paired with fusible plugs and the proper fire suppression system, can be safely used with flammable and combustible products, even under fire conditions.[3] For more information, you can reference NFPA Code 30 for additional details.[4]

What are fusible plugs?

Fusible plugs are a type of drum closure made of impact-resistant nylon, polyethylene or polypropylene resin.[5] They are installed in the openings on the top head of a steel drum to create a leak-proof seal.

There are three reasons why a fusible plug is a safer choice when packaging flammable and combustible liquids in steel drums. First, when the container is under extreme heat, the plug melts to allow gases to easily vent from the container by relieving pressure at the point of buildup. This feature preserves the structural integrity of the drum.[6] Second, fusible plugs meet the United Nations rating for both tight-head and open-head steel drums. Steel drums paired with fusible plugs can pass rigorous performance testing, meet international standards and is properly rated for many materials.[7] Lastly, drums with fusible plugs can be stacked four high during storage[8] and result in lower insurance costs.[9]

The Industrial Steel Drum Institute first partnered with TRANSCAER in 2018 to bring to light the importance of fusible plugs when applied to steel drums through their Seconds Count video series. The video, which was the 29th TRANSCAER produced, is used as a training tool for first responders.

"This new training is what TRANSCAER is all about – using the knowledge and expertise of our sponsors to better train and prepare our emergency responders," said Keith Silverman, chairman of the National TRANSCAER Task Group and senior vice president, global operations, quality and EHS at Ashland.

Here at ISDI, we couldn't agree more. By raising awareness with community leaders and first responders, we can help them prepare and properly respond to incidents involving potentially hazardous materials. ■

[1]https://whysteeldrums.org/why-steel-drums/safety-security/
[2]https://whysteeldrums.org/why-steel-drums/
[3]https://whysteeldrums.org//wp-content/uploads/2017/08/ISDI-Plug-Infographic_update.pdf
[4]https://www.nfpa.org/codes-and-standards/all-codes-and-standards/list-of-codes-and-standards/detail?code=30
[5]https://whysteeldrums.org/fusible-plugs-video/
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[7]https://whysteeldrums.org//wp-content/uploads/2015/03/Infographic.pdf
[8]https://whysteeldrums.org//wp-content/uploads/2017/08/ISDI-Plug-Infographic_update.pdf
[9]https://whysteeldrums.org//wp-content/uploads/2015/03/Infographic.pdf

FEDERAL RAILROAD ADMINISTRATION PROVIDES GRANT FUNDING SINCE 2010

TRANSCAER® has received grant funding for Transportation Emergency Response Training through the U.S. Department of Transportation's Federal Railroad Administration since 2010.

TRANSCAER team members have provided training to thousands of emergency responders nationwide under these grants.

U.S. Department of Transportation
Federal Railroad Administration

3 Potential Risks *When* Transporting Hazardous Materials

Article By: Troy Scarrow, Regional Sales Manager, Midland Manufacturing

Citing a forecast from the Federal Highway Administration, the Association of American Railroads (AAR) reported in July 2019 that total railroad freight shipments in the United States will rise from 17.8 billion in 2017 to an estimated 24.1 billion in 2040, an increase of 35%. A good portion of this growth is being driven by the historically high levels of oil and natural gas that is being produced and transported in the U.S., creating a need for more "crude-by-rail" shipping.

Since crude oil and natural gas are considered hazardous materials, there are now approximately 3.1 billion tons of hazardous materials – which also commonly include chlorine, anhydrous ammonia, ethylene oxide and sulfur dioxide (SO2) – transported via long-haul rail in the U.S. each year. Despite this growth in long-haul rail

transport, railroads remain one of the safest ways to transport both hazardous and non-hazardous materials.

According to Federal Railway Administration's (FRA) 2018 rail-safety data, the overall rates for train accidents, equipment-caused accidents, track-caused accidents, derailments and employee injuries, per million train miles traveled, have declined as much as 26% since 2009, depending on the category. More specifically, between 2008 and 2018, the hazardous material (hazmat) accident rate fell by 48%. In fact, in 2018 more than 99.999% of rail hazmat shipments reached their destination without a release caused by an incident.

These heartening statistics are much more than a happy coincidence. They are the manifestation of the railroad industry making a strong commitment to ensure that its infrastructure and rolling stock are up-to-date and in top working order, that all regulations regarding hazmat hauling are steadfastly observed and that its employees are properly trained.

ACCIDENTS CAN STILL HAPPEN

The railroad industry has a goal of one day becoming accident-free. If this level of operational nirvana is ever to be achieved, railroad operators must be familiar with the risks that are inherent in the handling of hazardous materials – and the ways that they can lessen the chances that an incident involving the release of hazardous materials will occur.

There are three primary potential risks every time a train laden with hazardous materials pulls away from the depot:

- **Accident:** Accidents are the hardest thing for railway operators to protect against since their rate of occurrence can be capricious and they are often caused by external factors that are entirely out of the operator's control. These can range from an automobile or truck that has stopped illegally on the tracks to a tree that may have fallen across the tracks during a passing storm.

The remaining two risks fall into the category of "non-accidental releases," or NARs. An NAR is the unintentional release of hazardous materials during transportation, which includes material loading and unloading, that is not caused by an accident. There are two basic types of NARs:

- **Mechanical Failure:** This category encompasses all leaks and other releases from malfunctioning or improperly secured pressurized railcar pressure-relief devices, valves, couplings, hoses, fittings and tank shells.
- **Operator Error:** Human beings are fallible creatures that are susceptible – no matter their level of conscientiousness or training – to making mistakes. So, all railroad technicians must take every precaution necessary to ensure that every coupling is attached properly and every valve is closed properly before, during and after every railcar loading or unloading.

Midland B-240/B-243 Emergency Response Kit consists of a toolbox containing a broad range of tools and replacement parts; cover cans of five different sizes that are used to cap a leaking valve or fitting, along with corresponding gaskets; and a bridge that is used to secure a cover can to the railcar's manway cover plate.

A FRIEND FOR FIRST RESPONDERS

Despite the next-generation design and operation of railcars and their ancillary components, the high-level training that rail personnel receive, the attention paid to guaranteeing that the railway infrastructure is in good working order and stricter regulations governing the transport of hazardous materials, the next hazmat release incident is always looming. To ensure that the sometimes inevitable doesn't become the next catastrophic, headline-generating hazmat-release incident, the manufacturers of railcar equipment have developed Emergency Response Kits (ERKs) that are marketed to fire departments, emergency-repsonse contractors and railway dangerous goods officers, or other organizations that employ first responders who are tasked with responding to railroad accidents or NARs.

One of the companies that has taken the lead in the development of ERKs is Midland Manufacturing, Skokie, IL. Its B-240/B-243 Emergency Response Kit has been developed to give emergency responders three easy-to-use cover assemblies and a carrying case that contains all of the tools and parts needed to quickly and safely cap hazmat leaks emanating from the top of pressurized railcars in the event of an accidental or NAR release incident.

A typical ERK consists of a toolbox containing a broad range of tools and replacement parts; cover cans of five different sizes that are used to cap a leaking valve or fitting, along with corresponding gaskets; and a bridge that is used to secure a cover can to the railcar's manway cover plate. Knowing the importance of the ERK's components being able to perform reliably in high-leverage situations, all of the tools are highly-engineered and designed to be durable no matter the pressures, product flows and general abuse they are subject to during a hazmat-release incident.

Like any product, the user of an ERK is only as proficient in its use as the level of training he or she receives. With that in mind, the providers of ERKs offer training classes and videos that are formatted to make the user capable of performing confidently during the most dangerous release incidents. In fact, it is recommended that all

The Midland B-240/B-243 Emergency Response Kit can be utilized to cap hazmat leaks emanating from the top of pressurized railcars in the event of an accidental or NAR release incident.

first responders practice using the components in the ERK at least twice a year and, if possible, train with an actual hazmat railcar as a way to better familiarize themselves with the railcar's components and where things can go wrong. The ultimate goal is for first responders to feel as comfortable as possible with the ERK and its components and capabilities long before they ever have to use it.

CONCLUSION

Despite the significant growth in volume over the past decade, the safety record of hazardous-material transport via railroad is strong – and getting better every year. Still, accidents (or "non-accidents") can and do occur. When these unfortunate incidents do happen, it is imperative that first responders possess the training and equipment required to prevent a catastrophe. Manufacturers of railcar equipment have responded with the creation of ERKs that include the tools needed to halt a hazardous-material release as quickly as possible, knowing that the safety of the environment, surrounding communities and, of course, the first responders themselves hangs in the balance.

About The Author

Troy Scarrow is a Regional Sales Manager for Midland Manufacturing, Skokie, IL, and can be reached at troy.scarrow@opwglobal.com or (847) 677-0333. Midland is delivering what's next through innovations designed to enhance safety, reliability, efficiency and business performance for the railcar industry. Midland specializes in products used on pressure and general purpose rail tank cars, chemical cargo tanks and ISO containers for the safe handling of toxic materials, chemicals and food products; bottom and top loading/unloading valves, pressure relief valves, level gauge device and monitoring equipment. Midland is part of OPW, a leading equipment manufacturer in the retail fueling, fluid-handling and car-wash industries. OPW has manufacturing operations in North America, Europe, Latin America and Asia Pacific, with sales offices around the world. OPW is part of Dover Corporation. To learn more about how Midland is delivering what's next in the railcar industry, visit midlandmfg.com. ■

Increasing Awareness of Rail Safety Education Across the Country

ARTICLE BY: Chantez Bailey, Director, Communications and Marketing, Operation Lifesaver, Inc.

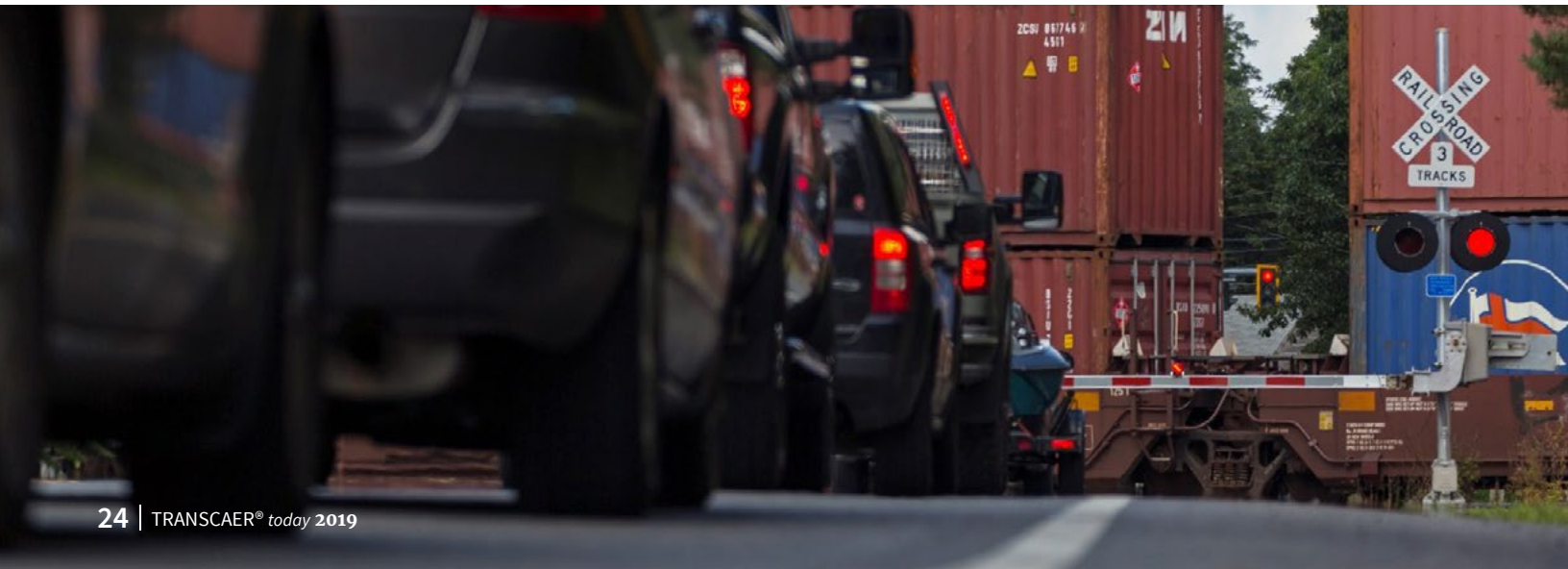
Photos by Operation Lifesaver, Inc.

Operation Lifesaver, Inc. (OLI) is a nonprofit public safety education and awareness organization dedicated to reducing collisions, fatalities and injuries at highway-rail crossings as well as trespassing on, or near, railroad tracks. Operation Lifesaver has been committed to saving lives since it first started in 1972, when there were 12,000 railroad crossing incidents reported each year. The organization has helped reduce the number of crossing collisions by more than 80 percent, down to approximately 2,100 incidents in 2017. Nonetheless, there is still more work to be done. The unfortunate reality is that in today's busy and distracted society, a person or vehicle is hit by a train roughly every three hours in the United States.

Operation Lifesaver's programs are co-sponsored by federal, state and local government agencies, highway safety organizations and America's railroads. OLI has a network of authorized volunteers in state programs across the U.S. who are passionate about the mission to save lives through education. OLI's state programs, led by State Coordinators, are in communities every day, giving free rail safety education presentations to school groups, driver education classes, community audiences, professional drivers, law enforcement officers, and emergency responders.

OLI Resources for Special Audiences

OLI creates public education and awareness campaigns that use innovative marketing and digital communications to educate people about staying safe on or near tracks and trains. Among the tools used by Operation Lifesaver state programs are award-winning



eLearning rail safety training programs for professional drivers and school bus drivers, as well as first responders. These interactive online programs were developed to prepare audiences for real-life scenarios in a virtual environment and help them make safer decisions.

Rail Safety Week Raises Awareness

In the U.S. and Canada, Rail Safety Week (RSW), a major public safety initiative held the last week of September, brings together Operation Lifesaver state programs and rail safety partners to further promote the importance of rail safety. Events are held each day during the observance to highlight crossing safety and rail trespass prevention in high-incident areas. The goal of RSW is to raise awareness of the need for rail safety education and empower the general public to keep themselves safe near highway-rail grade crossings and railroad rights-of-way.

First held in 2017, RSW continues to grow, with public safety events throughout the North America as well as public awareness campaigns via social media. Each day during RSW 2019, a new video was launched sharing personal stories of tragic consequences to pedestrians and drivers on or near the tracks. Operation Lifesaver's Near Miss PSA campaign was also launched during RSW to highlight the dangers to distracted pedestrians.

These campaigns underscore Operation Lifesaver's key safety tips:

- Trains move faster than they appear and are quieter than you think
- Trains can't stop quickly: it can take up to one mile or more (the length of 18 football fields) for a train to stop once the engineer sees someone on the tracks
- Drivers and pedestrians must use caution at every railroad crossing and near tracks
- Whenever you see tracks, think train – be prepared to yield to trains at crossings

Join Our Lifesaving Efforts

Operation Lifesaver is the only national nonprofit organization dedicated to saving lives by empowering the public to make safer choices near tracks and trains. We invite supporters of rail safety to get in touch with their state coordinators to find out about the great initiatives happening in their states. You can become part of the mission, too. Consider volunteering with Operation Lifesaver in your community and follow Operation Lifesaver on social media to stay current. Visit www.oli.org for information about state programs and other rail safety education resources. ■

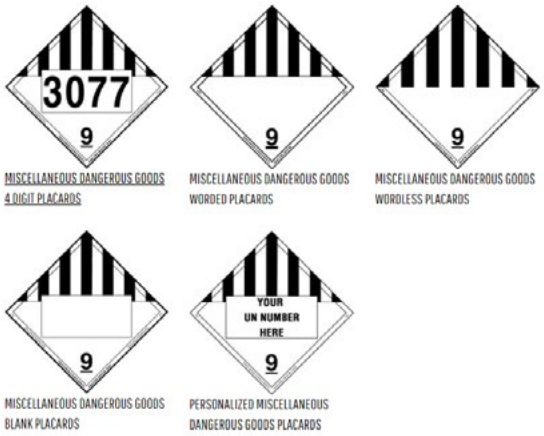
CLASS 9 – *The Miscellaneous Hazard*

Article By: Paul Holt, Manager Hazardous Materials, Union Pacific Railroad

When training on hazardous materials, do you cover all nine hazard classes? What is Class 9? Do you know if your incident involves a Class 9 hazard? It's important to understand that shipments of Class 9 commodities do not require placards but may be required to be marked in some manner. 49CFR172.504(f)(9) states, "For Class 9, a CLASS 9 placard is not required for domestic transportation, including that portion of international transportation defined in 171.8 of this subchapter, which occurs within the United States. However, a bulk packaging must be marked with the appropriate identification number on a CLASS 9 placard, an orange panel, or a white square-on-point display configuration as required by subpart D of this part."

A Class 9 commodity is defined by the Code of Federal Regulations as "…a material which presents a hazard during transportation but which does not meet the definition of any other hazard class. This class includes: (a) Any material which has an anesthetic, noxious or other similar property which could cause extreme annoyance or discomfort to a flight crew member so as to prevent the correct performance of assigned duties; or (b) Any material that meets the definition in §171.8 of this subchapter for an elevated temperature material, a hazardous substance, a hazardous waste, or a marine pollutant.."

According to release data from PHMSA 5800.1 reports, from 2014 through July 2019 there were 3089 incidents involving Class 9 materials in rail and highway transportation. If you are not familiar with the PHMSA 5800.1 document, it is a report that must submitted in certain circumstances involving hazardous materials (49CFR171.16). That being said, understand not all incidents are reported and the data may not accurately reflect all incidents involving a Class 9 commodity.



Class 9 materials can include molten sulfur, lithium batteries and polychlorinated biphenyls (PCBs). PCBs are extremely dangerous to your health and are listed as a Class 9 commodity in the Hazardous Materials Table (49CFR172.101).

Below is an example of the description of PCBs, a Class 9 material. It is important to remember that Class 9 materials can present chronic health hazards, can be carcinogenic, and teratogens. Just because it is labeled Miscellaneous, does not down play the severity of the exposure in the short or long term. (2)

According to the Environmental Protection Agency, PCBs have been demonstrated to cause a variety of adverse health effects. They have been shown to cause cancer in animals as well as a number of serious non-cancer health effects in animals, including: effects on the immune, reproductive, nervous and endocrine systems. Studies in humans support evidence for potential carcinogenic and non-carcinogenic effects of PCBs. In addition, the different health effects of PCBs may be interrelated meaning alterations in one system may have significant implications for other systems of the body. The potential health effects of PCB exposure are discussed in greater detail below. (https://www.epa.gov/pcbs/learn-about-polychlorinated-biphenyls-pcbs#healtheffects).

If you are dealing with a transportation hazmat incident, remember to always request the shipping papers. These can make the difference in properly protecting emergency responders when visual indications of a hazard such as a placard or label aren't present or may not be visible. ■

§172.101 Hazardous Materials Table

Symbols	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identification Numbers	PG	Label Codes	Special provisions (§172.102)	(8) Packaging (§173.***)			(9) Quantity limitations (see §§173.27 and 175.75)		(10) Vessel stowage	
							Exceptions	Non-bulk	Bulk	Passenger aircraft/rail	Cargo aircraft only	Location	Other
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(8C)	(9A)	(9B)	(10A)	(10B)
	Polychlorinated biphenyls, liquid	9	UN2315	II	9	9, 81, 140, IB3, T4, TP1	155	202	241	100 L	220 L	A	9
	Polychlorinated biphenyls, solid	9	UN3432	II	9	9, 81,140, IB8, IP2, IP4, T3, TP33	155	212	240	100 kg	200 kg	A	95

Note: This is an excerpt from the Hazardous Materials Table.

CHECK THE BOX

U.S. Department of Transportation
Pipeline and Hazardous Materials Safety Administration

Shipping HAZMAT? Send It Safely.

Is Hazardous Matt or his friends hiding in your package?

Each year, an estimated 3 billion tons of regulated hazardous materials (hazmat) are transported within the United States. These materials include explosive, poisonous, corrosive, flammable, and radioactive materials. When these materials are not properly declared, or identified as hazmat, the increased risk of accidents poses significant safety threats to inspectors, commercial motor vehicle drivers, mechanics and vehicle maintenance personnel, transportation professionals, motor carriers, emergency responders, the general public, and the environment.

Approximately 1,500 undeclared hazmat transportation incidents are reported each year. Undeclared and improperly packaged hazardous materials can be dangerous in transportation. These incidents put people's lives at risk.

The most frequent explanation for undeclared shipments, according to Federal HAZMAT experts? A shipper's lack of knowledge. By addressing unawareness or misunderstanding of the requirements for properly declaring and transporting hazardous materials, we can prevent incidents and save lives.

Everyone has a role to play to prevent hazardous materials from causing accidents and injuries. That's why it is important to always CHECK THE BOX to ensure you are safely shipping hazardous materials.

For assistance, visit checkthebox.dot.gov or contact our Hazardous Materials Information Center by telephone at 1-800-467-4922 or 202-366-4488 or by e-mail at infocntr@dot.gov

Meet Hazardous Matt and his friends. They are made of hazardous materials, which means that we need to take extra care when we send them somewhere.

US Coast Guard and First Responders Partner for LNG Safety

Article By: LCDR Dallas Smith & LT Ethan Lewallen, United States Coast Guard

The U.S. Coast Guard's Liquefied Gas Carrier (LGC) National Center of Expertise (NCOE) is a hand-selected team comprised of liquefied gas subject matter experts. Located in Port Arthur, Texas, the LGC NCOE was developed to serve the Coast Guard as in-house consultants on all aspects of liquefied gas carriers. They have also helped to bridge the gap in areas concerning liquefied gas terminals, liquefied gas-fueled vessels, and liquefied gas bunkering operations. This team provides technical advice to industry while striving to increase and maintain the Coast Guard's collective competency and capabilities. The LGC NCOE serves as the link between the Coast Guard and the liquefied gas community by always remaining up to speed on current, and often innovative, liquefied gas projects. They work diligently to guide industry's engagement with appropriate field and staff personnel.

As a Coast Guard headquarters unit, the LGC NCOE works to identify gaps within the maritime governance of the liquefied gas industry and provides recommendations for Coast Guard regulations and policy. As certified instructors, LGC NCOE personnel are leading the effort to achieve consistency in the Coast Guard's application of safety, security, and environmental standards by improving the availability and relevancy of training for the Coast Guard's community of gas carrier and gas-fueled ship marine inspectors.

As the natural gas renaissance emerged, the LGC NCOE quickly recognized the need to prepare the Coast Guard and other regulatory entities for the rapid expansion

Coast Guard received LNG properties & fire suppression training at the Fire Academy of the South during the 5th annual LNG as Fuel Workshop in Jacksonville, FL.

of natural gas facilities. Through the development of a long-term strategic vision and procedures, the unit meticulously analyzed projected export demands, identifying the need to establish regular federal and state interagency teleconferences, which resulted in up-to-date data across all agencies. Through this partnership, agencies involved with the approval or oversight of natural gas export are able to come together on a regular basis and discuss current and anticipated natural gas projects, lessons learned from previous projects and how each agency can support one another through this rapid growth of natural gas export.

Through this analysis, the LGC NCOE also identified the need to lead a multi-agency team in conducting an extensive review of the Panama Canal's equipment and emergency response procedures prior to the first-ever LNG vessel transit. Once completed, the LGC NCOE worked with the Panama Canal Administrator and executive staff to implement over $4 million in renovations to ensure it can safely transit LNG vessels in the future. The LGC NCOE has maintained a partnership with the Panama Canal to train the Canal's operators that are unfamiliar with LNG vessels and their unique safety and engineering systems found onboard.

Over the past 10 years, the arrival of Liquefied Gas Carriers in U.S. ports has nearly doubled. Subsequently, an uptick in vessel examinations and CG activities has occurred. The LGC NCOE has assisted in completing in up to 20% of those examinations annually throughout the U.S., Virgin Islands, Hawaii, American Samoa, Asia and Africa.

To ensure regulatory units are able to maintain qualified personnel needed to execute these examinations, the LGC NCOE created the Coast Guard's first accelerated training program for liquefied gas carrier examiners. Formalized in 2016, this four week accelerated training program is a complete immersion training program comprised of intensive classroom lecturing coupled with onboard gas carrier training, closely monitored with technical mentoring. This program not only streamlined the necessary gas carrier knowledge an examiner needs to carry out these unique examinations, but it also ensures units that receive gas carriers are able to remain competently-staffed to carry out that mission and facilitate export activity in their respective ports.

The LGC NCOE further revolutionized the Coast Guard's training by creating video-based gas carrier training via their own YouTube channel. These training videos deliver key elements currently focused on gas carrier examinations and also deliver safety concerns and notices to the field that might be found onboard during routine examinations. For more information check out our website www.uscg.mil/lgcncoe.

In addition to the increase of U.S. LNG export trade, the LGC NCOE is also aware of the looming worldwide emission requirements of 2020, making the now affordable LNG an attractive fuel choice for marine operators. The LGC NCOE collaborated extensively with other Coast Guard Headquarters offices, Coast Guard field units and industry partners to ensure these entities are moving towards an appropriate framework to facilitate the construction and operation of U.S. LNG-fueled ships and LNG fueling infrastructure. To date, there have been nine U.S.-built vessels using LNG as fuel, with three more currently under construction and many more in various stages of construction throughout the world. This includes 26 LNG-fueled cruise ships on order, several of which will call on U.S. cities to embark passengers in 2020. To support the necessary LNG fueling operations in the U.S., the LGC NCOE assisted in the oversight of the construction of the world's first membrane tank LNG bunker barge and is currently engaged with the construction of two new U.S.-built LNG bunker barges.

With these new fueling systems emerging in the U.S., it is imperative that industry, first responders, and the Coast Guard are fully trained. Recognizing the gap in this area, the LGC NCOE has partnered with LNG industry and regulatory leaders like ABS's Global Gas Solutions Team, Pivotal LNG Partners, Texas A&M's Emergency Services Training Institute and OCS Group to develop an annual Coast Guard LNG-as-Fuel Training Workshop. Through four days of training, Coast Guard inspectors and LNG industry representatives receive detailed classroom lectures to include witnessing an LNG bunkering operation. This year's fifth annual workshop will be held in Jacksonville, FL, where students will have the unique opportunity to actually dress out and fight LNG fires at the Fire Academy of the South with local and Texas A&M experts and learn LNG fire-fighting techniques and procedures. This sharing of technical knowledge amongst all involved in this workshop will undoubtedly prove beneficial to the future, safe expansion of LNG into more segments of the maritime industry. For more information, please contact lgcncoe@uscg.mil. ■

MANAGING Ethanol Blended Fuel Incidents

Article By: Joel A. Hendelman, Battalion Chief (Retired), City of Fairfax Fire Department

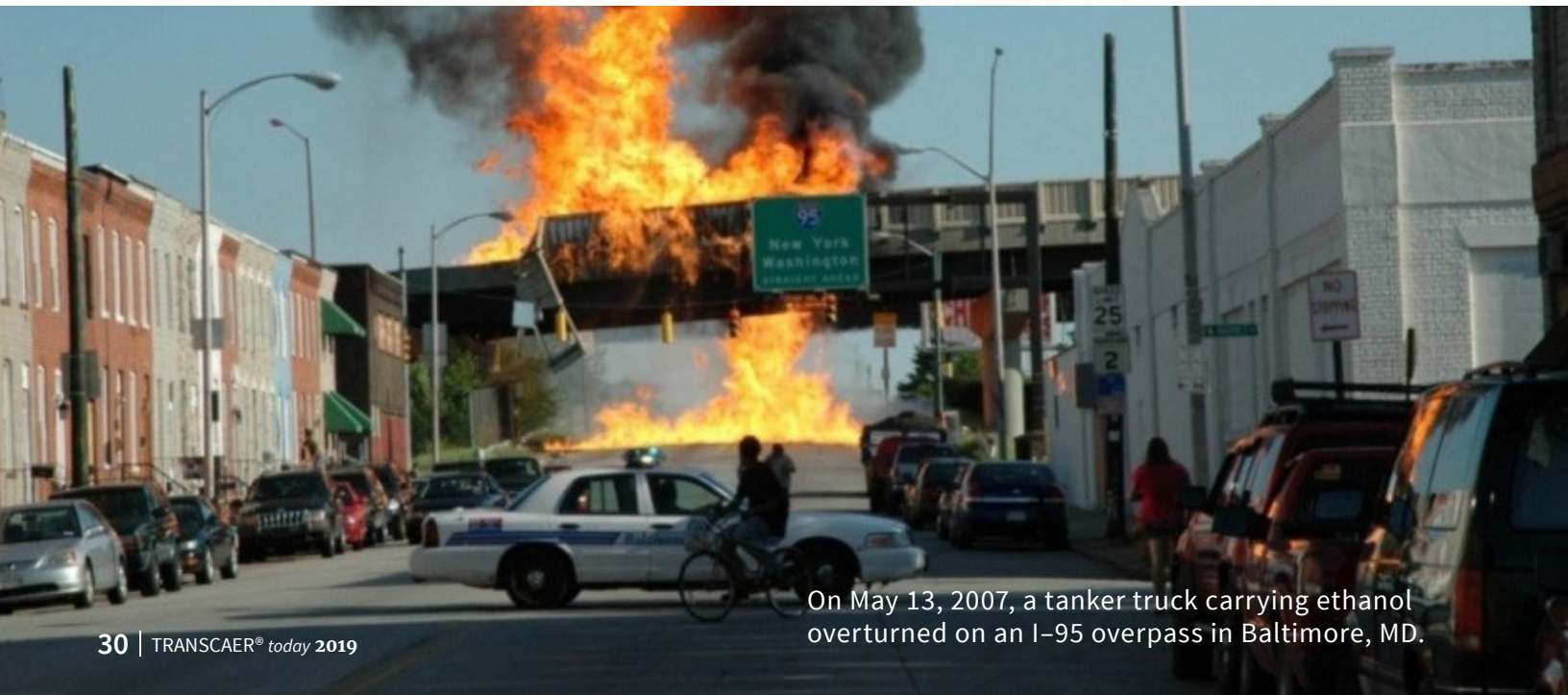
One of the most critical initial elements that must be performed is a proper scene evaluation at EVERY ethanol blended fuel incident, regardless of size or complexity is paramount to ensure a safe and successful management outcome and minimize risk to first responders and the community.

SIZE-UP THE INCIDENT SCENE

Regardless of the type of incident the first arriving tactical unit officer/supervisor (the term first arriving tactical unit officer includes industrial, private fire brigade or safety personnel located at a flammable liquid bulk storage, ethanol production, transloading or other related facility) has the responsibility to perform a visual and mental size-up of what is happening. Since we are discussing specifically an ethanol blended fuel incident and a hazardous material, it may be very appropriate to perform your size-up from a safe distance utilizing a pair of binoculars. This will ensure that the emergency response vehicle does not become the source of ignition for migrating flammable vapors if dealing with a significant spill incident or place the equipment and personnel within an extremely dangerous environment.

Your mental and visual size-up is addressing the initial critical benchmarks of life safety, incident stabilization and possibly property conservation (LIP). The questions that first arriving tactical unit officer or supervisor should be asking and answering are:

- *What is happening? Is this incident a spill or on fire?*
- *Are lives in imminent danger, if I as a first responder don't take immediate action? If the answer is "yes", then the next question asked and answered is critical.*
- *Are the risks to first responders manageable if life saving activities are initiated? If the answer to this question is "yes", then the officer/supervisor and crew go to work as soon as the situation report noted below can be provided.*
- *Is the spill or fire static or migrating and expanding along natural or manmade terrain?*
- *Are there potential sources of ignition for the flammable vapors within the incident location?*
- *Does this incident involve a bulk storage facility, ethanol production facility, tractor trailer, railcar(s) or packaged containers?*
- *Are there active multi-dimensional flange or valve leaks or fires involving the ethanol blended fuel under pressure?*
- *Are there any exposures regardless of whether the incident is a spill or on fire?*
- *What is the approximate surface area of the ethanol blended fuel incident?*
- *What foam resources (people and equipment) do I as the initial unit officer or supervisor have immediately available to me on or responding to the scene?*
- *Is this an industrial setting with engineered foam fire protection systems activated?*
- *Can first responders augment these fire protection systems?*



On May 13, 2007, a tanker truck carrying ethanol overturned on an I–95 overpass in Baltimore, MD.

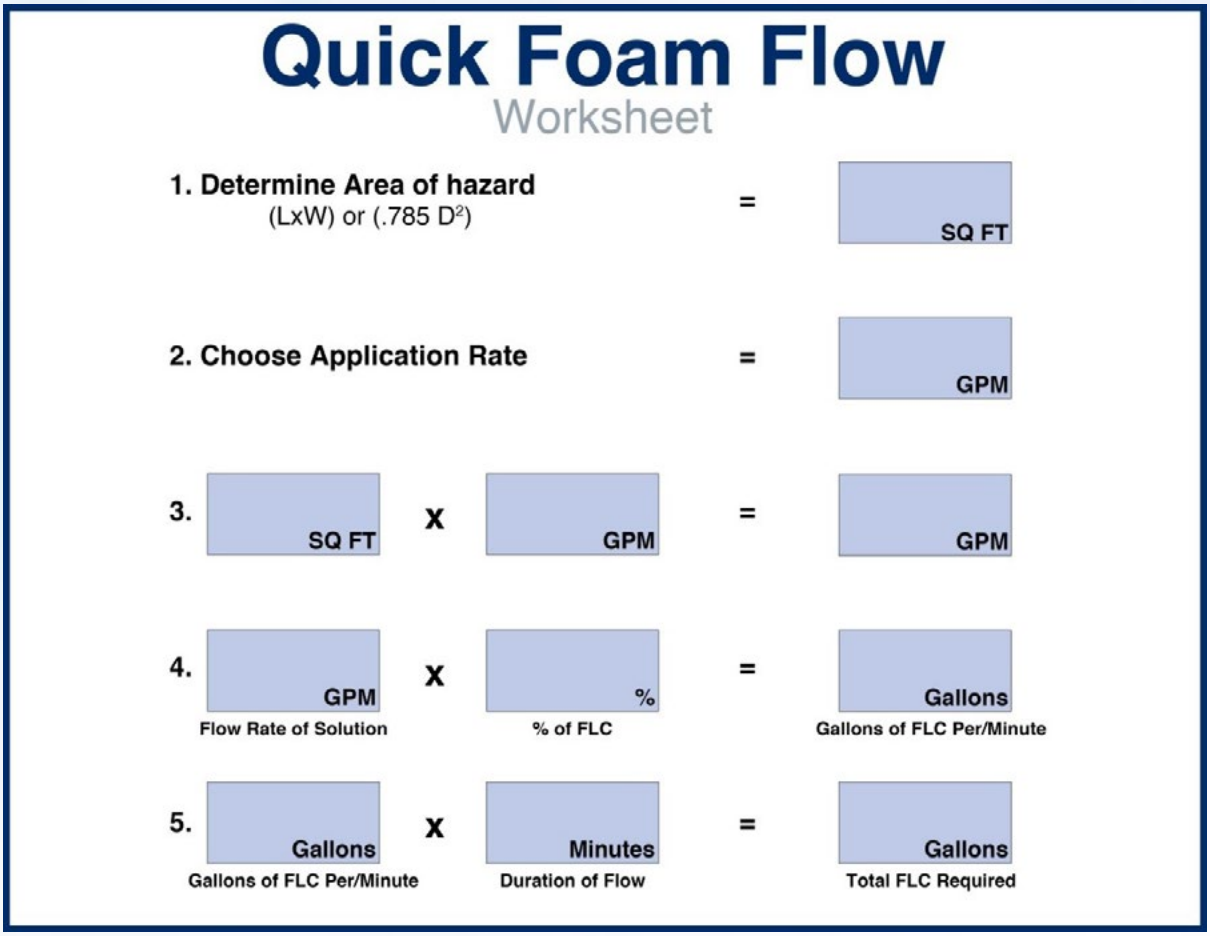


Figure 1: Quick Foam Flow Worksheet

- *What are the capabilities of privately-owned resources at the incident scene?*
- *If no lives are at stake, are there any other immediate actions that can be taken by me and my crew that will profoundly improve incident outcome by stabilizing or greatly minimizing environmental impact of the incident?*
  - *An example may be initiating some damning or diking for a significant amount of spilled ethanol blended fuel running down a street curb or gutter towards occupied structures.*

It is important to note that some of the questions the first arriving tactical unit officer is addressing may not apply to your specific incident. If the incident occurs at a hazardous facility the questions should be readily answered by accessing the detailed information in a PRE-PLAN document referencing the actual incident location.

The contents of the Pre-plan will be based on the nature of the facility or location being reviewed. I encourage anyone who is developing a detailed pre-plan of a high hazard facility within your response area to review National Fire Protection Association (NFPA) 1620 Standard for Pre-Incident Planning.

I believe public safety organizations and personnel working at facilities noted below are compelled to develop detailed pre-plans. The pre-plan document will prove extremely beneficial in identifying potential incident locations, inherent hazards and challenges associated with facilities such as: bulk storage, ethanol production, loading rack, rail, transloading (rail car transfer to tractor trailer) and retail fuel outlets. Pre-planning the major public roads and highways where ethanol blended fuel is transported by tractor trailer or rail to and from these bulk storage, ethanol production or transloading facilities is critical.

I can't overemphasis the importance of public safety, regulatory agencies and facility owners and operators working together to develop detailed data and operational plans. Once these pre-plans and operational SOPs or SOGs are completed, collaborating with the vendors and organizations that will be engaged in incident management at one of these locations is vital.

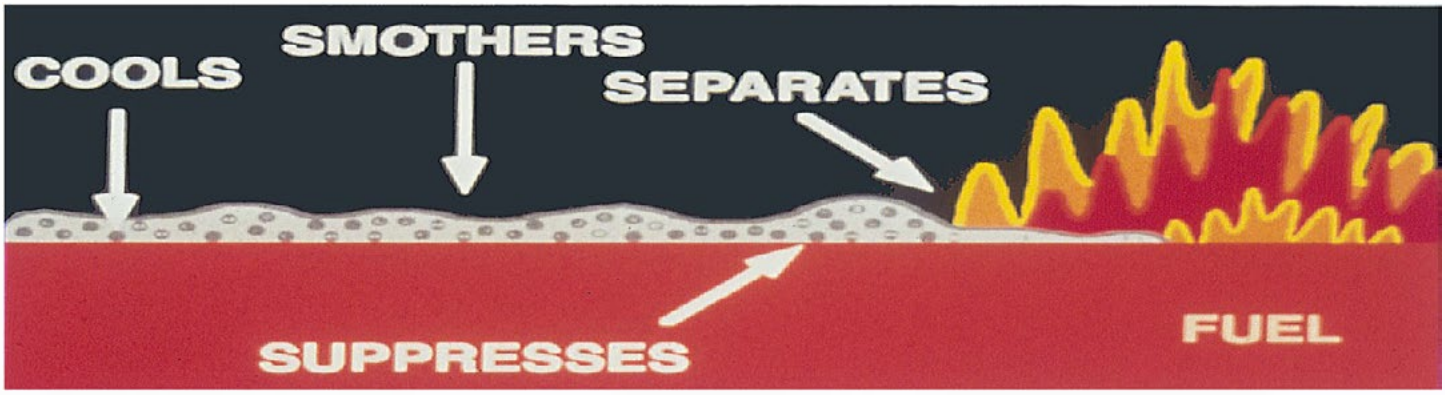
Full scale functional exercises will provide an excellent opportunity to train together and greatly improve working relationships in advance of an actual incident. Pre-plan review, updates and training exercises should be conducted at least annually or more often if significant modifications have been made at these facilities. These activities will most certainly improve incident success and reduce risk to first responders. In this business the old saying is "We never say IF, we say WHEN. We plan for the worst and hope for the best".

Determining specialized resource needs such as alcohol resistant foam concentrate is necessary. A quick assessment tool or similar foam flow work sheet such as the one noted above should be part of every detailed pre-plan. In addition, I also encourage that this or a similar document be printed, laminated with a grease pencil attached and stored in the cab of every response vehicle. The laminated document and grease pencil allow the user to record field-based calculations even in inclement weather.

Each step of the quick foam flow work sheet *(Figure 1)* is explained below.

1. Determining the area of the hazard is based on the square footage of the ethanol blended fuel spill or fire incident. As best as possible, determine if incident presentation is square or rectangular in nature so that an accurate estimate of length times (x) width can be determined in square feet. If the presentation is more circular in nature then utilize the other formula on the worksheet of .785 (.8 for field calculations) x the perceived diameter of the incident and multiple that diameter by itself (squared). The answer to the mathematical equation provides you the actual square footage of the more circular incident area.
2. The application rate is the pre-determined density of the AR-AFFF finished foam measured in gallons per minute for every square foot of surface area calculated containing ethanol blended fuel, whether spilled or on fire. For ethanol blended fuels this initial application density standard is .2 gallons per minute (gpm). Incident specific conditions such as bulk storage or ethanol production facilities may require a higher application rate.
3. Multiply the identified incident surface area by the .2 gpm/square foot application rate to determine the minimum finished foam flow rate required for offensive foam operations. Note that incident complexity may require separate finished foam flow calculations for different aspects of the same incident. For example, a tractor trailer on fire with some product exposed and burning within the tank and significant product that has migrated and pooled away from the accident scene releasing flammable vapors or burning that also requires assessment.
4. Once the minimum finished foam flow rate has been determined in item three (3), the AR-AFFF to be used on the incident scene must be properly proportioned with water as required by the manufacturer. Most AR-AFFF foam concentrate manufacturers make their foam to be proportioned at 1, 3 or 6%. This means that the foam concentrate is being mixed with water, presented at adequate pressure and velocity through an appropriate appliance or nozzle specifically designed for use with that foam concentrate. The blending of foam concentrates and water translates to 1 gallon of foam concentrate being mixed with 99 gallons of water to form 100 gallons of foam solution or 1% proportioning. Three (3) gallons of foam concentrate being mixed with 97 gallons of water, forms 100 gallons of foam solution or 3% proportioning. Six (6) gallons of foam concentrate being mixed with 94 gallons of water, forms 100 gallons of foam solution or 6% proportioning. This mathematical equation identifies how many gallons of AR-AFFF foam concentrate are being consumed every minute based on the proportioning rate and the finished foam flow rate calculated.
5. Once the gallons per minutes of AR-AFFF foam concentrate has been identified, the minimum finished foam application times must be determined. Ethanol blended fuel incidents involving small spills or fires may have a minimum flow time of 30 minutes. Incidents involving larger quantities of ethanol blended fuels can easily require flow times of 2 hours or more.

Regardless of the size, type, geographical location or type of facility where the ethanol blended fuel incident occurs, this work sheet will provide first responders an



Basic Foam Principles: Removes heat (cools) at a faster rate than it is released; separates the fuel from the oxidizing agent, Dilute the vapor-phase concentration of the fuel &/or oxidizing agent below that necessary for combustion, and terminate the chemical chain-reaction sequence.

opportunity to quickly determine critical resource needs which include foam concentrate, personnel, apparatus and equipment. There may be other challenges regarding your specific ethanol blended fuel incident and this worksheet is not all inclusive. This quick foam flow worksheet is a one of many "tools within your toolbox" and can be useful to a unified command incident management organization in determining whether offensive or defensive objectives, strategies and tactics will be initiated.

I hope to provide follow-up articles providing more detail in the actual management process of ethanol blended fuel incidents. Until then, strive to be a part of the solution, not a part of the problem. Learn, train, execute effectively and share your experience by being a mentor to those standing in your shadow...

About The Author

Battalion Chief (Ret.) Joel Hendelman - During his 34-year career with the City of Fairfax and Fairfax Volunteer Fire Department in Fairfax Virginia Mr. Hendelman served in every operational career capacity from firefighter/driver-operator to Captain. He also served 5 years in Fire Prevention and Investigation, obtaining the rank of Chief Fire Marshal before his return to emergency operations.

Mr. Hendelman attained the rank of Battalion Chief in 2003 serving in that capacity until retirement in January of 2009. He continued to serve in the City of Fairfax Volunteer department for an additional year as Deputy Fire Chief.

Chief Hendelman is recognized as a regional expert in flammable and combustible liquid firefighting operations; teaching hazardous materials tactical operations, incident management principles and mitigation techniques at national and regional conferences from 2003 to present.

He was a significant contributor as a subject matter expert to the NOVA (Northern Virginia) Regional Fire Departments Flammable Liquid Firefighting Tactical Operations Manual originally released in 2002 and revised three times since its inception. The manual is still in use today by 15+ jurisdictions within the Northern Virginia region protecting almost 3 million citizens.

Now in his 43rd year in emergency services, Chief Hendelman continues to travel the United States as a technical consultant and subject matter expert teaching Incident Management, Emergency Operations Center Management, mitigation techniques and of course the national Ethanol Blended Fuels Safety Seminars emphasizing strategy, tactics, management and mitigation.

He lives southwest of Richmond Virginia with his fiancé on a 109-acre farm where he enjoys hunting and fishing. Most evenings you will find him on the front porch or around the fire ring enjoying a good cigar and whiskey while savoring the company of family and friends. ■

LET'S GO INSIDE THE FENCELINE: Tips for Responding to Emergencies at Chemical Facilities

Article By: Keith Silverman, PhD, MPH, Senior VP Global Operations, Quality & EHS, Ashland

A call comes in for smoke inside a building. It's a call that firefighters respond to often, something referred to as a bread-and-butter call. On the way to the incident, you begin your size up. Is it a residential or commercial occupancy, what is the building construction type, and what special tools or resources might be needed? Firefighters train for these calls, respond to them often, and build their skills and experience level around these calls. Now, let's change the scenario, this time the call is for smoke in a chemical manufacturing facility that uses potentially hazardous chemicals. This is not your everyday, bread-and-butter call and you may not have the familiarity, experience, and/or training to feel you can safely and effectively handle it. That said, you have no choice, it's your call and you own it.

Take a moment to think about your local response area. Are you knowledgeable about the chemical manufacturing facilities in your response area and the types of emergencies they may have? Are you prepared to handle a fire inside the fenceline of a chemical facility? What about a spill of a potentially hazardous materials, a rescue from inside a chemical storage tank, or a rescue fifty feet above grade from the platform of a distillation column?

Safety is Our Priority

Safety is an excellent indicator of how well a facility is managed day to day. There is no single perfect way to be safe and no one safety program that works for everybody. So, take the opportunity to visit the facility and learn about their safety culture and programs. This will give you a good feel for how safe the facility is and how strong the safety culture is. Look for signs the employees are engaged in their own safety as well as the safety program. In facilities with strong safety cultures, there is strong engagement and a speak up mentality where employees feel safe to raise concerns and to stop un-safe acts. Ask the facility how they measure safety performance and what programs are in place to reduce risk. Our goal is that everyone goes home the same way they entered our facility.

When you enter a chemical facility, take a moment to understand the safety rules. They are there to protect you from the common hazards: chemical, electrical, temperature, pressure, motion, and gravity. For example, there are generally very specific rules around electronic equipment (such as cell phones and portable radios) because of the hazards that flammable vapors and/or combustible dusts in the area may present. The general personal protective equipment (PPE) you will be asked to wear (hard hat, safety glasses, fire resistant and reflective clothing, and safety shoes) is designed to be the last level of protection from the hazards present. The first line of protection is hazard identification and situational awareness – something firefighters are well trained in. So, when you go inside the fenceline, be situationally aware.

Enter the Front Gate and Go Inside the Fenceline

Relationships are key to success inside the fenceline and it takes time and effort to build those relationships. The first time you set foot inside the fenceline should not be during an emergency. The same holds true for workers inside the fenceline, the first time they meet the local fire chief or company officers should not be during an emergency. Most chemical manufacturers are committed to being safe and responsible employers and members of the community. These commitments to safe and responsible operations include working closely with local responders and welcoming them into the facility to preplan and train.

Get to know the key people such as the plant manager, the operations manager, the environmental, health and safety (EHS) manager, and the process engineer(s). What is the best way for you to gaining access to the facility in an emergency? Is there a security guard on duty or do you need to have a Knox Box with access keys and cards installed at the front gate? Think about what you need and ask that it be readily available for you when you arrive. Many facilities have plant maps, Safety Data Sheet (SDS) binders and dedicated facility portable radios available for local responders at the front gate. Years ago, facilities needed to keep paper copies of SDSs. Today, there are numerous electronic options available that allow for better sharing of SDSs during an incident. It's much better to learn about and test the system before an incident occurs.

Find out how the facility gets accountability for their employees in an emergency and how long it typically takes to get full accountability. Knowing typical personnel accountability times will help in a real emergency. Lastly, don't forget to ask about shelter-in-place (SIP) locations. In many facilities, shelter-in-place (SIP) means going to a pre-determined indoor safe location, where the ventilation

system can be controlled, and staying there until you are given an "all clear". Employees may check in and muster at a SIP area located well within the facility fenceline. Don't expect to find everyone mustered at the front gate or in the parking lot (figure 1).

Figure 1: Many facilities have a computer badging system that employees use to get inside the fenceline and any secure areas within the facility. These same systems can be used to obtain employee accountability during an emergency. In this case, during an evacuation, the employee badges in at the muster station and badges out if they leave the muster station.

One important thing to be aware of from the beginning is that employees at a chemical facility speak a different language than firefighters. For example, "charging the line" means something different to a firefighter than it does to a chemical operator. So, take a moment to be clear and use simple terms that everyone can understand. Understanding each other goes a long way towards building relationships. Another thing to always consider is that all emergencies potentially have a hazardous materials component. Sometimes the relationship is not clear or direct. For example, tank vents and piping in the vicinity of where you are operating could pose a hazard unrelated to the emergency you are handling (figure 2).

Figure 2: Always consider the potential hazardous materials aspects of all incidents inside the fenceline. The incident you are handling may not be associated with this tank. However, operating on or near the tank could pose a hazard due to vapors coming from flanges, valves, and/or vents.

Build Collaboration Through Relationships

Encourage your department to take advantage of specialized training opportunities. TRANSCAER® helps emergency responders prepare for and respond to emergencies involving potentially hazardous materials during transportation and at fixed facilities. After you get inside the fenceline and meet the right people, you need to spend some time building relationships, gaining each other's trust, and partnering for success.

Figure 3: TRANSCAER® training events are a way for responders to train side-by-side with subject matter specialists from the railroads, the chemical trucking industry, and chemical manufacturers.

One question the fire department always wants to ask an industrial facility is what services do you expect the local fire department to provide? Once you know the needs, look for the opportunities. Explore ways to share the costs of specialized equipment and/or training. If the facility has a fire and/or rescue team, look for opportunities to share the cost of training. One facility I know, pays the cost for local responder to attend specialized, out-of-state training with the facility fire brigade several times a year. Another thing to consider is forming joint specialized operations teams for low frequency, highly technical responses such as confined space rescue, high angle rescue, and hazardous materials spills (figure 3).

Agree on, train on, and use the same approach for incident management. The standard for fire departments in the United States is the Incident Command System (ICS) which can be used to manage any type of incident, including a planned training event. The ICS is a part of the National Incident Management System (NIMS) which is a systematic approach that government and the private sector can use to work together to respond to and recover from the effects of incidents. If you want to collaborate well during an incident, then it just makes sense to use the same incident management tool. Also remember, the incident priorities remain the same inside the fenceline: life safety, incident stabilization, and property conservation.

Reduce Anxiety by Knowing the Business

Learning what happens inside the fenceline, as well as where it happens inside the facility, will better prepare the responder to size up an incident so that they can develop effective and safe strategies and tactics if they are ever called to an emergency at the facility. Let's start with an introduction to what goes on inside the fenceline of a chemical facility that manufactures and stores potentially hazardous materials. Just like a residential home, chemical facilities have some basic features and a general flow as you move through them. In step 1, the chemicals needed to make the product (that will ultimately be sold) enter the facility. These chemicals are commonly referred to as raw materials. Raw materials can be solids, liquids and/or gases and are delivered in over the road chemical haulers, rail cars, and sometimes barges. Once delivered, the raw materials get stored until use (we will call this step 2) in warehouses or in tanks. When many storage tanks are located near each other they are referred to as a tank farm. In step 3, the raw materials are moved out of storage, transferred to a production area, and then mixed or reacted to form the final product. In step 4, the final product gets packaged and stored in another warehouse or in another tank. Lastly (in step 5), the final product leaves the facility traveling outside the fenceline in an over the road trailer, a railcar, or sometimes by barge. When responding to an incident inside the fenceline of a chemical facility, it is important to understand at what step in the manufacturing cycle the emergency is occurring.

There is a lot to discuss for each step, certainly more than I can cover here, so I will keep it at a high level. When incidents occur during transportation (steps 1 and 5) or during storage (steps 2 and 4) we are usually dealing with chemicals in their containers. If the containers used are the appropriate and intact, then the hazard is properly contained and the risk to responders is low. Problems occur when chemicals leave their containers. During storage, chemicals can leave their containers when the container and/or the piping or valves are damaged. In addition to the chemical hazards, responders may face electrical, temperature, pressure, motion and gravity hazards. In recent years, industries have been adding more sophisticated fall protection systems for their employees working at heights (a gravity hazard). These systems are a great worker safety improvement however, they also pose a technical rescue challenge for firefighters. Remember, always consider the potential hazardous materials aspects of that technical rescue from heights.

Step 3 generally takes place in what is commonly referred to as the process area or process building. During step 3, the raw materials need to be moved from their containers into a mixing tank or a reaction vessel. In a mixing tank (sometimes called a blending tank), materials are simply mixed. The mixing tank may be an open top tank or closed tank. Mixing tanks should always be considered permit required confined spaces and emergency responders must follow all safety procedures for operating in and around confined spaces. The mixing tank may contain flammable and/or toxic vapors as well as low oxygen conditions. As you would expect, these tanks have pipes and/or chutes for introducing raw materials, mechanical blades or agitators to mix the contents, and pipes and/or chutes to remove the mixed product.

A chemical reaction takes place inside a specialized reaction vessel commonly referred to as a chemical reactor. Chemical reactors are closed to the atmosphere with pipes for moving chemicals into and/or out of the tank, mechanical agitators with blades to mix the contents, and vents to remove vapors and/or relieve pressure from inside the reactor. Many chemical reactions that take place inside the reactor produce heat and/or pressure and therefore, they require pressure relief devices that are designed to prevent catastrophic failure of the vessel during an emergency. Chemical reactors should always be considered permit required confined spaces and responders must follow all safety procedures for operating in and around confined spaces. Reactors may also contain flammable and/or toxic vapors as well as low oxygen conditions. In addition to flammable and toxic vapors, the process areas may also contain combustible dusts. Simply stated, combustible dusts can

be any fine material that has the ability to catch fire and explode when mixed with air in an enclosed space. The process area is generally the most complex area inside the fenceline. Lastly, many process areas or process buildings are several stories high. This means firefighters must be prepared to handle an industrial style high rise fire; technical rescues from elevated platforms, stairs, or ladders; and confined space entries into tanks and/or vessels with challenging and tight entry points (figure 4).

Figure 4: A chemical reactor can pose several technical challenges with heights, limited access, mechanical agitators (see insert), as well as the chemicals used in the reactor.

When it Come Hazards, Get Some Focus

The process area is where you will want to spend more time assessing the hazards because this is where the mixing of chemicals or a chemical reaction occurs. During this step, chemicals must be taken out of their containers and added to the mixing tank or the reactor and therefore, this is the step most likely to produce vapors, dusts or mists. In addition, this area has a higher number of electrical, temperature, pressure, motion and gravity hazards. Chemical facilities spend a lot of effort and focus on prevention of spills and leaks which can lead to fires and explosions. One way they do this is by identifying and controlling hazardous locations where flammable liquids, gases or vapors, or combustible dusts may exist in sufficient quantities to produce an explosion or fire. Equipment used in hazardous locations must be equipped with special wiring and other electrical components for safety purposes. The Occupational Health and Safety Administration (OSHA), the National Electric Code (NEC) and the National Fire Protection Association (NFPA 70) have widely used hazardous location classification systems that industrial facilities follow. Firefighters must be familiar with the definitions of the different hazardous locations and the special procedures and equipment required for each hazardous location. Responding to incidents in the process area are complex situations but with planning, training and situational awareness you can operate safely and successfully.

Wrap Up

To wrap this all up, seek out opportunities to get more familiar and comfortable with the areas I highlighted:

- Safety is our priority
- Enter the gate and go inside the fenceline
- Build collaboration through relationships
- Reduce anxiety by knowing the business
- When it come hazards, get some focus

Let's look at a final example to reinforce the areas listed above.

- Safety is very important inside chemical facilities, with most facilities having employees dedicated to environmental, health, and safety (EHS) performance.
- Visit the facility and spend some time getting to know the EHS manager and the EHS team. Have coffee, ask questions and exchange mobile phone numbers.
- Decide how the EHS manager fits into your incident command system. One recommendation is they work side by side with the fire department safety officer and integrate into the local fire department command staff. For this to work, you need to trust each other and that is why relationships need to be built before an incident. Think about how much more comfortable you will be handling an emergency in the process area when you know the EHS manager on a first name basis.
- Talk with the EHS manager and learn what manufacturing takes place at facility. Are they mixing chemicals to make a blended product or are they reacting chemicals to produce a new chemical product?
- Ask the EHS manager their highest priorities and focus your pre-planning and training on the activities more likely to be involved in an incident.

The information necessary for safe and effective responses to emergencies inside the fenceline is available and I hope this article has helped you learn what to ask for. Relationships and partnerships are key, so build trust before an incident happens. Take the steps necessary to establish relationships in your community and use those relationships to help you acquire the tools, information, and the skills you need to be successful. Lastly, make time to plan and train together. Attending or hosting a TRANSCAER® event is a great way for emergency responders, industry personnel, the railroads, and motor carriers to work together and share in learning. ■

CHLORINE INSTITUTE EMERGENCY KITS
Continuous Improvement

Article By: Robert Wolniak, President, Indian Springs Manufacturing Company, Inc.

Chlorine Institute Emergency Kit-A
2013

Chlorine Emergency Kit-B
2014

Chlorine Emergency Kit-C
2016

The original Chlorine Institute Emergency Kits "A" "B" & "C" were officially established by the Institute during the 1960's and were based upon the earlier existing Solvay Emergency Kits dating back to the 1930's. Over the years, the original designs proved extremely robust and reliable, but they have evolved and improved considerably over the last few decades. Today's emergency kits would look very alien when compared to their original Chlorine Institute versions. The Institute and its partners continue to evaluate and revise the emergency kit specifications on a scheduled basis and as industry requires. Awareness of the current emergency kits specifications are essential for proper chlorine response planning and training.

The Chlorine Institute Emergency Kit-A, for use on chlorine cylinders (US DOT 3A480), has gone through several design changes over the years but most notably in the years: 1978, 1983, 1993 and 2013. Each of these dates represent a major design change to the Kit-A. Kit changes included going from flat, neoprene gaskets to molded Viton™ (1BMV), replacing the one bolt yoke to the 4 bolt Yoke (1C1) and flat top Hood (1A2), to adding the adjustable base assembly (1EFP) and radius gasket (1BRV)*. However, the 2013 design change was the most major to date.

The current Kit-A design (2013) is significant in its simplicity thus improving its ease of application. The kit no longer uses the 4 bolt Yoke – flat Hood design but rather a Hood (1A3) with an integrated yoke device. The design has a lower center of gravity and allows for the chains to work independently thus increasing the application success rate. The Gasket (1BRV) has been re-designed to be more stout and decrease roll-out but is still usable on earlier hood designs as well. The chain and base assembly (1EFP1) is adjustable, uses high strength but lighter alloy chains, and is also lower to the floor eliminating the need for the ramp.

Device 1 – Indian Springs Mfg.

Kit-A also utilizes a new patching Device (#8) that is designed to more effectively seal cylinder pin hole leaks by using a smaller "button" style gasket requiring much less torque to seal. The kit also includes a redesigned #2 Device to seal fusible plug leaks on standard and "Enhanced" style chlorine valves.

The Chlorine Institute Emergency Kit-B, for use with chlorine ton containers (US DOT 106A500X), has not gone through the same amount of design changes as the Kit-A through the years. Kit-B, however, had several smaller changes over the years including the same change from the flat neoprene gaskets to the molded gaskets of Viton™ as the Kit-A but remained largely unchanged until 2014.

In 2014, Kit-B (Device 12) received a radical new design. A spring loaded, two-bolt, Yoke Assembly (28C) replaced the long used, original 8 bolt Yoke Assembly (12C). The new design is much easier to apply and thus easier to teach. Kit-B also comes with a new fusible plug Hood (14A) that can be applied with Yoke Assembly 28C that can now contain fusible plug leaks without having to touch the plug itself. The Kit-B also comes with the same new side wall patching device (#9) as in the Kit-A as well as improved designs for the 4C Yoke and 106 Wrench.

The Kit-C, for use with chlorine tank cars and tank trucks (US Dot 105J500W & MC331), development has been much more incremental over the years than either the Kit-A or B. Kit-C has had several minor changes since the 1960's finally culminating into one complete redesign in 1996 and an updating in 2016.

The Kit-C design change in 1996 included the integration of the separate yoke, block and adapter plate components into one light weight, aluminum-based Device, (11A). The unit is pre-assembled and lighter than the previous all steel design and still incorporates the use of the port hole openings as anchoring devices. The Yoke device incorporates the four-bolt yoke and center quick spin bolt that works with the kit's two flat top hoods but is also backward compatible with earlier designs of Kit-C. This was a major design change that is still included in the current specifications.

The current Kit-C design specifications are based upon the Chlorine Institute review and approval in 2016. The 2016 design enhancements were incremental resulting in minor improvements in components of the yoke assembly (11A) and kit tools.

The Chlorine Institute Emergency Kits have gone through several design enhancements over their lifetimes and will continue to evolve as the industry requires. With that being said, there remains thousands of reliable, older style kits still in service today. Proper training and use of existing and new emergency kit tools and devices are critical. The Chlorine Institute and the emergency kit manufacturer remain excellent resources for this information.

***Note: all Chlorine Institute Emergency Kit gaskets are made of Viton™ and are stamped with the date of manufacture. Gaskets have a recommended four-year shelf-life.**

Viton™ is a registered trademark of The Chemours Company.

About The Author

Robert Wolniak has over thirty years of experience with the design, testing, and manufacture of the Chlorine Institute Emergency Kits. As an active participant in the Chlorine Institute over three decades, he has specifically assisted in the design development of the emergency kits and continues to work on emergency kit related activities within the Institute. Robert has also participated as a trainer for the CHLOREP team training school and is an emergency kit trainer for TRANSCAER/Chlorine Institute events. Robert is currently the President of Indian Springs Manufacturing. (Indian Springs Manufacturing Co., Inc. Baldwinsville NY, www.indiansprings.com) ■

Device 12 –
Indian Springs Mfg.

Device 24 –
Indian Springs Mfg.

THE CHLORINE INSTITUTE

2019 TRANSCAER® Training Events Recap

Article By: Cindy Kuranchie, Senior Manager - Member Services and Outreach, The Chlorine Institute

In 2019 the Chlorine Institute (CI) under the TRANSCAER® umbrella, collaborated with multiple railroad partners to host 11 training events including two in Canada and one in Mexico. For a majority of the stops, CI utilized our training car, ERTX 1017. These emergency response hazmat training events focus on ensuring first responders are adequately trained in the event that a hazardous materials transportation incident occurs. The training consists of presentations such as Chlorine Properties & Emergency Response Considerations and Railroad 101, followed by hands-on training with industry experts on topics such as: Understanding Tank Cars, Chlorine Emergency Response A-Kit, B-Kit and C-Kit, the magnetic patch as well as other ERKs – The Midland Emergency Response Kit and the Indian Springs ERK. These free 8-hour training events provide a great opportunity for knowledge sharing and connecting with the local community. It gives first responders the chance to meet face-to-face with industry experts, who will be an important resource should a hazardous material incident occur.

Some of our most memorable events in 2019 were in Buffalo, NY; Toronto, ON; Kent, OH; and Detroit, MI.

June 18-20, 2019, CI partnered with Scott Gould and Scott Deutsch from Norfolk Southern Railway in Buffalo, NY to put on a training event that drew in 125 first responders over the course of 3 days. The Buffalo Fire Department played a big role in generating high attendance, they sent their entire team – all four shifts! CI members sent instructors from ASHTA Chemicals, Inc., JCI Jones Chemicals, Inc, The Chemours Company, Specialized Response Solutions, Inc. (SPSI), Olin Corporation, Indian Springs Manufacturing and Midland Manufacturing, we can't thank them enough for all the support they provide for these training events.

FROM LEFT TO RIGHT:
Ray Racha (Indian Springs Manufacturing)
Rich O'Hara (Olin Corporation)
John Gabryelski (Olin Corporation)
Mike Croke (JCI Jones Chemicals)
Dom Miletta (The Chemours Company)
Dan Thompson (Midland Manufacturing)
Steve Hayes (ASHTA Chemicals)
Cindy Kuranchie (The Chlorine Institute)
Scott Deutsch (Norfolk Southern)
Scott Gould (Norfolk Southern)
Greg Godwin (The Chemours Company)
Drew McCarty (SPSI)
Erica Bernstein (CHEMTREC/TRANSCAER)

FROM LEFT TO RIGHT:
Tom Jaeckle (QM Environmental)
Mike Nedilsky (QM Environmental)
Bernie Cook (Brenntag Canada)
Rich O'Hara (Olin Corporation)
David Clarke (FESTI)
Chris Nicholson (CN Rail)
Andy Ash (Railroad Association of Canada)
Frédérike Hanigan (CANUTEC)
Troy Scarrow (Midland Manufacturing)
Ray Racha (Indian Springs Mfg.)
Mike Herringa (CN Rail)
Yves Hamel (CN Rail)

Photo by: Cindy Kuranchie (The Chlorine Institute)

July 9th Class Photo, Toronto, ON

July 9-11, 2019, CI traveled north of the border to Canada, specifically to the Fire and Emergency Services Training Institute (FESTI) located in Toronto, ON, right beside the Toronto airport. CI partnered with Canadian National Railway (CN) and the Railroad Association of Canada (RAC) to conduct rail safety and emergency response training. We also had representatives from the Chemical Industry Association of Canada (CIAC) and CANUTEC in attendance, they were able to present their respective resources to the first responders, some of which were learning about the resources for the first time.

FESTI has a well-equipped training facility, their classrooms were utilized for the presentation portion of the training and it is also the new home to the retired TRANSCAER Safety Train, CCPX 911 which was used throughout the three training days. With the airport serving as the backdrop and planes flying nearby, 99 first responders were trained on two sunny days and one rainy day. They were even given the opportunity to take a class photo in front of a burning plane. All in all, students gained a plethora of knowledge that they were able to take back to their respective fire departments.

FROM LEFT TO RIGHT: Roar Broch (Midland Manufacturing), Matt Bond (Westlake Chemical Corporation), Kyle Motylewicz (ASHTA Chemicals), Steve Hayes (ASHTA Chemicals), Cindy Kuranchie (Chlorine Institute), Drew McCarty (Specialized Professional Services, Inc.), Harry Hopes (Specialized Professional Services, Inc.), John Vergis (Wheeling & Lake Erie Railway), and Rob Wolniak (Indian Springs Manufacturing)

***From left to right**: Greg Palmer (CN Rail), Tim Venier (JCI Jones Chemicals, Inc.), Ray Racha (Indian Springs Manufacturing), Joe Weekley (Chemours), Nathaniel Owen (Dow Chemical Company), Chris Lewicki (Dow Chemical Company), Joe Caccamo (Conrail), Dan Thompson (Midland Manufacturing);* **Photo By:** *Brooke Lobdell (The Chlorine Institute)*

From Kent, OH CI moved on to Detroit, MI and partnered with Greg Palmer's team at the Canadian National Railway (CN). Detroit turned out to be a training stop with an impressive amount of turnout, we had 110 first responders attend the training from September 10-12, 2019. Not only did we garner high attendance at this training stop, but we also received a visit from local congressional staff. The congressional staffers were able to see how proactive our railroad partners and the chlor-alkali industry is about training local communities the important mitigation techniques for hazardous materials emergency response. They were also able to learn more about CN Rail, the Chlorine Institute and the mission of TRANSCAER.

2019 culminated as a successful training year with about 1,000 first responders and industry professionals trained. CI would like to thank our railroad partners and all our member companies that provided instructors as well as equipment. Providing free training for local communities would not be possible without the dedication and commitment of these companies and the instructors and for that, we are extremely grateful. ■

CI IS GEARING UP FOR OUR 2020 TRAINING EVENTS,

details and the training schedule can be found on our website: https://www.chlorineinstitute.org/emergency-preparedness/er-training-exercises-outreach/, and registration can be completed by visiting https://transcaer.com.

We look forward to seeing you soon!

Start Preparing Today!
www.nvfc.org/pipelines

IS YOUR DEPARTMENT PREPARED?

Millions of miles of pipelines stretch across the United States, transporting hazardous materials through thousands of communities. The National Volunteer Fire Council and the Pipeline & Hazardous Materials Safety Administration are here to help fire departments prepare for pipeline incidents.

The Fire Department Pipeline Response Emergency Planning & Preparedness (FD PREPP) Toolkit is a **FREE RESOURCE** designed to help departments plan for, and safely respond to, pipeline incidents.

Make pipeline incident readiness a priority. Access the FD PREPP Toolkit at

www.nvfc.org/pipelines

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U.S. Department of Transportation
Pipeline and Hazardous Materials Safety Administration

BNSF Railway and Metra Hosts Training with the Chicago Fire Department

Article By: Brian Soyk, Manager Safety Passenger Operations, BNSF Railway
Photos By: Brian Soyk and Derek Lampkin

BNSF Railway and Metra, in conjunction with TRANSCAER, completed a multiday training program for the Chicago Fire Department focusing on passenger rail emergencies as well as responses to hazardous materials incidents.

The training was held in June at BNSF's 14th Street Yard in Downtown Chicago. During the three-day event, nearly 100 Chicago Fire Department employees were taken through both classroom and hands-on training.

Training began with a hazmat refresher course in BNSF training boxcar BNSF 99915. Next, the trainees were broken into three groups and underwent hands-on training on BNSF Training Tank Car BNSF 99915, Metra Passenger Locomotive 111, and Metra Passenger Car 8492.

Topics covered included: ensuring responders communicate with the proper railroad, emergency egress/ingress window removal, passenger car makeup and hazards, locomotive fuel capacity and shutoffs, hazards of locomotive fires, proper saw-cut locations for passenger cars, door cutout and override features, flammable liquids properties, chemical characteristics (Crude Oil and Ethanol), and BNSF system-wide assets for incident responses.

Several of the training workshops were extended beyond their scheduled times due to the great enthusiasm and in-depth questions asked by the participants. Hilary Konczal, Metra Chief Safety & Environmental Officer, really appreciated the training as well stating, "Training first responders on how to respond to railroad emergencies and incidents is essential to passenger and public safety. Metra's longstanding partnership with the BNSF in conducting this type of training ensures first responders are ready to respond to any type of railroad emergency." ■

Passenger cars and training cars being setup at BNSF 14th Street yard near downtown Chicago.

Hazmat Manager Mike Sheehan training Chicago FD on high pressure and low pressure tank cars.

Chicago FD lining Canal Street just outside of BNSF 14th Street Yard.

BNSF Passenger training Chicago FD on passenger train emergencies.

Railroads Partner to Offer Railroad Emergency Response Training in Minneapolis

BNSF Northtown Yard – Minneapolis, Minnesota, July 8-12, 2019

Article By: Paul Hester, Manager Hazmat Field Ops & Emergency Response, BNSF Railway

BNSF hosted a Railroad Emergency Response Training with TRANSCAER partners CP and CN to train the local fire departments and Chemical Assessment Team (CAT) members from the Metro Minneapolis/St. Paul area. The BNSF Training tank car and classroom boxcar were mobilized to the BNSF Northtown Yard to add to the hands-on training experience.

Seventy-five first responders learned about the hazards of working on or near railroad property, rolling stock identification, how to read a train consist, and the hazards of locomotives and tank cars. The St. Paul CAT team also participated in hands-on training which challenged them with leak scenarios, including simulated chemical responses. The teams had to select the proper personal protective equipment (PPE) and mitigate the problem with the actively leaking (leaks are simulated using air or water) tank car housing training prop. The St. Paul CAT team successfully responded to simulated leaks of Anhydrous Ammonia, Chlorine and LPG using the Chlorine Emergency Response Kit 'C' as well as the Midland Emergency Response Kit.

TRANSCAER partners BNSF, CN and CP would like to thank the first responders for participating in the training.

Instructors for the event were Paul Hester (BNSF), Ken Collins (CN), and Ed Dankbar (CP). ■

2019 Dow Northeast TRANSCAER® Tour was an Outstanding Success!

Article By: Bob Jaffin, HAZMATGO & TRANSCAER State Coordinator (New Hampshire)

Starting in late June through July the DOW Safety Train made 3 stops training over 332 attendees! It started in Logan Township, NJ, followed by making its first appearance in Northern New England at the Pan Am Rail Yard in Portsmouth, New Hampshire on July 22-23, followed by a training event in Auburn, Maine on the St. Lawrence and Atlantic Rail Yard on July 26. First responders from Maine, New Hampshire, Vermont, Massachusetts, and New Jersey were trained on the following topics: Rail Car and Locomotive Anatomy, Chlorine Institute Emergency Response Kit 'C' and the Midland Emergency Response Kit, Leak Mitigation, Tank Truck Emergencies, LPG Emergencies, Pipeline Awareness, Toxic Inhalation Hazards, and Flammable Gas Incidents.

Great feedback was received from the New England participants:

- "Well planned and presented training"
- "Very Informative"
- "As good as Pueblo, CO"
- "Good combo of classroom and hands-on"
- "Long over Due; Please bring it back to Maine Add more dates"

A very special thank you to the following for making these training events such a success: Sam Simon (DOW Chemical), John O'Neill (Firefighters Education and Training Foundation), Dave Nagy (PANAM), and Bob Jaffin (TRANSCAER State Coordinator - New Hampshire).

Training tours require a tremendous amount of partners and supporters. We would like to extend a thank you to our railroad partners including: Federal Railroad Administration (FRA), Conrail, CSX Transportation, PANAM, CN Railway, Genesee Wyoming, and St. Lawrence and Atlantic; trucking partners: Dana Transport and Crestwood; local partners and industry partners including: Enbridge, PGANE, AmeriGas, Dead River Company, Market Basket Supermarkets, Lindt & Sprungli, Faith Staples and her Maine OEM team, and the Auburn Maine Fire Department. ■

DOW Northeast TRANSCAER Tour

BSNF & UP Host 4-day Railroad Safety and Education Course

Article By: Derek Lampkin, Manager-Hazmat Field Operations and Emergency Response, BNSF Railway

TRANSCAER, BNSF Railway, and Union Pacific collaborated to host four full-day Railroad Safety and Education course for first responders from Wichita, KS, and the surrounding area, the week of September 23. More than 130 firefighters were trained up at Spirit AeroSystems' Wichita plant in both classroom and field settings in Wichita, KS.

Seasoned railroad response affiliates aided in conducting interactive classes regarding hazardous materials, railcar identification, strategies and tactics of rail road emergency response, railcar anatomy, and general rail safety. The railroad safety portion of the training was especially noteworthy, to promote the safety of all first responders when responding to a rail road incident.

Following the in-depth classroom presentations, attendees were split into groups and tasked with responding to mock accidents involving a training tank car designed by BNSF. The training groups were sent to different stations and asked to identify the hazards and formulate a method of neutralizing the obstacles in a way that kept the entire scene contained and every team member safe. Two distinct methods taught during this involved training included installing a Midland Kit on a high pressure protective housing and implementing a C-Kit on a next generation chlorine protective housing. Both designs allow for fast and safe capping of leaking valves and fittings atop pressurized rail cars during an emergency situation when leaking chemicals are present. By being able to confidently and correctly analyze each situation, responders learned how to communicate to railway officials with as much information as possible. ■

An instructor observes a team member installing a C-Kit on a next generation chlorine protective housing while other trainees learn the technique.

Two groups at stations are reviewing the anatomy of the BNSF training tank car used during the week of training in Wichita.

Firefighters installing a midland kit on a high pressure protective housing.

A trainer shows pupils the proper techniques of installing a C-Kit on a next generation chlorine protective housing.

Photos taken by John Rode, Vice President of Field Services at Environmental Works, Inc.

Minnesota Railroad Summit

Article By: Paul Hester, Manager Hazmat Field Ops & Emergency Response, BNSF Railway

The Minnesota Fire Marshal's office hosted the third annual Minnesota Railroad Summit at Lake Superior College in Duluth, Minnesota on September 25 and 26, 2019.

The focus this year was on chlorine and chlor-alkai chemical preparedness. In partnership with The Chlorine Institute (CI) and TRANSCAER, the railroads were able to add Railroad Hazmat Emergency Response Training to make for an all-hazards technician training.

The 49 attendees were from eleven Chemical Assessment Teams (CAT) located throughout Minnesota.

The training included hazardous materials chemistry lecture, skill stations and leak scenarios in daylight and night-time conditions.

The skill stations incorporated the Chlorine Institute Emergency Response A-kit, B-kit, C-kit, and the Midland Emergency Response Kit, Level A personal protective equipment (PPE) dexterity exercises, Self-contained breathing apparatus (SCBA) rotations, tank car valves and fittings, product transfer procedures, and railroad fire-fighting equipment.

The leak scenarios included a 150-pound cylinder leak inside a building to simulate a swimming pool utility room, a one-ton container leak inside a building to simulate a water treatment plant and two tank car leaks. One of the tank car leaks was on top of an upright tank car training prop located at the training field and the other was a training housing on the ground to simulate a derailed rail car. The scenarios were made more realistic with the addition of theater smoke and compressed air to challenge the responder teams who had to install the emergency response kits to mitigate the simulated leak.

The TRANSCAER partners involved look forward to another great event next year!

Instructors for the event were Paul Hester (BNSF), Ken Collins (CN), Ed Dankbar (CP), Joe Eichten (UP), Randy Rowe and John Seebruk (ERCO Worldwide), Don Mekeland and Sean Trebiatowski (Wenck Response Services). ■


Daylight Leak Scenarios


Duluth Skill Stations


Midland Capping Kit Install


Midland Kit with Level A


Mission Chemicals Lecture


C Kit on rail car Level A

Wisconsin Department of Natural Resources (WIDNR) Forest Ranger Railroad and Fire Hazards Training Event

Article By: Paul Hester, Manager Hazmat Field Ops Emergency Response, BNSF Railway

CN hosted a Railroad Fire Hazards Training with TRANSCAER® partners CP, UP, and BNSF to train Wisconsin Department of Natural Resources (WIDNR) Forest Rangers on the hazards of working near railroad tracks and potential ignition sources on locomotives and other railroad rolling stock.

100 WIDNR Forest Rangers from across the state rotated through lecture and skill stations which included two types of locomotives and their hazards, railroad rolling stock identification and hazards as well as a station on the operation of a railroad fire trailer which all the Class I railroads have in their preparedness and response arsenal.

The training event was another opportunity to build a stronger stakeholder relationship between the railroad industry and WIDNR Forest Rangers.

Instructors for the event were:

- CN Police: Joe Holmstrom and Gene Meyer
- CN Risk Mitigation: Matt Turner, Ed Verlanic, and Stephen Moller
- CN Locomotives: Ed Polacek, Brian White, and John Smith
- RR Hazmat Instructors: Ken Collins (CN), Ed Dankbar (CP), Joe Eichten (UP) and Paul Hester (BNSF) ■

CN Rail Yard - Stevens Point, Wisconsin

IAFC HAZMAT CENTER

GET TRAINED. BE PREPARED.

The International Association of Fire Chiefs (IAFC) Hazmat Center is dedicated to training first responders for improved hazmat planning, and response at hazardous materials incidents.

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The Hazmat Fusion Center - is a data and information network with trainings, tools and resources for hazmat teams, first responders, LEPCs, federal, state, local agencies, and the private sector.

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On the Right Track with NS First Responder Training

Article By: Glen Rudner, Hazardous Materials Compliance Officer, Norfolk Southern Corporation
Photos By: Glen Rudner & Cris Burch, Hazardous Materials Compliance Officer, Norfolk Southern Corporation

Throughout the 22 state Norfolk Southern footprint, emergency responders had the opportunity to experience the Norfolk Southern OAR Safety Train in 2019. Over 2,428 first responders from communities along that footprint were able to board the safety train and attended classes that provided instruction of safe operations in and around the railroad right of way, railcar identification, ASKRAIL, TRANSCAER training opportunities and other key points on safety.

During the approximately 140 presentations, the emergency responders including paid and volunteer firefighters, EMS, law enforcement officers, emergency management and industry personnel were able to experience hands on training on various tank cars, tank car protective housings and visualize the types of hazardous materials containers that move products.

Norfolk Southern's strong commitment to training first responders is through the efforts of the Norfolk Southern Hazardous Materials Compliance Officers and the network of NS Contractors. Their knowledge, skills and experience are shared with America's first responders. During this year the Norfolk Southern staff have trained more than 5,550 emergency responders. ■

Norfolk Southern Rail Safety and Emergency Response Training

Location: Princeton, Indiana
Dates: August 27, 28, 29, 2019
Photographer: Larry Shots, TRANSCAER Indiana Co-coordinator

Group picture with Cris Burch and Brian Shanks (Norfolk Southern), Princeton Fire Territory, Vincennes Police Dept., Columbia Township Fire Dept., Duke Energy.

Brian Shanks (Norfolk Southern) explains the chlorine valves and the Chlorine Institute Emergency C kit that is in place.

Cris Burch (Norfolk Southern) watches as firefighters from Princeton Fire Territory place a Chlorine Institute Emergency C kit.

Brian Shanks (Norfolk Southern) explains the DOT 117A100W1 general purpose tank car. ■

reaching OUT

Chris Lind (Mauser Packaging Solutions Ret.) instructs on Steel Drums 101 for Emergency Responders in Orange, VA on August 3, 2019. The training session was held in partnership with the Renewable Fuels Association.

TRANSCAER® exhibited at the International Hazardous Materials Response Teams Conference in Baltimore, MD on June 14 & 15, 2019. Joe Milazzo (CHEMTREC) and Keith Silverman (TRANSCAER Chairman) talk with attendees at the TRANSCAER Booth. We look forward to seeing everyone again at the conference in June 2020!

Attendees working through their scenario at the Anhydrous Ammonia Response: Applying Tactics to Scenarios & Perfecting Processes and Packaging Training held at Anheuser-Busch in Williamsburg, VA on September 9, 2019. Thank you to our training partners Anheuser-Busch, Virginia Association of Hazardous Materials Response Specialists, Tanner Industries, Inc., and the Virginia Department of Emergency Management for helping make this training such a success!

Thank you to all of our instructors at the Highway Tank Truck Training at the 2019 Louisiana Emergency Response School on March 19, 2019 held at the Louisiana State Police - Joint Emergency Services Training Center in Zachary, LA.

(Left to Right): Elroy Hoover (Schneider Bulk Carriers), Marc Landry (Dupre Logistics), Donald Manual (Dupre Logistics), Stephen Torres (Schneider Bulk Carriers), Skip Parker (Dana Transport), Al LaCombe (Dupre Logistics), Brian Patterson (Quality Carriers), Scotty Reynolds (Dupre Logistics), and Anthony Guillory (Dupre Logistics).

National TRANSCAER Task Group Members were given a tour of the Norfolk Southern Safety Train in Alexandria, VA, on March 21 following the National TRANSCAER Task Group Meeting.

Left to right: Keith Silverman (Ashland LCC), Cindy Kuranchie (The Chlorine Institute), Glen Rudner (Norfolk Southern), Missy Ruff (Renewable Fuels Assoication), David Schoendorfer (Norfolk Southern) and Joe Milazzo (CHEMTREC).

John Vergis (Wheeling and Lake Erie Railway) and the TRANSCAER State Coordinator for Ohio attended the Stark & Summit County joint Local Emergency Planning Commission Annual Hazmat Conference in Massillon, OH on October 3, 2019.

Toby Crow (Corteva Agriscience) staffs the TRANSCAER exhibit booth at the Hotzone Hazmat Conference with Joe Milazzo (CHEMTREC) in Houston, TX, on October 18, 2019.

The Corteva Agriscience Emergency Response Team helped set up the TRANSCAER booth at the Continuing Challenge Hazmat Workshop in Sacramento, CA. (*Left to Right: Zheng Li, Todd Lohr, Marc Gould, Kerry Morelli, and John Ehinger).*

Joel Hendelman instructs on Ethanol Safety & Emergency Response in Orange, VA on August 3, 2019. It was a great training day held in partnership with the Industrial Steel Drum Institute.

John Vergis (Wheeling and Lake Erie Railway) and David Binder (Tanner Industries, Inc.) at the Ohio Hazmat Teams Conference held on Nov 1 & 2, 2019 in Solon, OH.

CHEMTREC HELP Award -

Our Commitment to helping Volunteer Fire Departments

Article By: Erica Bernstein, Director- Outreach, CHEMTREC®

For nearly 50 years, CHEMTREC's engagement with emergency responders around the world has been the engine that drives our success. In light of that relationship, in 2019, CHEMTREC partnered with the National Volunteer Fire Council (NVFC) to offer $7,500 to two volunteer fire departments in the U.S. that are also members of the NVFC. The awards are intended to help the fire departments enhance their response capabilities and increase local preparedness

Chief Tim O'Donnell (Willow Grove Fire Department) with Chief Executive John Modine (CHEMTREC)

to respond to and prepare for hazardous materials incidents. John Modine, CHEMTREC's Chief Executive, couldn't be more proud of the new award: "Since 1971, CHEMTREC has worked closely with emergency responders, however I sensed that we needed to have a stronger connection with practical benefits for fire and emergency medical services, so we created the annual HELP award. This award allows us to make a significant financial impact on the communities in most need of our support."

In 2019, the following departments became the first recipients of the CHEMTREC HELP (Hazmat Emergencies Local Preparedness) Award: Willow Grove Fire Company and Prairie View Volunteer Firefighting Association.

On December 5th, CHEMTREC had the privilege of visiting the Willow Grove Fire Company in Pittsgrove, New Jersey. The Willow Grove Fire Company was established in 1937 and is an all-volunteer fire department. The department handles on average 250 calls a year and serves a population of 11,000 over 45 square miles. Through the HELP Award, the Willow Grove Fire Company plans to purchase four Incident Command System Cases for command operations and hold training for their department. Chief O'Donnell said, "By receiving this award, we are better suited to track the resources operating on the scene of any emergency, including the identity of the responders, their exact location, and the apparatus they arrived on scene with. The incident command cases will help us utilize our resources efficiently at the scene of an emergency. The newer equipment will also allow our personnel to work effectively in keeping the community and environment safe for years to come."

CHEMTREC visited the Prairie View Volunteer Firefighting Association on December 18th. The department was established in 1986 and has 18 volunteer firefighters who serve a population of 18,000 over 39 square miles and handle 350 calls annually. Chief Jackson said, "As recipients of this award, our department will be better prepared with responding and handling hazmat emergencies involving our railroad system, our local commercial/industrial facilities, and Prairie View A&M University. This award will significantly enhance our hazmat capabilities by purchasing new equipment, hazmat suits, and provide training to our members."

Thank you to both departments for welcoming CHEMTREC into your stations. We are grateful for the service you provide your communities and appreciate your dedication to enhancing your response capabilities for potential hazardous material incidents.

CHEMTREC is pleased to announce that we will be continuing the HELP Award in 2020 and will be increasing the award amount to $10,000 for two volunteer or mostly-volunteer fire departments. Be sure to follow CHEMTREC on social media for an announcement regarding the award application period opening in early summer 2020! ■

(Left to Right): Assistant Chief Vedron Bordeaux (Prairie View Fire Department), Chief Executive John Modine (CHEMTREC), Chief Frank Jackson (Prairie View Fire Department), and Assistant Chief Mark Shaffer (Prairie View Fire Department)

2019 CHEMTREC HELP Award Recipients!

Willow Grove Fire Company

Left to Right: Shawn D'Agostino, Firefighter (Norma Alliance Fire Co.); Linda Kurtz, Fire Chief (Norma Alliance Fire Co.); Kristofer Myers, First Assistant Chief (Centerton Fire Co.); Edward Myers, Senior Fire Chief (Centerton Fire Co.); Tim O'Donnell, Fire Chief (Willow Grove Fire Co.); John Modine, Chief Executive (CHEMTREC); Joe Milazzo, Operations Center Director (CHEMTREC); William Rumpp Jr., Deputy Chief (Willow Grove Fire Co.); and Thomas Hayes, Emergency Management Coordinator (Pittsgrove Township Emergency Management)

Prairie View Volunteer Firefighting Association

Members of the Prairie View Volunteer Firefighting Association receive the 2019 CHEMTREC HELP Award

2020 CHEMTREC HELP (Hazmat Emergencies Local Preparedness) AWARD

CHEMTREC, in partnership with the National Volunteer Fire Council (NVFC), will award $10,000 to two fire departments in the U.S. that are all-volunteer or mostly-volunteer and are also members of the NFVC. The awards are intended to help the fire departments enhance their response capabilities and increase local preparedness to respond to and prepare for hazardous materials incidents. Learn more at https://www.chemtrec.com/emergency-responders/help-award

The 2020 application period will be open June 1 – September 1, 2020.

Congratulations to our 2019 HELP Award Recipients!

Willow Grove Fire Company (Willow Grove, NJ)

Prairie View Volunteer Firefighting Association (Prairie View, TX)

CHEMTREC® is the leading source of 24/7 call center support and information during hazardous materials incidents.

We're the single point of contact that connects emergency responders with everyone involved—manufacturers, shippers, consignees, carriers, and government agencies. We're equipped to handle any situation and any class of hazardous material.

Our team of trained, experienced Emergency Service Specialists provide emergency responders with the information they need to safely and effectively manage chemical shipping incidents, including guidebooks, training opportunities and industry resources.

CHEMTREC's service is complimentary for emergency responders and we welcome your call at any time!

CHEMTREC®

For more information visit
chemtrec.com/responders

Meet Our Team

MEET OUR NEW TRANSCAER® DIRECTOR

Erica Bernstein joined CHEMTREC® in February of 2019. She manages CHEMTREC's public and industry service-related initiatives including the TRANSCAER® program. One of Erica's main focuses is establishing and maintaining relationships with key stakeholders including government agencies, emergency responders, trade associations, carriers and other industry partners. She is also responsible for managing the overall TRANSCAER program and works with the National TRANSCAER Task group and Executive Committee to plan and execute TRANSCAER's initiatives, including TRANSCAER's participation in hazmat conferences. She earned a Master of Arts in Homeland Security and Emergency Preparedness from Virginia Commonwealth University and received her Bachelor of Science in Design from Radford University. She has completed the Master Exercise Practitioner Program (MEPP) at the Emergency Management Institute and has six years of experience in all-hazard exercise design and evaluation. Erica previously served as a volunteer firefighter and is an Emergency Medical Technician | EMT-B.

A NOTE FROM OUR NEW DIRECTOR

Thank you for making 2019 a remarkable year for TRANSCAER! Over the course of the last few months since I started as the program's director, I have been inspired by the hard work and dedication of all the volunteers, sponsors, and partners of TRANSCAER.

In 2020, TRANSCAER is well positioned to continue to build upon its great legacy, working alongside our Executive Committee, sponsors, partners, and regional and state coordinators to pursue our mission and achieve our annual goals. TRANSCAER is stronger than ever due to our volunteers and supporters who come together to donate time, resources, and talent in support of our mission.

I look forward with great anticipation to the year ahead, meeting and working with all of you. Together we are helping communities and preparing emergency responders!

Erica Bernstein
TRANSCAER Director

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Missy Ruff
Renewable Fuels Association

VICE CHAIR
Paul Holt
Union Pacific Railroad

ACC MEMBER
Brian Dailey
The Chemours Company

NTTG MEMBER
Robyn Kinsley
The Chlorine Institute

PAST CHAIR
Keith Silverman
Ashland LLC

DIRECTOR
Erica Bernstein
TRANSCAER/CHEMTREC

NTTG Member Highlights

ANDY ELKINS

MANAGER OF HAZMAT COMPLIANCE
Association of American Railroads
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NATIONAL TRANSCAER® TASK GROUP

In my job as manager of hazardous materials compliance with the AAR, and in my previous experience in law enforcement, having served 27 years as a Special Operations Police Officer with the Metro Nashville, Tennessee Police Department, I have seen first-hand how first responders rush toward incidents that most others are running from. I strongly support programs, such as Operation Lifesaver Inc. and TRANSCAER, that provide information that keep these responders, and the communities they serve, safe.

For the Association of American Railroads (AAR), one of the leading railroad policy, research and technology organizations for North America's major freight railroads, safety is a top priority. America's privately-owned freight rail network continues to invest billions annually on capital improvements and maintenance. One priority is the support of first responders that may be called to the scene of a railroad incident.

As the freight rail industry continues its work to make operations safer, it also supports critical initiatives like Operation Lifesaver (OLI), International Level Crossing Awareness Day (ILCAD), TRANSCAER and many others that focus on the rail safety message. I am proud to serve on the Board of Directors for Operation Lifesaver Inc., to be a member of the National TRANSCAER Task Group (NTTG) and to have the opportunity to share part of the technologies and initiatives that are sponsored by the Railroads.

JOHN CHEMELLO

REGIONAL SAFETY MANAGER
Quality Distribution, Inc.
jchemello@qualitydistribution.com

NATIONAL TRANSCAER® TASK GROUP

My introduction to TRANSCAER began in 2014, with a TRANSCAER event hosted at the Joint Emergency Services Training Center (JESTC) located in Zachary, LA. The event and subsequent events are performed in conjunction with the Baton Rouge Area Mutual Aid System (BRAMAS) for first responders, plant first responders and operators, and transportation personnel.

I have been in the transportation industry since 1977, and this was my first exposure to a TRANSCAER event and needless to say I was hooked.

I have been with Quality Distribution, Inc. (QD) a bulk tank truck carrier in North America since 2014. With my functional area for QD in the northeast United States, in 2019 I began serving as the TRANSCAER state coordinator for Vermont and Massachusetts.

I was born and raised in the Allentown, PA area. My wife Jenny and I have lived in the Fort Worth, TX, Cleveland, OH, and now reside in Lawnside, NJ. We have 3 daughters and 2 grandsons, and I am always thankful for the great support that Jenny provides.

I look forward to hosting and attending TRANSCAER events in the coming months to provide educational and hands on training.

SUSAN NAUMAN

EXECUTIVE DIRECTOR
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NATIONAL TRANSCAER® TASK GROUP

Susan Nauman serves as the Executive Director for the Industrial Packaging Alliance of North America (IPANA), the Industrial Steel Drum Institute (ISDI), the Plastic Drum Institute (PDI) and the Rigidi Intermediate Bulk Container Association (RIBCA). Before assuming this position, Susan was the Technical Manager for the Hedwin Corporation, a leading manufacturer of precision performance packaging in the United States. She has over 35 years experience working in the Hazardous Material Packaging arena and is a certified HAZMAT trainer. Hedwin was also a DOT certified 3rd Party Test lab and she managed that program since its inception.

Susan holds an undergraduate degree in Biological Sciences from Bucknell University in Lewisburg, Pa. where she graduated cum laude. She also holds an M.B.A. in Marketing from Loyola University in Baltimore Md. Susan currently resides in Severna Park, MD.

CHRIS LIND

CONSULTANT
Mauser Packaging Solutions (Retired)
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NATIONAL TRANSCAER® TASK GROUP

Chris Lind recently retired from his position as Director of Technology and Regulatory Affairs at Mauser Packaging Solutions after a long and illustrious career specializing in hazardous materials compliance with a special expertise in packaging. His responsibilities included ensuring that all packaging produced by Mauser complied with U.S. Department of Transportation (DOT) and international regulations. In that capacity, he was the Director of their U.S. DOT Approved Third Party Laboratory. Mauser is the only large industrial packaging manufacturer with approval. He also reported to the CEO of Mauser as member of Senior Leadership Team and Global Leadership Team.

Chris enjoys global recognition and participates in several international committees concerning packaging and the transport of hazardous materials. He regularly attends the United Nations meeting in Geneva focused on the Transport of Dangerous Goods. Chris graduated from the University of Rochester in Rochester, NY with B.A. Geological Science and an M.A. Environmental Science.

NATIONAL TRANSCAER® TASK GROUP

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Join the TRANSCAER Team

To learn more about becoming a TRANSCAER® State Coordinator, visit https://www.transcaer.com/coordinators/apply.

TRANSCAER TODAY — *DESIGN*

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CHEMTREC® Welcomes the TRANSCAER® Program!

CHEMTREC® is privileged to have the TRANSCAER Program back within our organization. CHEMTREC has a long standing history of supporting emergency responders and we believe that TRANSCAER is a vital part of achieving our goal of effective outreach to communities and emergency responders.

People are and will always be our greatest asset to the TRANSCAER Program. I would like to thank the sponsors, partners, coordinators, instructors and the emergency responders that make TRANSCAER the incredible program that it is today. Your contributions are a vital ingredient to the program's success and we are proud to have each of you as part of the TRANSCAER Team.

I want to commend the TRANSCAER team for your efforts this past year which led to several major successes for TRANSCAER, including: new operating procedures, a new website (www.transcaer.com) , expanded sponsorship, new Steel Drum and Liquefied Natural Gas *Seconds Count – Are You Prepared?* videos, partnerships between TRANSCAER Sponsors to deliver joint training seminars, and $200,000 in federal grant funding to implement new training initiatives next year.

TRANSCAER is on a great path forward and I hope you have already been able to see CHEMTREC's commitment to the program. If there is ever anything CHEMTREC can do to enhance our support to TRANSCAER in the future, I welcome those suggestions.

I invite each of you to take a moment to reflect upon 2019's accomplishments and take pride in knowing that you have made an impact in communities across North America, and provided training to thousands of emergency responders. I look forward to watching the TRANSCAER program continue to grow in 2020 and beyond.

Thank you again for your continued support.

Sincerely,

John Modine

John Modine
Chief Executive
CHEMTREC®
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"We believe that TRANSCAER is a vital part of achieving our goal of effective outreach to communities and emergency responders."

THE TRANSCAER® MISSION IS TO:

Promote safe transportation and handling of hazardous materials

Aid community emergency response planning

Educate and assist communities regarding hazardous materials

TRANSCAER®

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