

Assisting Communities & Preparing Responders

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Letter from Chair



Paul Holt Manager Hazardous Materials Union Pacific Railroad pholt@up.com

To all of the teams that worked on various projects and continued to build and develop the future of TRANSCAER, I thank you and the Executive Committee thanks you! What a great year 2022 was for TRANSCAER®! We successfully established TRANSCAER Mexico®, developed new training materials, and we are growing with technology to deliver different views of incidents and options for training environments to meet the needs of our audience. To all of the teams that worked on various projects and continued to build and develop the future of TRANSCAER, I thank you and the Executive Committee thanks you!

I am excited to see the development and growth of TRANSCAER in 2023. The talent and dedication of all members, partners, sponsors, and the behindthe-scenes individuals at CHEMTREC[®] are the reason we are constantly improving our performance and reputation. TRANSCAER's goals are clear, our team is dedicated, and our ideas are limitless to build an even stronger organization.

I want to give a special thanks to Robyn Kinsley and Ken Collins for stepping in during my absence in 2022. I made a personal decision to take a personal leave of absence in 2022 unexpectedly and that left the Executive Committee with a gap. Robyn moved into the role of Chair and Ken moved into the role of interim Vice Chair to ensure the Executive Committee continued without issue. Thank you, Robyn and Ken, for volunteering above what you already give.

With the number of trainings, conferences, and seminars increasing, I am certain we will have a tremendous year. We hope to continue to grow the TRANSCAER brand and make it more recognized in the hazmat and emergency response world and we look forward to developing new relationships and opportunities to train, partner, and grow. Our team of representatives and state coordinators are some of the best in the industry.

Thank you again for everyone's participation, input, dedication, and time to make TRANSCAER the success that it is.

Sincerely,

Paul Holt

About the Cover Photo

One of the most requested TRANSCAER[®] trainings is the Ammonia Emergency Response Training & Live-Release Drill. Our program had the opportunity to partner with Tanner Industries, Inc., and the Georgia Public Safety Training Center to host this training last summer from August 30-31, 2022. Read more about the ammonia live-release drills on page 59 in this magazine.

We appreciate the following fire departments for their participation in this training in Forsyth, Georgia:

- Cherokee Fire & Emergency Services
- City of Gray Fire Department
- Clayton County Fire and Emergency Services
- Coffee County Fire Department
- Columbia County Fire Rescue
- Country Oven Bakery/Kroger Bowling Green, KY
- Dekalb County Fire Rescue
- Environmental Protection Agency
- Georgia Emergency Management/Homeland Security Agency
- Hart County Fire Department
- Henry County Fire Rescue
- Houston County Fire Department
- Jacksonville Fire & Rescue Department
- Marietta Fire Department
- Tetra Tech
- Waynesboro Fire Department

"For the things we have to learn before we can do them, we learn by doing them."

- Aristotle



Photo credit: Erica Bernstein, Director of Outreach, CHEMTREC®

DISCLAIMER

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AWARDS



TRAINING RECAP



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TRANSCAER DIRECTORY



2021 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 the time, energy, and effort each of you has shared and thank you for your outstanding commitment to helping communities across the country.

ngratulations

CHAIRMAN'S AWARD

Carlos Juarez, JH Seale & Son Inc. Jared Sharp, Crestwood Midstream Partners West Virginia University Fire Service Extension

NATIONAL ACHIEVEMENT AWARD

BNSF Railway CN Rail Dangerous Goods Team CP Norfolk Southern Railway Renewable Fuels Association Tanner Industries, Inc. Union Pacific Railroad

REGIONAL ACHIEVEMENT AWARD

Kansas City Southern Railway

TRANSCAER Awards were presented throughout last year for efforts in 2021. Stay tuned to learn about our 2022 recipients this year!



CHAIRMAN'S AWARD

Carlos Juarez JH Seale & Son Inc.



Carlos Juarez with his TRANSCAER Chair Award for 2021.

Carlos Juarez with JH Seale & Son is also a TRANSCAER State Coordinator for North Carolina. Carlos was awarded a 2021 TRANSCAER Chairman's Award for his assistance on the Over the Road Transportation of Flammable Liquids video. He coordinated a filming day with his company JH Seale & Son, a driver, and an MC 406. Additionally, he delivered a tank truck presenta-

tion to a local fire department as part of outreach as a

West Virginia University Fire Service Extension



Left to Right: Ralph McNemar (WVU FSE), Matt Reed (WVU FSE), and Tom Miller (West Virginia TRANSCAER Coordinator).

A TRANSCAER Chair Award was given to the West Virginia University Fire Service Extension for being instrumental in filming for the TRANSCAER Over the Road Transportation of Flammable Liquids video. The award was presented at the Ammonia Emergency Response Training and Live Release Drill at the State Fire Academy in Weston, West Virginia on July 30, 2022. Ralph McNemar (WVU FSE), Matt Reed (WVU FSE), and Tom Miller were also recognized with Individual Achievement Awards.

State Coordinator.



CHAIRMAN'S AWARD



Jared Sharp (right) discusses the elements of the Crestwood Training Trailer with an attendee from the Virginia State Police at the TRANSCAER Event in Fairfax, Virginia.

Jared Sharp played a critical role in the filming of the TRANSCAER Over the Road Transportation of Flammable Liquids video. He coordinated the participation of Crestwood Midstream Partners providing multiple trailers, having a driver available onsite to move the cargo trailers, and coordinated with the local fire departments to be a part of the filming. The video would not have been possible without Jared's assistance!



NATIONAL ACHIEVEMNT AWARDS

BNSF Railway



Left to Right: Ken Collins (CN), Robyn Kinsley (The Chlorine Institute), Derek Lampkin (BNSF Railway), and Keith Silverman (Axalta).

Tanner Industries, Inc.



Left to Right: Ken Collins (CN), Robyn Kinsley (The Chlorine Institute), David Binder (Tanner Industries, Inc.), and Keith Silverman (Axalta).



Jim Kozey (CP) accepted the company's TRANSCAER National Achievement Award.

Renewable Fuels Association



Kelly Davis holds The Renewable Fuels Association's 2021 National Achievement Award.

CN Rail Dangerous Goods Team



Left to Right: Robyn Kinsley (The Chlorine Institute), Ken Collins (CN), and Keith Silverman (Axalta).



INDIVIDUAL RECOGNITION AWARDS

30 Individual Recognition Awards were awarded for outstanding efforts in 2021.



Left to Right: Matt Paynter (Nutrien), David Binder (Tanner Industries), Erica Bernstein (TRANSCAER/CHEMTREC), Pete Kirk (Dow), and Keith Silverman (Axalta).

The TRANSCAER Individual Recognition Awards are presented as a challenge coin to recognize the special efforts of any individual, team, company, or other organization in advancing the principles of TRANSCAER.



Several 2021 Individual Recognition Award recipients display their challenge coins.

The TRANSCAER Awards Program is designed to:

- Recognize the achievements of individuals, companies, and organizations that have gone beyond the normal call of duty to advocate, demonstrate, and implement the principles of TRANSCAER;
- Enhance public recognition of TRANSCAER; and
- Increase participation in TRANSCAER initiatives.

To learn more about transcaer awards, visit transcaer.com/awards



TRANSCAER Learning Management System

Article By: Jennifer Membreno-Maltez, TRANSCAER Specialist, CHEMTREC®

The TRANSCAER Learning Management System (LMS) continues to provide a variety of online hazmat training courses for emergency responders and the hazmat community. Online learning has shown significant growth with over 9,900+ registered users on the TRANSCAER LMS site (as of April 2023).

The LMS was designed with the first responder in mind, offering a variety of online hazmat courses for those who cannot always attend classroom events. Currently, there are 16 courses available that can be taken at each user's own pace, and the time and location most convenient to them. TRANSCAER is committed to providing valuable online resources on hazardous materials training to responders across North America by offering online courses in Spanish, as well.

Following the completion of all required course content, users are eligible to receive a certificate of completion for each course. In 2022, over 5,300 LMS certificates were awarded for online course completion, a 22.5% increase from the previous year. Each certificate includes the user's name, course name, course completion date, and the credit hours received for the course.

Full list of courses available:

HAZMAT AND STEEL DRUM TRAINING



Anhydrous Ammonia Safety Training Revised July 2022

The Fertilizer Institute in partnership with TRANSCAER created this course designed for emergency responders in communities where anhydrous ammonia is manufactured, stored, or shipped.

Chlorine Emergencies: An Overview for First Responders

The Chlorine Institute developed this course to help first responders prepare to act in those critical first 15 minutes – what to do when the call comes in, what to expect on-scene, and where to find the resources needed to contain a release. The course includes information on resources for mobile devices, security & antiterrorism considerations, and an explanation of shelter-in-place, and chlorine release footage.

Emergencias de Cloro: Una descripción general para socorristas

• Full Spanish version of the Chlorine Emergencies: An Overview for First Responders course.

Crude Oil by Rail Safety Video

This course provides general guidance on several key topics: moving crude oil by rail, the type of tank cars that carry crude oil, and the characteristics of crude oil. It also covers the Rescue, Exposure, Containment, Extinguish, Overhaul, Salvage (RECEOS) strategies that should be considered if crude oil is present, spill response and firefighting considerations, and the need for structured incident management.

Ethanol Emergency Safety Training

The Renewable Fuels Association (RFA) created the ethanol emergency safety training course. Attendees taking this course will receive in-depth information on proper training techniques that emergency responders and hazmat personnel rely upon to effectively respond to an ethanol-related emergency.

Respuesta a Emergencias de Etanol general para socorristas

Released July 2022

Full Spanish version of the Ethanol Emergency Safety Training Course.

Flammable Liquids Safety

TRANSCAER in partnership with SERTC created the Flammable Liquids Safety course. The course provides an overview of the properties of flammable liquids, storage and transportation of flammable liquids, and emergency response techniques.

Steel Drums 101 for Emergency Responders

The Steel Drums 101 course is designed for emergency responders to better understand the components of steel drums, including the difference between an open-head and a tight head steel drum; and how to interpret the UN markings.

Over the Road Transportation of Flammable Liquids

Released July 2022

This course is designed for emergency responders to better understand the properties and common uses of flammable liquids, be able to identify the presence and type of flammable liquid using placards, understand the risks and potential outcomes associated with a flammable liquid incident, and determine appropriate defensive and offensive actions.

RAILROAD-SPECIFIC TRAINING

TRANSCAER encourages you to take a rail-focused training from the railroad(s) operating in your area.

Norfolk Southern Corporation (4 courses)

- Railroad 101 Rail operations, awareness, and response
- Tank Car Valves and Fittings Overview valves and fittings
- Tank Car Identification Overview of gathering information on tank cars
- Locomotive Fire Overview of response to locomotive fires

CSX Transportation

• Emergency Response to Railroad Incidents

The CSX Hazardous Materials Team presents Emergency Response to Railroad Incidents and discusses safety while operating on or near the railroad, initial response procedures for first responders, hazardous materials transported by rail, introduction to tan k cars, and other equipment found on the railroad (locomotives, freight cars, etc.).

Union Pacific Railroad

• Hazmat Management Railroading 101

The Union Pacific Railroad (UPRR) Hazardous Materials Management Team presents Railroading 101, and provides and overview of the UPRR system, pre-planning, railroad equipment (locomotives, tank cars (pressure and non-pressure), contacting the railroad, discusses safety while operating on or near the railroad, railroad resources, markings, rail shipping papers, the emergency response process, and recovery operations.

Kansas City Southern

• Introduction to Railroad HazMat - Overview of railroad hazmat



Create an LMS Account



Sign-Up Link: pathlms.com/ transcaer/sign_up

An access code is not required to create an account

Visit The TRANSCAER LMS Website



www.hazmatcourses.com



FASTWATER SPILL RESPONSE IN WINTER

Article By: Paul Hester, BNSF Railway and Cody Harris, White Water Rescue Institute

Inland spill response in cold weather is difficult and risky. Responding to oil spills along rivers in winter requires additional risk management and emphasis on standard operating procedures for all responders on site. Obviously, we try to avoid working on ice whenever possible. Several spills have required us to work on ice over bodies of water and even rivers. Moving water under ice is one of the most unforgiving and dangerous environments for responders. The work on river ice is much more dangerous than working on lake ice simply because the water is moving underneath the ice. A responder breaking through the ice on a river with current is immediately in a life-threatening situation. Every precaution must be taken to prevent a breakthrough from happening. Responders must stay off ice until a complete assessment and safety plan have been established and reviewed.

River Ice Initial Size Up

Size up should include:

- 1. Assessment of current river speed
- 2. Assessment of river depth
- 3. Thorough ice assessment/Thickness. Quality. Consistency.
- 4. Calculate Ice Strength

Calculating Ice Strength: One simple formula to estimate ice strength is $P=50 \times T2$ (Or Ice Capacity = 50 multiplied by the thickness squared). For example, 4" of lake ice squared would equal 800 lbs. of load bearing capacity. Compare this to some guidelines for ice clear/lake ice such as:

2 Inches or less: STAY OFF!

- 4 inches: May support an adult, ice fishing, or skating
- 5-6 Inches: May support snowmobile/ATV's
- 7-8 Inches: May support one medium truck

Remember this formula applies to clear lake ice. If working on a river you need to reduce ice strength estimates by at least 15% and up to an additional 50% for snow ice.

Procedure for River Ice Assessmen

You cannot judge the strength of ice just by its appearance, age, thickness, air temperature, or whether the ice is covered with snow. Strength is based on all these factors-plus the depth of water under the ice, size of the water body, water chemistry and currents, the distribution of the load on the ice, and local climatic conditions. Establish an Initial Safety Plan before drilling assessment holes. An ice rescue instructor should supervise the initial approach for drilling assessment slots/holes. Start along shore and drill series of test holes throughout response zone progressively working outward from shore, recording thickness, quality of ice. Responders should be belayed, operate from an airboat, or consider using 4 by 8 sheets of plywood to distribute weight when drilling assessment holes. Consider having an inflatable rescue float positioned nearby for safety along with belayer.

Types of Ice

- Lake: Clear and possibly reflective. Forms after quick drops in temperature. The strongest ice.
- Frazil: Slush, disk shaped thin ice on surface. Early phase of ice.
- Candled: Whitish gray with deterioration. Can be thick but is weak.
- Snow Ice: Opaque or milky. Occurs when snow freezes on a sheet of ice. Very weak.
- Anchor Ice: Forms on submerged objects. In rivers this ice can create ice jams.



Ice slotting and deflection



Cold water rescue training

Ice Color and Characteristics

- Light gray to dark black Melting ice, occurs even if air temperature is below 32°F (0°C). Not safe, its weak density can't hold a load, stay off.
- White to Opaque Water-saturated snow freezes on top of ice forming another thin ice layer. Most times it's weak due to being porous from air pockets.
- Blue to Clear High density, very strong, safest ice to be on if thick enough, stay off if less than 4 inches (10 cm) thick.
- Mottled and slushy or "rotten" ice not so much its color but its texture. This ice is thawing and slushy. It is deceptive it may seem thick at the top, but it is rotting away at the center and base. Not suitable for even a footstep.

River Ice

Rivers have several hazards and conditions that weaken ice that are not common on lakes.

- Stream inlets of all types should be regarded as potential problem areas.
- Bridges over rivers often have thinner ice or open water near them.

- High gradient streams can put deltas into the side of the river that divert flow and are especially likely to create open/thin areas (see below).
- Changing water levels can create a puddle along the edge when the water level rises. When the water level drops, shore ice may be suspended in the air and is likely to be weak without the underlying water.
- Outside bends tend to have more problem areas. In general, the ice over the channel tends to be thinner and to melt first.
- Any area where the elevation gradient picks up is likely to be thinner or open as a result of the faster current.
- Industrial/power plant outflows of warmer water can create open/thin areas.
- Shipping traffic on bigger rivers.
- Reefs, sand bars and deltas are potential areas of thin ice.
- Impounded rivers are, in general, less hazardous than free running rivers.

PPE for River Ice Assessment

Drysuit, helmet, PFD, boots, gloves, appropriate ear, eye and saw protection, ice awls for self-rescue, and ice cleats. Please note that ice rescue suits are not designed for rescuers responding to current. While they provide plenty of floatation and warmth, they are not designed to

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keep water from entering around the neck like a dry suit. Additionally, the built-in floatation makes it more difficult to actively self-rescue in current.

Operations

Once the size up is complete procedures should be set up to minimize first responders on ice. Improve walking access and consider installing anti-slip measures to and from site and on riverbank. Use plywood sheets to help weight distribution when possible. Always belay responders on ice when necessary. Consider cutting downstream rescue slot if there is no open water downstream. Unstable conditions may require rescuers to operate from boat platforms. Consider positioning belayers upstream and using inflatable or boat platforms to position belayers. Once slots or holes are cut in ice, cordon off and/or mark with protective fencing. Use the buddy system so workers always have someone close by for assistance. Responders are going to need extra sets of boots and gloves available in case they get gear wet. Monitor weather forecasts and periodically reevaluate weather and ice for changes in conditions.

Equipment

Dry suits, Rescue PFD's, Augers, Chainsaws, Belay Lines, Rafts/Airboats, Cleats, Awls, Ice Poles, Throwbags, Shovels, and Pry Bars.



Ice trenching for oil collection



FIRST AID / Warming Tent

Set up a warming tent/hut as soon as possible with Hypothermia-Wraps, EMS Kit, AED, O2, Portable Heaters, Cots, Extra PPE, and Warm Clothing.

The Site Safety Plan Should Include

Communications Plan, Ice Assessment and Ops Plan, Assessment of Hazards, EMS, and Evac Plan.

Ice Self-Rescue Technique

What should you do if you fall through the ice? Put your arms out to the side to prevent submersion. First, try not to panic. This may be easier said than done unless you have worked out a survival plan in advance.

- Don't remove your winter clothing. Heavy clothes won't drag you down, but instead can trap air to provide warmth and flotation. This is especially true with a snowmobile suit.
- 2. Turn toward the direction you came. That's probably the strongest ice.
- 3. Place your hands and arms on the unbroken surface. This is where a pair of nails, sharpened screwdrivers, or ice picks come in handy in providing the extra traction you need to pull yourself up onto the ice.
- 4. Kick your feet and dig in your ice picks to work your way back onto the solid ice. If your clothes have trapped a lot of water, you may have to lift yourself partially out of the water on your elbows to let the water drain before starting forward.
- 5. Lie flat on the ice once you are out and roll away from the hole to keep your weight spread out. This may help prevent you from breaking through again.
- 6. Get to a warm, dry, sheltered area and re-warm yourself immediately. In moderate to severe cases of cold-water hypothermia, you must seek medical attention. Cold blood trapped in your extremities can

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come rushing back to your heart after you begin to re-warm. The shock of the chilled blood may cause ventricular fibrillation leading to a heart attack and death!

WIND CHILL

The Wind Chill Temperature Index is a "measure of the combined cooling effect of wind and temperature." How cold it "feels" is not just about the temperature. It's also about wind speed. As the wind speed increases, the body is cooled at a faster rate causing the skin temperature to drop. If you combine freezing temperatures with a frigid wind, the danger of frostbite and hypothermia increases. In northern climates, it's not uncommon to hear wind chill warnings where exposed flesh can freeze in less than a minute.

- Wind chill actually causes your body tissue to freeze! Frostbite is body tissue that has frozen and usually starts with the fingers, toes, tips of the nose, and ear lobes. If you lose feeling in these areas or they are turning pale or white, immediately get inside and seek medical attention.
- Hypothermia happens when your body's temperature drops too low; uncontrollable shivering, disorientation, and incoherence are signs of this issue and medical attention should be found immediately. In both cases, take care to rewarm the body very slowly.

Example: when the temperature is 15°F and the wind speed is 30 miles per hour, the windchill, or how cold it feels, is -5°F.

WINDCHILL SAFETY TIPS: Be Smart About Wind Chill!

- Listen to the weather station. Wind Chill Warnings are issued when wind chill temperatures are life threatening. Wind Chill Advisories are issued when wind chill temperatures are potentially hazardous.
- When there is low wind chill, cover your exposed flesh, especially your face and hands! Consider a balaclava to cover your mouth and protect your lungs. Mittens are better than gloves.
- Wear layers of loose-fitting, warm clothing as the layers will trap air and provide insulation. Your outer shell should be water-repellent and hooded.
- Always wear a hat.

Training and practice are critical to respond safely to a winter oil spill on a river. Most hazards are not obvious, and the consequences of a mistake are profound. Do not go easy onto the ice. Make sure that you have a solid safety plan in place, that you have completed a thorough assessment and reevaluate that assessment regularly, and that you have trained personnel doing the work of response and safety. Remember, there is no amount of oil recovery worth the life of a responder. ■



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FIRST RESPONDERS ARE A CRITICAL RAIL SAFETY PARTNER

Whether Responding to or Preventing Incidents, Keep Yourself Safe Around Tracks and Trains

Article By: Jennifer DeAngelis, Director of Communications and Marketing, Operation Lifesaver, Inc.

Did you know? Every 3 hours in the U.S., a person or vehicle is hit by a train. That's a staggering statistic. First responders like you are critical rail safety partners. Whether you are a firefighter, law enforcement, EMT/EMS, or dispatcher, it's imperative to know how to keep yourself and others safe around railroad tracks and trains.

First responders are not immune to incidents involving trains. Since 1877, more than 200 officers have died as a result of a collision with a train, and since 2012, nine emergency response personnel have been injured in collisions with trains (Sources: Officer Down Memorial Page, Federal Railroad Administration).

Operation Lifesaver, Inc. (OLI) is a mission-driven rail safety education nonprofit whose goal is to end collisions, deaths

and injuries around railroad tracks and trains. We accomplish this goal across the U.S. through education and public awareness efforts while supporting the 3 E's: Education, Engineering, and Enforcement. Operation Lifesaver has programs in 47 states and Washington, D.C.

When Operation Lifesaver first started in 1972, there were 12,000 railroad crossing incidents

each year. Operation Lifesaver and its safety partners, including TRANSCAER sponsors and partners, have helped reduce railroad crossing incidents by 83 percent. But there is more work to be done.

OLI offers a variety of FREE resources educating first responders as well as the general public about rail safety. From in person and virtual trainings to brochures, from Public Service Announcements (PSAs) to online video games and so much more – our goal is to educate the public and empower them to make safe choices around railroad tracks and trains.

Resources for First Responders

Operation Lifesaver has several excellent safety resources specifically for the first responder community.

Free Rail Safety Presentations - Operation Lifesaver's trained volunteers offer free customized in-person and virtual rail safety presentations to any audience including first responders, photographers, professional drivers, school-aged children, school bus drivers, new drivers, and community groups. Sign up at oli.org/request-presentation

Free RISC Training – OLI's Railroad Investigation and Safety Course (RISC) was developed with you in mind, providing critical rail safety incident response information and training for first responders across North America. RISC is offered at Basic (1-hour), Intermediate (2-hour), and Advanced (4-hour)

"FIRST RESPONDERS ARE A CRITICAL RAIL SAFETY PARTNER. WHETHER RESPONDING TO INCIDENTS OR PREVENTING THEM, ALWAYS STAY ALERT WHERE THE ROADWAY CROSSES TRAIN TRACKS." – Jennifer DeAngelis, Operation Lifesaver, Inc.

> levels helping law enforcement and first responders safely and effectively manage rail-related incidents. Since RISC training began in 2020, more than 430 classes have been held, reaching over 7,000 first responders. A RISC Module specifically tailored for firefighters is releasing later in 2023. Find out more and request a course for your agency at www. oli.org/risc.

> Free First Responder Rail Safety Brochure – OLI's first responder brochure (available in English and Spanish) is a great reminder about the basics of responding to incidents near railroad tracks and trains.

More information and resources for first responders are also available on the OLI website at oli.org.

Frequently Asked Questions

What is one important thing to remember when responding to incidents around railroad tracks and trains?

Whether responding to incidents or preventing them, always stay alert around railroad tracks and trains. Always assume railroad tracks are active and always expect a train on any track, at any time, in either direction.

How do you notify trains of an emergency?

Tracks are active until you contact the railroad.

Find the Blue and White sign, which has critical information for you as a first responder. Each public railroad crossing has a Blue and White Emergency Notification System (ENS) sign with a specific 800 number and crossing identification number. Call the phone number on the Blue and White sign and provide the DOT crossing number listed on the sign. This phone number connects you directly with the railroad and is the ONLY WAY to stop rail traffic. NOTE: when multiple tracks are present, signs can be different on different sides of the road.

Why can't a train yield to an emergency vehicle?

Because of their size and weight, trains cannot stop quickly. It takes the average freight train hauling 6,000 tons and traveling at 55 mph a mile or more - the length of 18 football fields - to stop.

Who has the right-of-way at a railroad crossing?

A train always has the right-of-way. Be aware of railroad crossings in your area and plan routes allowing drivers and other crew members clear views down the railroad tracks in both directions.

What's louder: A train horn or an emergency vehicle siren?

Assume railroad engineers cannot hear your siren inside the locomotive cab. Train horns typically range between 110-140 decibels, while emergency vehicle sirens range between 110-120 decibels.



OLI's social media graphics reinforce the rail safety message for first responders.



Ice slotting and deflection first responders attending a RISC.

What should emergency vehicle drivers do when approaching highway-rail intersections?

Remember that all vehicles – including emergency vehicles – must yield to trains at railroad crossings. Turn off sirens, air horns, and other sound-producing devices. Slow down, open the vehicle's window, and look both ways to see if a train is approaching. At crossings with obstructions or severe curves interfering with vision, stop your emergency vehicle and ask a crew member to go out and check on crossing safety.

Why should first responders avoid parking or stopping on tracks?

Trains overhang tracks are quieter than you think and move faster than they appear – by the time an engineer sees something on the tracks, it's too late. Emergency vehicles should always park at least 15 feet from the nearest rail.

What should fire response teams do if fighting long-term brush or structure fires near railroad tracks?

Contact the railroad before placing hoses so they can assist with feeding hoses under tracks. Doing so allows both safe, effective firefighting and train passage.

What is Rail Safety Week and why is it important to first responders?

Rail Safety Week (RSW) is an annual week-long collaborative effort among Operation Lifesaver, Inc., state Operation Lifesaver programs and rail safety partners including first responders, concentrating public attention on the need for safe behavior around railroad tracks and trains. Rail Safety Week is observed across North America, led by Operation Lifesaver, Inc. (OLI), Operation Lifesaver Canada and the Mexican Association of Railroads (AMF). Since 2017, Rail Safety Week has saved lives by educating and empowering the public to make safe decisions around trains and tracks and raising awareness of the need for rail safety education. Each Rail Safety Week has a daily theme. During Operation Clear Track (OCT), held on the Tuesday of Rail Safety Week, hundreds of law enforcement agencies and first responders across the country deliver rail safety messages in person and online. Operation Lifesaver will observe Rail Safety Week again this year from September 18-24, 2023. Learn more about Rail Safety Week at oli.org/rsw and email news@oli.org for more info.

How can I help make my community safer?

Everyone can do something to help #STOPTrackTragedies. Know the railroads that operate in your community. Recognize the railroad signs and signals. And share the rail safety message in your communities.

Sign up for free RISC training, consider becoming an Operation Lifesaver Authorized Volunteer (OLAV) by filling out an application at oli.org/volunteer, sign up to participate in Rail Safety Week at news@oli.org and learn more about Operation Lifesaver at <u>oli.org</u>.

Follow OLI on social media and share our posts with your followers. Help raise awareness about the importance of safety near railroad tracks and trains. Together, we are making communities safer. ■



Connecticut police officers during an Operation Clear Track positive safety enforcement effort during Rail Safety Week 2022.



Tennessee police officers conducting a positive enforcement effort during Rail Safety Week 2022.

Emergency Response Planning Guidelines: AIHAs Contribution to the Chemical Emergency Response Community

Article By: Larry Sloan, FASAE, CAE, AIHA CEO, and Michele Twilley, DrPH, CIH, AIHA CIH

As a longstanding supporter of the emergency response community, the American Industrial Hygiene Association (AIHA) Guideline Foundation (AIHA GF) is proud to be a new TRANSCAER sponsor. AIHA is a 501(c)(6) nonprofit membership organization dedicated to protecting worker and community health from occupational or environmental hazards.

Formed in 2009, the AIHA GF oversees two main program areas: the development of community exposure guidelines for chemical agents, also known as Emergency Response Planning Guidelines (ERPGs) and oversight of AIHA's involvement in consensus-based standards

development. As a 501(c)(3) nonprofit organization, the AIHA GF may also conduct research intended to educate the public.

ERPGs are air concentration guidelines for single exposure to agents and are intended for use in accident prevention and emergency response plans. ERPGs and their associated reference documents are prepared by a team of volunteer health scientists consisting of industrial hygienists, toxicologists, and medical doctors representing companies that manufacture and distribute hazardous chemicals as well as consultants specializing in emergency response.

The ERP Committee was established in 1987 in response to the growing demand for reliable, consistent, and well-documented emergency planning guidelines following the December 2-3, 1984, release of methyl isocyanate (MIC) from the Union Carbide plant in Bhopal, India. At that time, water entered a storage tank containing more than 80,000 pounds of water-reactive MIC. The reaction overheated the tank, resulting in an explosion releasing the toxic gas. One of the worst industrial disasters, the Bhopal plant explosion is estimated to have killed over 3,800 people and injured over 550,000.¹ A similar plant and process as the one operating in Bhopal, was also operating in West Virginia where accidental leaks of MIC had also occurred. Following Bhopal, people across the globe demanded information about chemicals used in industrial processes in their communities. The event triggered the U.S. Federal government to promulgate the Superfund Amendments and Reauthorization Act (SARA) of 1986 which included the Emergency Planning and Community Right-to-Know (EPCRA) legislation. This, along with the Clean Air Act of 1990, mandated communities to develop Emergency Response Plans.ⁱⁱ

In response to the need for plans, ERPGs are highly valued; they are referenced in EPAs Risk Management Plan rule and incorporated into the Computer-Aided Management of Emergency Operations (CAMEO) software suite, which was

"ONE OF THE WORST INDUSTRIAL DISASTERS, THE BHOPAL PLANT EXPLOSION IS ESTIMATED TO HAVE KILLED OVER 3,800 PEOPLE AND INJURED OVER 550,000.ⁱ"

developed jointly by the National Oceanic and Atmospheric Administration Office of Response and Restoration, the EPA Office of Emergency Management and the Department of Energy.ⁱⁱⁱ They are a preferred source of information used in the development of "Initial Isolation and Protective Action Distances" found in the 2020 Emergency Response Guidebook.^{iv} They are also the only source of updated exposure guidelines since the EPA stopped funding the development of Acute Exposure Guideline Levels (AEGLs).

To date, the ERP Committee has published ERPGs and Technical Supporting Documentation for 149 chemicals. The ERPG values are published every other year in the Emergency Response Planning Guidelines[™] handbook. Each chemical has a one-hour threshold concentration designated as ERPG-1, ERPG-2 and ERPG-3. The ERPG levels are defined in the handbook and a brief discussion of each follows:

ERPG-1: The maximum airborne concentration below which nearly all individuals could be exposed for up to one hour without experiencing more than mild, transient adverse health effects or without perceiving a clearly defined objectionable odor.^v

The ERPG-1 level identifies the concentration that does not pose a health risk to the community but may be noticeable due to odor, discomfort, or irritation. For some chemicals, because of their properties, there may not be an ERPG-1 level. These would be for substances that had sensory properties that were above the ERPG-2 level or those that have no valid sensory perception data.^{vi}

ERPG-2: The maximum airborne concentration below which nearly all individuals could be exposed for up to 1 hour without experiencing or developing irreversible or other serious health effects or symptoms that could impair an individual's ability to take protective action.^{vii}

Above ERPG-2 concentrations, some members of the community may experience significant adverse health effects. This level could impair an individual's ability to take protective action. These effects might include dizziness, severe eye or respiratory irritation, central nervous system depression, or muscular weakness. This is the level utilized by emergency planners/responders to model the dispersion of the chemical cloud over a community.^{viii}

ERPG-3: The maximum airborne concentration below which nearly all individuals could be exposed for up to one hour without experiencing or developing life-threatening health effects.^{ix}

ERPG-3 is the worst-case planning level, when there is the possibility that exposure to levels above ERPG-3 will be lethal to some members of the community. This guidance level could be used to determine the maximum releasable quantity of a chemical should an accident occur.[×]

The handbook also provides lower explosive limit (LEL) warnings, where applicable, to alert emergency responders that an explosion hazard may exist in addition to toxicity hazards.

The committee welcomes suggestions of chemicals that may require ERPG values. If you would like to nominate an agent for consideration by the ERP Committee, download this form here: https://aiha.info/3Kwov5N. Please note, the process of producing an ERPG can take a couple of years.

As the only regularly updated guidelines for emergency responders, the ERPGs fulfill a crucial role. Maintaining these essential resources is vitally important to emergency responders and to the communities that could be affected by accidental chemical releases. The all-volunteer committee seeks exposure scientists (e.g., toxicologists and medical doctors) to develop and update ERPG values and appreciates any financial help to defray expenses. To learn more about how you or your company can help, visit the AIHA ERPG landing page. ■

¹ US Chemical Safety and Hazard Investigation Board, On 30th Anniversary of Fatal Chemical Release that Killed Thousands in Bhopal, India, CBS Safety Message Warns it Could Happen Again. Available from URL: On 30th Anniversary of Fatal Chemical Release that Killed Thousands in Bhopal, India, CSB Safety Message Warns it Could Happen Again - General News - News | CSB

^{II} Cavender, Phillips and Holland, Development of Emergency Response Planning Guidelines (ERPGs), Journal of Medical Toxicology, 4 2:127-131 (2008)

^{III} AIHA, Essential Guidelines for Emergency Response. Synergist Blog, August 23, 2022 Available from URL: https://www.aiha.org/ blog/essential-guidelines-for-emergency-response

^{iv} Brown and Freeman, Development of the table of Initial Isolation and Protective Action Distances for the 2020 Emergency Response Guidebook. Argonne National Laboratory. (2022) Available from URL: https://www.phmsa.dot.gov/sites/phmsa.dot.gov/files/2022-04/ERG2020-ANL-report-v2.pdf

^v AIHA Guideline Foundation, Emergency Response Planning Handbook, 2022 Available from URL: www.aiha.org/get-involved/ aiha-guideline-foundation

^{vi} Cavender, Phillips and Holland, Development of Emergency Response Planning Guidelines (ERPGs), Journal of Medical Toxicology, 4 2:127-131 (2008)

^{vii} AIHA Guideline Foundation, Emergency Response Planning Handbook, 2022 Available from URL: www.aiha.org/get-involved/ aiha-guideline-foundation

^{viii} Cavender, Phillips and Holland, Development of Emergency Response Planning Guidelines (ERPGs), Journal of Medical Toxicology, 4 2:127-131 (2008)

^{ix} AIHA Guideline Foundation, Emergency Response Planning Handbook, 2022 Available from URL: www.aiha.org/get-involved/ aiha-guideline-foundation

^x Cavender, Phillips and Holland, Development of Emergency Response Planning Guidelines (ERPGs), Journal of Medical Toxicology, 4 2:127-131 (2008)





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ERPG values are developed for chemicals with a high potential for uncontrolled releases or pose hazards due to their volatility or toxicity. The values assist occupational and environmental health and safety professionals in the development of emergency response strategies for protecting workers and the public and emergency response personnel in planning for catastrophic chemical releases to a community.





ERPG Stakeholders

FAST FACTS

- Community emergency planners
- Emergency responders
- Air dispersion modelers
- Industrial process safety engineers
- Community Action Emergency Response (CAER) participants
- Local Emergency Planning Committees (LEPCs)
- State Emergency Response Commissions (SERCs)
- Toxicologists
- Transportation safety engineers
- Fire protection specialists
- Government agencies
- Risk assessors and risk managers
- Resource Conservation and Recovery Act (RCRA) managers
- Product Stewards
- Industrial hygienists

Fields of Focus

- Toxicology
- Emergency Medicine
- Industrial Hygiene

ERPGs Details

- 10 to 15 updated values annually
- 1 to 3 new values annually
- 150 chemicals with assigned ERPGs
- ERPGs are referenced in 10's of millions of copies of the DOT ERG book

Reasons Companies Use ERPGs

- Process risk or safety management
- Community right-to-know and awareness campaigns



A recent survey of chemical manufacturers who produce products for which ERPG values exist found

- 62% say their company produces at least 1 of the 150 chemicals listed in the Emergency Response **Planning Guide**
- 72% say their company uses ERPGs in emergency response to spills or releases of chemicals the company produces
- 96% say AIHA's ERPGs are valuable to their company
- 100% say it is important to update or increase the development of new ERPGs*
- 59% say AIHA should be leading the efforts to update or increase the development of new ERPGs.

*Findings supported in a DC Policy Influencer survey conducted in December 2021

Did you know...

- No other organization produces these values for community exposure levels...not even the Department of Transportation nor the EPA?
- Industry does not have a platform to establish their own ERPs and that's why they refer to AIHA's?
- First responders refer to AIHA's ERPGs to determine if they should evacuate, shelter in place. etc.?
- Disaster response personnel refer to AIHA's ERPGs to determine standoff distances?









TRANSCAER[®] Canada Expands its Reach with Modernized Learning Tools

Article By: Kristina Adler, Chemistry Industry Association of Canada

Over the past few years, the TRANSCAER Canada team has worked to advance its safety training program by developing innovative ways to engage with communities and first responders. The team has made great progress towards their goal of delivering modern learning tools to share information with first responders about the dangerous goods that are transported through their communities and the measures that are in place to support their safe transportation.

In 2019, the Chemistry Industry Association of Canada (CIAC) began working with Transport Canada under the Rail Safety Improvement Program. The program has provided funding to support the development of modern training tools that will be used to help emergency responders and communities across Canada increase their awareness of rail safety.

CIAC has worked to successfully implement new virtual reality training tools for remote learning. This program includes a web-based virtual tour of the retired CCPX 911 tank car. This virtual program is compatible with any personal device and is accessible on demand through TRANSCAER Canada's website. Additionally, the team launched Virtual Reality (VR) headsets, which the TRANSCAER team will use in communities or at events where a training tank car can not be present.

TRANSCAER's virtual reality tour offers a 360-degree view of the retired CCPX 911 training tank car, allowing first responders to familiarize themselves with railway equipment, gain a better understanding of emergency response and safety procedures, and the transportation of dangerous goods. The bilingual virtual reality tools allow TRANSCAER to engage with more communities and first responders across Canada than ever before.

TRANSCAER Canada was pleased to debut the new VR headsets at conferences and events in 2022 such as: the BC Fire Training Officers Conference and Trade Show in Salmon Arm, B.C.; the Colloque sur la sécurité civile in Quebec City; and at the Prairie Regional TRANSCAER Committee Spring Meeting.

In addition to the work that the team has done to implement virtual learning tools, the Canadian TRANSCAER team has also been working to fit-up a railway tank car to develop a new Safety Train. This will replace the former

The TRANSCAER Canada team is eager to begin construction of the new safety train. The team will fit-up a railway tank car that was donated by GATX, to display commodities that are commonly transported throughout Canada to educate communities for years to come.

Photo courtesy of Randy Mak, Prairie Region TRANSCAER Committee.





Representatives from the British Columbia TRANSCAER Committee demonstrated new VR headsets at the British Colombia Fire Officers Conference and Trade Show.

Photo courtesy of Doug Kittle, Practical Preparedness



The team received positive feedback from stakeholders and participants and will further leverage the new virtual reality tools with local emergency responders and at future events.

Photo courtesy of Doug Kittle, Practical Preparedness

CCPX 911 training tank car, which was retired in 2018 due to an irreparable crack. The team has made great progress over the last few years despite being met with challenges caused by the COVID pandemic. Designs and drawings have been completed and the team has worked with CIAC and TRANSCAER members and partners to secure donated parts and funds.

The new Safety Train will display commonly used valve arrangements to highlight some of the products that are transported throughout Canada. This will provide practical learning experiences to first responders to increase awareness of railway emergency response.

"I am encouraged by the great work that many people are engaged in to bring the Safety Train back to life," said Jeffery Bowes of Shell, and TRANSCAER Canada's National Committee Chair. "I look forward to seeing the new Safety Train at TRANSCAER events across the country."

The team is planning to launch the new Safety Train in 2023. Upon completion, the new training tank car will embark on a cross-country tour, raising awareness about rail safety and emergency response for transportation incidents involving dangerous goods. These modernized tools will provide TRANSCAER with the exciting opportunity to teach first responders, community leaders, Indigenous communities, and industry personnel about rail safety and Responsible Care[®] using modern equipment. ■



Dow's North American Emergency Rapid Response Team

Article By: Peter Kirk, Dow's North American Emergency Response Coordinator

Dow is committed to providing effective and efficient management of emergency incidents to minimize any negative impact on life, property, and/or the environment. This is accomplished by leveraging Dow's internal resources with external emergency response resources as needed to safely mitigate an incident.

Dow's North American Emergency Rapid Response Team is made up of professional emergency responders from the following Dow locations across North America: Canada, Louisiana, Michigan, Texas, Pennsylvania, and West Virginia. The members are trained and certified in multiple disciplines of emergency response which include firefighting, emergency medical response, incident command, rescue, air monitoring, and HAZMAT technician level, to name a few. Alongside these professional responders, the team also includes personnel from Public Affairs, Supply Chain & Logistics, Reactive Chemical Specialists, Business & Operations Support, Human Resources, Occupational Health, and Environmental Health & Safety.

The team of highly trained professionals has the capacity to respond at a moment's notice when a Dow product is

involved in a distribution emergency on rail, road, or water, including inland waterways, air, pipeline, terminals, and warehouses. The team honors all government or regulatory agency requests for assistance and mutual aid requests through established industry agreements or local government requirements.

To accomplish this rapid response, the team has an extensive inventory of HAZMAT Response kits and equipment and access to Dow's corporate aviation to respond to locations quickly if needed. This team has been deployed to transportation incidents and emergencies at Dow locations across the United States and Canada and remains committed to providing effective and efficient management of emergency incidents to minimize any negative impact on life, property, and/or the environment. ■



The 2020 Emergency Response Guidebook (ERG) mobile application, available for Android and iOS devices

The Pipeline and Hazardous Materials Safety Administration (PHMSA) and its partners have published the ERG to provide first responders with a go-to safety resource to help manage hazardous materials transportation accidents during the critical first 30 minutes. The guide offers crucial information to help determine the proper response to an incident, including an indexed list of hazmat and associated ID numbers, general hazards, and recommended safety precautions. To date, more than 16 million print copies have been distributed to the emergency response community in the United States alone.

The ERG mobile application provides emergency responders with fast and easy access to critical information on their mobile device. The app can now be downloaded directly from PHMSA, for free, for both Apple and Android devices—look for "ERG for iOS" in the App Store, or "ERG 2020 for Android" on Google Play!

Already an ERG user for iOS, with a version of the ERG 2020 app released by the National Library of Medicine? Be sure to download the new version under the PHMSA storefront for ongoing support, updates, and bug-fixes.

ERG 2024 is in development PHMSA wants your feedback, to help make the ERG even better! Submit your name, organization, contact information, and comments to <u>ERGComments@dot.gov</u>.



ERG for iOS (Pipeline and Hazardous Materials Safety Administration)



ERG 2020 for Android (PHMSA)

Electronic files (including the ERG App) cannot be substituted for hard copy documents to comply with the Emergency Response Information requirements of 49 CFR Part 172, Subpart G. A person interested in displaying emergency response information in an alternate manner may request a special permit from the Associate Administrator for Hazardous Materials Safety (see 49 CFR 107, Subpart B).

TRANSCAER to

What Should Facilities and Transporters Do to Prevent and Minimize Ethanol Releases?

Article By: The Renewable Fuels Association

Federal regulations that apply to most ethanol facilities require the preparation of several plans designed to create awareness, prevent releases, and minimize the impact of releases.

- 1. Facility Response Plan (FRP)
- 2. Spill Prevention, Control and Countermeasures Plan (SPCC)
- 3. Risk Management Program (RMP)
- 4. Process Safety Management (PSM)
- 5. Emergency Action Plan (EAP)
- 6. Storm Water Pollution Prevention Plan (SWPPP)
- 7. Oil Spill Prevention and Response Plans (SRP)

Each of these plans provides a means whereby releases can be prevented and appropriately managed should they occur. Ethanol facilities are responsible for determining which plans are applicable and properly implementing all aspects of the required plan(s), which in turn will serve as a great asset and resource in the event a release incident should occur.

Federal regulations that apply to transporters, primarily railroads, are largely regulated by the Department of Transportation (DOT) and the Federal Railroad Administration, as well as satellite departments such as The Pipeline and Hazardous Materials Safety Administration. This particular group of regulatory authorities has recently released an enhanced rail tank car standard for the transportation of ethanol and crude oil.

Railroads have strict internal training programs and rules which make the handling and transport of ethanol as safe as possible. Contractors assisting emergency response efforts must comply with railroad safety and procedural policies, but awareness and risk management skills encouraged by



ethanol facility personnel in this section wholly apply to all railroad personnel and contractors.

Many state regulations mirror the requirements established by the federal regulations, however, many states and some local governments have also implemented additional requirements regarding release prevention and response. Some general rules of thumb with regards to state and local requirements include the following:

- State-specific regulations are typically more stringent than federal regulations including having more stringent reporting thresholds.
- Some state and local agencies ask that copies of the aforementioned plans are provided to local responders in the case of an emergency.
- In some instances, states have primary enforcement responsibility (primacy) over EPA for implementing regulations. One such instance includes the National Pollutant Discharge Elimination System (NPDES), which encompasses SWPPPs. Facilities requiring SWPPPs must be aware of state permitted SWPPP requirements for release prevention when developing those plans.

While it is preferred to prevent all releases from occurring, unforeseen circumstances necessitate responding to a release. State release reporting requirements vary widely and facilities must be familiar with and prepare for these well in advance of an incident. Both federal and state requirements should be accurately addressed in any required release prevention plans. In an emergency, these plans become a great asset and resource to facilitate compliance with all applicable federal and state regulations. In a review of release reporting, the categories that tend to vary the most from state to state include the following:

- The amount of a material constituting a reportable release
- The amount of time before a facility must contact state and/or local agency for a reportable release
- Special requirements associated with the media to which the release occurred
- Whether or not an onsite release to an impermeable surface (i.e. within secondary containment) is considered reportable
- Which agencies must be notified for different kinds of releases

Despite these variations in reporting, each state generally has an environmental emergency response hotline available 24-hour hours per day, 365 days per year, used for reporting releases immediately. When reporting to one of these hotlines, states often require information to be provided to their dispatchers including the following:

- Responsible party
- Material name or identity of substance involved in release and whether or not it is hazardous
- Quantity of substance released
- Date, time, and duration of release
- Location of release
- Medium into which the release occurred (i.e. land, water, air)
- Risks to community (i.e. health risks requiring medical attention)
- Actions/Notifications/Precautions needed (i.e. evacuation)
- Name and phone number of facility contact person

The information contained here is by no means comprehensive and, to maintain compliance, individual facilities should check with their regulatory agencies to verify the applicability of state release prevention and response regulations. Response plans are effective only if they are well understood by employees, implemented during regular operations, and educated reactions are taken in the event of an actual release. Quick actions taken by facility personnel to contain a release can be extremely effective at mitigating the environmental impact and financial cost of the release. Contingency planning is important, but additional steps should be taken to make plans more effective:

AWARENESS

- Employees should be trained and made aware of the importance of their actions. Especially in the first hour after a release, quick action can contain the spill, which allows for faster cleanup and reduces the environmental impact.
- What type of heavy equipment is available at, or nearby, the facility? A front-end loaded used at the facility can be used to create dikes and berms for emergency containment.
- What kinds of spill control products are available on site? A well-stocked spill kit can mean the difference in an incident contained onsite to one that is released offsite.
- Who are the local authorities and how will they respond? In the event of a spill, notifications in accordance with state and federal law must be made. Facilities should establish relationships with the local responders so that the local responders are familiar with the facility and the risks. In the midst of an emergency is not the best time to first establish a relationship with local responders.
- Are there appropriate contractors lined up to respond? Contractors can provide additional manpower and key equipment used to quickly recover lost product reducing the risk of environmental impact. Facilities should establish working relationships with available contractors.

SITE SPECIFICS

- The specific geology of the site will affect how a release impacts the environment.
- Nearby surface waters and the pathways to those waters should be understood and mapped in advance.
- Soil type and distance to groundwater should be understood in advance.
- What are my state's cleanup standards for ethanol released into the environment? These standards will dictate the remediation strategy and methods.

PREVENTION

- Many spills are preventable or can be contained with improved systems and facilities.
- Engineering controls and improvements can go beyond the regulations and focus on the process itself. An engineering control quickly pays for itself if it prevents a costly release.
- Transfer and containment systems should be reviewed. In some cases, rail transfer secondary containment is sufficient to hold the required amount of ethanol, but in a larger release the secondary containment conveyance piping might not be properly sized to completely convey the release to containment.
- Process Safety Management is an important component of release prevention. Are the process, storage, and piping systems properly inspected and maintained for the hazards involved?
- Drills and training exercises are mandatory under some regulatory programs and are generally a best operating practice for the industry. Consider inviting your local responders (fire department, police, etc.) to participate in your drills and training exercises. Debriefs following these exercises often lead to improved prevention by identifying gaps that can be addressed moving forward.

Beyond knowing what facilities and transporters should do to prevent and minimize ethanol releases, it is important to understand what happens to ethanol released into the environment, the physical properties of ethanol, and how these properties affect environmental media such as air, soil, surface water, and groundwater. Knowing what to do if a release should occur from the available resources in the response area, to knowing what to do in the first 24 hours, first week, after the emergency response, and the remediation for the various media is a vital skill. The Renewable Fuels Association has developed a Denatured fuel Ethanol: Guideline for Release Prevention & Impact Mitigation document that covers these topics. ■



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SERTC enhances its first-rate experience this year with new curriculum, scenarios, and props

Article By: Forrest Wieder, SERTC Executive Director

The Security and Emergency Response Training Center (SERTC) at MxV Rail has returned to in-person residential and remote training. This was welcome news to emergency responders and public officials nationwide, after a pause while SERTC moved to its new location.

SERTC's hands-on, realistic training in hazardous materials response to surface transportation incidents, is unlike any other, and the new location, facilities and curriculum only add value to the student experience.

The SERTC team, headquartered in Pueblo, CO, was counting down the days in preparation to reopen in-person training. Updates to course design and levels of student engagement are sure to challenge both new and returning trainee students. SERTC staff and instructors proved their expertise and commitment to the program by expediting the move in less than six months. As an affiliate of MxV Rail and the Association of American Railroads (AAR), SERTC was able to collaborate with leading engineers and the Class I railroads as it planned for the future.

The project was dubbed "SERTC Reimagined." Between the last class at the old facility on July 1 and opening the doors for students at the new training site on November 28, 2022, a new and rigorous training experience came to life.

Ninety-five students were the first to test the new features and 2023 classes started in January on schedule



with a strong demand. We are all proud of the SERTC staff and instructors, the updates we've been able to make to scenarios, and the feedback we're hearing from students. There's no stopping us now!

In addition to new features on the 100-acre hands-on training grounds, improved technology in classrooms, and a new 45,000 square foot Operations and Training Center (OTC), SERTC has recruited more diversity and added new experience to the staff.

Early reviews suggest that SERTC is living up to its reputation for world-class training from an exceptional instructional team.

"The experienced background of the teachers allowed them to share their vast knowledge and real-world experience to answer questions. Having a mixed class of industrial firemen, municipal firemen, and hazmat contractors contributed to great questions and discussions," commented one trainee.

"The hands-on and personal experience of instructors integrates all the information we're taught," wrote another.

Department of Homeland Security (DHS) / Federal Emergency Management (FEMA) / National Preparedness Directorate

If TRANSCAER[®] today readers are ready to enroll at this point, there is another advantage of SERTC training to consider for yourself and your local response team.

SERTC offers training at no cost to our nation's first responders through a cooperative agreement within the FEMA National Training and Education Division (NTED), as a member of the National Domestic Preparedness Consortium (NDPC). This cooperative agreement fully funds local, state, tribal, and territorial first responders to attend any of SERTC's DHS/FEMA certified courses.

To date, SERTC has sponsored over 10,400 of our nation's first responders through this cooperative agreement. No eligible student or sponsoring agency is responsible for out-of-pocket expenses. Travel, lodging, meals, and tuition are covered through this cooperative agreement.

Whether being fully emersed in training in-person or starting training through web-based courses, DHS/FEMA support through the NDPC means that communities of all sizes, even in the most remote locations, have access to SERTC training and skill-building.

Residential On-Site Learning – DHS/FEMA Funded with approved application:

- FEMA PER 290 Tank Car Specialist (TCS)
- FEMA PER 291 Highway Emergency Response Specialist (HERS)
- FEMA PER 292 Leadership and Management of Surface Transportation Incidents (LMSTI)
- FEMA PER 293 HazMat/WMD Technician for Surface Transportation (HWMDTST)

Remote Delivery Courses – DHS/FEMA Funded delivered in your area:

- FEMA PER 326 Surface Transportation Emergency Preparedness and Security – Freight (STEPS-FR)
- FEMA PER 330 Surface Transportation Emergency Preparedness and Security – Mass Transit & Passenger Rail (STEPS-PT)
- FEMA PER 331 Surface Transportation Emergency Preparedness and Security – Senior Officials (STEPS-SR)

Web-based & Hands-on Residential Hybrid Courses - DHS/FEMA Funded with approved application:

- FEMA PER 291 Highway Emergency Response Specialist (HERS)
- FEMA PER 290 Tank Car Specialist (TCS)

Trainees attending in-person courses will experience more than 85 different rail, highway, and intermodal transportation vessels. SERTC's reimagined immersive scenarios feature exactly what responders can expect to see in the field with current revenue and industry standard cars and tankers.

Back by popular demand, SERTC is returning Crude Oil/ Class 3 Flammable Liquids, Transportation Container Loading & Unloading, Tactical HazMat Operations and updated Intermodal Specialist programs. SERTC will continue expanding its reach to first responders with new remote delivery programs delivered in your community, at your facility pending FEMA NTED approval. Check SERTC.org throughout the year for updates on these programs. "As an instructor, I am excited about the new heights we are reaching in 2023," said Jason Biggerstaff, Senior Instructor II with SERTC and MxV Rail. "We are the SERTC that the industry and our students love but shined up and polished with even more support for first responders and team leaders. It's world-class training and an experience that you won't forget."

According to SERTC instructors, this is only the beginning of the future. ■




Stay connected to SERTC via social media on LinkedIn and Facebook @TeamSERTC and @WeAreMxVRail. For additional information and student registration, visit www.SERTC.org or call SERTC direct at 719-584-0584.





About SERTC: The Security and Emergency Response Training Center (SERTC) at MxV Rail is a globally recognized program that brings transportation experts and first responders together in a one-of-a-kind fully immersive training experience. In its first 35 years, SERTC trained more than 75,000 professionals worldwide in safety protocols and rapid response for a variety of scenarios. SERTC is a member of the National Domestic Preparedness Consortium (NDPC). As a world leader in Hazardous Materials Response to all forms of surface transportation incidents, SERTC courses offer hands-on learning in a real-world environment. **About MxV Rail:** MxV Rail (formerly TTCI) is a subsidiary of the Association of American Railroads established to provide vital support to the nation's rail industry as its most trusted research and engineering partner. Through focused funding and strategic planning, MxV Rail is making key investments in its people and facilities to undertake new technological challenges in the rail industry and beyond. Building on its legacy of excellence, the team offers a full suite of advisory and research services including consulting, testing, research, maintaining standards and training. Learn more at www.mxvrail.com.



SEGURIDAD, PRIORIDAD Y ESTRATEGIA DE GRUPO MÉXICO TRANSPORTES

A lo largo de las últimas dos décadas Grupo México Transportes (GMXT) ha hecho de **la seguridad un pilar de su actuar y un objetivo estratégico de todas las áreas de la compañía.** Con más de 10 mil empleados y un área responsable del seguimiento y mejores prácticas en materia de Seguridad Operativa y Sustentabilidad, se ha realizado un amplio trabajo de diagnóstico y acciones de mejoras e implementación de mejores prácticas en materia de seguridad.

En este sentido, GMXT fue sede de la primera reunión del capítulo TRANSCAER México con el Seminario de Respuesta a Emergencias realizado en Veracruz, México. En este evento se capacitó a más de 200 participantes de diversas corporaciones de rescate, así como miembros de la industria de todo México en temas de seguridad y atención a emergencias con líquidos inflamables.

Load Securement of Steel Drums: What First Responders Should Know

Article By: Chris Lind, Technical Advisor, Industrial Steel Drum Institute

An often-overlooked regulatory requirement when transporting hazardous materials (hazmat) or dangerous goods is their proper securement. The United Nations Model Regulations on the Transport of Dangerous Goods, local and regional regulations, and modal regulations of transportation by highway, water, rails, and air require securement of hazmat packagings from movement in all directions. These regulations also prohibit hazmat packagings from having additional freight placed on top of them.

These requirements may seem simple but are very often overlooked. The U.S. Department of Transportation (USDOT) requires notification and reporting of incidents of hazmat accidents and spills (49 CFR 171.15 and 171.16). However, the USDOT's Pipeline and Hazardous Materials Safety Administration has acknowledged that many such incidents are not reported, and of those that are, many are incompletely reported. Incompleteness notwithstanding, in 2021 there were 6768 incidents involving non-bulk packaging, including drums, boxes, and jerrycans. To segment these incidents 312 involved steel drums; 217 involved steel jerrycans; and 6239 involved other types of packaging.

Shipments of New Empty Steel Drums

The first type of cargo we will discuss is the shipment of new steel drums. The average 55-gallon steel drum can weigh as much as 36 pounds for a robust 1.2 mm thickness drum. Thicker drums like this are popular because of their thicker steel construction. Drums of this type are much less likely to dent than a 1.0 mm steel drum (roughly the same thickness as an automobile fender). It is also important for first responders to note that steel drum producers may secure a load of new empty drums by a cross of poly or hemp twine.

In the event of an incident, this twine could break or drums could fall through the simple cross pattern upon opening a trailer's doors. A truckload shipment of steel drums can range from 308 to 330 drums. At a weight of 36 pounds each, a full truckload shipment could weigh between 11,088 to 18,300 pounds. Normal gravitational force equivalents, more commonly known as G-forces, during highway transport have been documented up to 25Gs, which is a significant amount of force to contain.

First responders should be extremely cautious when responding to an incident involving the highway transportation of new steel drums, as the drums likely will



Shock tests of tomato drums



Steel drum damage of tomato drums

have become unsecured and will fall out quickly once the trailer doors are opened. A single empty drum that falls from the top of a stack will impart 1400 pounds of force onto the first responder opening the door, likely causing an injury. If that same steel drum was filled to its maximum allowable net mass of 880 pounds, the impact force would exponentially increase to 35,250 pounds of force. This statistic will serve as a segue to a discussion on responding to shipments of filled steel drums.

Shipments of Filled Steel Drums

Industrial packaging of all types can take a beating during transport – but it doesn't have to if proper load securement techniques and products are utilized by shippers. A recent study conducted by a California grower that ships tomato products cross-country to the east coast helps to illustrate this issue. Triaxial shock monitors were placed in a shipment of tomato products in 55-gallon steel drums. The study results recorded that the shipment received at least 20 significant "humps" at speeds of at least 23 miles-per-hour while being transported cross-country. This helps explain why the shipper of tomato products experienced so many damaged shipments. The study also helped develop a simple, yet effective, solution to minimize these damaged shipments. The Association of American Railroads (AAR) partnered with a manufacturer of load securement strapping to develop and test various loading patterns, strapping patterns, load securement equipment, and the use of bulkheads to minimize damage to future shipments. Utilizing the newly developed strapping schemes, another cross-country shipment test was conducted, and the filled drums were received in perfect condition.

Types of Load Securement Devices

Strapping: It is important for first responders charged with securing loads of filled steel drums involved in an incident to recognize there are two hazards to manage: a chemical hazard and a hazard because of the weight of the freight. This realization is critical to determine how strong a load securement must be to prevent the remainder of a trailer's cargo from shifting. There are several manufacturers of high-strength strapping materials specifically designed for securing loads of hazmat or dangerous goods, and some offer online tutorials or will assist in providing demonstrations if requested. It is very important to make sure the straps are wide enough, so they do not crimp-down the top of a drum or cause a point load. A point load is caused when the top drums are off-center or not fully supported by the lower drums multiplying the net force on the bottom. A pallet of four drums can be especially susceptible to damage when personnel tighten the strapping around the drums too much and bend the drum's top ring or chime, which increases the likelihood of drum failure. A first responder may pull over a motor carrier for a routine traffic stop and be faced with an unanticipated hazmat situation due to such a failure.

Anti-Skid Mats: Anti-skid mats, also known as friction mats and transport mats, help prevent wooden pallets that contain freight like steel drums from sliding around the inside of a trailer or dry van when being transported. These mats provide a frictive surface that slows the sliding of the pallets and in some cases stop it entirely. There are online videos showing how these mats work compared to non-anti-skid. Along with anti-skid mats there are gripper feet that can be pounded onto the bottom of the pallet so it will grab onto the wooden floor of the trailer. These do work; however, one must be aware they are there and avoid grabbing one of these pallets with bare hands. Also, the trailer truck company may not appreciate the floor getting scratched.

<u>Plastic PTFE Sheeting</u>: Similar to Tyvek wraps put on houses for insulation, these sheets have adhesive that attaches to the trailer or CTU wall and wraps the drums.

Another adhesive wrap is then affixed to these sheets, so the drums do not move. They work very well in securing drums and can be used to prevent bouncing as well. The removal of the sheeting is quick and easy.

There are online videos as well as tutorials on the website to assist in application. It is easy if the proper tools are used (supplied by vendor) to snug the wraps and attach the final securement.

Blocking and Bracing: Last, but not least, is the old reliable wooden blocking and bracing, basically framing in the load with lumber and using blocks attached to the floor to prevent movement. If proper dunnage is used to prevent side-to-side movement and bouncing, this method does allow for customization for odder shaped loads.

Dunnage: Securing the load nose to tail controls only one third of the forces present. Dunnage consists of strong corrugated materials, wood, foam, inflatable pillows, and composite materials. The function is to prevent the side to side and up and down movement of the freight.

The Bottom-Line for First Responders

- 1. Never assume the load inside is secure. Do not casually open the doors as you may be crushed by falling freight.
- 2. Never assume the hazardous material is contained within the package. Steel drums authorized for hazardous materials are tested by being dropped from a height of 6 feet to 9 feet, a force of up to 26,000 pounds. But given the forces in an incident they may fail.
- 3. Be prepared for a chemical leak even under routine circumstances if the load was not secured or the drums were damaged or not closed properly. Also, the packaging itself may be adding fuel in a fire.
- 4. Take advantage of online tutorials for the various load securement vendors. Some produced in Germany show side by side loads with and without proper strapping or anti-skid mats in simulated emergency stops.
- When fire officials do routine visits to shippers of hazardous materials or even new packaging facilities, it may be worthwhile to see a loading operation or two so they can assess the effectiveness of the load security. ■



Pipeline Incidents

Is your fire department prepared?

Millions of miles of pipelines stretch across the U.S., transporting hazardous materials through thousands of communities. Make sure your department is ready to safely and effectively respond should a pipeline incident occur. Access the FREE Fire Department Pipeline Response, Emergency Planning, and Preparedness (FD PREPP) online training and toolkit to help your department conduct pre-incident planning, increase preparedness, and improve response.

Access the FD PREPP Resources: www.nvfc.org/pipelines



Brought to you by the National Volunteer Fire Council and the Pipeline & Hazardous Materials Safety Administration



U.S. Department of Transportation

Pipeline and Hazardous Materials Safety Administration

Benner's Behavior Model in the Modern Era: Part 2

Article By: Jon Simpson, Manager Hazardous Materials, Norfolk Southern

"Nothing in life is to be feared. It is only to be understood." - Marie Curie

Everyone loves a good sequel or at least that's what I have been told; Police Academy 5: Assignment in Miami Beach notwithstanding. In my previous TRANSCAER blog we discussed a wide lens view of Mr. Ludwig Benner's D.E.C.I.D.E. decision making tool for emergency response and the general behavior model (GEBMO) as a prediction pathway for failure of hazardous materials containers. In his model, the final three events that occur which were discussed in the last article are, engulfment, impingement, and harm. It is these three that will be examined a bit further as it relates to expectations and realities during a rail incident where hazardous material(s) have left their container. As we know, once we have determined release of hazardous materials, there must be a decision where to pull away the "domino" to prevent a cascading chain of events leading to harm to a population and to the environment. Choosing that response objective, whether it be defensive, offensive, or a combination, then swiftly implementing the plan as it relates to ultimate **harm** avoidance is critical.



Mr. Ludwig Benner's D.E.C.I.D.E. decision making model

The release has occurred. As we know, mechanical and chemical energies involved may initiate another element to our already complex incident, fire. At the heart of the conversation involving **engulfment** and the ensuing elements of Benner's model, we have to be adept at two things: knowing our response territory and understanding chemical and physical properties, i.e., how will this tiger behave once it has left the cage, burning or not. The good news is that preplanning all critical infrastructure, topography, water supplies, access routes and threatened populations is ongoing. Second, with the availability of AskRail and the multitude of apps and other e-format, identifying the hazardous loads in question, reviewing the isolation zone map embedded and understanding those chemical properties, **impingement** contact time and potential harm can quickly be estimated and factor into the C-choose the best option of DECIDE.

This brings us to a key point in any hazmat release in a populated area, evacuation vs. shelter in place. It is an important fact to mention that the railroad will not make that decision, as that is the decision of the AHJ (authority having jurisdiction). What is also important is that



MARPLOT® (Mapping Application for Response, Planning, and Local Operational Tasks) is the mapping program for the CAMEO® (Computer-Aided Management of Emergency Operations) software suite, which is used widely to plan for and respond to chemical emergencies.



AskRail® app, launched in 2014, is a collaborative effort among the emergency response community and all North American Class I railroads. The app provides more than 35,000 first responders — from all 50 states and eight Canadian provinces — with immediate access to accurate, timely data about what type of hazardous materials a railcar is carrying so they can make an informed decision about how to respond to a rail emergency.

we will work to arm the AHJ with the most comprehensive data possible via plume modeling, air monitoring, volume, rate of release etc. The last two are important because in looking at these two decisions impingement thresholds are listed in three different values: Acute Exposure Guidelines (AEGL's), Emergency Response Planning Guidelines (ERPG's), and Temporary Exposure Limits (TEEL's). Broadly speaking, when looking at each tiered dataset, AEGL's are the preferred value on which to base decisions as they are carefully reviewed and broadly based for sensitive individuals including the young. Contrast that with ERPG's which do not include a data set for sensitive individuals and are only determined for a 60 min exposure. AEGL's look at 10, 30, 60-minute exposures as well as 4 and 8 hrs. Finally, as in the case of ALOHA software, when there are no AEGL's or ERPG's to consider, levels of concern are essentially manipulated using current data and a TEEL is created, obviously being born of a less intense process.

This hierarchy of **impingement** values offers a quantitative way to come up with a risk assessment for a community. It would be impossible to discuss evacuation vs. shelter in place in the space given, but given this macro view, there are two resources that draw heavily from empirical data parsed over a long period of time that can provide tremendous guidance to those pre planning a large release of a non-burning hazardous material. First, *Planning Considerations: Evacuation and Shelterin-Place Guidance for State, Local, Tribal, and Territorial Partner* and second, Shelter in Place Protective Action Guidebook. This is an older document based on release from the Chemical Stockpile Emergency Preparedness Program for nerve agent munitions that were stored domestically before their destruction. Tremendous information on the science behind how and for how long we shelter our threatened populations are contained within both pieces of literature. While no one article can capture the multitude of variables seen during a hazmat release at a rail incident, relying on an industry pioneer's proven methodology to give us a template for how we can anticipate a scene to play out or containers to behave may provide just the time we need to engage in the proper response objective resulting in the most desired of all outcomes, safety for civilians and responders alike. ■



Planning Considerations: Evacuation and Shelter-In-Place



CHEMTREC HELP Award

Our Mission to Support Volunteer Fire Departments Across the United States

Article By: Erica Bernstein, Director of Outreach, CHEMTREC

In its fourth consecutive year the CHEMTREC HELP Award funding assisted three volunteer departments with purchasing equipment and attending future training to increase their response capabilities and enhance local preparedness to respond to hazmat incidents.

The volunteer fire service serves a critical role to hazmat incidents and our mission through the HELP Award program is to provide additional resources to departments to make them and their community safer during a hazmat response. CHEMTREC provides these \$10,000 awards in partnership each year with the National Volunteer Fire Council (NVFC).

The 2022 recipients that each received \$10,000 were:

Genoa Volunteer Fire Department (Texarkana, AR)

Gilt Edge Volunteer Fire Department (Gilt Edge, TN)

> West Hancock Fire Rescue (Pearlington, MS)

Genoa Volunteer Fire Department

The Genoa Volunteer Fire Department, located in Texarkana, Arkansas, was established in 1974 and is in an expanding rural community that has hazardous materials passing through their district daily. The department plans to utilize their HELP Award to provide training at both the Operations and Technician level to members of their department and neighboring fire companies. The HELP Award will also assist the department with purchasing necessary Personal Protective Equipment (PPE), spill kits, and a decontamination station.

Chief Michael Godfrey said "Receiving this award of \$10,000 will enable the Genoa Volunteer Fire Department to get the training and gear needed to safely mitigate any hazardous incident, man-made or natural, within the scope of the training that we will be receiving. With two interstates, a railroad, and a major state highway coming through our fire district, this has been a concern for our department for many years. We have not had the funding in the past, but thanks to CHEMTREC and with the help of the National Volunteer Fire Council, this has now become something that our department can achieve. This will enable us to better protect our community and serve our district giving them the peace of mind that we will respond with their safety and protection as a priority with Genoa VFD. Thank you, CHEMTREC for allowing us to be better tomorrow than we are today with this award."



Left: Rob Ingram (NVFC State Director) and Erica Bernstein (CHEMTREC) present Chief Michael Godfrey (Genoa Volunteer Fire Department) with a commemorative plaque for their department being a HELP Award recipient.



Members of the Gilt Edge Fire Department with Chief Melvin Martin (NVFC, far left) and Joe Milazzo (CHEMTREC, second from left).



Members of the Genoa Volunteer Fire Department are the first to receive the new HELP Award t-shirts provided by CHEMTREC.

Gilt Edge Volunteer Fire Department

In their application, the company wrote: "Our department's biggest limitation to our hazmat response capability is not our training but our ability to transport necessary tools and equipment to the scene." This will soon be resolved, as the Gilt Edge Volunteer Fire Department purchased a truck that they are currently retrofitting into a new rescue/hazmat response apparatus for their department that will help their community and be a mutual aid asset to assist other departments through the HELP Award.

Chief Brandon Fletcher said, "This grant is an absolute game changer for our rural community and fire department! We cannot thank CHEMTREC and the National Volunteer Fire Council enough for this award, and we hope this program continues to help volunteer fire departments like ours across the nation!"



Chief Melvin Martin (NVFC, left) and Joe Milazzo (CHEMTREC, right) present Chief Fletcher (center) with a plaque to commemorate their HELP Award.



Deputy Chief Hursh (left) and Fire Chief Fletcher (right) with the department's new truck that will become their rescue and hazmat vehicle.

West Hancock Fire Rescue

West Hancock Fire Rescue, located in Pearlington, Mississippi, was established in 1999. The volunteer department is actively recruiting new members and has embarked on an aggressive training program for both new and existing members. The department is expanding to meet its goal of providing on-site coverage for Port Bienville Industrial Park.

The CHEMTREC HELP award will allow the department to further the training initiatives and procure up-to-date hazmat gear and supplies to keep their company and community safe. The department plans to back our existing and new members in completing their annual hazmat training. West Hancock Fire Rescue will also be able to outfit their trucks with proper hazmat response gear for all members, as well as the consumables needed to respond to hazmat incidents.



Members of the West Hancock Fire Rescue Department with Joe Milazzo, CHEMTREC (Far Left), George Stevens NVFC State Director – MS (Third from Left – Back Row), and Erica Bernstein, CHEMTREC (Far Right).



George Stevens NVFC State Director – MS (left) and Erica Bernstein, CHEMTREC right), present Chief Deedra Burton with their plaque honoring them as a 2022 HELP Award Recipient.

It continues to amaze the CHEMTREC team how far each of these volunteer departments have stretched their HELP Award funding to best meet the needs of their department and their community. From our many award trips to visit the departments, we see firsthand the amount time and energy volunteer firefighters give to support the needs of their department and their community. The HELP Award is a way for CHEMTREC to say thank you for your service, sacrifices, and your dedication to protecting your community.

IN THE YEAR AHEAD

CHEMTREC is pleased to announce that we will be continuing the HELP Award in partnership with the National Volunteer Fire Council for the fifth consecutive year. This year, we will be providing \$10,000 each to three volunteer fire departments that are members of the NVFC. The 2023 application period will be open from June 1 to September 1.

Be sure to review all criteria before applying, but a few key items to note that are sometimes overlooked by applicants:

- 1. Check to be sure that either the Chief or individual applying on behalf of the department is a member of the NVFC.
- 2. Funding for your department must not exceed \$250,000 annually. The funding requirement includes all funding the volunteer fire department received, whether it was from the city/county/ town budget/tax funding, fundraising, community donations, subscriptions, EMS service/revenue recovery, or other sources.
- 3. The narrative questions are key! Remember, the award period is open until September 1, which leaves plenty of time to write a detailed narrative (1000 words or less). Take this opportunity to describe the specific equipment or training that your department needs. What are the estimated costs? Has there been a past incident that demonstrated a gap in training or equipment for your department? Paint a picture of your community, your department, and highlight how these awards could fill a gap.

If you have questions regarding the CHEMTREC HELP Award please contact Erica Bernstein, Director of Outreach, CHEMTREC at ebernstein@ chemtrec.com.

TRANSCAER México[®] 2022 Event Highlight: Emergency Response Seminar on Flammable Liquids

Article By: Jennifer Membreno-Maltez, TRANSCAER® Specialist, CHEMTREC®

On October 5-6, 2022, TRANSCAER México hosted its first in-person training event in Veracruz, Mexico. This event was a collaboration with Ferromex - Grupo México Transportes and Kansas City Southern de México; two of the three Class I railroads in Mexico.

Over the course of the two days, nearly 200 first responders and industry personnel learned about the nature and behavior of flammable liquids, as well as handling a potential emergency during transportation.

Guest speakers were invited to present on topics related to the central theme of flammable liquids. Presentations included:

• General Overview of the Transport of Hazardous Materials in Mexico via Rail Presented by: Francisco Merchant, Kansas City Southern de México, and Luis Castillo, Ferromex

- An Overview on Flammable and Combustible Liquids Presented by: Mario Alberto Dominquez, National Firefighters Board of México
- Emergency Response Preparation with Flammable Liquids Presented by: Ruben Munoz Garcia, ECBE
- Mechanical Structure of Tank Cars Presented by: Antonio Solis Valtierra, Ferromex
- Qualification of Barrel and Service Equipment in General Purpose Tank Cars Presented by: Jose Luis Lee Zavala, TERBSA



Pictured Left to Right: Aaron Bello Gonzalez (Ferromex), Mario Dominguez (National Firefighters Board of Mexico), and Erica Bernstein (CHEMTREC).



Participants shown simple ways to mitigate leaks of chlorine and other hazardous materials from railcars, as well familiarizing themselves with spill capping kits.



The TRANSCAER México event, Seminario de Respuesta a Emergencias con Líquidos Inflamables (Emergency Response Seminar on Flammable Liquids) also gave participants the hands-on opportunity to learn about the handling and safety of self-contained breathing apparatuses, knowledge about firefighting foams involving petroleum products, bioremediation of water and soil contaminated with hydrocarbons, and familiarization with spill capping kits. This was possible thanks to the various vendors who volunteered their time to lead the field exercises on these topics. Vendors who participated at the Veracruz event include:

- HESCA Environmental & Industrial Services
- Enforcer Fire Service Pulse México
- Lubricantes Juguer S.A de C.V.
- SEIF y Respuestas a Emergencias S.A. de C.V.
- MERGOB Emergency Response

A special thanks to the partners that coordinated the first in-person training event for TRANSCAER México, and for their continued support of training and outreach initiatives in Mexico. We also appreciate the key role that each speaker and vendor played in the success of the training.

TRANSCAER's mission continues to transcend borders by providing awareness of the safe transportation and handling of hazardous materials through more in-person trainings in Mexico to come. ■

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The TRANSCAER México 2022 Event Staff pictured between the KCSM and Ferromex Training Tank Cars.

Ammonia Safety Training and Live-Release Drills

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

TRANSCAER's most frequently requested training is the Ammonia Emergency Response Training and Live-Release Drill.

The training is presented by David Binder, Tanner Industries, Inc and Bob Kelly (Philadelphia Fire Department). The training covers an overview of anhydrous ammonia, including its chemical and physical properties, placards, labels, containers, tank construction, and the hazards and potential outcomes associated with an anhydrous ammonia incident.

A live release ammonia drill is held for the responders to practice and perform basic control and confinement operations, including tarp and cover. Decontamination and air monitoring are also incorporated in the drill.

Cheyenne, Wyoming

The Cheyenne Fire & Rescue Training Facility hosted TRANSCAER on May 19, 2022. The training included 38 attendees from the following organizations: the 84th Civil Support Team, Arvada Fire Protection District, Cheyenne Fire & Rescue, City of Fort Collins, Dyno Nobel, Inc., El Paso County Hazmat Team, Laramie County Fire District #1, Wyoming Air National Guard Fire, and Wyoming Regional Emergency Response Team 7.



A mix of Colorado and Wyoming first responders at the Ammonia Live-Release Drill in Cheyenne.

Weston, West Virginia

The West Virginia University Fire Service Extension – State Fire Training Academy hosted TRANSCAER on Saturday, July 30, 2022. The training was held on a Saturday to allow volunteer firefighters to participate in the training and drill. In total there were 42 attendees who participated in the training.



Decon was set up at the ammonia live release drill.



Attendees from three states (West Virginia, Virginia, and Pennsylvania) attend the live-release ammonia drill in Weston, West Virginia on Saturday, July 30, 2022.

Forsyth, Georgia

On August 30-31, 2022 the TRANSCAER Ammonia Emergency Response Training & Live-Release Drill was held at the Georgia Public Safety Training Center. Over the course of two-days 92 attendees particpated in the training.



David Binder (Tanner Industries, Inc.) presents on anhydrous ammonia prior the live-release drill.



The drill allows for multiple rotations for teams to practice the tarp and cover method.



Attendees from agencies in Georgia and Florida attended the TRANSCAER Ammonia Training and Live-Release Drill in Forsyth, Georgia.

These drills utilize anhydrous ammonia and are conducted in a controlled environment and within regulatory guidelines.

Special thank you to the Cheyenne Fire and Rescue Training Facility, West Virginia University Fire Service Extension, the Georgia Public Safety Training Center, and Tanner Industries, Inc. for your tremendous support during these training events.



Ammonia Safety Training (Online)

If you haven't been able to attend a live ammonia session, we encourage you to take the online training course that was just updated July 2022.

Thank you to the following TRANSCAER State Coordinators for their assistance in the planning and logistics for this training events:

Wyoming - Brent Osborne (Cheyenne Fire and Rescue), Dillon Conner (Wyoming Regional Emergency Response Team 7), Chris Graves, Laramie County Fire Authority

West Virginia - Tom Miller (WVU Fire Service Extension) Georgia - David Bullard (HEPACO)

52 TRANSCAER today 2022-2023

TRANSCAER Liquefied Natural Gas Emergency Response Training

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

TRANSCAER[®] and the Center for Liquefied Natural Gas coordinated a three-day LNG training for 107 emergency responders at the Fire Academy of the South in Jacksonville, Florida on September 20-22, 2022.

Since 2021, TRANSCAER has been offering classroom-based training on LNG. The training is supported by federal grant funding from the Pipeline and Hazardous Material Safety Administration and the Federal Railroad Administration.

The course provides an overview of LNG, including the history, properties, and current uses. The training also provides information on the basic safety considerations concerning LNG containers and its various applications and discussed the modes of LNG transportation and the use of LNG as a fuel. The final module is Managing LNG Incidents for Emergency Responders and includes lessons learned from LNG incidents, identifies important pre-incident planning considerations, and walks through several scenarios to identify appropriate defensive and offensive action options.

At the session in Jacksonville, the facilities at the Fire Academy of the South allowed for a live demonstration with LNG. The LNG was provided by Eagle LNG. Members of the Jacksonville Fire Department were able to practice extinguishing an LNG fire.

Special thanks to Chief Squires (Jacksonville Fire Department) for his support in planning the event

and Jason Carpenter (Fire Academy of the South) and Eagle LNG for their support during the training event.

To date, The Center for Liquefied Natural Gas and TRANSCAER has trained over 630 attendees through webinars, training events, and seminars at national and state-level hazmat conferences on LNG.



Controlled LNG fire at the Fire Academy of the South.



Instructor Scott Walden in Jacksonville, Florida.

Upcoming Sessions:

TRANSCAER is still putting together our 2023 training locations for LNG. Visit our website www.transcaer.com to find out if this training will be headed to a city near you!

Additional LNG Resources:

TRANSCAER has developed several *Seconds Count* videos for first responders on LNG.



National TRANSCAER Events

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

TRANSCAER[®] (which stands for Transportation Community Awareness Emergency Response) hosts numerous training events in coordination with our industry sponsors.

At each national-level TRANSCAER event at least one mode of transportation and one hazmat commodity is covered during the training day.

Fairfax, Virginia

TRANSCAER held a Highway & Hazmat Training from April 11-13, 2022, at Fairfax Center - Fire Station 40. Over the course of three days, there were 177 attendees from seven different agencies. Our partners on this event included Crestwood Transportation, Kenan Advantage, and The Renewable Fuels Association.

The training focused on ethanol emergency response, emergency response to LPG incidents, and familiarization with the valves, fittings, and leak points of an MC 331, DOT 406, and MC 338 cargo trailers.



Kenan Advantage had an MC 338 onsite.



RFA Instructor, Joel Hendelman starts the training with Ethanol Emergency Response.



Kenan Advantage provided a DOT 406 trailer.

Oklahoma City, Oklahoma

TRANSCAER's hazmat and transportation training events continued April 19-21, 2022, in Oklahoma City, Oklahoma. TRANSCAER hosted 92 attendees from nine different agencies. The training covered ethanol emergency response, rail transportation and understanding tank cars, and familiarization with the leak points and safety features of an MC 331 and DOT 406 cargo trailers.



BNSF Railway provided an overview of tank cars, including valves and fittings.



Responders climb on top of the Groendyke Transport DOT 407 cargo trailer in Oklahoma City.



Brian Weber, Farmer's Oil Company, shows responders the features of the MC-331 Training Cargo Trailer.

Carnegie, Pennsylvania

TRANSCAER held a national training event that focused on hazmat and transportation topics in Carnegie, Pennsylvania on June 17-18, 2022. In total there were 98 attendees from 26 different agencies. The event included three railroads: CSX Transportation, Norfolk Southern, and Wheeling and Lake Erie. Nutrien presented on ammonia emergency response. Westlake Chemical, a member of The Chlorine Institute, presented on chlorine emergency response. Emergency response to LPG, ethanol, and flammable incidents was presented by TRANSCAER Corporate Member, Specialized Professional Services, Inc. A total of four cargo trailers were onsite in partnership with Messer Gases for Life, Sunoco LP, and Ferrell Gas.



Scott Gould, Norfolk Southern provides an overview of tank cars.



Instructors who supported the training event in Carnegie, Pennsylvania.



Sunoco LP brought a DOT 406 trailer onsite.



Messer Gases for Life was onsite with an MC 338.



Ferrellgas provided support and equipment by bringing two trailers to the training event.

Special thank you to our training partners this year for supporting these TRANSCAER training events.

- BNSF Railway
- Crestwood Midstream Partners
- CSX Transportation
- Kenan Advantage
- Farmer's Oil, Inc.
- Ferrellgas
- Groendyke Transport
- Messer Gases for Life
- Norfolk Southern
- Nutrien
- Wheeling and Lake Ernie Railway
- Specialized Professional Services, Inc. (SPSI)
- Sunoco
- The Renewable Fuels Association
- Westlake Chemicals



View the current TRANSCAER Training Event Schedule



reaching



Jennifer Membreno-Maltez (TRANSCAER Specialist) and Michael White (Indiana State Coordinator) were onsite during the 2022 FDIC International Conference held at Indianapolis Convention Center in Indianapolis, Indiana.



Duane Carpenter (Westlake Chemical) presenting a Chlorine C-Kit to participants at our Carnegie, Pennsylvania Hazmat and Transportation Training in June 2022.



Mike Stephenson (New Jersey State Coordinator) staffing the TRANSCAER Booth at the New Jersey Emergency Preparedness Conference in April 2022. This was TRANSCAER's first time exhibiting at this conference, and we hope to be back again in 2023!



Joe Taylor, Senior Manager of Hazardous Materials at CSX Transportation, presenting at the PHSMA Hazardous Materials Emergency Preparedness (HMEP) Workshop in August 2022. His presentation focused on Styrene Monomer Tank Car Stabilization.



Mike Murphy (Messer Gases for Life) educating emergency responders to familiarize themselves with various valves and fittings on an MC 338 cargo trailer, as well as potential leak points at our Carnegie, Pennsylvania Hazmat and Transportation Training in June 2022.



Tom Miller (WVU Fire Service Extension Team and West Virginia State Coordinator) presented at our Regional Hazmat & Transportation Training in St. Albans, West Virginia in September 2022.



Shell held a workshop for first responders in Houston, TX where attendees were led through a field exercise related to emergency response and situational awareness. Participants from the Houston City Fire Hazmat Team and the Houston Police Department learned about extinguisher types and uses, level 1 inspections, & spill response in April 2022.



CSX Transportation and Norfolk Southern Railway held a joint safety training event in Bristow, Virginia. CSX and NS hazardous materials experts leading local first responders in through hands-on exercises for responding to rail-related emergencies back in June 2022.





Left to Right: KC Childress (Kenan Advantage Group), Mark Follet (Kenan Advantage Group), Jared Sharp (Crestwood Transportation), Bret Barnett (Kenan Advantage Group), Joel Hendelman (RFA Ethanol Instructor) were the instructors leading the 2022 VA Highway & Hazmat Training Event in Fairfax, Virginia.

Jennifer Membreno-Maltez (TRANSCAER Specialist) onsite during the IAFC Conference in Baltimore, Maryland in June 2022. We can't wait to be back in 2023!



JH Seale & Son Inc. Instructors with the Charlotte Fire Department at a training held at the Charlotte Fire Department Training Academy in Charlotte, North Carolina in March 2022.



Our Instructors from the Oklahoma City Hazmat & Transportation Training in April 2022 posing for a picture.

Left to Right: Clint Greenwood (OK State Coordinator), Clay Reid (BNSF Railway), Brian Weber (Farmer's Oil), Derek Lampkin (BNSF Railway), Joel Hendelman (RFA Ethanol Instructor), Nick Highfill (Groendyke Transport), Chris Pape (Groendyke Transport), Erica Bernstein (CHEMTREC).

TRANSCAERVHazmat Team Response Fund

Article by: Erica Bernstein, Director of Outreach, CHEMTREC

The TRANSCAER® Hazmat Team Response Fund was established to assist hazmat responders in acquiring hazmat response equipment and advanced training to protect themselves and their community when responding to hazardous materials transportation incidents.

The TRANSCAER Hazmat Team Response Fund provides annual awards between \$500-\$2,500 (based on individual needs) to hazmat teams across the United States who are seeking to purchase specific hazmat equipment or attend advanced training.

Funding for the TRANSCAER Hazmat Team Response Fund is supported through our Corporate Membership Program. From each corporate membership fee, \$500-\$3,000 is directed to the Hazmat Team Response Fund.

The following departments received funding through the 2022 TRANSCAER Hazmat Team Response Fund:

City of Marion

City of Marion Hazmat team is located in Marion, South Carolina, a small city and one of only two paid fire departments in the county. During the daytime, the department is often called to assist the volunteer departments throughout the county. The City of Marion Fire Department serves as the primary option for hazmat in the area. The funding they received will purchase five 4 gas meters. This will replace the units the department has been using for well over ten years, which are old and are no longer serviceable.

City of Elgin

IRE DEPT

The Elgin Fire Department is located in Elgin, Illinois. The Elgin Fire Department Hazardous Materials Team and members also work in partnership and coordination with MABAS Division 2's Hazardous Materials Team. In 2021, the Elgin Fire Department responded to 360 National Fire Incident Reporting System (NFIRS) Series 400 Hazardous Condition calls.

TRANSCAER[®]

The fire department will utilize the \$2,500 Hazmat Team Response Fund to help cover the cost of purchasing two DuraChem 500 NFPA 1994 Class 1 & 2, HAZMAT/CBRN ensemble suits. Obtaining these suits will improve their team's ability to respond to hazmat incidents within the City of Elgin, as well as to mutual aid calls.

PAST RECIPIENTS

- Champaign Fire Department (Champaign, IL)
- Hawkins County Emergency Response Team (Rogersville, TN)
- Laredo Metro Fire Department (Laredo, TX)
- Devine Volunteer Fire & Rescue Department (Devine, TX)

TRANSCAER HAZMAT TEAM RESPONSE FUND APPLICATION PERIOD

The application period is open from April 1, 2023 to June 1, 2023.

CRITERIA

To be eligible to apply for funding through the TRANSCAER Hazmat Team Response Fund, hazmat teams must meet the following criteria:



- The Hazmat Team within a local or state fire department must be located in the United States and be legally organized under state law.
- The Hazmat Team must demonstrate their need to receive funding, and, in the application essay their department must describe the specific hazmat equipment that would be purchased and/or specific advanced training the hazmat team would attend to increase their response capabilities to hazardous material transportation incidents.
- Only one application will be accepted per Hazmat Team/ Department. Any subsequent applications received from the Hazmat Team/Department during the application period will be disqualified.
- Past recipients of funding through the TRANSCAER Hazmat Team Response Fund must wait five years before reapplying for additional funding.
- The Hazmat Teams that receive funding must use the money to increase their hazmat response capabilities and not for any other purpose. The funding cannot be redistributed.
- The Hazmat Teams that receive funding agree that their department/hazmat team name, details from their application essay, and all photos taken during the award presentation may be used in media by CHEMTREC, TRANSCAER, and the American Chemistry Council for the purposes of promoting the TRANSCAER Hazmat Team Response Fund program.
- The Hazmat Teams who receive funding also agree to a department visit by a TRANSCAER representative for an award presentation within 60 days of notification of being selected as a recipient.

AskRail[®] is a safety tool for first responders.

✓ Fast ✓ Accurate ✓ Simple

Plan informed responses to rail emergencies involving hazardous materials with an easy-to-use mobile interface.



The app includes railroad emergency contacts and Emergency Response Guidebook information.



AskRail grants realtime access to data about the contents of specific railcars through the app's simple railcar ID

Learn more at www.AskRail.us





TRANSCAER® State Coordinator Program

Article By: Jennifer Membreno-Maltez, TRANSCAER Specialist, CHEMTREC®

The TRANSCAER State Coordinator Program is a dedicated group of volunteers from across the United States and Mexico who implement TRANSCAER initiatives at the state level. Coordinators work with the local community and emergency responders to help provide awareness of the safe transportation and handling of hazardous materials. Some of the State Coordinator's primary responsibilities include promoting TRANSCAER training and events within their state/region, engaging with local emergency planning committees, and identifying state TRANSCAER needs and opportunities.

If you share TRANSCAER's Mission to help communities and emergency responders prepare for and respond to hazmat transportation incidents, consider applying to be a coordinator today!

STATE COORDINATOR OPEN POSITIONS:

• Connecticut

• Hawaii

- District of Columbia
- MassachusettsSouth Dakota

• Vermont



Apply at: www.transcaer.com/coordinators/apply

• Utah

"Being a State TRANSCAER Coordinator, I am able to help field questions and fulfill requests for hazmat training we can offer in partnership with our three local railroads (CSX, NJ, and Conrail) and our partners within the chemical and transportation industries that has proven very successful over the last 12+ years. As a team, we engage local and regional law enforcement, governmental agencies, fire, EMS, and hazmat responders to support their preparedness for any type of transportation incident that may occur within their response jurisdiction. Become part of an awesome team of partners and sponsors who share the same goal - to enhance emergency preparedness and response throughout your state, regional, and local response organizations. You will not believe the contacts and resources available and how willing they all are to help drive the TRANSCAER initiatives-you certainly will not have to do it by yourself. And if you have any questions, please give me a shout!!"

> Mike Stephenson, New Jersey State Coordinator



"I enjoy being part of a group dedicated to sharing hazmat safety culture, experiences, and training with different emergency responders' organizations, companies, and individuals in the hazmat industry. We get to know lots of folks in the hazmat industry, lots of friends, and we support each other along the way. It is an opportunity to bring knowledge and experience from our different industries and help others, especially our emergency responders. Also, there is a lot to learn from the materials and training as well."



"I enjoy being a state coordinator for a few reasons. One, it enables me to meet folks who in one way or another can be of assistance to me when my own emergency occurs. When you surround yourself with knowledgeable people, you sleep better at night knowing that those who you've formed relationships with are just a phone call away, should you need advice or help. Secondly, I have received feedback from responders who have attended trainings that I helped coordinate, and they have said how much they appreciated the training since they were able to use it in an actual emergency. Knowing that I have helped keep people safe in an emergency response incident is extremely gratifying. Lastly, having helped train countless responders over the years, it makes me happy to know that I have helped keep the community safe. All it takes is one person to make a difference. To quote Dr. Seuss, "To the world you may be one person; but to one person you may be the world." You never know whose life you are going to touch in a positive way or possibly save."







RESPONDER TRAINING WITH PROPANE INDUSTRY

The IAFC and Propane Education Research Council (PERC) has developed Part II for the new propane education program. We wanted to take a moment to share the training access for this great training opportunity. The Propane Training for Specialist Employees B Operations online course provides specific knowledge about handling propane and propane-related emergencies for hazardous materials technicians who respond to releases or potential releases of hazardous substances as part of the initial response to the site to protect nearby persons, property, and the environment from the effects of the release.

IAFC has also created a new USING DETECTION METERS: and a PROPANE TRUCK OVERVIEW.

These videos were produced through our partnership and provides the basic principles of air monitoring that all members of the fire service and propane industry can utilize.

Instructor-led training Pilot programs will be held this spring with the final opportunity being held for review and feedback at the International Hazardous Materials Response Teams (Hazmat) Conference in Baltimore. Please take advantage of this terrific opportunity scheduled for Thursday, June 8, 2023, 8 AM - 5 PM ET.

IAFC Hazardous Materials (Hazmat) Committee

International Association of Fire Chiefs 8251 Greensboro Drive, Suite 650, McLean, VA 22102 I 703-273-0911



Schedule a Drill

Quite often, the first time a responder interacts with CHEMTREC is during an actual emergency. So to help emergency responders, CHEMTREC offers a comprehensive drill program.

CHEMTREC's drill program familiarizes your team with our process by walking them through a mock emergency situation. The drill program is comprehensive, with exercises that simulate exactly how CHEMTREC's Emergency Service Specialists respond to actual emergency calls.

Emergency responders benefit from the drill experience. By walking through the motions of an actual chemical emergency call with CHEMTREC, they will have a better understanding of how CHEMTREC assists in these situations, as well as what resources and services we offer.

Schedule a drill today: www.chemtrec.com/training-drills/schedule-drill



U.S. Department of Transportation Federal Motor Carrier Safety Administration

Most cargo tank rollovers are preventable.





Preventing rollovers starts with you.

Scan here to watch a training video! Or visit www.fmcsa.dot.gov/rolloverprevention



CLEARINGHOUSE

Stand Against Impaired Driving

Employers of CDL and CLP holders covered by FMCSA's Drug and Alcohol Testing Program must use FMCSA's Drug and Alcohol Clearinghouse to ensure their drivers are not prohibited from operating a CMV.

Learn more and register at: https://clearinghouse.fmcsa.dot.gov/learn







FMCSA Training Provider Registry

CDL applicants subject to Entry-Level Driver Training regulations are now required to use the Training Provider Registry to find registered training providers.

Learn about how to meet the new Federal requirements: https://tpr.fmcsa.dot.gov



Assisting Communities & Preparing Responders



Check Out Our FREE ONLINE HAZMAT COURSES

www.hazmatcourses.com



Each free course includes timed video modules, a post-course knowledge assessment, and a course survey. Participants are eligible to receive a certificate of completion after finishing all required course content.

FEDERAL RAILROAD ADMINISTRATION PROVIDES GRANT FUNDING SINCE 2010

TRANSCAER receives grant funding for Transportation Emergency Response Training through the U.S. Department of Transportation's Federal Railroad Administration.





PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION PROVIDES GRANT FUNDING SINCE 2019

TRANSCAER receives grant funding through the U.S. Department of Transportation's Pipeline and Hazardous Materials Safety Administration Assistance for Local Emergency Response Training (ALERT) Grant and the Community Safety Grant.

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



TRANSCAER SECONDS COUNT – ARE YOU PREPARED? VIDEO SERIES

This video series is designed with the notion that in an emergency, responders may have only seconds to react safely. These fast-paced videos introduce a hazmat, emergency response, or transportationrelated topic to the viewer.

Training videos located at transcaer.com/seconds-count



2022–2023 Executive Committee



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DIRECTOR Erica Bernstein TRANSCAER/CHEMTREC

Team Member Highlights



JENNIFER MEMBRENO-MALTEZ TRANSCAER Specialist & Executive Assistant, CHEMTREC[®] TRANSCAER Mexico Regional Coordinator

Jennifer Membreno-Maltez serves as the TRANSCAER® Specialist at CHEMTREC, a service of the American Chemistry Council. Linked to the largest network of chemical and hazardous material specialists in the world, CHEMTREC offers a world-class emergency response information service helping shippers of hazardous materials comply with regulatory requirements and accepts all first responder calls as a public service to the communities they serve.

Jennifer began her career at CHEMTREC in October 2017 as a Customer Care Representative, directly working with some of the biggest chemical manufacturers and shippers globally. She then continued as a TRANSCAER Specialist in June 2021 and quickly became an integral part of the TRANSCAER team. Jennifer's current responsibilities include leading the TRANSCAER State Coordinator program, managing the TRANSCAER Corporate Membership program, and handling administrative duties for TRANSCAER and CHEMTREC Outreach. Thanks to her fluency in Spanish and her ability to lead a Mexico National Task Group comprised of volunteer representatives from the chemical industry, industry associations, emergency response, transportation, and distribution, Jennifer was a driving force in the launch of the TRANSCAER Mexico program in 2021. She currently serves as a TRANSCAER Mexico Regional Coordinator and the liaison for the Mexico region of the TRANS-CAER Program.

Jennifer holds a double major B.A degree in Homeland Security & Emergency Preparedness and Political Science with a concentration in International Relations from VCU in Richmond, Virginia. She is passionate about assisting first responders and loves what she does because she sees firsthand the impact the TRANSCAER program has on communities all over the United States, Canada, and Mexico.

Jennifer's favorite hobby is dancing. On the weekends, she works with children 12-16 years of age and teaches them dance choreography to a variety of musical genres. On her days off, Jennifer enjoys spending time with her husband, three children, and two dogs Toby and Appa.



SCOTT DEUTSCH Northern Regional Manager Hazardous Materials NORFOLK SOUTHERN TRANSCAER Representative

As Norfolk Southern's Northern Regional manager of hazardous materials, Scott Deutsch is responsible for all aspects of hazardous materials compliance, emergency responder training, emergency preparedness and response, and environmental cleanup and remediation activities across Norfolk Southern's Northern Region.

Scott joined NS from Allegheny County Emergency Service, where he served as assistant chief operations and training. While there, he managed the emergency response program, Fire Training Academy staff and facilities, and hazmat drill coordination.

Scott worked in the chemical industry for 22 years, holding various positions in management and environmental health, safety, and security. He has 40 years of experience in the public safety field responding to fire, rescue, hazardous material, and industrial fires.



"Teamwork is the ability to work together toward a common vision. The ability to direct individual accomplishments toward organizational objectives. It is the fuel that allows common people to attain uncommon results." – Andrew Carnegie



TOM MILLER TRANSCAER State Coordinator - West Virginia

Tom Miller is a 38-year veteran of the West Virginia fire service. He is a Pro-Board-Certified Firefighter II, Fire Instructor III, and a Hazardous Materials Technician & Incident Commander. Tom is State Certified as a Fire Officer II and to the Technician Level in various aspects of Technical Rescue including Vehicle/Machinery, Rope, Swift Water, and Confined Space. He is a Life Member of the West Virginia State Firemen's Association. Tom has been an Adjunct Instructor with West Virginia University Fire Service Extension since 1990 and has written numerous courses on specialized topics in emergency response and delivered them across the country. He has been published in Firehouse and Fire Engineering magazines and has served as a Curriculum Reviewer for IFSTA and Jones & Bartlett textbooks. He is the West Virginia Director to the NVFC and serves as the Chair of its Hazardous Materials Response Committee and its Pandemic Response Task Group, as well as serving as an SME on the various Technical Committees. Tom also serves on the Homeland Security; Standards & Codes; and Health, Safety & Training committees of the NVFC. He is a Principal on the NFPA 470 (formerly 472/473/475/1072) Technical Committee for Hazardous Materials and WMD. Tom has a Bachelor of Science degree from West Virginia State University and a Master of Arts degree from the School of Education and Professional Studies at Marshall University.

How I Got Interested in TRANSCAER:

Over my career I had attended several TRANSCAER training events and had found the sessions very informative and highly applicable to my work in emergency response. When I saw the opportunity to become a Coordinator for West Virginia, I jumped at it. TRANSCAER has been a strong partner with the NVFC to help build the resiliency and hazmat training opportunities for the nation's volunteer fire service. The ability to network and share information with some of the best in the business is another benefit of being a part of the TRANSCAER network. The training resources are free and produced and vetted in such a manner as to allow responders at all levels to derive benefit. Being a part of TRANSCAER has been one of the most rewarding parts of my 38-year career.



RUBYDAWN MANNING TRANSCAER State Coordinator - Idaho and Nevada

TRANSCAER State Coordinator, RubyDawn's experience consists of Emergency Management, Fire Service, and independent contract instruction, and consulting. She has been in the fire service since 2002. During her career she has worked throughout the United States as an instructor as well as first responder. She is a member of multiple organizations specializing in national preparedness.

Ms. Manning has written, updated, and consulted on emergency operations plans, all-hazard mitigation plans, handbooks, ordinances, and policies and procedures.

She is currently a full-time COBRA hazmat instructor at the Center for Domestic Preparedness, a part time instructor for the Alabama Fire College, and a board member for the National Association of SARA Title III Program Officials.

She received the CDP Instructor of the quarter for the second quarter of 2022, only the second female instructor to do so.

Ruby Dawn has proudly served as a TRANSCAER State coordinator for Idaho and Nevada since 2019 and promotes TRANSCAER to every class and agency she has worked with.

Philosophy of Training Emergency Responders:

"I believe that training emergency responders is one of the most important aspects in emergency management/ planning. Preparing our first responders and receivers provides a service that cannot be overstated in importance. It resonates in each community through the careers we have the honor to influence. Mitigating the negative impact on communities and Tribal Nations is very important, which I know from personal experience, having worked in the middle of multiple incidents involving emergency declarations. I am very proud to be able to serve in this capacity."

NATIONAL TRANSCAER® TASK GROUP

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If you are looking for training or additional resources, please contact your State Coordinator.



Scan QR Code to Find Your Local Coordinator

TRANSCAER today magazine design created by:

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Letter from the TRANSCAER Director



Erica Bernstein

Director, Outreach & Special Programs CHEMTREC

ebernstein@chemtrec.com

OUR MISSION

TRANSCAER® (Transportation Community Awareness Emergency Response) is an outreach program covering North America. Since 1986, the organization has focused on assisting communities and training emergency responders to prepare for and respond to hazardous material transportation incidents. The TRANSCAER program is led by industry professionals and supported by partner agencies who are critical to the success of our mission.

OUR PURPOSE

- Provide awareness of the safe transportation and handling of hazardous materials
- Conduct training for communities and emergency responders on how to safely respond to incidents involving hazardous materials during transportation
- Assist communities with emergency response planning, training, and exercises for hazardous material transportation incidents

After 37 years, our National TRANSCAER Task Group (NTTG) decided it was time to revise our mission and purpose statement. While our commitment to assisting communities and training responders is unwavering, we wanted to emphasize the training elements and exercise capabilities of our program and highlight the industry professionals and partner agencies who are critical to the success of our mission. One additional change was adding in "North America" to the mission statement since last year we expanded our program to Mexico, which means TRANSCAER now covers all of North America!

Our Executive Committee also took time to hold a strategic planning session in June of 2022 to draft a new strategic plan that will focus on expanding training and resources, identifying new training equipment, participating in more exercises, making the TRANSCAER name a more recognized brand in hazmat training, identifying sustainable funding opportunities, strengthening our coordinator program, and continuing to increase engagement from our Executive Committee, Sponsors, and Partners over the next three years.

If you haven't had a chance to take a course on TRANSCAER's Learning Management System at www. hazmatcourses.com, I encourage you to join the over 6,700 users who have already joined and started taking free online training! Last year we issued over 5,300+ certificates and we now have 16 courses (two in Spanish) that are available 24/7 and credit hours are listed on each certificate. Our most recent course added was the *Over the Road Transportation of Flammable Liquids*, and we've revised our longest-standing commodity specific course the *Ammonia Safety Training*!

TRANSCAER was able to reach 32,476 attendees through 836 training events and webinars. Our program also had a huge increase in participation from our highway carrier partners at national-level TRANSCAER events. We truly value the participation from Kenan Advantage, Groendyke Transport, Farmer's Oil Company, Ferrellgas, Messer Gases, Sunoco LP, and Crestwood Midstream Partners who all provided support at multiple training events in 2022, and several have already committed to 2023 events too! Bringing together the multiple modes of transportation along with commodity specific instructors is at the core of our training mission.

To the emergency responder community, you are at the heart of our mission always. We strive to provide you with the tools, resources, and training opportunities to keep you















The increase in participation from highway carriers allowed TRANSCAER to host multiple joint railroad & highway transportation training events last year.

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and your community safe. We appreciate each of you being committed to expanding your knowledge and experience and engaging with TRANSCAER through our training events, learning management system, and webinars. We look forward to seeing many of you at upcoming events and hazmat conferences in 2023!

With immense gratitude I'd like to thank our Sponsors, Partners, Corporate Members, and State Coordinators, who remain engaged with the TRANSCAER program and are dedicated to supporting our mission. On behalf of the entire NTTG and Executive Committee, we appreciate all that you do each year for TRANSCAER, for emergency responders, and for communities across North America!

I look forward to 2023 being another excellent year for TRANSCAER, as we continue to expand our program, increase resources, and remain an integral part of the hazmat training community.

Wishing each of you a safe, wonderful, and successful year!

Sincerely,

Erica Bernstein



First TRANSCAER México Event was held October 5 & 6, 2022 in Veracruz, Mexico in partnership with Kansas City Southern De México and Ferromex.



TRANSCAER Executive Committee Members met in June 2022 to draft our next Strategic Plan. Left to Right: Pete Kirk (Dow), Robyn Kinsley (CI), Erica Bernstein (TRANSCAER), Ken Collins (CN).



Members of the TRANSCAER National TRANSCAER Task Group on December 8, 2022.

Back Row from Left to Right: Joe Milazzo (CHEMTREC), Paul Hartman (American Petroleum Institute), Tony Rodriquez (Kansas City Southern), Paul Holt (Union Pacific Railroad), Ken Collins (CN Rail), Brian Dailey (The Chemours Company), John Vergis (Wheeling & Lake Erie Railway), Matt Paynter (Nutrien), Ken Desmond (NVFC), and Joe Taylor (CSX Transportation).

Front Row Left to Right: Eddie Murphy (DOT/PHMSA), Robyn Kinsley (The Chlorine Institute), Missy Ruff (The Renewable Fuels Association), Jennifer DeAngelis (Operation Lifesaver), Erica Bernstein (CHEMTREC/TRANSCAER), Pete Kirk (Dow), Jennifer Membreno-Maltez (CHEMTREC/TRANSCAER), Keith Silverman (Axalta), and Derek Lampkin (BNSF Railway).

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