TRANSCAER

EMERGENCY RESPONSE ★ TRANSPORTATION ★ COMMUNITY AWARENESS ★

TRANSCAER today 2024–2025

Assisting Communities & Training Responders

TRANSCAER.com

Joseph L. Taylor
Director Chemical Safety
CSX Transportation
Joe_Taylor@csx.com

LETTER FROM OUR CHAIRMAN

Greetings TRANSCAER®,

Nearly every metric tracking hazardous material incidents shows a steady decline in occurrences. Seasoned veterans often say, “Back in my day…” or “It’s not like it used to be,” and they’re right—but this shift presents a unique challenge. Today’s responders take much longer to gain the same level of experience that past generations acquired in a shorter time. This growing gap in hands-on experience leaves us with only one solution: training and exercises.

Communities today face mounting challenges—staffing shortages, limited funding, and the increasing demands of specialized training requirements. TRANSCAER is uniquely positioned to address these challenges by providing high-quality training and exercises, all at no cost. Our greatest strength remains our ability to connect emergency responders with industry experts, ensuring they are prepared for real-world incidents.

This continued excellence is only possible because of the investment from our Sponsors, Partners, Corporate Members, and the dedication of our State Coordinators, National TRANSCAER Task Group (NTTG) Members, and staff. Through their support and a significant increase in grant funding, we continue to demonstrate just how far we can stretch every dollar. It is essential that we build on this momentum, pushing forward to ensure that future generations of responders are equipped with the knowledge and skills they need. On behalf of the TRANSCAER Executive Committee, thank you for your dedication to this incredible organization. We invite you to explore this edition of *TRANSCAER Today,* celebrate our collective achievements, and continue supporting our mission to enhance responder readiness nationwide.

Thank you for being a vital part of TRANSCAER’s success!

Best regards,
Joseph L. Taylor
Chairman, TRANSCAER

> “Our greatest strength remains our ability to connect emergency responders with industry experts, ensuring they are prepared for real-world incidents.

About the COVER

Photo credit: Erica Bernstein Fischer, Director of Training, Outreach, and Partnerships, CHEMTREC®

"Find a group of people who challenge and inspire you, spend a lot of time with them, and it will change your life."

– AMY POEHLER, ACTRESS AND COMEDIAN

Last year, TRANSCAER® held a Hazmat and Transportation Training Event in Seattle, Washington from June 25 to 28. BNSF Railway partnered with TRANSCAER and provided presentations on the following topics: Railroad 101, AskRail® Mobile App, and Flammable Liquids by Rail – Response Considerations.

1. 2. 3.

The training drew ninety-eight (98) attendees from the following fire departments and companies:

- AltaGas
- Department of Ecology - Spills Program
- East Pierce Fire and Rescue
- Emergency Protection Agency (EPA) - Region 10
- GrayMar Environmental, Inc.
- Marysville Regional Fire Authority
- Puget Sound Regional Fire Authority
- Seattle Fire Department
- South County Fire Department
- South Snohomish County Fire and Rescue
- Student (College/ School Unknown)
- Tacoma Fire Department
- Thurston County Fire Protection District 8
- U.S. Environmental Protection Agency
- Washington Emergency Management Division
- Washington State Department of Ecology
- Weston Solutions, Inc.

← *1. Each training day included a simulated drill. 2. Attendees rotated through multiple field exercises, including Understanding Tank Cars, Locomotive Emergency Response, and hands-on training with several emergency response kits. 3. It was wonderful to have team members from GrayMar Environmental Services at the Seattle event. GrayMar is a Chairman's Club Corporate Member that supports the TRANSCAER program and the TRANSCAER Hazmat Team Response Fund on an annual basis.*

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AWARDS

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Recognizing Dedication:

TRANSCAER AWARDS SPOTLIGHT OUTSTANDING CONTRIBUTIONS

The TRANSCAER® Awards Program honors the exceptional efforts of individuals, companies, and organizations that go above and beyond in advancing TRANSCAER's mission. Your dedication, hard work, and passion for training, emergency response, and safety have made a lasting impact. We sincerely appreciate your contributions to preparing communities and training emergency responders across the country.

Today, we proudly recognize the following companies, organizations, and TRANSCAER team members whose exceptional commitment and achievements in 2023 have set a high standard for excellence.

Congratulations

2023 TRANSCAER AWARD RECIPIENTS

DISTINGUISHED SERVICE AWARD
Paul Williams, Norfolk Southern (Retired)
David Binder, Tanner Industries, Inc.

CHAIRMAN'S AWARD
Paul Holt, Union Pacific Railroad
Groendyke Transport

REGIONAL AWARDS
Genesee & Wyoming Railroad Services, Inc.
Grupo México Transportes – Ferromex

TORCH AWARDS
Tim O' Brien
Francisco Gonzalez

NATIONAL AWARDS
BSNF Railway
CN Dangerous Goods Team
CPKC
CSX Transportation
Kenan Advantage Group
Norfolk Southern Railway
Renewable Fuels Association
Roseville Fire Department
Tanner Industries, Inc.
Union Pacific Railroad

COORDINATOR OF THE YEAR
Brent Osborne – Wyoming State Coordinator

INDIVIDUAL RECOGNITION AWARDS
Anthony Blake, Martin MLP
Antonio Rodriguez, CPKC
April Steger, CTEH
Bob Kelly, Philadelphia Fire Department
Capt. David Newell, Henrico County Hazmat Team
Capt. John Cundiff, Hanover County Fire & EMS
Capt. Michael O'Hare, Houston Fire Department
Carl Akins, CPKC
Charles Parrish, Nutrien
Chief Andrew Novak, Kansas City Kansas Fire Department
Chief Grey Chance, Kansas City Kansas Fire Department
Cindy Kuranchie, The Chlorine Institute
Clay Reid, BNSF Railway
Clem Schimikowski, CPKC
Craig Jorgenson, The Sulphur Institute
Dan Wright, Kenan Advantage Group
Derek Lampkin, BNSF Railway
Ed Dankbar, CPKC
Evan Foley, CPKC
Francisco Merchant, CPKC
Glen Rudner, Instructor for RFA
Jake Hammer, Union Pacific Railroad
Jason Wisdom, DPC Enterprises
Joe Taylor, CSX Transportation
Joel Hendelman, Instructor for RFA
John Bayer, Corteva Agriscience
John L. Bowlby, Kenan Advantage Group
John Vergis, W&LE
Jon Simpson, Norfolk Southern
Keith Silverman, Gold Sheil
Ken Collins, CN Rail
Ken Desmond, National Volunteer Fire Council
Kenneth "KC" Childress, Kenan Advantage Group
Kevin Okonski, Houston Fire Department
Kristian Ahrens Jr., Union Pacific Railroad
Lane Sekavec, Union Pacific Railroad
Matt Paynter, Nutrien
Matt Thompson, Union Pacific Railroad
Mike Stephenson, New Jersey State Coordinator
Missy Ruff, Renewable Fuels Association
Nick Highfill, Groendyke Transport, Inc.
Quin Carroll, American Chemistry Council
Robbie Morris, Corteva Agriscience
Ron Eriksen, Nebraska State Coordinator
Scott Deutsch, Norfolk Southern
Scott Walden, Sr., LNG Instructor
Steve Bis, Corteva Agriscience
Steve Martin, Ironhorse Services
Steve McNealy, CPKC
Toby Crow, Corteva Agriscience
Tony Houdyshell, CPKC

Featured 2023 Award Highlights

Chairman Awards

Paul Holt (Union Pacific Railroad) received the 2023 Chairman's Award in recognition of his outstanding leadership. He has not only led by example but has consistently gone above and beyond in his service to the National TRANSCAER Task Group (NTTG) and the broader community we support. As an active and engaged member of the TRANSCAER Executive Committee, Paul has been a valuable source of support, insight, and encouragement. His ability to foster collaboration, inspire new ideas, and maintain a steady focus on our shared goals is something we all admire.

The award was presented by the TRANSCAER Chairman, Joe Taylor (CSX Transportation) at the NTTG Meeting held on December 12, 2024.

2023 TRANSCAER State Coordinator of the Year Award

Brent Osborne
Wyoming State Coordinator

Brent's approach as a TRANSCAER State Coordinator is to combine engaging hazmat training with interactive demonstrations to offer emergency responders in his community a diverse range of programs on transportation safety and emergency response. On June 26-27, 2023, Brent coordinated an Ethanol Safety and Steel Drums Seminar in Cheyenne, WY, that trained 30 attendees from Cheyenne Fire Rescue, Laramie County Fire District, City of Torrington Emergency Management, and the Goshen County Sheriff's Office. This is not the first time Brent has hosted a TRANSCAER event. In 2022, he hosted an Ammonia Live-Release Drill with multiple fire departments and the 84th Civil Support Team/Wyoming Air National Guard.

TRANSCAER appreciates all your contributions and dedication to our mission. Wyoming is lucky to have you coordinating so much excellent training!

2023 National Awards

→

Kenan Advantage Group has been an incredible partner of TRANSCAER, bringing cargo trailers to multiple 2023 first responder training events.

TRANSCAER Executive Committee Member, Keith Silverman (far left) presents a National TRANSCAER Award to instructors from Kenan Advantage Group.

←

In 2023, the **BNSF Railway Hazmat Team** trained 8,025 individuals from the emergency response community by hosting 243 training events, 5 webinars, and through its Learning Management System (LMS).

Have you checked out BNSF's new virtual reality training, now available through the TRANSCAER LMS?

SCAN ME

RFA President and CEO Geoff Cooper with their National Achievement Award.

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↑

The **Union Pacific Railroad Hazardous Materials Team Members** with their 2023 National TRANSCAER Award. Union Pacific trained 7,211 individuals from the emergency response community between the 233 training events they held across the states in which they operate and their *Hazmat Management - Railroading 101 Course,* available online on the TRANSCAER Learning Management System (hazmatcourses.com).

←The **Roseville Fire Department** graciously opened their doors and provided their training center, allowing TRANSCAER to film critical content for the TRANSCAER Ask Rail® video. Throughout the collaboration process, the Roseville Fire Department exhibited professionalism, expertise, and a genuine dedication to the project's success.

In recognition of their outstanding contribution to railroad safety and emergency preparedness, the Roseville Fire Department was awarded a 2023 National Achievement Award. Their exemplary efforts embody the true spirit of collaboration and service to the community.

TRANSCAER Sponsor – The Chlorine Institute

Celebrated 100 Years in 2024

Left to Right: Erica Fischer (CHEMTREC/TRANSCAER), Cindy Carmichael (CI), Robyn Kinsley (CI), Brooke Lobdell (CI), and Frank Reiner (CI).

CHEMTREC was proud to honor the 100th anniversary of The Chlorine Institute (CI) in 2024, and celebrate a century of leadership, partnership, and unwavering dedication to safety.

For 100 years, The Chlorine Institute has been a driving force in promoting the safe production, transportation, and use of chlorine and related chemicals. Their proactive approach to safety has had a profound impact on our industry, our communities, and our shared mission to protect people and the environment.

The Chlorine Institute has been a trusted partner to both CHEMTREC and TRANSCAER, helping to strengthen our training initiatives, support emergency preparedness, and empower first responders with the knowledge and training they need to act with confidence. Their commitment to collaboration has made our partnership stronger and our impact even greater.

NEW TRANSCAER AWARD!

Outstanding Community Safety Partnership Award

This award will be given in recognition of a fire department's achievement in hazmat preparedness and community safety within their community.

The minimum eligibility criteria for the award are as follows:

Training and Education

- Demonstration of continuous education and training in hazardous materials management and emergency response by the fire department.

Community Engagement

- Active participation in community outreach programs to educate the public about hazmat safety and emergency procedures.
- Collaboration with local businesses, schools, and other organizations to promote hazmat awareness and preparedness.

Incident Response

- Exemplary performance in responding to hazardous materials incidents, including successful containment and mitigation by the department.
- Documentation of innovative response strategies and successful outcomes in past incidents.

Collaboration and Partnership

- Strong partnerships with other emergency services, local government, and industry stakeholders in managing hazmat situations.
- Participation in TRANSCAER training, drills, exercises, and workshops to improve coordination and response capabilities.

Leadership and Innovation

- Demonstration of leadership in advancing hazmat response techniques and technologies.
- Implementation of innovative practices or programs that improve overall hazmat safety and response.

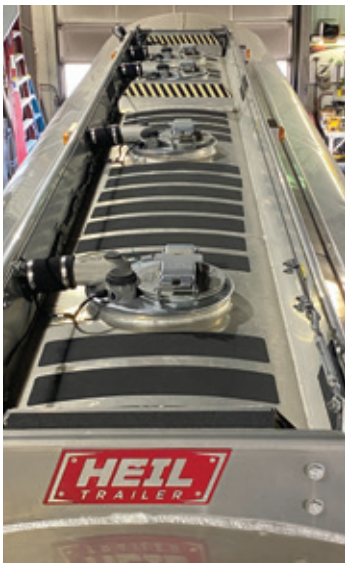
To learn more about TRANSCAER Awards, visit: transcaer.com/about-transcaer/transcaer-awards

SCAN ME

DOT-406 Safety Features OVERVIEW

Photos and Article by: Rick Hughes, Senior Fleet Safety Specialist, Sunoco Transportation

Gasoline and diesel fuel are the most common hazardous materials transported over public roadways today. Combined with an average of 1,300 tank rollovers occurring each year in the United States—about four rollovers every day— first responders are likely to encounter a gasoline tanker rollover at some point during their careers. In this article, we will explore design features of the DOT-406 trailer that help to reduce the likelihood of rollovers, as well as other safety features for managing gasoline tanker emergencies.



Top view of rollover protection rail designed to protect dome lids in the event of a rollover event. It is also part of the vapor recovery system.

The DOT-406 trailer is designed for the safe and efficient transportation of flammable liquids. They are commonly used to make deliveries to gas stations, airports, and other locations that require motor fuels. Constructed from lightweight aluminum, these trailers typically have 3 to 6 separate compartments to allow for diverse types of fuel to be delivered at one time. Their carrying capacity ranges from 9,000 to 9,500 gallons. Prior to 1990, petroleum fuels were transported in DOT-306 specification trailers as mandated by the United States Department of Transportation (DOT). In 1990, the DOT introduced design changes to the DOT-306 and updated the designation to the current DOT-406 trailer. While the basic shape and operation remained the same, these design changes focused on implementing or improving rollover prevention features, dome lid and relief vent performance, overfill prevention, emergency shut-off mechanisms, and vapor recovery systems.

Rollover Prevention

With an aluminum shell thickness of 3/16" to 1/4", preventing rollovers is of the utmost importance. The DOT-406 trailer incorporates several design features aimed at reducing rollover events. For instance, when viewed from the end, the profile is elliptical rather than round. This lowers the center of gravity and makes the trailer more stable.

Transporting liquid loads is challenging for a driver. The movement of the liquid, known as *slosh* and *surge*, can lead to a rollover in certain conditions. *Sloshing* refers to when the liquid moves from side-to-side while turning. *Surge* occurs when brakes are applied, and the liquid begins to move back and forth. Both conditions can force a tanker to rollover. Partially loaded trailers are even more dangerous as the liquid has more room to move. The trailers being divided into individual compartments not only increases efficiency, but it also helps with stability. The compartments are separated by bulkheads which reduces the surging effect. In addition, each compartment has two baffles that

continued on next page

help to reduce liquid slosh and surge. Liquid sloshing can be reduced by filling compartments completely. In the event a full trailer delivery is not required, it is a safe practice to fill as many compartments as possible and have others empty, as opposed to several partially filled compartments. Although not a requirement, trailer manufacturers have made significant progress with Electronic Stability Controls (ESC). The ESC system recognizes the possibility of a potential rollover and automatically applies the brakes without the driver's actions.

Protecting Dome Lids

In the event of a rollover, protecting the dome lids is vital. The primary safeguard is a rollover protection rail that runs the length along the top of the trailer, acting like a spine. Made of aluminum, this structure is raised above the dome lids by 8" and must be designed and installed to withstand loads equal to twice the weight of the loaded cargo tank motor vehicle, thus preventing the dome lids from being damaged during a rollover event. This box-like structure creates a trough that also helps with containing small spills that might occur during the loading process.

Vapor Recovery System

Environmental Protection Agency regulations require the loading and unloading of gasoline to be a closed system, with no vapors being released to the atmosphere. To accommodate these regulations, DOT-406 trailers incorporate a vapor recovery system in the trailer design. As product is loaded through the bottom of the trailer, vapors from previous loads are forced out through internal piping, up to the rollover protection rail, and funneled through a hose from which they are collected and processed by the loading facility. When unloading at a delivery site, a similar process occurs. Product is "dropped" into an underground storage tank (U.S.T) while vapors from that tank are forced back to the trailer through a connection port on top of the U.S.T. From a First Responder's perspective, it is important to always view a DOT-406 trailer as "loaded", either with product or vapors, as both carry a significant risk.

Pressure Relief

The action of loading or unloading liquids can inherently create situations where overpressure conditions may occur. Additionally, in the event of a trailer fire, product expansion can create dangerous overpressure conditions which can lead to a boiling liquid expanding vapor explosion (BLEVE). Pressures that exceed a predetermined level will be alleviated through vents in the dome lids. U.S. DOT regulations require pressure relief valves to open at 1psi. With DOT-406 trailers having a maximum allowable working pressure (MAWP) of 3.3psi, these relief vents maintain a safe condition. However, if pressures rise above 2psi, additional vents will activate. The dome lids have vents that will open at 5psi. This pressure is well above the MAWP so these vents are essentially severe emergency vents. A severe emergency would be a sudden pressure increase—possibly from a fire. An interesting aspect of these dome lid vents is that they can differentiate between a pressure buildup and a rollover situation. If pressure increases are sudden and exceed 30psi for 60 milliseconds, the vents are designed to close without releasing more than 1 liter (or 1 gallon if manufactured prior to September 1, 1995) of liquid before reclosing to a leak-tight condition.

continued on next page

Helpful Resources

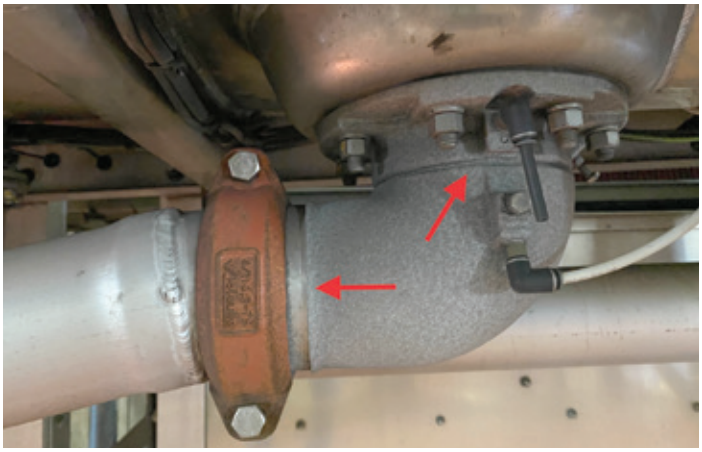
Federal Motor Carrier Safety Administration (FMCSA) Cargo Tank Rollover Factsheet

Article on Electronic Stability Control

Emergency Response Guidebook (ERG)

Overfill Prevention

As mentioned earlier, occasionally, product releases may occur during the loading process. To reduce the likelihood, DOT-406 trailers are equipped with overfill prevention systems. Each compartment has a probe mounted on the inside of the dome lid. If the product level touches this probe, a signal is sent through trailer wiring to the grounding wire at the loading facility, which shuts off the flow of product.



The internal loading valve is located at the bottom of each compartment. During normal operation, it is used to load and unload product. In an emergency, designed fail points (indicated by the arrows) will break before the valve is damaged, keeping product in the trailer and minimizing spills.

Emergency Shutoff

Another DOT requirement is a switch that will close all valves simultaneously. This shutoff switch cuts off the air supply to all valves, which is required for operation, and must be located 10 feet away from the point of product discharge. The shutoff switch will typically be found at the driver-side front corner of the trailer. In the event of an emergency, activating this switch will close any valves that are open and prevent any valve from being opened until the switch is deactivated. A First Responder's immediate course of action during any emergency event should be to close this shutoff switch to prevent a release of product or stop any active product release.

Emergency shutoff switch stops air supply to discharge valves. Any open valves will close automatically, and no valves can be opened until the switch is activated and the air supply is reactivated.

Underride Guard

In the event of an underride accident—where a vehicle hits and damages the piping under a trailer—the piping is a designed failure point. It is meant to break away while preventing product loss from the compartment. This is accomplished with an emergency valve at the bottom of the compartment. During normal operation, this air-operated valve is opened and closed to allow for loading and unloading. During an underride event, the valve has a shear point which will break before the valve is damaged. Once sheared, the air supply is cutoff, which closes the valve and keeps the product inside the compartment, limiting any product release to what was in the piping. A good estimate is approximately one-half gallon for each one-foot section of pipe.

Optional guard rail designed to help protect the internal loading valve and under-trailer piping, in the event of an underride crash.

Closing

All these design changes were put in place for the safety of tanker drivers, the motoring public, and the first responders that deal with emergency events. When responding to any situation involving a DOT-406 petroleum trailer, always proceed cautiously. Remember to identify exactly what product is onboard by referencing the UN number on the placards. If unaware of how to safely proceed, refer to the U.S. DOT/Pipeline and Hazardous Materials Safety Administration (PHMSA) Emergency Response Guidebook (ERG) for help. Additionally, close the emergency shutoff switch, even if there is no active product release. Always remember, the trailer is never empty, it is either carrying product or vapors. Both can be deadly if mishandled.

ASSISTANCE FROM CHEMTREC® IS MORE THAN A PHONE CALL

Article by:
Joe Milazzo, Director – Standards, CHEMTREC

For over 50 years, CHEMTREC® has been a trusted resource for emergency responders, providing detailed and specific chemical and product information needed to safely handle and respond to critical hazardous material incidents. CHEMTREC continues to find ways to support first responders beyond assisting them over the phone.

Through CHEMTREC's awards program, we offer multiple awards and scholarships to first responders, enabling them to attend training, purchase hazmat response equipment, and participate in hazmat conferences to stay up to date in the ever-evolving world of hazardous materials.

CHEMTREC offers the following award and scholarship programs to emergency responders:

CHEMTREC HELP AWARD

CHEMTREC's HELP (Hazmat Emergencies Local Preparedness) Award program provides $10,000 annually to selected fire departments to enhance their response capabilities and improve local preparedness for hazardous materials incidents.

In 2024, thanks to our partnership with the National Volunteer Fire Council (NVFC), the American Chemistry Council, DOW, and LyondellBasell, CHEMTREC was able to provide six awards at $10,000 each to the following departments:

- Etowah Rescue Squad and Rural Fire Department
  Etowah, TN
- Glen Gardner Fire Company No. 1
  Glen Gardner, NJ
- Pleasant Hope Rural Fire District
  Pleasant Hope, MO
- Robstown Volunteer Fire Department
  Robstown, TX
- Sheridan Community Fire Department
  Sheridan, MI
- Town of Superior Volunteer Fire Department
  Superior, WI

Announcing 2025 HELP Awards

CHEMTREC is pleased to announce that we will continue the HELP Award in partnership with Dow, the American Chemistry Council, and LyondellBasell this year!

This year CHEMTREC and our award sponsors will open up the HELP award to all fire departments, including career, volunteer, and combination departments across the United States.

In total, we will provide $10,000 each to six (6) fire departments. We appreciate our ACC Members and ACC for supporting this critical emergency responder initiative again this year!

The 2025 application period will be open from June 1 to September 6.

If you have questions regarding the HELP Award, please contact CHEMTREC at awards@chemtrec.com.

Learn more

chemtrec.com/helpaward

CHEMTREC®

SCHOLARSHIPS

CHEMTREC is committed to supporting emergency responders in gaining the knowledge and skills they need through educational and networking opportunities.

In 2024, CHEMTREC partnered with Emery & Associates to sponsor six scholarships for responders to attend the Midwest Hazmat Conference in Northbrook, IL, from May 2-4, 2024, the premier hazardous materials conference in the Midwest. The scholarships cover all expenses for the recipients, including travel and conference fees. The following individuals were selected for the 2024 Midwest Hazmat Conference Scholarship:

- **Brian Hobbs, Louisville Fire Department**
  Louisville, KY
- **Curt McKinney, Jackson Township Fire Department**
  Jackson Township, OH
- **Charles Swank, Mansfield Fire Department**
  Mansfield, OH
- **Dereck White, New Castle Fire Department**
  New Castle, IN
- **Eric Petersen, Racine Fire Department**
  Racine, WI
- **Jeremy S. Jeffcoat, Orangeburg County Fire District**
  Orangeburg, SC

CHEMTREC will once again be partnering with Emery & Associates to sponsor six scholarships for the 2025 Midwest Hazmat Conference, which will be held from May 2-4 in Northbrook, IL.

In addition to the Midwest Hazmat Conference, CHEMTREC teamed up with Safeware and Hazard to sponsor two scholarships for their Hazardous Materials Instructors and Command (HMIC) Conference held in Fort Lauderdale, FL, from November 12 -14, 2024.

This conference is designed for hazmat instructors and officers in charge of responding to hazardous material incidents. CHEMTREC believes that this is a natural fit since we are the global leader in providing hazardous materials information and guidance to the first responder community.

The 2024 HMIC winners were:

- **Instructor of the Year: Battalion Chief Roy Mitchell**
  Boise Fire Department, Boise, ID
- **Officer of the Year: Captain Daniel Hoy**
  Sacramento Metropolitan Fire District, Sacramento, CA

For the fourth consecutive year, CHEMTREC is proud to support this conference by recognizing both the Hazardous Materials Instructor and Officer of the Year. Award recipients are honored at the conference and receive full coverage of their conference fee and travel expenses. The 2025 HMIC Conference will take place in San Antonio, TX from November 12-14. At CHEMTREC, we are committed to providing these opportunities to enhance first responder preparedness. We believe that training, networking, and access to the right response equipment empower fire departments and hazmat teams to serve their communities more effectively.

L-R: Gary Sharp (Safeware), Captain Daniel Hoy, (Sacramento, CA Metropolitan Fire District), Joe Milazzo (CHEMTREC), Dr. Christina Baxter (Emergency Response TIPS, LLC)

L-R: Gary Sharp (Safeware), Battalion Chief Roy Mitchell (Boise, ID Fire Department), Joe Milazzo (CHEMTREC), Dr. Christina Baxter (Emergency Response TIPS, LLC)

For more information

To learn more about CHEMTREC's Awards programs, please scan the QR code.

chemtrec.com/awards

UNLOCKING THE SECRETS OF DIRECT READING INSTRUMENTS IN EMERGENCY RESPONSE:

Five Critical Insights That Could Save Your Life—And Those Around You

Article by: Michele M. Twilley, DrPH, CIH, AIHA Chief Science Officer

1 No Equipment

It may be a resource issue—you simply don't have the budget to purchase direct reading equipment or maintain back up equipment. More often, you have the equipment, but it is unavailable when you need it. It could be in for annual factory calibration, fail field calibration, be missing from the case, have a dead or missing battery, or contain expired or faulty sensors. Maybe the rental equipment doesn't work, the screen is cracked and pixelated, or the equipment was just run over and crushed.

2 Wrong Equipment

Some of these scenarios make it impossible to proceed with activities like confined space entry, which has legal requirements for atmospheric monitoring. In these cases, you may have no choice but to assume worst-case scenarios—such as oxygen deficiency, flammable or explosive atmospheres, and toxic environments—and proceed by establishing engineering controls and using higher levels of respiratory protection and protective clothing.

You have functioning, calibrated equipment and start monitoring, but you are not detecting anything—even though you know there should be some kind of response. A colleague uses the analogy that this is where you have an elephant problem, but your instrument can only see zebras. You need to understand the limitations of the monitoring equipment you are using. This error is most common when using a photoionization detector (PID), which is an instrument capable of sensing a variety of volatile organic compounds (VOCs). The energy of the ultraviolet light emitted by the lamp in the instrument determines which VOCs can be ionized and therefore detected by the PID. There are three common energy levels associated with PID lamps, each detecting a specific range of chemicals. You must know which lamp is installed in the instrument and refer to the manufacturer's reference charts to determine if the instrument can detect the VOC of interest.

You decide to use a multigas monitor to check the Lower Explosive Limit (LEL) and acetonitrile concentration in air with a PID containing a 10.6 eV lamp. Your results show that you are less than 10% of the LEL, and volatile organic compounds are not detected after the leak has stopped. You conclude that there is no hazard above background and downgrade your use of respiratory protection and personal protective clothing. Is this the right conclusion? No. The PID with a 10.6 eV lamp is not recommended for detecting acetonitrile in air. A PID with an 11.7 eV lamp is required. Therefore, you are using the wrong equipment to assess acetonitrile concentration in the air, and you are getting misleading results that could lead to underestimating hazardous exposures.

Use the technical guidance documents provided by the instrument manufacturer to ensure that the direct reading instrument is suitable for making critical decisions about exposures. An example of a technical guidance document for a PID from Honeywell can be found here: *A GUIDELINE FOR PID INSTRUMENT RESPONSE.* (RAE Systems by Honeywell)

American Industrial Hygiene Association (AIHA) Emergency Response Planning Guidelines (ERPG)

One-hour exposure limits used for emergency response planning and response. An ERPG exposure limit is the maximum airborne concentration below which nearly all individuals could be exposed for up to 1 hour without:

ERPG-1 – experiencing more than mild, transient adverse health effects or without perceiving a clearly defined objectionable odor.

ERPG-2 – experiencing or developing irreversible or other serious health effects or symptoms that could impair an individual's ability to take protective action.

ERPG-3 – experiencing or developing life-threatening health effects.

(AIHA Guideline Foundation, 2025)

3 Right Equipment – Wrong Interpretation

Let's say you're using the same PID with a 10.6 eV lamp to respond to an acetic acid spill. You are using the correct lamp, and the PID response shows 9 ppm averaged over one hour at a location near the spill. The Emergency Response Planning Guideline (ERPG)-1 value is 5 ppm for a one-hour exposure to acetic acid, and the ERPG-2 value is 35 ppm for one hour. Recalling that the ERPG-1 value for acetic acid is based on odor detection, you conclude that there is no need to take additional precautions. This is the wrong interpretation of the result.

Unless the PID is specifically calibrated to read acetic acid, the instrument is likely calibrated against 100 ppm Isobutylene. Therefore, the 9 ppm measurement is actually interpreted as isobutylene-equivalents. Consulting the manufacturer's technical guidance, the correction factor for the 10.6 eV lamp for acetic acid is 22. This means the concentration of acetic acid measured is the result (9 ppm) times the correction factor (22), yielding a concentration of 198 ppm. The true result is closer to the ERPG-3 value of 250 ppm, where acetic acid may cause exposed populations to experience or develop life-threatening health effects.

4 Right Equipment – Right Interpretation

Let's return to the acetonitrile example from earlier. You are using a multigas monitor that measures oxygen concentration, LEL, and VOCs using a PID fitted with an 11.7 eV lamp. The oxygen concentration is 20.9%, the %LEL reading is 8.5%, and the VOC concentration is 32 ppm. You conclude that there was sufficient oxygen to trust the LEL reading, and both the LEL and VOC readings are unacceptable once you apply the appropriate correction factors for acetonitrile.

The LEL for acetonitrile in air is 3.0%. A safe practice is to stay at or below 10% of the LEL which is 0.3% or 3,000 ppm. There are two ways to use the meter to determine if you are sufficiently below 10% of the LEL to be safe. The first approach is to look at the %LEL and apply the appropriate correction factor to adjust from methane to acetonitrile. According to the technical guide for the instrument, you need to apply a 1.7 correction factor. This brings the %LEL to 14.45%, which is above the 10% safety margin.

Another approach is to look at the VOC result after applying the appropriate correction factor—in this case, 100. The adjusted acetonitrile concentration is 3,200 ppm, which exceeds the 3,000 ppm associated with 10% of the LEL.

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5 Are You Sure? How Confident Are You That the Measurements and Interpretation Are Correct?

There are still several things to be aware of when using direct reading instruments that go beyond the scope of this article, including understanding the limit of detection, limit of quantitation, sensor drift, sensor poisoning, and interferences—just to name a few instrument-related issues. You also need to be able to identify and interpret the response against the universe of correct exposure limits to decide where an exposure falls on the 'is it safe' to 'will it kill me now' continuum. You must also understand who is being exposed and how to determine the appropriate exposure limit. Worker exposures, like those to fire fighters, are governed by Occupational Exposure Limits, which apply to a full work shift and are for properly trained and equipped personnel to manage the exposure. Whereas, community exposure limits, like ERPGs, are one-hour acute exposure limits for unprotected, untrained, and unequipped persons who may experience the odor of a chemical to debilitating effects with short- or long-term consequences.

Where you measure and for how long are also important considerations. Direct reading instruments are excellent for alarm setting and leak detection purposes. However, using them to measure and interpret exposures over a period of time and in a dynamic vapor dispersion scenario is much more challenging.

AIHA Guideline Foundation. (2025). *ERPGs (Emergency Response Planning Guidelines™).* Retrieved from https://www.aiha.org/get-involved/aiha-guideline-foundation/erpgs

AIHA University. (2022). *Technical Framework: Guidance on Use of Direct Reading Instruments.* Falls Church, VA: AIHA. Retrieved from https://www.aiha.org/education/frameworks/technical-framework-guidance-on-use-of-direct-reading-instruments

RAE Systems by Honeywell. (n.d.). *A Guideline for PID Instrument Response Technical Note-106.* Retrieved from https://prod-edam.honeywell.com/content/dam/honeywell-edam/sps/his/en-us/products/gas-and-flame-detection/documents/Technical-Note-106_A-Guideline-for-Pid-Instrument-Response.pdf

U.S. Chemical Safety and Hazard Investigation Board. (2021, 9 24). *Chemical Reaction, Hydrogen Release, Explosion, and Fire at AB Specialty Silicones.* Retrieved from https://www.csb.gov/ab-specialty-silicones-llc/

U.S. Department of Transportation Pipeline and Hazardous Material Safety Administration. (n.d.). *Incident Statistics.* Retrieved from 2024 Commodity Summary by Incidents: https://portal.phmsa.dot.gov/analytics/saw.dll?PortalPages

U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration. (2024). *2024 Hazardous Materials Guidebook.* Retrieved from https://www.phmsa.dot.gov/sites/phmsa.dot.gov/files/2024-04/ERG2024-Eng-Web-a.pdf

EMERGENCY PREPAREDNESS FOR ETHANOL-BLENDED FUEL STORAGE AND DISPENSING

Article by: The Renewable Fuels Association (RFA) | Images: Provided by RFA and Adobe Stock

Often, when the response community thinks of storing and dispensing ethanol-blended fuels, we fail to think of retail fueling stations. As a result, we may think that there is no bulk storage operation or production operation in our jurisdiction, and therefore we have little to worry about. This could not be further from the truth.

Today, nearly all gasoline in the United States is blended with some level of ethanol. Ethanol and ethanol-blended fuels are found at production facilities, bulk tank farms, rail transload facilities, construction sites, and retail fueling stations within your community and throughout the country.

Ethanol Fuel Dispenser

Depending on the size of your jurisdiction or response area, it may not be practical to pre-plan a response for each retail facility offering ethanol-blended fuels. However, it is realistic and highly recommended that standard operating procedures or guidelines (SOP/SOG) be developed to establish consistency for addressing life safety, incident stabilization, and property conservation during ethanol and ethanol-blended fuel emergencies. Therefore, it is important for emergency responders to be familiar with these facilities in their community.

Any large volume of denatured fuel ethanol will typically be stored in conventional carbon steel storage tanks, the same type of storage tanks used for gasoline and other flammable fuels. Denatured fuel ethanol can also be stored in stainless steel storage tanks, although these tanks are less common. As consumption increases, larger ethanol tanks may become increasingly prevalent.

These storage tanks should be identified by markings corresponding with the fuel stored. It is incumbent upon any organizations and agencies with statutory responsibilities or functional capabilities to become familiar with bulk storage and ethanol production facilities. This includes identifying the nature and types of bulk storage tanks in use and developing detailed pre-plans.

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Spill Containment

Spill containment dikes are required to be capable of holding the volume of the largest tank within the contained area, plus a certain proportion over tank capacity to account for rainfall and ancillary spills during an incident. Additional fluid from a firefighting operation could lead to overfilling/breaching of the dike.

Tank Fire Protection Systems

Some storage tanks are equipped with fixed (built-in) fire protection systems. Fixed systems are a combination of components including foam concentrate storage, proportioning valves, and delivery devices that are permanently installed to provide fire suppression protection. These same fixed systems can service multiple storage tanks, piping manifolds, and loading and unloading racks. The systems can be activated manually or by an automatic detection device. Topside application foam systems may require much higher application rates for ethanol-blended fuels than for previously stored fuels. Subsurface injection systems may not work at all with ethanol-blended fuels. Emergency responders should collaborate with terminal operators to stay informed about changes in fuel storage at liquid product terminals.

Emergency Response Pre-planning

Effective pre-planning for potential incidents at liquid product terminals is extremely important. A significant piece of the pre-planning efforts necessarily includes consideration for, and development of, mutual aid partners. Fire departments responsible for protecting liquid product terminals should have access to high-flow firefighting foam equipment and access to large supplies of compatible Alcohol Resistant Aqueous Film-Forming Foam (AR-AFFF).

Pre-planning with Local Authority Having Jurisdiction (AHJ).

Emergency response agencies or organizations should recognize they may not be able to contend with a terminal fire operation and may need to contact additional external resources or assistance to manage an incident of significant scope and magnitude. Emergency responders are encouraged to proactively build strong relationships with mutual aid partners and storage facility operators within their jurisdiction before an emergency occurs.

Terminal Size Considerations

Smaller bulk distribution storage facilities may pose unique challenges to local fire departments. These facilities are located throughout communities to better distribute fuel to end-users. Storage tanks in these facilities can be a multitude of styles and layouts depending on age and location. These tanks may be vertical, horizontal, or a combination of both. Flammable liquid fuels, including gasoline and ethanol-blended fuel, are typically stored at these facilities in modest quantities. Most of these facilities lack built-in fire protection systems and are commonly designed with limited fuel spillage containment structures or dikes. Additionally, they are often unstaffed.

Fuel Terminal Storage

Large bulk distribution storage facilities also pose unique challenges to local fire departments. Storage tanks in these facilities have high-capacity storage and high product transfer capabilities. A variety of different storage tanks may be present: vertical, horizontal, above-ground or below-ground, or a combination of all of these. Flammable liquids, including gasoline and ethanol-blended fuel, are stored at these facilities in significant quantities. These facilities have detailed emergency response plans due to the sheer volumes stored on-site.

Storage at a Production Facility

Both denatured and undenatured (neat) ethanol can be stored at a production facility, although the most common is denatured fuel ethanol (E95-E98). Ethanol-blended fuels found at retail fuel stations are not generally found at a production

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facility. Denaturants, such as natural gasoline or unleaded gasoline, may be stored at a production facility. These are added to ethanol through inline blending systems before the final product enters the storage tanks.

Ethanol Production Facility

Retail Dispensing Stations

There are approximately 115,000 retail fueling stations across the U.S. Geography, throughput volume or sales, fire codes, and many other variables impact whether an above-ground or below-ground storage tank is used. Above-ground storage tanks can be either vertical or horizontal in design, while nearly all underground storage tanks are horizontal. Inventory is delivered by cargo tank trucks to the retail station and transferred directly into underground storage tanks, which typically range in capacity from a few thousand gallons up to 20,000 gallons. Emergency shut-off valve configurations, as well as loading and unloading points, vary based on tank design and construction.

Fuel Retail Station

Working Relationships

Pre-planning is crucial, and establishing strong working relationships between fire departments and storage facility operators is equally important. The absolute backbone to successfully managing an incident involving ethanol-blended fuel is pre-establishing an excellent working relationship between fire departments and facility operators.

For more information

To learn more about RFA and our initiatives, visit ethanolrfa.org.

RFA
RENEWABLE FUELS ASSOCIATION

The Sulphur Institute and TRANSCAER held a training event in partnership in May 2024 with CSX Transportation, Veolia, and AdvanSix.

THE SULPHUR INSTITUTE'S COMMITMENT TO THE SAFE TRANSPORTATION OF SULPHUR AND SULPHURIC ACID

Article by: Craig Jorgensen, President and CEO, The Sulphur Institute (TSI)
Photos provided by The Sulphur Institute

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The Sulphur Institute (TSI) is proud to sponsor TRANSCAER®. TSI represents over 60 member companies in the energy, agriculture, mining, and chemical sectors of the economy. In addition to advocating for fair regulations related to our industry, TSI and its member companies are committed to the safe transportation of molten sulphur and sulphuric acid by rail tank car and cargo tank truck. In the United States alone, over 8 million tons of sulphur are produced annually, contributing to the over 80 million tons of sulphur produced worldwide each year. Similarly, sulphuric acid—often referred to as the "King of Chemicals,"—is produced globally for a wide range of industrial applications.

> **In the United States alone, over 8 million tons of sulphur are produced annually, contributing to the over 80 million tons of sulphur produced worldwide each year.**

TSI offers numerous benefits to its members and the broader industry. As a global advocate for sulphur, TSI represents stakeholders involved in producing, consuming, trading, handling, or adding value to sulphur. TSI Membership provides access to valuable programs, communications, and publications that support the industry. TSI plays a leadership role on key industry committees, such as the Association of American Railroads Tank Car Committee and addresses critical issues like safety regulations and environmental concerns. TSI members benefit from the Institute's efforts to develop guidance documents, respond to sulphur-related inquiries, and anticipate regulatory changes—ultimately adding value to their business while advancing the safe and efficient use of sulphur across various applications.

TSI is deeply committed to the safe and efficient transportation of sulphur and sulphuric acid, as these essential raw materials are relied upon by various industries. The Institute's efforts include educating first responders and environmental remediation teams on the safe handling of sulphur and sulphuric acid to support effective incident response. Through partnered training events with TRANSCAER, TSI is able to disseminate crucial safety information to the emergency response community.

For more information

To learn more about our initiatives, safety resources, and industry recommendations, visit sulphurinstitute.org or contact us at sulphur@sulphurinstitute.org.

65 YEARS THE SULPHUR INSTITUTE

Essential Emergency Response Training

TSI sponsored a TRANSCAER hazmat training event in Richmond, VA, on May 7–8, 2024, providing essential emergency response training for first responders, government officials, and industry professionals.

The training featured a combination of classroom sessions and hands-on exercises, covering the chemical and physical properties of sulphur, sulphuric acid, hydrogen sulfide, and sulfur dioxide. Participants gained critical insights about response considerations for emergencies involving these substances, as well as the roles and responsibilities of incident command. The event was well-received, drawing over 135 attendees from 35 organizations. It also featured demonstrations of safety appliances, valves, and fittings for both rail and tank trucks. This successful training was made possible through the collaboration between TSI, TRANSCAER, AdvanSix, Veolia, and CSX, reinforcing the shared commitment to hazmat safety and preparedness.

TRAINING FIRST RESPONDERS IS NOT JUST A JOB: IT IS PERSONAL

Article by: Jesse Duplechin, Hazardous Materials Manager, Union Pacific Railroad

> "That'll never happen here" are famous last words that always end in regret.

"That'll never happen here" are famous last words that always end in regret. In a world where our human instincts can be divided easily into a fight or flight response, the world of train derailments involving hazardous materials (hazmat) demands a balance of both—along with managing public safety, responder safety, environmental protection, and sometimes even extreme conditions. Experience, comprehensive training, college or technical degrees, and complete focus aid in the success of a response, but they are ineffective without strong communication and well-developed relationships. In this line of work, there is no room for selfishness or a "hero" mentality—teamwork is essential.

In our world of first responders, individuals come from all walks of life, each wearing different "hats"—often multiple at once. These "hats" range from being a First Responder to a spouse, a parent, a child, and everything in-between. However, the most important thing is ensuring they can continue to wear these "hats" after a call to an incident, let alone a train derailment involving hazmat. Safety - that is absolutely the number one priority.

First responders are often the first line of defense in train derailments involving hazmat emergencies. Knowing the Railroad Hazardous Materials Manager representative in your jurisdiction and conducting comprehensive training— not just once, but annually—provides essential technical knowledge. More importantly, it strengthens the relationship between first responders and railroads. Expanding that network with individuals who have your back during an incident is not only vital but is the foundation to a successful response. We live in a world that is constantly evolving from rules and regulations, technology, safety, innovative designs of rail cars and locomotives, and even incident management strategies. Taking advantage of training opportunities is essential to gain practical hands-on training and knowledge to be prepared to safely respond to an incident.

Coming from the Hazardous Materials Emergency Response contractor side to accepting a position as a Hazardous Materials Manager with Union Pacific Railroad, I have been thankful for every training opportunity and real-life experience I took advantage of, and the team by which I am surrounded. I am even more thankful to be able to share with first responders the knowledge and real-world experiences I have obtained in hopes that they can identify the right tools, skills, and knowledge to respond effectively with the goal that everyone goes home injury free.

This is not just a job to me. It is personal. My family thanks all personnel involved in every incident that I respond to, knowing that we are building a community that supports one another and will respond together and communicate openly during an incident, no matter the level of response. That is what gives me the passion and love that I have for this job.

This is YOUR call to action to reach out to the railroads that pass through your jurisdiction, obtain trainings that are offered, and continue to take annual refreshers! At the end of the day in the hazmat world, it is not a matter of "IF" but "WHEN". Be prepared.

Jesse Duplechin, a Hazardous Materials Manager for Union Pacific Railroad, provides a demonstration at a rail safety training course for emergency responders held in Denver, CO in June 2024.

Jesse Duplechin, Hazardous Materials Manager, Union Pacific Railroad with his family.

NVFC
NATIONAL VOLUNTEER FIRE COUNCIL
FIRE • EMS • RESCUE

FREE TRAINING

The NVFC and the Pipeline & Hazardous Materials Safety Administration (PHMSA) are helping first responders prepare for pipeline incidents and hazmat response with the FD PREPP and PIT Crew programs.

FD PREPP

Millions of miles of pipelines stretch across the U.S. transporting hazardous materials through thousands of communities. **Are you prepared?** Take the Fire Department Pipeline Response, Emergency Planning, & Preparedness (FD PREPP) FREE online trainings and download the supplemental toolkit.

Pipeline Incidents
Is your fire department prepared?

PIT Crew

Hazardous materials are in our homes, on our roads, and in our communities. All first responders will at some point be involved in hazard mitigation and response. **Are you ready?** Register for a free hazmat train-the-trainer course or apply to host a training at your department through the Partners In Training (PIT) Crew program.

NVFC HAZARDOUS MATERIALS

LEARN MORE ABOUT THE NVFC
www.nvfc.org

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

SIGN UP FOR A RISC CLASS TODAY

Blue & White SIGN CAN SAVE A LIFE

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

Emergencies on or around railroad tracks and trains demand swift action. First responders, emergency personnel and community members can play a critical role in preventing rail-related incidents by knowing how to use the Blue and White Emergency Notification System (ENS) sign.

continued on next page

Understanding the ENS Sign

These rectangular Blue and White signs display a unique phone number and specific crossing ID number, allowing direct communication with the railroad. Calling the number on this sign is the **quickest way to stop rail traffic** in an emergency. When multiple tracks are present, ENS signs may differ on either side of the road, so it is crucial to safely locate and us e the correct one.

If a vehicle is stuck or stalled on the tracks, debris is spotted, or any other hazard arises, calling the number on the ENS sign can alert the railroad to stop oncoming trains and help prevent incidents.

> "It's imperative that first responders know about the blue and white ENS sign and how to safely respond to incidents on or near railroad tracks. Together, we can #stoptracktragedies."
>
> – *JENNIFER DEANGELIS, OPERATION LIFESAVER, INC.*

What to Do in an Emergency:

- If your vehicle stalls on the tracks, **exit immediately** and move to a safe location away from the tracks—even if you don't see a train.
- From a safe distance, **locate the ENS sign, call the number and provide the crossing ID.** No sign? **Call 911.**
- **If you see someone stuck or stalled on the tracks or any other hazard,** safely locate the ENS sign, call the number and share the crossing ID. No sign? **Call 911.**
- **First responders should be aware of ENS signs to use them on-site, as well as request this info from callers.**

First Responder Training

SIGN UP FOR A FREE TRAINING TODAY

Enhance Your Rail Safety Knowledge and Sign Up

First responders can strengthen their rail incident response skills by participating in OLI's free Railroad Investigation/Incident and Safety Course **(RISC),** designed specifically for law enforcement **(RISC LE)** and firefighters **(RISC FF).** This free training, designed by industry experts and post-certified in 40 states, equips first responders with the expertise needed to safely and effectively manage emergencies in the unique rail environment and keep themselves and their communities safe.

SCAN ME

Available in 1-hour, 2-hour, and 4-hour formats, RISC covers essential topics such as identifying rail-specific hazards, maintaining on-scene safety, and collaborating effectively with railroad personnel.

continued on next page

OPERATION LIFESAVER®
Rail Safety Education

Operation Lifesaver, Inc. (OLI), the national rail safety education nonprofit, encourages everyone to familiarize themselves with these signs and share this information with family, friends, and coworkers.

SCAN ME

Help Us Raise Awareness!

OLI posts lifesaving tips daily on Facebook, Instagram, LinkedIn, and X and shares PSAs and videos on YouTube. Follow OLI on social media and share our posts. Help raise awareness about the importance of safety near railroad tracks and trains.

Everyone can do something to help #STOPTrackTragedies.

Know the railroads that operate in your community.

- Recognize the railroad signs and signals.
- Share the rail safety message.
- Sign up for free RISC training
- Talk about the ENS signs in your communities
- Consider becoming an Operation Lifesaver Authorized Volunteer (OLAV) by filling out an application at oli.org/volunteer

Learn more about Operation Lifesaver at oli.org.

Key Rail Safety Facts

OLI works every day across the U.S. to **#STOPTrackTragedies** through education and public awareness campaigns and programs in 47 states and Washington, D.C. We are a proud TRANSCAER partner and support TRANSCAER's mission of assisting communities in preparing for and responding to possible hazardous material transportation incidents.

Every 3 hours
in the U.S., a person or vehicle is hit by a train.

Trains can take
a mile or more
to stop.

More than 60%
of crossing incidents happen at active crossings with lights and/or gates.

First Responder Safety Tips

- **All vehicles – including emergency vehicles – must yield to trains at railroad crossings.**
- **Know about the Blue and White ENS signs and how to use them.**
- **If you see tracks, you should always think train.** Whether responding to incidents or preventing them, always stay alert around tracks and trains. Always assume railroad tracks are active and always expect a train on any track, at any time, in either direction. Multiple tracks means multiple trains.
- **Avoid parking or stopping on tracks.** Trains overhang the tracks, move faster than they appear, and are quieter than expected. 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.
- **If fighting brush or structure fires near railroad tracks, contact the railroad before placing hoses** so they can assist with feeding hoses under tracks. Doing so ensures both safe, effective firefighting and train passage.

Free OLI Rail Safety Resources

OLI offers a variety of free materials educating first responders, professional drivers, school bus drivers, new drivers, and the general public about the importance of making safe choices around tracks and trains. We offer in-person and virtual safety trainings, brochures, posters, Public Service Announcements (PSAs), online video games, and more.

- **Request Free Rail Safety Education Presentations**
  Trained volunteers across the nation 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 inexperienced drivers, and community groups. Sign up at oli.org/request-presentation

- **Free RISC Training**
  Sign Up Today for Free RISC Training – RISC empowers first responders with lifesaving information unique to the rail environment. Find out more and request a course for your agency at oli.org/risc.

- **OLI's Virtual Library**
  Explore OLI's virtual library of rail safety materials on the oli.org website and share the rail safety education message with communities.

See Tracks? THINK TRAIN® WEEK

SEPTEMBER 15-21

Join *See Tracks? Think Train® Week & Operation Clear Track*

Participate in **See Tracks? Think Train® Week (September 15-21, 2025),** an annual week-long collaborative effort concentrating public attention on the need for safe behavior around railroad tracks and trains and join us for **Operation Clear Track (September 16)** where law enforcement and first responders across the country share the lifesaving rail safety education messaging directly with their communities.

Learn more

Email news@oli.org for more info and to be added to our mailing list to receive assets.

TRANSCAER CANADA CELEBRATES 40TH ANNIVERSARY WITH THE LAUNCH OF THE New Safety Train

Article by: Kristina Adler,
Transportation Policy and Program Officer,
National TRANSCAER® Coordinator,
Chemistry Industry Association
of Canada

2025 marks a significant milestone for TRANSCAER® Canada (Transportation Community Awareness and Emergency Response) as it celebrates its 40th anniversary. Established in 1985 by the Chemistry Industry Association of Canada (CIAC), TRANSCAER has dedicated four decades to ensuring the safe transportation of chemicals and dangerous goods by working with communities across Canada.

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Over the past 40 years, TRANSCAER has helped build strong partnerships between industry, government, and emergency responders. This is done through outreach events that are hosted in communities from coast to coast. These events aim to ensure that emergency responders and communities are aware of the dangerous goods traveling through their area, and the measures that are in place to ensure their safe transportation.

"For years, TRANSCAER has played an integral role in safety education and emergency response," said Jeffery Bowes, Chair of Canada's National TRANSCAER Committee. "This anniversary is not only a celebration of our achievements but also an opportunity to look ahead to how we can further contribute to a proactive approach to transportation safety and emergency preparedness in the years to come."

One of the most impactful aspects of TRANSCAER's initiatives is its ability to engage directly with communities. To commemorate this year's milestone, TRANSCAER Canada will highlight this impact by sharing our participants' stories and planning targeted outreach events. Additionally, as a key part of the anniversary celebrations, the TRANSCAER team is excited to launch its new training tank car, the CCPX 911 or "Safety Train," after several years of development.

The Safety Train is a railway tank car that has been converted into a classroom on wheels that travels to key regions offering free learning sessions to first responders, municipal officials, and other stakeholders. The train is outfitted with equipment and displays that provide hands-on learning opportunities to emergency responders and community members across the country.

These sessions focus on rail safety, familiarization with railway equipment, and transportation of dangerous goods. By fostering these partnerships, TRANSCAER can share safety best practices and prepare first responders for potential incidents involving dangerous goods.

While the 40th anniversary provides us with the opportunity to reflect on past achievements, TRANSCAER Canada remains committed to advancing safety and emergency preparedness and plans to expand its outreach efforts by leveraging its new tools. The launch of the new Safety Train is a key step in TRANSCAER's efforts to reach more communities across Canada.

> **"For years, TRANSCAER has played an integral role in safety education and emergency response. This anniversary is not only a celebration of our achievements but also an opportunity to look ahead to how we can further contribute to a proactive approach to transportation safety and emergency preparedness in the years to come."**
>
> *– JEFFERY BOWES, CHAIR OF CANADA'S NATIONAL TRANSCAER COMMITTEE*

Fortieth anniversary events will be celebrated in several communities across Canada. These events aim to recognize TRANSCAER's impacts while highlighting its ongoing commitment to transportation safety.

For more information

For more information about TRANSCAER Canada, upcoming outreach events, and the new Safety Train, visit TRANSCAER.ca or follow @TRANSCAERCanada on LinkedIn and X.

TRANSCAER National Events

Collaboration in Action: Industry-Supported Training That Prepares Responders for Real-World Hazmat and Transportation Incidents

TRANSCAER® (Transportation Community Awareness Emergency Response) continues to advance responder preparedness through a series of national training events. These sessions, conducted in collaboration with industry sponsors, provide hands-on experience and in-depth instruction on hazardous materials transportation and emergency response. Our national-level events focus on transportation (rail or highway) and/or a specific hazardous material; some training events include all three (rail, highway, and a hazardous commodity). These events are delivered across the United States to enhance learning and real-world application.

Throughout 2024, TRANSCAER worked alongside key industry partners to deliver high-quality training to the entire emergency response community. TRANSCAER's goal is to equip responders with the knowledge and skills necessary to handle hazmat transportation incidents safely and effectively. These events not only strengthen emergency response capabilities but also reinforce the importance of industry and community collaboration in safeguarding public safety.

Ammonia Emergency Response Training & Live-Release Drill

North Kingstown, Rhode Island
April 23-24, 2024

A live-release ammonia drill was conducted for responders to practice and perform basic control and confinement operations, including tarp and cover techniques. Decontamination procedures were also incorporated into the drill.

A total of 83 attendees from 18 different local and state agencies participated in the event.

Live-release ammonia drill in North Kingstown, Rhode Island, held from April 23-24, 2024.

Decontamination setup as part of the drill in Rhode Island.

All drills were conducted in a controlled environment and adhered to regulat ory guidelines.

TRANSCAER Rail Safety Transportation & Hazmat Training Event

Denver, Colorado
June 4-6, 2024

From June 4-6, 2024, TRANSCAER hosted a Rail Safety Transportation & Hazmat Training Event in Denver, Colorado. The event was supported by Union Pacific Railroad and TRANSCAER Corporate Member Haz-Mat Response, Inc.® (HMRI). 22 different organizations from the surrounding area participated.

The training included case studies that provided attendees with an overview of railroad incidents and response considerations. Participants also learned about the AskRail® Mobile App, how to read a train consist, and how to interpret critical information for emergency response during a railroad incident. Each training day concluded with a drill scenario, allowing attendees to work through the situation together.

Jesse Duplechin, Union Pacific Railroad, familiarizes attendees with the design and build of pressure and general service tank cars, how to identify tank car types, and how to conduct a field damage assessment.

Attendees work together to establish Incident Command and discuss initial response actions for a simulated LPG release drill using the Union Pacific training tank car in Denver, CO.

TRANSCAER Rail Safety Training & Drill

Seattle, Washington

June 25-28, 2024

TRANSCAER continued its hazmat and rail safety training events in Seattle, Washington, from June 25-28, 2024. BNSF Railway trained 98 attendees from 17 different organizations over four days. The training covered railroad operations, hazards, and the AskRail® Mobile App. Rail hazmat safety and emergency response procedures were also reviewed.

Participants also received a presentation on the challenges associated with recognizing and responding to a flammable liquid by rail emergency. Each training day concluded with a rail-related drill where emergency responders used appropriate Personal Protective Equipment (PPE), checked for leaks on tank car valves, and utilized emergency response capping kits.

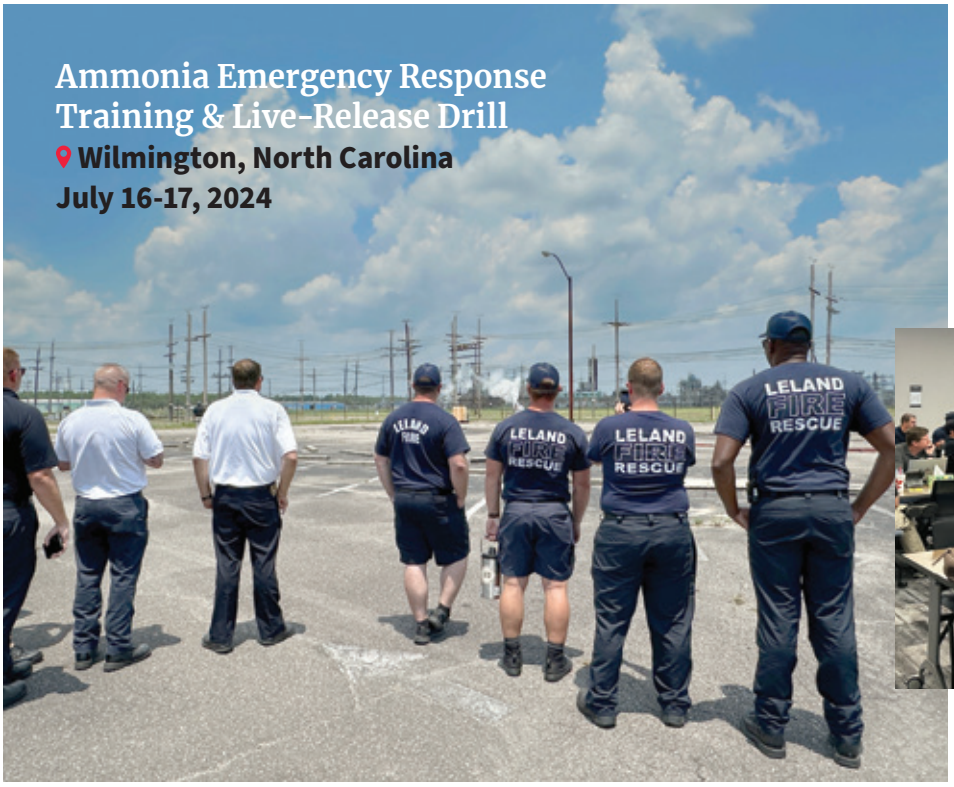
Justin Piper, BNSF Railway, leads local first responders and emergency response contractors through a debrief following the simulated drill scenario in June 2024.

On June 25, 2024, members of the Seattle Fire Department Hazardous Materials Team assist members of the Puget Sound Fire Department Hazardous Materials Team in preparing for entry to mitigate a simulated leak from a training tank car during the drill.

Participants learned about potential leak scenarios involving tank car valves and fittings, as well as methods for mitigating those leaks. During the simulated drill scenario, participants prepared the Indian Springs Emergency Response Kit for the entry team.

Ammonia Emergency Response Training & Live-Release Drill

Wilmington, North Carolina
July 16-17, 2024



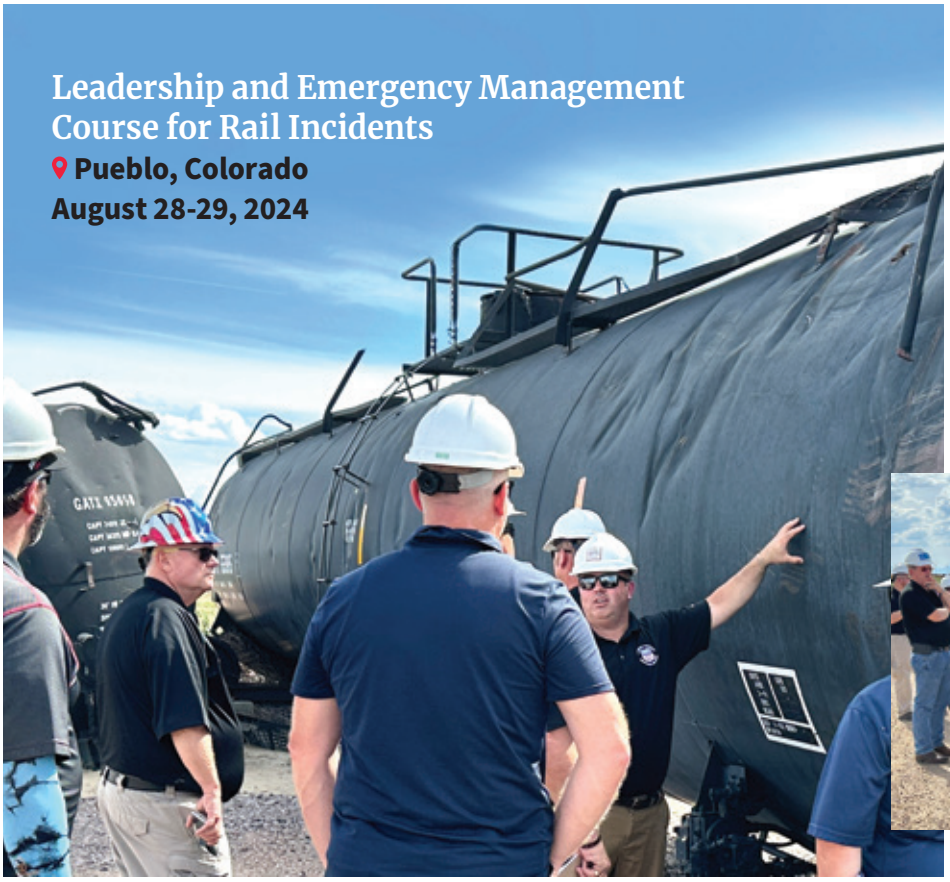
Presentations on Ammonia Emergency Response, Railroad Emergency Response, and ICS During Rail Incidents were conducted at the New Hanover County (NC) Emergency Operations Center. This portion of the training was also held virtually to allow for additional emergency responder participation.

Looking to conduct both training and a live-release drill using HMEP grant funding? That's exactly what the New Hanover County Local Emergency Planning Committee (LEPC) did on July 16-17, 2024, in partnership with TRANSCAER, Tanner Industries, Inc., and CSX Transportation.

Participants from local fire departments observe a demonstration of the physical properties of ammonia during the live-release drill. Due to extreme heat, attendees were unable to participate in the hands-on portion of the drill for their health and safety.

Leadership and Emergency Management Course for Rail Incidents

Pueblo, Colorado
August 28-29, 2024



Matt Thompson, Union Pacific Railroad, provides an overview to attendees on how to conduct a field damage assessment.

TRANSCAER, in partnership with Union Pacific Railroad, hosted a Leadership and Emergency Management Training at the Security and Emergency Response Training Center (SERTC) in Pueblo, CO, from August 28-29, 2024. The event brought together participants from 20 different homeland security and emergency management agencies, state fire marshal offices, and fire departments across 23 states where Union Pacific operates.

John Ireland, Instructor (SERTC), answers questions from attendees about the derailment scene at the SERTC Training Center in Pueblo, CO.

Rail Safety & Hazmat Transportation Training

Las Vegas, Nevada
November 5-7, 2024

TRANSCAER held a national training event with Union Pacific Railroad in Las Vegas, NV, from November 5-7, 2024. The event welcomed 115 attendees from 16 different organizations, including participants from Nutrien and two TRANSCAER Corporate Members—GrayMar Environmental Services, Inc. and Indian Springs Manufacturing, Inc.

Attendees learned about the AskRail® Mobile App, tank car anatomy, common leaks, valve fittings, pressure relief devices, tank car housings, and case studies. The event also covered ammonia emergency response procedures.

Mark Newton, Union Pacific Railroad, guides attendees through an overview of tank cars during a field exercise in Las Vegas

Matt Paynter, Nutrien, provides an overview of anhydrous ammonia, including its chemical and physical properties, hazards, and potential outcomes associated with an anhydrous ammonia incident.

Ray Racha (center), Indian Springs Manufacturing, Inc., engages participants in hands-on activities, allowing them to gain practical experience with an emergency response kit.

Kristian Ahrens, Jr. (center), Union Pacific Railroad, discusses how to conduct a field damage assessment with attendees.

Thank You to Our Sponsors & Partners

A special thank you to all our training partners and sponsors who made these events possible. Your dedication and support play a crucial role in TRANSCAER's mission to enhance safety through education and hands-on training.

Stay tuned for upcoming events in 2025 as we continue to expand our reach and provide critical training opportunities to emergency responders across the country.

TRANSCAER®

View Upcoming TRANSCAER Training Events
transcaer.com/training training-events/united-states

Please Note: Training events are frequently added by Sponsors, TRANSCAER, and State Coordinators.

Follow us on social media or check the Training Events webpage regularly for updates.

@TRANSCAER

Advancing Hazmat Training *Across the Border*

Article by: Sawyer Sanchez, Training & TRANSCAER Curriculum Specialist, CHEMTREC®

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TRANSCAER® MÉXICO

Event attendees, instructors, and team members from Ferromex, SEIF, MERGOB, and TRANSCAER.

Building on the impact we made last year in Monterrey, TRANSCAER México aimed to further expand our reach across the country. In 2024, we brought our efforts to Veracruz, Mexico hosting an event in collaboration with Grupo México Transportes—Ferromex, SEIF, and MERGOB—three of the four TRANSCAER México Corporate Members. Despite a storm hitting Veracruz during the two-day event, about half of the 250 registered attendees successfully participated.

The TRANSCAER México team provided a brief program overview before handing it over to Ferromex, who covered railroad safety, outlined emergency response protocols, displayed emergency response kits, and provided an overview of the foam laboratory.

continued on next page

Acknowledgments

This event's success was made possible by the invaluable contributions of the entire team of Grupo México Transportes – Ferromex, SEIF, and MERGOB.

Jorge Alberto Moreno Velásquez
Grupo México - Ferromex

José Juan Aguilar Rodríguez
Grupo México - Ferromex

Javier Infanzón
SEIF

Abel Gonzáles
MERGOB

Workshops/Field Exercises

1

The **EPP A-level Workshop** covered the elements that make up the maximum level of protection (according to EPA) against exposure to vapors, gases, or particles that could severely impact health through skin contact or inhalation. Participants wore hazmat suits and took a brief walk to experience the gear firsthand.

2

The **Valves and Tank Car Components Workshop** provided a hands-on opportunity for the attendees to learn about liquid and gas valves. During the workshop attendees learned about other elements within the manway of a tank car including the thermowell, tank car gauge stick, and pressure relief valve.

3

The **Emergency Response Kit (ERK) Workshop** provided attendees the opportunity to learn about the ERK manufactured by Indian Springs for tank cars and tank trucks.

4

The **ICS–Tabletop Simulation Workshop** discussed Implementing the Incident Command System (ICS) as established in NOM 010 SSPC 2019 through a tabletop exercise, where roles, functions, and an incident action plan must be defined to manage an emergency.

5

The **Decontamination Zone Workshop** covered the essential elements required to set up a decontamination zone when toxic or corrosive materials are involved.

The **Emergency Response Guide (ERG) Workshop** provided an overview of the sections that make up the ERG and how to utilize the guide. The workshop also covered the advantages of the ERG application on cell phones and how to define isolation zones and protection zones.

6

7

The **Dynamic Kahoot – Hazmat Rally Workshop** allowed for some friendly competition between attendees. The trivia contest evaluated the attendees' knowledge about hazardous materials.

Looking Ahead

The TRANSCAER México program is embracing a new vision to broaden its reach across Mexico. Instead of hosting a single major event each year, the program is working to expand TRANSCAER Mexico's presence by organizing two to three major events per year in different regions of Mexico, increasing training opportunities for emergency responders.

As TRANSCAER México continues to grow, we appreciate the ongoing support of our Corporate Members through the TRANSCAER México Corporate Membership program. TRANSCAER México is a voluntary outreach program that relies on corporate members to help fund training and outreach efforts. In return, Corporate Members gain valuable opportunities to engage with emergency responders, industry professionals, and transportation companies.

To pledge your support, complete the TRANSCAER México Corporate Membership application form.

transcaer.com/mexico/formulario-de-solicitud-de-miembro-corporativo

Grupo México Transportes – Ferromex (Team Picture)

Stay updated

on the latest training events, online courses, and resources in Spanish by following TRANSCAER México on Facebook at facebook.com/transcaermexico

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a nuestros miembros corporativos

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MERGOB
Mexican Emergency Response Group Operations and Bussines

Are you interested in becoming a TRANSCAER Corporate Member?

LEARN MORE AT
transcaer.com/corporate-members

See more details on page 59

Exploring the TRANSCAER® LMS: A Hub for Free Hazmat Training

Article by: Sawyer Sanchez, Training & TRANSCAER Curriculum Specialist, CHEMTREC®

In today's digital landscape, Learning Management Systems (LMS) have transformed online education and professional training, making crucial knowledge more accessible than ever. The TRANSCAER LMS serves as a central hub for free training resources, including courses, webinars, and virtual reality modules tailored for first responders, law enforcement, firefighters, emergency medical personnel, military personnel, and hazmat professionals across the nation.

The TRANSCAER LMS is designed to provide a comprehensive training platform where first responders can access content on hazardous materials, safety, transportation, and emergency response from the nation's leading railroads and trade associations. Since its launch at the end of 2020, the LMS has welcomed over 18,000 registered users, averaging more than 350 new registrations per month.

Comprehensive Course Offerings

The TRANSCAER LMS currently offers 21+ courses covering essential topics including:

- Hazmat Awareness & Response
- Rail Safety Training
- Lithium-Ion Battery Response
- Flammable Liquids Safety
- Steel Drums & Crude Oil Transportation
- And much more!

Additionally, two courses are available in Spanish, focusing on ethanol emergency safety and chlorine emergency response to provide accessibility to a broader audience.

The TRANSCAER LMS has many training opportunities, including our 21+ online courses, AR/VR training, 5+ webinars, a link to The Hazmat Files Podcast episodes, 30+ *Seconds Count-Are Your Prepared?* videos, and a link to upcoming TRANSCAER events.

Immersive Virtual & Augmented Reality Training

To enhance hands-on learning, the TRANSCAER LMS includes Virtual Reality (VR) modules, sponsored by BNSF Railway, about initial Incident Size-up and Reading a Train Consist, as well as the TRANSCAER Augmented Reality (AR) application featuring six interactive rail-focused scenarios. These include:

- New DOT 117 BOV Handle Operation
- Rupture Disk Mitigation on HCl Railcars
- DOT 117 Manway Gasket Alignment
- Chlorine Gas Release Response
- Rail Crossing Incident Response
- Using a Train List

These advanced simulations allow first responders to experience real-world hazmat and rail incidents in a controlled environment, improving their readiness for emergencies.

Visit the
TRANSCAER LMS WEBSITE
hazmatcourses.com

An access code is not required to
CREATE AN LMS ACCOUNT
Sign-Up Link: pathlms.com/transcaer/sign_up

Webinars & Additional Resources

The LMS also hosts five webinars covering rail safety and chlorine emergency response, available in both English and Spanish.

Additionally, users can find direct links to the TRANSCAER website, where more valuable resources are available, including:

- ***The Hazmat Files* Podcast**
  A must-listen for first responders, military hazmat personnel, law enforcement, and emergency response teams. Season 1 is currently available and stay tuned for Season 2 coming soon!
- ***Seconds Count – Are you Prepared?* Video Series**
  Quick, high-impact videos designed to provide first responders with rapid insights into critical hazmat topics.
- **In-Person Training & Live Webinars**
  Registration access for upcoming in-person training events across the U.S. and Mexico, covering rail safety, ethanol safety, tank car safety, and more.

reaching OUT

The 2024 Binational Event U.S./Mexico training event was held in Nogales, AZ, from March 4-8, 2024. 280 attendees were trained.

Members of the Las Vegas Fire Department joined industry partners at the Union Pacific Railroad & TRANSCAER Rail Safety & Hazmat Transportation training event in Las Vegas, NV, from November 5-7, 2024.

Union Pacific Railroad, SERTC, and TRANSCAER partnered to host Emergency Management Agencies Leadership & Management Course for Rail Incidents at Security and Emergency Response Training Center (SERTC) in Pueblo, CO, on August 28-29. Union Pacific Railroad invited emergency management and fire officials from across the 23 states they operate in to participate in the training session.

TRANSCAER, Union Pacific Railroad, Nutrien, Indian Springs Manufacturing, Inc., and GrayMar Environmental Services, Inc. (GrayMar) partnered to host a Rail Safety & Hazmat Transportation Training in Las Vegas, NV, on November 5-7, 2024. A special thank you to TRANSCAER's Corporate Members, GrayMar and Indian Springs Manufacturing, for not only supporting our program on an annual basis but also hitting the road with us to train first responders! We couldn't do it without your support and dedication!

An LNG Safety & Highway Transportation Training was hosted in Miami, FL from September 24-26, 2024. The training included Liquefied Natural Gas Safety and Emergency Response. Attendees also had the opportunity to learn about multiple highway cargo trailers that were provided onsite by Kenan Advantage Group.

Union Pacific Railroad and TRANSCAER held a training event in Denver, CO, from June 4-6, 2024, focused on railroad case studies, understanding tank cars, and a drill scenario.

Members of the National TRANSCAER Task Group took a tour of the new CHEMTREC Emergency Operations Center in Falls Church, VA, on December 12, 2024.

Government officials in the Denver, CO, area joined Union Pacific Railroad, the American Chemistry Council, and TRANSCAER.

In 2014, The Chlorine Institute (CI) put its training tank car into service to enhance hands-on chlorine emergency response training events. This tank car has served its purpose well over the past ten years and is now ready to retire. CI's Emergency Preparedness Issue Team chose to donate the training car (ERTX 1017) to the Mississippi State Fire Academy (MSFA), which has been a partner in hosting CI's annual CHLOREP Team training every year since 2007.

Government officials were out at The Sulphur Institute training in Richmond, VA, on May 7-8, 2024. TSI collaborated with TRANSCAER, AdvanSix, Veolia, and CSX Transportation to host the training for local emergency responders. The training combined presentations on Sulphur, railroad emergency response presented by CSX Transportation and hands-on rail safety elements.

BEHIND THE SCENES FOR THE TRANSCAER SECONDS COUNT - ARE YOU PREPARED? *VIDEO SERIES*

This behind the scenes shot captures the filming of our new Rail Incidents Video for Emergency Responders in Illinois with the Homewood Fire Department, CN Dangerous Goods Team, and our video producer, Andy Johnson (iMed Design).

Be sure to check out the final video (coming soon) under the TRANSCAER Seconds Count – Are you Prepared? *video series available online.*

A TRANSCAER Ammonia Emergency Response Training & Live-Release Drill was held in North Kingstown, RI, from April 23-24, 2024, with 83 emergency responders in attendance.

BNSF Railway and TRANSCAER hosted a Rail Safety Training & Drill for 4 days in Seattle, WA. There were 98 attendees from 17 different organizations that attended the training from June 25-28, 2024.

CHEMTREC and TRANSCAER were honored to attend the 36th Annual National Fire and Emergency Services Symposium and Dinner hosted by the Congressional Fire Service Institute on February 13, 2024, in Washington, D.C.

To the courageous first responder community:

"Thank you for your unwavering dedication, selflessness, and commitment to keeping our communities safe. Your bravery and service do not go unnoticed, and we are deeply grateful for everything you do, every single day!"

Left to Right: Chief Kenny Gray (Calvert County, MD, Rescue Dive Team), Maria Middleton (CHEMTREC), Andrew LaVanway (CHEMTREC), Erica Fischer (CHEMTREC & TRANSCAER), Chief Steve Stanton (Calvert County, MD, Fire & EMS), PMIC Adam Weiss (Calvert County, MD, Fire & EMS), and Joe Milazzo (CHEMTREC). Not pictured but in attendance: Chief Mike Hubbel (Prince William County, VA, Fire & EMS) and Keith Silverman (Somerset, NJ, Fire & Rescue and TRANSCAER Executive Committee Member).

TRANSCAER®

Empowering Hazmat Responders: 2024 Highlights from the TRANSCAER Hazmat Team Response Fund

Article by: Erica Fischer, Director - Training, Outreach, and Partnerships, CHEMTREC®

The TRANSCAER® Hazmat Team Response Fund, established in 2020, continues to enhance hazmat response capabilities by providing funding for essential equipment and advanced training. This initiative enables responders to acquire the tools they need to protect themselves and their communities when handling hazardous materials during transportation-related incidents.

In 2024, the fund supported two outstanding hazmat teams, reinforcing their commitment to safety and preparedness:

Beaver County Hazardous Materials Team

Beaver, PA

The funding allowed Beaver County Hazmat Team to acquire a MagnaSeal, a high-strength magnetic patch that can provide a quick and effective solution for sealing leaks in tanks. Given the team's location along major transportation corridors—including the Pennsylvania Turnpike, Interstate 376, and the Ohio River—these patches enhance their response efficiency. The team also provides mutual aid, notably responding to the East Palestine, OH, train derailment and supporting 13 counties through the Southwestern Pennsylvania All Hazards Task Force.

Beaver County (PA) Emergency Services with their MagnaSeal patches, purchased through the TRANSCAER Hazmat Team Response Fund.

continued on next page

Clarksville Fire Rescue

Clarksville, TN

Serving a rapidly growing community and a major industrial park, the Clarksville Fire Rescue Department—the only municipal fire department in its county—used its funding to purchase a Draeger HazMat Simultest Kit. This tool enables rapid identification and quantification of chemical substances, ensuring a more precise and effective emergency response. With heavy interstate traffic and significant hazardous material transport through its jurisdiction, this investment strengthens the team's ability to protect residents and advance safer commerce.

The Clarksville Special Operations Team will now have the ability to detect 15 chemicals in less than 5 minutes with its new HazMat Simultest Kit.

Thank You to Our TRANSCAER Corporate Members

The TRANSCAER Hazmat Team Response Fund is made possible through the generous support of our Corporate Members. Their contributions not only enhance emergency response capabilities but also help build safer, more resilient communities across the country.

Learn more about joining the Corporate Member Program on page 59.

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Past Recipients of TRANSCAER's Hazmat Team Response Funding

2023

Buckingham County Department of Emergency Services
Buckingham, VA

Carters Valley Fire Department
Church Hill, TN

Polk County Fire Rescue
Bartow, FL

2022

City of Marion Fire Department
Marion, SC

Elgin Fire Department
Elgin, IL

2021

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
2025 Application Period

The 2025 application period opened on February 3, 2025, and will remain open through June 6, 2025.

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 must be affiliated with a local or state volunteer, career, or combination fire department, or be a regionally organized hazmat team. All hazmat teams must be located in the United States and be legally organized under state law.

  Note: For regional hazmat team recipients, the award will be provided to one organization with directed distribution to the Regional Hazmat Team.

- The hazmat team must demonstrate its need to receive funding, and in the application essay, describe the specific hazmat equipment that would be purchased and/or the advanced training the hazmat team would attend to increase its response capabilities to hazardous material transportation incidents.

- Each hazmat team/department may submit only one application. Any additional applications received 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 solely 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, application essay details, 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.

Applications that do not meet the stated criteria will be disqualified from the application process.

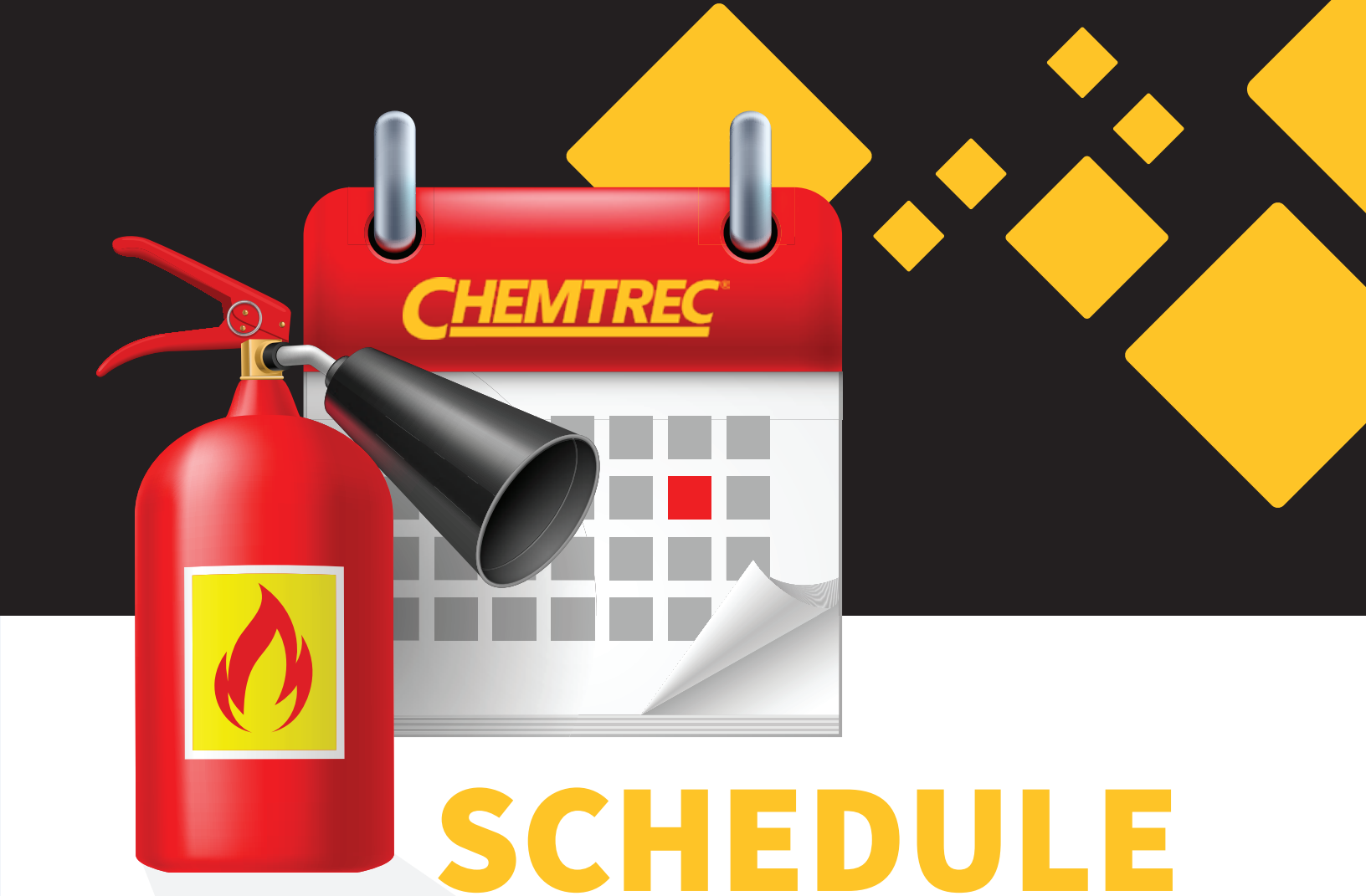
Selection Process

After the application period ends, the TRANSCAER Executive Committee will review the applications to assess financial need, anticipated use of funds, community risk, and overall eligibility. At a minimum, two hazmat teams will be selected to each receive up to $5,000 each in funding. Selections are based upon the information provided in the application essay and the decisions of the TRANSCAER Executive Committee are final.

Learn more about the

HAZMAT TEAM RESPONSE FUND

transcaer.com/about-transcaer/hazmat-team-response-fund



SCHEDULE A DRILL

Quite often, the first time a responder interacts with CHEMTREC is during an emergency. To help emergency responders enhance their knowledge of the resources available through CHEMTREC during a hazmat incident, we offer a comprehensive drill program.

CHEMTREC's drill program familiarizes your team with our process by walking them through a mock scenario that would require them to contact our Operations Center. The exercise is simulated to demonstrate how CHEMTREC's Emergency Service Specialists would support you during an actual emergency call.

Emergency responders benefit from the drill experience by walking through the motions of our 24/7 emergency response service, so they have a better understanding of how CHEMTREC can assist responders during real-world incidents by connecting you with everyone involved and providing your team with the information needed to manage hazmat shipping incidents safely and efficiently.

chemtrec.com/training-drills/schedule-drill

MEET OUR TEAM

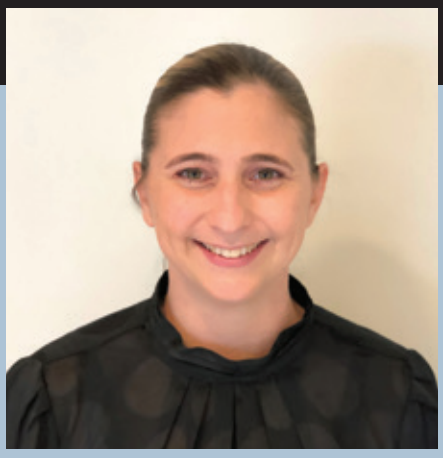
2025–2026 Executive Committee

CHAIR

Joe Taylor
CSX Transportation

VICE CHAIR

Pete Kirk
Dow



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The Chlorine Institute

RAILROAD SPONSOR

Paul Holt
Union Pacific Railroad

NTTG MEMBER

Keith Silverman
GoldShield TEAM

DIRECTOR

Erica Fischer
TRANSCAER/CHEMTREC


CSX

TEAM MEMBER HIGHLIGHTS

SEAN REID

Manager of Emergency Preparedness & Training
CSX Transportation
Jacksonville, FL

Sean Reid is a newly appointed member of the National TRANSCAER® Task Group (NTTG), representing CSX Transportation. He began his career with CSX in November 2010 and currently serves as the Manager of Emergency Preparedness & Training within the CSX Hazardous Materials Team. Sean initially joined CSX as an Emergency Communications Specialist in the Public Safety Coordination Center (PSCC), where he played a crucial role in managing emergency communications. His expertise led to his transition onto the Hazardous Materials Team as a Crisis Communications Manager, where he oversaw hazardous materials and environmental incidents, coordinated resource dispatch, interfaced with shippers through CHEMTREC®, made regulatory notifications, and oversaw various projects. Due to operational needs, Sean later returned to the PSCC as a supervisor, leading a team of Emergency Communications Specialists responsible for incident response, information dissemination, and regulatory compliance. His leadership facilitated seamless coordination among first responders, regulatory agencies, and internal business partners to ensure safe and efficient operations.

Before joining CSX, Sean worked at Naval Air Station Jacksonville's Regional 9-1-1 Dispatch Center, where he began as a dispatcher and was later promoted to Assistant Training Coordinator. In this role, he trained new employees, managed 15 training officers, and supervised the training and professional development of the center's dispatchers.

Sean's commitment to emergency preparedness and response stems from his military background. He served four years in the U.S. Air Force as an F-16 Crew Chief, completing deployments in Kuwait, Saudi Arabia, and South Korea. His passion for public safety and emergency management led him to further his education, earning a bachelor's degree in Homeland Security and a master's degree in Emergency and Disaster Management from American Military University.

Outside of his professional life, Sean has been married to his wife, Abigail, for 16 years. Together, they have two children, Payton (15) and Carter (13). An avid traveler, he has spent over 11 years living in various countries across Europe and Asia. In his free time, he enjoys fishing and woodworking. Additionally, he volunteers as an Assistant Scoutmaster for Troop 389 in Middleburg, FL, supporting youth development through scouting activities and mentorship.

RYAN BOWLEY

Vice President
Government Affairs
The Fertilizer Institute

Prior to joining The Fertilizer Institute (TFI), Ryan worked in government relations, public policy, and corporate affairs in the freight transportation, energy, natural resources, consumer products, and chemical sectors. His experience includes roles with the American Trucking Associations, BHP, SC Johnson, and the Owner-Operator Independent Drivers Association. He also served as the Washington, DC representative for the South Carolina State Ports Authority.

Before transitioning to the private sector, Ryan was a legislative staffer to members of Congress serving on the Appropriations and Transportation & Infrastructure committees.

A native of northwest Pennsylvania, Ryan now resides in Washington, DC. He earned his bachelor's degree from The American University, graduating Phi Beta Kappa, and holds a master's degree from The George Washington University.

JOE MILAZZO

Director of Standards
CHEMTREC®

Joe Milazzo began his career at CHEMTREC in 1988 in the Emergency Operations Center. Over the years, he has held various roles within the center, starting as an Emergency Services Specialist, then advancing to a Team Supervisor and a Training Coordinator, and ultimately Director of the Emergency Operations Center.

In January 2024, Joe transitioned to the CHEMTREC Training, Outreach, and Partnership Team (TOPS) under the leadership of Erica Fischer. In this position, he collaborates with the TRANSCAER team to plan and staff events, works with TRANSCAER Corporate Sponsors, and identifies potential sponsors and partners to enhance and expand the program. He also represents CHEMTREC on the National TRANSCAER Task Group (NTTG). Joe engages with the first responder community to discuss both TRANSCAER and CHEMTREC capabilities. He has presented on both programs at various conferences and events. Additionally, he has attended the Pipeline and Hazardous Materials Safety Administration Hazmat Roundtable yearly to discuss and address emerging trends and concerns in the response to hazardous materials.

Joe takes great pride in his tenure at CHEMTREC/TRANSCAER and the achievements of the team. "TRANSCAER is the most vibrant and action-packed team in CHEMTREC, and I am deeply proud of the difference that we can make to the responders and the communities in which they serve," Joe said.

Joe has been married to Sandy for 34 years, and they have one daughter, Kali, who is a public-school teacher living in the City of Newport News, VA.

CARLOS SANCHEZ

Director
Incident Response Team (IRT)
GrayMar Environmental Services

With more than 25 years of industry experience, Carlos Sanchez is the Director of GrayMar Environmental Services' Incident Response Team (IRT). Under Carlos' leadership, this team provides professional, technical, and specialized on-demand emergency response services to customers throughout GrayMar's service footprint.

Carlos is an expert in all areas of hazardous materials emergency management, working with customers across a variety of industries, including transportation, oil and gas, chemical manufacturing, and many others. With safety as his top priority, he oversees all high-risk and complex incidents, manages large projects, and actively participates in training exercises as needed.

His relationship with TRANSCAER® spans nearly two decades as an active member. During this time, Carlos has led training sessions as an Outreach Instructor, teaching all aspects of emergency response, including railroad safety and tank car safety awareness (his favorite!).

Carlos is thankful for his team at GrayMar Environmental. In his words, "I couldn't do my job without each and every one of them!" Outside of work, Carlos enjoys fishing and is a salsa connoisseur, experimenting with new recipes in his free time and regularly sharing his creations with his training attendees.

WE WANT YOU TO JOIN OUR TEAM!

We are currently recruiting State Coordinators

APPLY HERE!

transcaer.com/coordinators/apply

SPONSORSHIP PROGRAM

Why become a sponsor?

TRANSCAER trains 30,000+ emergency responders each year for FREE! Since we are a voluntary national outreach program, we depend on our sponsors to financially support our training and outreach initiatives.

- Sponsorship benefits your company with new channels to promote your brand and visibly promote the safe transportation and handling of hazardous materials.
- Sponsorship both supplements and reinforces your training initiatives. Your sponsorship support enables TRANSCAER to provide quality training programs for emergency responders throughout the year.

Apply Online

transcaer.com/sponsorship-opportunities/sponsor-application

For additional questions regarding TRANSCAER's Sponsorship Program please contact:
Erica Fischer through email at efischer@chemtrec.com or call (703) 741-5524.

SPONSORSHIP BENEFITS	Champion ($11,500)	Supporter ($8,500)
Representative & Voting Ability on NTTG	✔	✔
Company logo on TRANSCAER® homepage	✔	✔
Access to TRANSCAER Coordinator Portal	✔	✔
Ability to promote your support of TRANSCAER with the use of the "Proud Sponsor of TRANSCAER" logo	✔	✔
Company description and website link on TRANSCAER Sponsorship webpage	✔	✔
Acknowledgment of Sponsorship & Training Program in a dedicated slide of TRANSCAER Overview Presentation	✔	✔
Supporting emergency responders and communities across North America through the TRANSCAER Program	✔	✔
Company logo on TRANSCAER Champion Sponsor banner utilized at all national-level hazmat conferences where TRANSCAER attends with an exhibit booth	✔	-
Promotion of your company logo and yearly training recap in TRANSCAER Fact Sheet (distributed at all national-level conferences that TRANSCAER attends and in the TRANSCAER Outreach Package)	✔	-
Ad in the next edition of *TRANSCAER today* Magazine	Full Page	Half Page
TRANSCAER apparel items for your company and/or instructors (issued annually)	10	5
TRANSCAER website ads annually	4	2
Non-commercial articles in the next edition of *TRANSCAER today* Magazine	3	1
Training promoted via ad on TRANSCAER's social media accounts	3 events per year	1 event per year

LETTER FROM THE TRANSCAER DIRECTOR

thank you

Dear TRANSCAER Community,

As we reflect on 2024, I want to express my heartfelt appreciation for the dedication, collaboration, and unwavering commitment of our Sponsors, Partners, Corporate Members, and State Coordinators. Your support has been instrumental in advancing TRANSCAER's mission of ensuring communities and first responders are well-prepared for hazardous material incidents.

Last year was one of tremendous growth and innovation. We expanded our reach with new training opportunities, launched valuable resources, and continued strengthening our partnerships to enhance emergency response capabilities nationwide.

2024 Highlights

- **The Hazmat Files Podcast** – We introduced *The Hazmat Files*, an exciting new podcast series that brings real-world hazmat response stories, expert insights, and in-depth discussions on critical transportation and safety topics. This platform has allowed us to connect with a broader audience and share knowledge in a dynamic and engaging way.
- **New Online Lithium-Ion Battery Training** – As battery-powered technology continues to evolve, so do the risks. Our new *Lithium-Ion Battery Response Online Training* was developed to provide first responders with the knowledge needed to handle battery-related emergencies safely and effectively.
- ***Seconds Count - Are you Prepared?* Training Videos** – We expanded our *Seconds Count - Are you Prepared?* video series, offering quick, high-impact training modules designed to reinforce best practices in hazardous materials response. These short yet powerful videos have become a go-to resource for responders seeking on-demand training.
- **Training & Drills** – Thanks to our incredible team and partners, we hosted 1,063 training sessions across the country. A total of 47,552 participants from the emergency response community received hands-on training, scenario-based drills, downloaded a podcast, or attended online training courses or webinars to enhance their skills and preparedness in hazmat transportation and emergency response.

Erica Fischer
Director, Training, Outreach, and Partnerships
CHEMTREC®/TRANSCAER®
efischer@chemtrec.com

THE HAZMAT FILES PODCAST

DON'T FORGET TO SUBSCRIBE & LISTEN!

If you haven't listened to the episodes in our first season, we encourage you to subscribe and listen.

TRANSCAER
SCAN ME

Stay tuned!
Season 2 is coming soon.

◆ **Grant Funding & Support** – We are grateful for the federal grant funding support that has allowed us to expand our reach and develop critical training programs and resources. We secured $995,357.00 in federal grant funds through the Federal Railroad Administration (FRA) and the Pipeline and Hazardous Materials Safety Administration (PHMSA), which will enable TRANSCAER to enhance our offerings and bring more free training to emergency responders nationwide.

A Special Thank You to the First Responder Community

To the firefighters, law enforcement officers, emergency medical personnel, and all hazmat responders – we recognize the sacrifices you make to protect our communities. Your dedication inspires us to continuously improve our training programs and provide the resources you need to stay safe on the job.

Looking Ahead

As we close out the first quarter of 2025, TRANSCAER is excited to continue providing world-class training and hosting drills that prepare first responders for the challenges ahead.

Additionally, we are already planning for a major milestone—**TRANSCAER's 40th anniversary in 2026!** We look forward to celebrating four decades of our program's commitment to safety, preparedness, and training with all of you!

Be sure to check out our upcoming training events.

TRANSCAER
SCAN ME

Thank you for being part of the TRANSCAER network. Your support, engagement, and passion make all the difference. Here's to another impactful year ahead!

Stay safe and stay prepared!

Erica Fischer

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

Members of the National TRANSCAER Task Group held their June 2024 quarterly meeting in Missoula, Montana. Following the meeting, several members enjoyed a team-building exercise and the thrill of white-water rafting!

Back Row from Left to Right: Paul Hartman (American Petroleum Institute), Ken Collins (CN Rail), Derek Lampkin (BNSF Railway).

Front Row Left to Right: Pete Kirk (Dow), Ashley Lampkin, Missy Ruff (The Renewable Fuels Association), and Erica Fischer (CHEMTREC/TRANSCAER).

Join the CORPORATE MEMBER PROGRAM

Why Become A Corporate Member?

TRANSCAER trains thousands of emergency responders each year for FREE! Since we are a voluntary national outreach program, we depend on our corporate members to financially support our training and outreach initiatives.

Corporate membership benefits your company with new channels to promote your brand. Additionally, your membership contributions enable TRANSCAER to provide quality training programs for emergency responders throughout the year.

Learn more at
transcaer.com/corporate-members

✓ Benefits Include:

Employee Satisfaction
Companies that partner with nonprofits and are engaged in community outreach tend to have better employee retention and satisfaction.

Professional Development
Volunteering is a great way to give back to your community. One of the key benefits of volunteerism for employees is the ability to create new skills and sharpen existing ones.

Philanthropy
Volunteering highlights the philanthropic work of your organization and improves consumer confidence that your organization is invested in social responsibility.

Marketing & Community Outreach
Becoming a corporate member and showing your support of emergency responders improves your reputation among your peers and in the community. Improving employee satisfaction and professional development and demonstrating corporate social responsibility can result in a positive return on investment.

APPLY ONLINE

transcaer.com/corporate-member-application

NATIONAL TRANSCAER SPONSORS

American Chemistry Council

API American Petroleum Institute

ASSOCIATION OF AMERICAN RAILROADS

TSI THE SULPHUR INSTITUTE

CHEMTREC

center for LNG

ISDI Industrial Steel Drum Institute

RFA RENEWABLE FUELS ASSOCIATION

The Chlorine Institute

AIHA | GUIDELINE FOUNDATION

TRANSCAER®

3130 Fairview Park Drive, 4th Floor, Falls Church, VA 22042
transcaer.com