OHIO HAZMAT TEAMS CONFERENCE

2026 ANNUAL TRAINING & EXPO

25th Annual Haz-Mat Technician/Specialist Refresher Training

Dates: November 6 & 7, 2026
Location: Solon, Ohio
Features: Advanced Workshops • Industry Vendors • Professional Networking
Official Website: www.OhioHazmatConference.com

Sponsored by the **Chagrin / Southeast Hazmat Response Team**
with generous support from the **Cuyahoga County EMA & LEPC** and the **Ohio PUCO**

Friday, November 06, 2026 — Schedule

Time	Room A	Room B	Room C
0800 - 0830	Registration, Coffee & Visit Exhibits (All Areas Open)		
0830 - 0845	Welcome & Opening Remarks *Mark Vedder*		
0845 - 1000	**ONG 52nd WMD CST Briefing:** Capabilities and Resources		
1000 - 1030	Break — Visit Exhibits		
1030 - 1200	**Toxicology for Hazmat:** What Do These Numbers Mean? *Barry Lindley*	**Gas & Vapor Identification:** Integrating FTIR into Response *Kilpatrick Woodward*	**Initial Assessment of Rail Incidents** *Jon Rettig*
1200 - 1245	Lunch — Provided in Exhibit Areas (Exhibits Open)		
1245 - 1415	**Radiation 101:** Emergency Response Basics & Instruments *Trent North*	**Emergency Response to Corrosives Incidents** *Thomas Murdock*	**Commonly Overlooked Metering Tasks** *Ronald Stenger*
1415 - 1445	Break — Cookies & Exhibits		
1445 - 1630	**Radiation Monitoring for Events:** Locating & Identifying *Trent North*	**Chemical Assisted Suicide:** Rescue vs Recovery *Thomas Murdock*	**Commonly Overlooked Metering Tasks** (Repeat) *Ronald Stenger*
1630	Evaluations & Certificates Distribution		

Saturday, November 07, 2026 — Schedule

Time	Room A	Room B	Room C
0800 - 0830	Registration, Coffee & Visit Exhibits (All Areas Open)		
0830 - 0845	Welcome & Opening Remarks *Mark Vedder*		
0845 - 1000	**Risk Based Response to an Explosives Emergency** *Robert McClure*		
1000 - 1030	Break — Visit Exhibits		
1030 - 1200	**National Weather Service Assistance for Hazmat** *Freddie Zeigler*	**UAS Across the Hazmat Incident:** Assessment, Ops & Remediation *Paul Celinski / Scott Mlakar*	**Oxidizers and Other Pool Chemicals** *Thomas Murdock*
1200 - 1245	Lunch — Provided in Exhibit Areas (Exhibits Open)		
1245 - 1415	**Damage Assessment of Highway Cargo Tanks** *Barry Lindley*	**Level A Suit Emergencies:** Do You Have A Plan? *Mark Vedder*	**Emergency Response to Corrosives Incidents** *Thomas Murdock*
1415 - 1445	Break — Cookies & Exhibits		
1445 - 1630	**Response to Lithium Battery Emergencies - What's New?** *Nick Zamiska*	**Anhydrous Ammonia Nurse Tanks** *Mark Vedder*	**Gas & Vapor Identification:** Integrating FTIR into Response *Kilpatrick Woodward*
1630	Evaluations & Certificates Distribution		

Workshop Descriptions

FRIDAY SESSIONS

Ohio National Guard 52nd WMD Civil Support Team Briefing

This presentation will provide an overview of the capabilities and resources of the unit. The 52nd CST's mission is to support local and state authorities at domestic WMD/CBRNE or natural disaster incident sites by identifying agents and substances, assessing current and projected consequences, advising on additional response measures and assisting with appropriate requests for additional state and federal support.

Toxicology for Hazmat: What Do These Numbers Mean?

Instructor: Barry Lindley

TLV-TWA, REL, PEL, IDLH, AEGL. What do they all mean and how can I use the information in my risk assessment and response? This workshop will break it all down into useable information.

Gas and Vapor Identification: Integrating FTIR into Modern HazMat Response

Instructor: Kilpatrick Woodward

This workshop explores how gas-phase FTIR provides highly specific, quantitative identification of airborne hazards and how it integrates with traditional air-monitoring equipment such as PIDs, multi-gas meters, and colorimetric tubes. Through field case studies and practical examples, participants will learn how FTIR enhances situational awareness, confirms unknowns, and supports critical tactical decisions including PPE selection, isolation zones, and remediation strategies during complex chemical incidents.

Initial Assessment of Rail Incidents

Instructor: Jon Rettig

This workshop provides emergency responders with essential knowledge and practical strategies for effectively managing the initial phase of a rail emergency. Learn about what resources are available, who to contact for assistance, the AskRail app, and how to use a consist.

Radiation 101: Radiation Basics, Survey Meters and Personal Dosimeters

Instructor: Trent North

This workshop will provide a basic understanding of ionizing radiation and how to measure it. You will learn about the different types of radiation, the characteristics of and what harm can be caused by each. We will cover the principles and use of basic survey instruments and electronic personal dosimeters. This will also be a great refresher for those who have been trained before, but want a better understanding.

Emergency Response to Corrosives Incidents

Instructor: Thomas Murdock

This workshop will briefly review common terminology describing corrosives, including the definition of acid and base, concentration, acid and base strength, pH, and hands on demonstrations of Heat of Solution, Heat of Dilution and neutralization. The risk-based response process will be used to analyze hazards of corrosives, which include corrosivity, toxicity, oxidizer, flammability and reactivity. Incidents involving spills of corrosives will be reviewed to provide students with an opportunity to develop strategy and tactics (plan) to mitigate corrosives incidents. Some demonstrations will be conducted in class.

Commonly Overlooked Metering Tasks

Instructor: Ronald Stenger

In the urgency of a hazmat response, critical metering steps can be overlooked. This workshop will focus on the readings we forget to take, the areas we forget to check, and the data we forget to document during a run. By consistently monitoring air quality, exposure levels, and environmental conditions before, during, and after operations, hazmat metering fills the gaps left by stress, time pressure, and changing scenes. It ensures responders make informed decisions, protect personnel, and maintain accountability—measuring what matters when it matters most.

Radiation Monitoring for Public Events: Locating and Identifying

Instructor: Trent North

This workshop will expand on the basic course and discuss radiation monitoring at public events. We will discuss what instruments are available and how to use them to locate and identify potentially dangerous sources of radiation. We will discuss JHAT's, survey strategy, adjudication and best practices.

Chemical Assisted Suicide: Rescue versus Body Recovery

Instructor: Thomas Murdock

In the past, most of these attempts were successful, but recently there have been reports of attempted chemical suicide where the victim is still viable, therefore, the objective for emergency responders is a rescue operation rather than a body recovery. As a result, emergency responders, paramedics, ambulance crews and emergency room personnel may be contaminated or cross-contaminated by hydrogen sulfide and/or the chemical used to prepare hydrogen sulfide. Recent research results will be shared including guidelines for initial medical treatment of the victim, transportation, and emergency room protocols.

SATURDAY SESSIONS

Risk Based Response to Explosives Emergencies

Instructor: Robert McClure

Over 138 million pounds of explosives are used annually in Ohio supporting the mining, construction, and oil and gas industries. This workshop provides a brief overview on commercial explosives safety, product identification, and the characteristics of explosives. We will cover best practices for handling incidents involving explosives, which will include hazard recognition, standoff distances, and responder safety.

National Weather Service Support for Hazmat Incidents

Instructor: Freddie Zeigler

This workshop will discuss how weather impacts hazmat incidents and how the NWS can provide support to ongoing hazmat operations. This will include detail on wind measurements and micro-climates as well as plume modeling, and truck mounted weather stations.

Damage Assessment of Highway Cargo Tanks

Instructor: Barry Lindley

This workshop will teach emergency responders how to identify structural damage, evaluate container integrity, and determine safe mitigation options during a transport incident. We will focus on highway cargo tank design, stress points, failure criteria, and leak recognition for DOT 406, 407, 412 and 331 tanks.

Oxidizers and Other Pool Chemicals

Instructor: Thomas Murdock

Oxidizers are highly energetic chemicals that react violently with many other materials and may be involved in fires that are extremely difficult to extinguish. Swimming pool and spa chemicals are a class of inorganic oxidizers (DOT Hazard Class 5.1) that are commonly used in private, municipal, hotel and school pools. Learn what to expect and what goes wrong when your hazardous materials response team is summoned.

Response to Lithium Battery Emergencies: What's New?

Instructor: Nick Zamiska

This workshop will provide a quick review of the hazards associated with Lithium Ion (Li-Ion) Batteries and then discuss what has recently changed in response best practices, tools and equipment available for response and lessons learned in actual incidents.

Level A Suit Emergencies: Do You Have A Plan?

Instructor: Mark Vedder

This workshop will review the different types of Level A Suit emergencies and how to train your personnel so they can implement a systematic response to save themselves in an emergency. Includes air problems, suit problems, people problems, comms problems, and solutions.

UAS Across the Hazmat Incident: Assessment, Operations & Remediation

Instructors: Paul Celinski & Scott Mlakar

UAS is becoming a critical tool throughout the hazmat response. This session will examine both exterior and interior drone operations for reconnaissance, thermal imaging, air monitoring, plume assessment, tactical support, remote sensor deployment, mitigation, and remediation.

Anhydrous Ammonia Nurse Tanks

Instructor: Mark Vedder

This class will briefly review the properties and hazards of anhydrous ammonia and will then focus on the construction, design, use and response to emergencies involving agricultural nurse tanks. A Response Guide will be provided to attendees.

Instructor Biographies

Jeff Jones

Jeffery Jones serves as the Commander of the 52nd Civil Support Team (WMD) within the Ohio National Guard, leading specialized responses during homeland security operations involving chemical, biological, radiological, or nuclear incidents. His unit coordinated resources and interagency efforts during both the East Palestine train derailment and statewide COVID-19 relief operations. His career spans over 25 years in military operations, emergency management, and crisis response within the Adjutant General's Department of Ohio. He holds an M.S. in Homeland Security from Capella University, is pursuing a PhD at Liberty University, and has taught intelligence and security studies at The Ohio State University.

Barry Lindley

Barry is a Senior chemist with Emergency Response Solutions, SPSI, and MMR. He is a NBFSPQ Level I and II fire instructor, HAZMAT Technician, Branch Officer, and Branch Safety Officer. He was formerly with DuPont and Chemours for 37 years where he was a team leader, safety officer, chemist, and instructor. Barry is the Chairperson for IFSTA's Hazardous Materials Publications Committee for Awareness, Operations and Technician, and a member of the National Fire Protection Association (NFPA) 470 technical committee.

Kilpatrick Woodward

Kilpatrick is a Product Specialist at 908 Devices, specializing in deploying and training users on portable technology like the MX908 for real-time field chemical identification. He has over 30 years' experience in hazmat response, including serving as the Hazmat Liaison for the Buffalo Fire Department (NY) for almost 20 years. He is an instructor for LSU NCBRT and holds a Master's Degree in Emergency Management & Homeland Security.

Jon Rettig

Jon has been with Norfolk Southern Railroad for the past 16 years, starting in transportation and moving over to the Hazmat group. Jon has also spent 25 years in the Fire Service in various roles, from Firefighter, EMT, Hazmat Technician, and Railcar Specialist. Jon currently is a member of the Springfield Township Fire Rescue (Mahoning County), Ohio, and the Mahoning County Haz-Mat Team.

Trent North

Trent is an Applications Engineer with Symetrica Radiation Detection & Identification in Hindsdale, Arkansas. He was previously a Fire Captain and Hazmat Team Leader for the Fayetteville Fire Department where he retired after 21 years of service. He is a SME for Type 1 WMD/CBRNE response for Northwest Arkansas, a Hazmat Adjunct Instructor for ADEM, and a security-cleared JTTF Liaison for the FBI-AR.

Thomas Murdock

Thomas O. Murdock obtained a Ph.D. in Chemistry in 1977 and completed post-doctoral studies at the Max Planck Institut and University of Minnesota. He is currently a consultant/trainer/member of the St. Cloud Chemical Assessment Team. His extensive industrial experience includes roles as Research Scientist at H.B. Fuller, ALZA Corporation, and Director of EHS at Medtronic World Headquarters. He holds several patents and peer-reviewed publications.

Ron Stenger

Ron has been a Firefighter/Paramedic with the Colerain Twp Fire Dept for over 30 years, with 28 years assigned to the Rescue Company. He is also an active member of Ohio Task Force 1 (OHTF-1), the Hamilton County USAR Team and the Greater Cincinnati Hazmat Team. Ron is also a lead instructor for All Safe, Inc. and Cincinnati State College.

Robert McClure

Robert McClure is President of R.A. McClure, Inc. (RAM). As an international independent consulting firm, RAM offers innovative and advanced technical support, training, services and solutions for blast design and explosive applications in civil, military, government, construction, mining, demolition, and seismic operations.

Freddie Zeigler

Freddie Zeigler serves as the Warning Coordination Meteorologist (WCM) for the National Weather Service (NWS) in Cleveland, overseeing warning and preparedness operations across northern Ohio and northwest Pennsylvania. He earned a B.S. in Meteorology from Jackson State University and has advanced through numerous NWS roles since 1994, specializing in Impact-Based Decision Support Services during major weather events like Hurricane Isaac.

Paul Celinski & Scott Mlakar

Paul Celinski is the Assistant Fire Chief of the Macedonia (OH) Fire Department, instrumental in the formation of the Summit County Drone Team.

Scott Mlakar is a retired Assistant Chief of the Willoughby Fire Department, currently serving as Administrative Officer of WFD, Chief of the Lake County Public Safety Unmanned Response Team and Director of the Ohio Public Safety UAS Coordination Group (OHGRU).

Mark Vedder

Mark is a 50+ year veteran of the fire service, recently retiring as the Fire Chief for Solon Fire-Rescue in Solon, Ohio. He continues as the part-time Assistant Fire Chief with the Chagrin Valley Fire Department, and has been Hazmat Coordinator for the Chagrin/SE Hazmat Team for over 35 years. He serves on the Cuyahoga County LEPC and chairs the Ohio Hazardous Materials Technical Advisory Committee.

Nick Zamiska

Nick is the retired Fire Chief of the Brecksville (OH) Fire Department and former Director of the Southwest Emergency Response (SERT) Hazmat Team. He holds a Master's in Public Administration and is a lead instructor with Bad Day Training. Nick is an alternate member of the NFPA Technical Committee on Hazardous Materials / WMD Response (NFPA 470).