

HOTZONE 2025 Pre-Conference

Course Descriptions

Thursday, October 16, 2025

At the Hotel

A 1: New: The New Fire Officers Guide to the HazMat Universe

Frank Docimo

8-Hours of Classroom

(Unlimited Seating)

There are monsters out there. Fire-Breathing Dragons. Ferocious Lions. Deadly Scorpions and Killer Whales. All of which will not scare the new or young officer BUT a 55 gallon drum, an odor that has made people sick and don't forget about the dreaded CO call.

A 2: Tactical Chemistry

Chris Weber

8-Hours of Classroom

(Unlimited Seating)

Tactical decisions at hazardous materials emergencies are heavily influenced by the released chemicals and their properties. Using NFPA 470 as the framework, we will make tactical decisions at hazardous materials incidents fall into place using chemical demonstrations, scenario-based exercises, and hands-on chemical identification exercises using a variety of air monitoring and sample identification equipment. We will examine the effect of chemical class, concentration, and complexity of mixtures on detection, identification, and product control. The class is highly interactive with students leading the direction of the class as we discuss scenarios culled from the news to illustrate the chemistry of hazmats.

A 3: Unstable Materials: Oxidizers, Organic Peroxides, and Monomers

Keith Silverman, Bill Cullen

8-hours of Classroom

Mike Callan

(Unlimited Seating)

Energy is always dangerous at a hazardous materials emergency. After explosives, unstable materials are some of the most reactive and unpredictable situations responders can face. Unstable materials may decompose, condense, polymerize or self-react. Temperature, shock, light, contaminants, incompatibles, or inhibitor loss may trigger an uncontrolled exothermic reaction. Participants will learn about the chemistry of oxidizers, organic peroxides, and peroxide forming chemicals, including the materials' intrinsic ability to release energy through a reaction with air, decomposition, or self-reaction. Also discussed will be the chemistry of monomers and their ability undergo runaway polymerization reactions. There is no single hazard class for unstable materials because they often present multiple hazards. The class begins with an awareness level focus on understanding unstable materials and the risks associated with them in an emergency. The remainder of the class is a technician level focus on risk-based response strategies and tactics including using the NFPA 704 system to size-up a material's stability and reactivity, establishing control zones, selecting a response strategy, and implementing HazMat tactics including detection, PPE selection leak/spill control, and decontamination procedures.

A 4: When Meters Matter: Air Monitoring for First Responders
8-Hours of Classroom Hands-on Training

**Scott Russell, Dan
Warchol, Ben Bosley**

(Seating is Limited to 45)

Our most popular option! This is our classic revolutionary hands-on training course. There is nothing like this class on the market ask our clients. If you want to make your responders better this is the class for them. The young and the old alike will benefit from our course. The best part is we bring all the meters and equipment all we need is a classroom. We have taught this class coast to coast and are making a difference in the Safety and Health of First Responders!

A 5: Wet Chemistry Field Identification
8-Hours Classroom Hands-on Training

**Brian Heinz
Josh Matlock**

(Seating is Limited to 25)

This 8-hour “wet chemistry” course will consist primarily of hands-on lab work with liquid and solid unknown chemicals. The properties of various substances and chemical families will be discussed as each sample is analyzed and tested. Safety, personal protection, and proper technique when working with chemicals will be emphasized and stressed. Participants will work in small groups and test approximately 12 samples throughout the day. Samples will consist of corrosives, oxidizers, flammable and combustible liquids, water reactive materials, and others. Physical properties such as appearance, thermal stability, vapor pressure and water behavior will be analyzed and discussed as it relates to hazard determination and response tactics for hazardous materials team members.

A 6: Managing the HazMat Group
8-Hours of Hands-on Scenario Based Training

**Greg Socks, Chris Hawley
Robert Bradley, Monique
Lewis, Jason Waterfield**

(Seating is Limited to 30)

Hazardous Materials Officers (Hazardous Materials Group Supervisor within NIMS/ICS) at hazardous materials incidents shall be responsible for directing and coordinating all operations involving hazardous materials/WMD within the designated hazard control zones. This program will address NFPA 470 Chapter 17 JPR’s utilizing a risk-base response process while managing realistic simulated hazardous materials releases. Simulated air monitoring will also be utilized as part of the scenario-base simulations.

HOTZONE 2025 Pre-Conference
Course Descriptions
Thursday, October 16, 2025
Off Site

A 7: Houston Ship Channel Petrochemical HazMat
Familiarization Tour
8-Hours Field Training

**Bill Hand, Richard Lawhorn,
Mack Newell**

(Seating is limited to 30)

This workshop will start with a classroom session at the hotel on Thursday morning. Then the students will travel to the Houston Ship Channel where they will board one of the Houston Fireboats for an up-close waterside tour of the Houston Ship Channel

A 8: HazMat Scenario Simulator

Tony Janke, HFD HazMat

8-Hours of Hands-on Training at the Houston Fire Department Jahnke Training Center

(Seating is Limited to 20)

We are excited to announce the return of the HazMat Scenario Simulator at the HFD Fire Academy for the 2025 HotZone. This hands-on, interactive program is designed to enhance incident command decision-making, teamwork, and response effectiveness in hazardous materials incidents. The simulator will feature **multiple dynamic scenarios** that mirror real-world hazardous materials emergencies. Each scenario will require a designated student to serve as **Incident Commander (IC)**, responsible for assessing the situation, formulating a plan, and directing the response. The IC will "dispatch" fellow students to specific tasks and operational zones based on the evolving needs of the scenario. The rest of the participants will assume roles such as entry teams, decon, safety officers, and logistics. Immediate feedback and after-action reviews will follow each scenario to reinforce learning objectives and highlight areas for improvement.

A 9: Physical and Chemical Properties for Risk Based Response

Brian Ramsey

8-Hours Interactive Training at The Woodlands Emergency Services Training Center

(Seating is limited to 40)

During this 8-hour session, participants will witness the dynamic tendencies of hazardous materials brought to life through Physical and Chemical Properties demonstrations. During this lecture flash point, flammable range, boiling point, vapor pressure, auto ignition temperature, molecular weight, vapor density, and solubility will be demonstrated. This lecture will also demonstrate the properties of liquefied compressed gasses as well as cryogenics. These high energy fast paced demonstrations will leave the audience / students with a keen awareness of fire behavior and hazardous materials. Participants will have a better understanding of how to apply physical and chemical properties to fire behavior and hazard assessments.

A 10: Surviving the Hot Zone

Christina Baxter, Toby Frost

**8-Hours of Classroom and Hands-on Training
at the Harris County Fire Training Facility**

Rick Meehan

(Seating is Limited to 30)

Emerging threats, suit selection, and decontamination methods are impacting our operations in the hot zone. There is more to it than Level A or Level B. In the 8-hour class we begin with a classroom presentation covering all of these, and then move into hands on exercises that will prepare you to survive hot zone operation. Use different levels of PPE in challenging situations, using a risk-based decision process identify the hazards, the PPE and the decon methods you will use. Learn tricks of the trade to overcome in suit emergencies, low air, and other emergencies. We must be prepared when things do not go "right".

A 11: Emergency Operations Center HazMat Training

Misty Gunn, HCOEM Staff

**8-Hours of Simulation Training at the Harris County
Office of Emergency Management Operations Center**

(Seating is limited to 40)

Join the Harris County Office of Homeland Security & Emergency Management (Harris County OEM) for an immersive, all-day (8-hour) training session at the Hot Zone Conference. This comprehensive workshop will provide attendees with a deep understanding of how Harris County OEM responds to various incidents across the county. During this session, participants will explore the structure and functions of Harris County's Emergency Operations Center (EOC), engage in EOC 101 and EOC 201 training modules designed to build foundational and advanced skills, receive a complimentary copy of the Harris County EOC Liaison Guidebook, learn how to design and organize an effective EOC tailored to their community's needs, and discover best practices and strategies widely used in emergency management today. Whether you are new to emergency management or looking to enhance your operational knowledge, this session offers valuable insights and hands-on experience to help you become an effective part of the emergency response team.

A 12: HazMat Incident Mayday Train the Trainer Course
8-Hours of Hands-on HazMat Back-up Team Training
at the Houston Fire Department Jahnke Training Center
(Seating is limited to 20)

Rick Emery, Darrell Wiseman
HFD HazMat

Class size is limited for this exclusive Train-The-Trainer workshop. Each participant will receive a comprehensive course instructor package, including the lesson plan, PowerPoint, and instructional videos to share with your team. Why Attend? With the introduction of NFPA 470 (2022), the approach to hazardous materials (haz mat) Mayday incidents has changed dramatically. Many responders still mistakenly equate the fireground Rapid Intervention Team with the hazmat Backup Team. This workshop will clarify these critical differences and provide you with the latest best practices for handling a haz mat Mayday. What Will You Learn? Updated Mayday Protocols: Understand how the Mayday process has been redefined to address the unique mental and physical challenges of haz mat incidents. Hands-On Skills: Participate in practical evolutions and scenario-based training to break down and master the tasks required during a haz mat Mayday rescue. Critical Differences: Learn the significant distinctions between fireground and haz mat Mayday responses. Time Management: Master the 25/75 model for managing work cycles, air consumption, and personnel assignments. Equipment & Decontamination: Review NFPA 470 requirements for equipment and emergency decontamination to ensure rapid removal and treatment of stricken members.

Workshop Features:

- Short Didactic Session: Get up to speed with a concise overview of the new standards and procedures.
- Scenario-Based Practical Training: Apply what you've learned with hands-on practice in realistic Mayday scenarios.
- Proven Results: These updated skills have been shown to decrease removal times, improve survivability, and ensure safe resolution of Mayday incidents.

Takeaways - Every participant will receive:

- The full course lesson plan
- PowerPoint slides
- Instructional videos
- Empower your team with the knowledge and tools to respond effectively to haz mat Mayday situations.

Join us to become a certified trainer and bring these life-saving skills back to your department!

HOTZONE 2025

Course Descriptions

Friday, October 17, 2025
1:00 PM

**D 1: Air Monitoring Considerations for
First Arriving HazMat Response**

Part 1 of 2

Brian Ramsey

This course examines the strengths and weaknesses of standard 4 gas instruments that are carried by many hazmat teams and first arriving fire apparatus. In today's world critical decision making is predicated on not only using instrumentation but using it correctly. This class goes into essential decision making when using a 4-gas instrument for qualitative and quantitative monitoring at hazardous materials incidents. Participants will understand the following concepts, T-90 time and its relevance to accuracy, correction factors and when to apply, and common mistakes while using air monitoring equipment.

D 2: New: No One Wants to Talk About It! **Part 1 of 2**

Chris Aguirre

This workshop will be a case study of my life's failures that led me to the tools to find equanimity. And how I helped others to find their path to peace. (I have over 50 years in the fire service). Studies show that over 100 firefighters commit suicide every year. The numbers are relatively the same for our military & law enforcement family. More emergency responders die from suicide than responding to any other type of emergency.

Then why does no one talk about it?

D 3: Propane Incidents – Let's Talk Tactics **90 Minutes**

Ron Huffman

As the title of the course says, "Let's Talk Tac4cs". We'll spend our time discussing tactical options for incidents found online, ones that I've been on and the ones you provide. We'll talk through evacuation issues, vapor management using water and air, we'll talk about incidents that had vapor pressure reduced without a flare. We'll discuss how to manage heat sources that hurt or help us on scene. We'll discuss the why, where, and how to correctly apply water. We will discuss freeze patching and the challenges of making it work well. We'll look at past incidents and see what happened and what we can learn from them and much more in the classroom. One of your best tools is sitting on your shoulders, let's put some more fuel for thought in it.

**D 4: New: Preparation and Response to
HazMat Rail Incidents** **90 Minutes**

Clay Reid

This workshop will cover what is needed by your team to prepare for and response to Railroad Incidents involving hazardous materials.

**D 5: New: Your HazMat Incident Just Became
A Federal Crime Scene, Now What?** **90 Minutes**

Kevin Johnson

Presented by a retired member of the FBI's Technical Hazards Response Unit with both Local and Federal hazmat team experience, this presentation will discuss how hazmat incidents can rapidly transition to Federal criminal investigations. Topics such as assessment of the threat, the difference between public safety sampling and evidence collection, initial interaction with the FBI, the process for conducting evidence collection, and the continuing role for hazmat teams throughout the incident will be discussed.

D 6: New: “WTF” Is Happening?**Part 1 of 2****Paul Christensen****Why Does it Keep Happening?**

This course is based on building better relationships in life and on the job, but more importantly within our homes. Over the past 3 years, my wife and I have worked as Relationship Coaches for First Responders, Police, and Healthcare workers. We have had great success in coaching others within our industry on how to get the "owner's manual" we wish we all had. Discover the humor in harmonizing your personal relationships. If you feel you are always in "In the Hot Seat", this course helps to transform your relationship handling skills into a laughter-infused adventure. Learn to navigate emotional flare-ups, while using humor as your extinguisher. Discuss ideas on how to sync up with your partner through fun activities and gain skills to manage scorching moments with ease and rekindle romance. Embrace this heartwarming ride and strengthen your "thin line" bond with love and laughter! Humor required, helmets are optional.

D 7: New: Area Monitoring for**90 Minutes****Jeremy Van Auker****Modern Airborne Threats**

Traditional area monitors, while effective for VOCs, TICs, and gamma radiation, struggle to name more dangerous threats like CWAs and PBAs. Remote monitoring for CWA detectors is scarce, and aerosolized threats pose identification challenges. New technologies like the MX908 Beacon offer a leap forward, enabling remote operation and prolonged data viewing. This advancement enhances area monitoring, specifically for detecting and identifying vapor and aerosol CWAs and PBAs, addressing the limitations of traditional monitors.

D 8: New: Special Event Mass Decon**Part 1 of 2****Frank Roberts**

This session explores modern, evidence-based strategies for mass casualty decontamination (mass decon) at special events and large-scale incidents. Drawing on findings from Operation DOWNPOUR, it highlights why immediate dry decon is now the default emergency approach, replacing outdated practices. Attendees will learn to apply the P.L.A.T.E. framework (Physical/Chemical properties, Location, Amount, Time, Environment) to tailor decon operations, and understand how to integrate triage, privacy, and effective communication. The presentation covers step-by-step protocols for both ambulatory and non-ambulatory patients. using dry, wet, and hybrid methods, supported by examples of scalable hybrid systems and insights into federal capabilities like CBIRF and CERF-P. Participants will leave equipped to implement faster, safer, and more coordinated decontamination that protects responders, medical teams, and the public.

D 9: New: Chemical Time Bombs**90 Minutes****Tim Crockett**

This presentation explores the hidden dangers of smoke in today's structure fires. Specifically, how the widespread use of synthetic materials has turned residential and commercial environments into chemically volatile hazardous materials spaces. Unlike legacy fires, modern fires release toxic, flammable, and fast-acting gases that change fire behavior rapidly and increase the risk of flashover, backdraft, and firefighter injury or death.

Attendees will learn how specific compounds—such as hydrogen cyanide, carbon monoxide, acrolein, and VOCs affect smoke toxicity, ignition thresholds, and vapor density. Through the lens of the “3 Ps” (Patterns, Positions, and Placement), we'll examine how smoke behaves and how firefighters must adjust their tactics in real time using thermal imaging, coordinated ventilation, and tactical cooling.

The class includes case study analysis from the 2010 Boston structure fire and the 2017 Grenfell Tower disaster, illustrating the operational and health consequences of failing to account for modern fire chemistry. Fire officers will gain practical recommendations for updating PPE protocols, decontamination standards, training curriculums, and long-term health surveillance for firefighters.

**D 10: New: Crossing the Line;
(Mercury Response vs Remediation)**

Part 1 of 2

**Greg Socks
Monique Lewis
Jason Waterfield**

In the context of mercury contamination, response refers to the immediate actions taken by first responders to address a mercury spill or exposure, while remediation refers to the private sector of cleaning up and restoring a contaminated environment. This presentation will focus on building those relationships needed to effectively initiate spill containment, exposure prevention and mercury contamination.

D 11: Why Are We Still Talking?

90 Minutes

Dave Donohue

101 Ways to Teach Without Lecturing

In this workshop, participants will discover multiple options to lecture in order to engage students and improve knowledge retention, recall, and application. At the end of this session participants will be able to:

- Identify alternatives to lecture for sharing information in the training environment.
- Select appropriate lecture alternatives based on the instructional objectives.
- Demonstrate the use of alternatives to lecture in the training environment.

D 12: New: Hazard & Risk Assessment for

90 Minutes

Tom Murdock

Corrosive Incidents

The topic of corrosives includes a large category of compounds used in industrial applications, including inorganic acids and bases, organic acids and bases and acidic and basic gases. According to the Pipeline and Hazardous Materials Administration, in 2024 there were approximately 12,000 DOT incidents involving spills of corrosive chemicals in transportation. This class 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 (APIE) 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. There will be emphasis on the unique toxicity of hydrofluoric acid and emergency medical treatment for exposure to HF. Nitric acid is a strong acid and a powerful oxidizer and frequently reacts with metals and organic material to afford nitrogen dioxide. The delayed toxicity of nitrogen dioxide will be discussed. Some demonstrations will be conducted in class.

Course Descriptions

Friday, October 17, 2025

3:00 PM

E 1: Air Monitoring Considerations for

Part 2 of 2

Brian Ramsey

First Arriving HazMat Response

This course examines the strengths and weaknesses of standard 4 gas instruments that are carried by many hazmat teams and first arriving fire apparatus. In today's world critical decision making is predicated on not only using instrumentation but using it correctly. This class goes into essential decision making when using a 4-gas instrument for qualitative and quantitative monitoring at hazardous materials incidents. Participants will understand the following concepts, T-90 time and its relevance to accuracy, correction factors and when to apply, and common mistakes while using air monitoring equipment.

E 2: New: No One Wants to Talk About It? Part 2 of 2

Chris Aguirre

This workshop will be a case study of my life's failures that led me to the tools to find equanimity. And how I helped others to find their path to peace. (I have over 50 years in the fire service). Studies show that over 100 firefighters commit suicide every year. The numbers are relatively the same for our military & law enforcement family. More emergency responders die from suicide than responding to any other type of emergency.

Then why does no one talk about it?

E 3: Right Reference Requires Research

90 Minutes

Toby Bevelacqua

Regularly, Repetitively

Michelle Murphy

Most HazMat responders look at reference or science or research as that area of a hazmat incident that is boring and uneventful. Hazmat Group leaders use the Reference area as where the weakest responder can go and "just fill out the documents". In either case, the science section is the most important area of the hazmat incident. But there is a caveat, there is a plan, a process if you will. In the past it was just thought of as looking up the chemical and outline process of research. Come join us for an interactive session on the how's and why's of the research section. You will be amazed how easy the right reference requires research regularly and repetitively.

E 4: Recognizing & Responding to

90 Minutes

Al Valerioti

Commercial Explosives

Bob Bradley

Commercial explosives have changed the face of the world but for many responders, they still remain a source of confusion and misinformation. In this workshop students will learn common sense actions to make a scene safer or when it's truly time to "get out of Dodge." For explosives, ERG says to work "UNDER SUPERVISION OF A SPECIALIST". Who is that? Should you believe the "experts"? More than 500,000 shipments of commercial explosives are made each year in the United States and Canada. They are carried in all types of vehicles, ranging from tractor-trailers, to pickup trucks to specially made transports. They travel all types of roads, from interstates to rural dirt roads. Explosives are everywhere, almost all the time, in almost every jurisdiction. By their very nature and power, commercial explosives may cause an overreaction by various responders at incidents, which in itself may increase dangers to both responders and public.

E 5: New: Threat Matrix and the HazMat Team**90 Minutes****Bill Hageman****E 6: New: "WTF" Is Happening?****Part 2 of 2****Paul Christensen****Why Does it Keep Happening?**

This course is based on building better relationships in life and on the job, but more importantly within our homes. Over the past 3 years, my wife and I have worked as Relationship Coaches for First Responders, Police, and Healthcare workers. We have had great success in coaching others within our industry on how to get the "owner's manual" we wish we all had. Discover the humor in harmonizing your personal relationships. If you feel you are always in "In the Hot Seat", this course helps to transform your relationship handling skills into a laughter-infused adventure. Learn to navigate emotional flare-ups, while using humor as your extinguisher. Discuss ideas on how to sync up with your partner through fun activities and gain skills to manage scorching moments with ease and rekindle romance. Embrace this heartwarming ride and strengthen your "thin line" bond with love and laughter! Humor required, helmets are optional.

E 7: FTIR Gas and Vapor Identification**90 Minutes****Jeremy Van Auker**

FTIR is a well-established tool for identifying solids and liquids in the field, but applying it to gases and vapors has long been a challenge due to atmospheric interference from water vapor and CO₂, as well as sensitivity limitations in handheld devices. Despite these issues, FTIR offers highly specific, quantitative data, enabling identification of unknowns and mixtures without user calibration. This workshop explores how recent advancements in FTIR software and hardware have overcome these barriers, allowing for effective handheld gas detection. Case studies will demonstrate how FTIR enhances traditional air monitoring tools and supports tactical decisions like PPE selection and site remediation.

E 8: New: Special Event Mass Decon**Part 2 of 2****Frank Roberts**

This session explores modern, evidence-based strategies for mass casualty decontamination (mass decon) at special events and large-scale incidents. Drawing on findings from Operation DOWNPOUR, it highlights why immediate dry decon is now the default emergency approach, replacing outdated practices. Attendees will learn to apply the P.L.A.T.E. framework (Physical/Chemical properties, Location, Amount, Time, Environment) to tailor decon operations, and understand how to integrate triage, privacy, and effective communication. The presentation covers step-by-step protocols for both ambulatory and non-ambulatory patients, using dry, wet, and hybrid methods, supported by examples of scalable hybrid systems and insights into federal capabilities like CBIRF and CERF-P. Participants will leave equipped to implement faster, safer, and more coordinated decontamination that protects responders, medical teams, and the public.

E 9: Risk Based response to CNG Vehicle Emergencies**90 Minutes****Toby Frost**

CNG cylinders are not the same as propane cylinders. With 20 times the pressure, different valves, and different cylinder construction, different tactics are required. Firefighters using Propane tactics for CNG truck fires are causing the CNG cylinders to fail and torpedo over a quarter mile away from the incident sending fire and shrapnel into nearby homes and businesses. CNG vehicles are becoming more and more common, and for fleet vehicles even more so. This class will cover hazards, size up and mitigation tactics to keep responders safe. CNG is coming or already in your first due, make sure you are prepared.

E 10: New: Crossing the Line;
(Mercury Response vs Remediation)

Part 2 of 2

Greg Socks
Monique Lewis
Jason Waterfield

In the context of mercury contamination, response refers to the immediate actions taken by first responders to address a mercury spill or exposure, while remediation refers to the private sector of cleaning up and restoring a contaminated environment. This presentation will focus on building those relationships needed to effectively initiate spill containment, exposure prevention and mercury contamination.

E 11: Utilities are IDLH
(Immediately Dangerous to Life and Health)

90 Minutes

Mike Callan

Responding to emergencies are present, are some of the common emergencies we face IDLH situations. Haz Mat responders, especially technicians are trained to recognize Risk. Remember Risk is “any situation, atmosphere or condition that is fatal, can permanently injure or interferes with the person’s ability to escape.” Mike Callan has been training responders to the IDLH conditions and the risks of flammables products like Propane, Natural Gas and the IDLH conditions and the risks of flammables products like Propane, Natural Gas and especially the “Dangerous” conditions of electricity. Hazardous material responders are risk analyzers in a world of response risk takers. You as the Hazardous Material technician are the first step to protecting your personnel. Taking this session will help you stay alive around IDLH conditions exist when utilities are present.

E 12: New: Why Do We Care?
The Periodic Table

90 Minutes

Bobby Salvesen
The HazMat Guys

In this workshop, the Haz Mat Guys will delve into the essential insights derived from the Periodic Table, connecting them to our hazardous materials responses. We'll explore the similarities and differences among elements, explain what they are, how they work, and why they are vital in our world. Students will learn how to:

- **Understand the Structure and Significance of the Periodic Table:** Attendees will develop a foundational grasp of the Periodic Table’s organization, including the importance of element groups and periods, and how this knowledge can be applied in hazmat responses.
- **Identify Key Elements Relevant to Hazmat Scenarios:** Participants will learn to recognize specific elements commonly encountered in hazardous materials incidents, understanding their properties, risks, and interactions.
- **Apply Periodic Table Knowledge to Enhance Response Strategies:** This session will equip attendees with the ability to utilize insights from the Periodic Table to inform decision-making during hazmat responses, including predicting chemical reactions and ensuring safety.

Course Descriptions

Saturday, October 18, 2025

8:00 AM

F 1: New: Save Ourselves

Part 1 of 2

Scott Russell, Ben Bosley
Dan Warchol

The Health and Safety of your personnel is your number one priority. This class teaches the attendee the importance of understanding what's in the smoke you and your personnel are breathing. This class focuses on fire gases and the risks to personnel. This is not a class on CO and HCN, we go way beyond this basic approach. Attendees will learn a wide array of toxic gases that could be present and why we have such a prevalent cancer problem in the fire service. Only through education/training can we make a difference now and in the future of your personnel. This is an essential class for all responders! We must change our culture now! This is a true safety course for all responders, not a check the box Incident Safety Officer course!

F 2: Air Dispersion Models - "It Depends" Part 1 of 2 **(The Ultimate Hazmat answer)**

Al Valerioti
Bob Bradley

Models have specific uses and trying to use them when they are not the appropriate tool can have unfortunate results. This hands-on session will explore if, when and how air models can help you in planning and emergency response. ALOHA, the responders air model, now has empirical to help show you its strengths and weaknesses. The Jack Rabbit experiments at Dugway will be explored and related to air model results in ALOHA and the ERG. The proposed Jack Rabbit III projects will also be discussed. Case studies from actual releases (experimental and accidental) will be discussed and the reality of the release and model results will be compared and explained. Other modeling products - and their pros and cons will also be discussed as will the basics of air dispersion. A limited number of computers for student use will be available and students are welcome to bring their own computers. Students will create - and then interpret - diversion models based on past incidents and are welcome to bring in their own examples for discussion. The program will be available for installation.

F 3: Radiation Everywhere

Part 1 of 2

Paul Christensen

Radiation is always present in our daily lives through both natural and artificial sources. The purpose of this course is to provide a basic understanding of radiation for the first responders serving our community each day. Having this knowledge can promote safe practices when the call comes in. We will discuss basic skills surrounding ALARA, detection, and response considerations when dealing with some of our known radioisotopes. We will also be discussing the accident at Chernobyl. Chernobyl remains one of the most infamous incidents in history, vividly illustrating devastating consequences of mishandling radioactive materials. In conclusion, we will be doing a hands-on lane using the Argon system to display radiation environments for the purpose of detection and survey. The Argon system proves capable of simulating high RAD environments for responder training, without the risk of exposure.

F 4: New: Field Identification of Controlled Substances 90 Minutes

Jeremy Van Auker

A trend towards increasing potent synthetic and designer opioids, cathinones, cannabinoids, and other substances has affected the ability to detect and identify controlled substances in the field. Synthetic drugs tend towards higher potency, and therefore lower concentration in mixtures. This dangerous combination has fueled a significant rise in overdose deaths, highlighted in the DEA's "One Pill Can Kill" campaign. Learn how synthetic and designer drugs have fueled a trend towards counterfeit pills, a rise in lethal overdoses, and how field detection technology has evolved to keep pace with these trends.

F 5: New: Oxidizers and Swimming Pool ChemicalsPart 1 of 2**Tom Murdock
Brian Ramsey**

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 and water treatment facilities. Swimming pool chemistry is discussed in terms of recognizing what chemicals and equipment you may expect to see and what has gone wrong when your hazardous materials response team has been summoned to an evacuation at a local pool. Several videos have been prepared that show violent reactions when incompatible materials are mixed with common pool chemicals. Organic peroxides, including hydrogen peroxide, (DOT Hazard Class 5.2) are widely used in pulp and paper manufacture, sanitizing surfaces in food processing plants, a variety of polymerization processes and synthetic organic reactions. Physical and chemical properties (The HazMat Dirty Dozen) and reactivity of organic peroxides are discussed and observed with video demonstrations. Students will learn to assess chemical hazards and risks using the APIE risk assessment model (Analyze, Plan, Implement and Evaluate) and develop the appropriate tactical response to those hazards during spills and fires involving inorganic and organic oxidizers in compliance with the advanced chemical risk assessment and analysis competency outlined in Chapter 38 of NFPA 470 (2022). This knowledge will allow students to provide their IC with recommendations for PPE, Zones and Perimeters Delineation, Monitoring, Decontamination, Respiratory Protection, Site Safety Plan, Evacuation vs Shelter-in-Place, etc.

**F 6: Put It Out or Let It Burn
Gasoline Tank Truck Fires****90 Minutes****Rick Meehan
Travis Franzoy**

When gasoline tankers go up in flames, we are faced with some tough decisions. Let's discuss the basics of gasoline tanker trucks and things to consider when it's your decision on whether or not to let 'em burn.

**F 7: Crazy Concoctions, Obnoxious Odors,
And Colored Smoke****90 Minutes****Keith Silverman
Bill Cullen**

Colorful smoke billows, strange odors fill the air, and bubbling beakers threaten a volatile reaction – the imagery of a lab gone wrong can spark anxiety in even the most seasoned responder. The sheer complexity of hazardous chemicals, specialized gases, and intricate laboratory equipment turns these emergencies into high-pressure unknowns. Add to that the unpredictable nature of scientific processes, and responder anxiety is understandable. Join us to strip away the mystery and empower yourself with critical insights for safe and effective laboratory response. In this workshop, you'll learn rapid situational assessment to quickly decipher complex lab environments and identify hidden dangers; to employ robust risk-based decision-making tailored for volatile lab environments; and how to protect yourself and your team in the face of unique lab hazards. Don't let the mystery of the lab intimidate you. Step into this workshop and gain the definitive edge in handling these challenging incidents.

F 8: Developing the Incident Action Plan**Part 1 of 2****Dave Donohue**

In this workshop, participants will develop an incident action plan and work documents to support an emergency incident, aid in recovery, and provide the basis for cost recovery documentation. At the conclusion of this session, the participant will be able to:

- Develop work products to support the development of an incident action plan.
- Develop an IAP to support incident operations.
- Describe benefits of the IAP development process.
- Identify IAP elements that can aid and enhance cost recovery.

F 9: New: Responder's Resiliency**90 Minutes****Camilo Olivieri**

This presentation will discuss actionable, evidence-based strategies that first responders can apply to their everyday lives to enhance and optimize their mental, emotional, and physical resiliency. We'll discuss the ARSENAL stress management principles, the importance of sleep and exercise in cognitive and emotional resilience, and other effective strategies that responders can incorporate into their daily routines. This presentation builds on the concepts and recommendations discussed in the article about responders' well-being published in DomPrep Magazine (<https://www.domprep.com/arBcles/a-holisBc-strategy-forresponders-well-being>)

F 10: New: Tier II Chemical Reporting Facility Planning & Response Job Aid**90 Minutes****Colin Willingham**

Throughout my time working in emergency management in the Dallas-Fort Worth area, I have noticed there is not a lot of training or knowledge of Tier II products and their impacts. Despite having such a large presence in our lives, many of us are not aware of their impacts on our lives and careers. I began making maps showing the locations of Tier II sites and identifying the characteristics of the chemicals located there. When I joined Grayson County OEM, my director, Sarah Somers, introduced me to the "Tier II Chemical Reporting Facility Planning & Response Job Aid". This binder not only allows us to keep track of Tier II locations and chemicals in the county, it is also used in a response capacity. We send these documents out to our fire departments and sometimes, local governments to raise awareness and to track and identify areas that could be impacted by the presence of these chemicals. They are sorted by industry and serve as a valuable tool for first responders to plan and respond since each facility contains different chemicals. The forms our department created and the binders in which they are received, could be useful for emergency management professionals, first responders, state planners, and more. I would like to present the format we use to emphasize the importance of Tier II training and their importance to planning in the field of emergency management.

F 11: New: Monitoring Railcar Temp and Pressure**90 Minutes****Glen Rudner**

This comprehensive training program is designed to empower participants at the Technician/Specialist level, with the essential knowledge and skills to safely and effectively monitor the temperature and pressure of railcars. Participants will develop a deeper understanding of damage assessment, railcar systems, monitoring techniques, and response protocols when responding to incidents involving overloaded or damaged tank cars.

F 12: Thermal Imaging Usage in HazMat Incidents**90 Minutes****Tim Crockett**

This presentation will introduce the uses of infrared technology for fire grounds and beyond. Concentration on usage for Hazardous Materials events in the Incident Command, detection, demonstrations, along with research material will be presented using Bullard, MSI, FLIR and a Scott and Seek series TIC camera. I will take a simple approach using personal field experience. This, coupled with proven technology, will give insight to how the fire industry can utilize the infrared camera to detect hot spots, seat of fire, and search and rescue to enhance fire programs. During the presentation, we will examine mock & actual photographs and videos from various events.

This presentation is intended to give the audience an idea of how IR technology can be beneficial for "in field" uses. Additionally, it will motivate individuals with gaining support through first-hand, in-field experiences. Within the presentation, initial set-up and camera operations will be discussed and concluded with the delivery of high-quality video and still shots which can be used for reports. I will be discussing the abilities to utilize the camera in monitoring and maintaining safety on fire grounds in addition to a hands-on lab.

This class will utilize the *NFPA 1408: Standard for Training Fire Service Personnel In the Operations, Care, Use and Maintenance of Thermal Imagers* and references from *Fundamental of Firefighter Skills and Hazardous Materials Response* (Fifth Edition) for a full learning experience.

Course Descriptions

Saturday, October 18, 2025

10:00 AM

G 1: New: Save Ourselves

Part 2 of 2

Scott Russell
Ben Bosley
Dan Warchol

The Health and Safety of your personnel is your number one priority. This class teaches the attendee the importance of understanding what's in the smoke you and your personnel are breathing. This class focuses on fire gases and the risks to personnel. This is not a class on CO and HCN, we go way beyond this basic approach. Attendees will learn a wide array of toxic gases that could be present and why we have such a prevalent cancer problem in the fire service. Only through education/training can we make a difference now and in the future of your personnel. This is an essential class for all responders! We must change our culture now! This is a true safety course for all responders, not a check the box Incident Safety Officer course!

G 2: Air Dispersion Models - "It Depends" Part 2 of 2 **(The Ultimate Hazmat answer)**

Al Valerioti
Bob Bradley

Models have specific uses and trying to use them when they are not the appropriate tool can have unfortunate results. This hands-on session will explore if, when and how air models can help you in planning and emergency response. ALOHA, the responders air model, now has empirical to help show you its strengths and weaknesses. The Jack Rabbit experiments at Dugway will be explored and related to air model results in ALOHA and the ERG. The proposed Jack Rabbit III projects will also be discussed. Case studies from actual releases (experimental and accidental) will be discussed and the reality of the release and model results will be compared and explained. Other modeling products - and their pros and cons will also be discussed as will the basics of air dispersion. A limited number of computers for student use will be available and students are welcome to bring their own computers. Students will create - and then interpret - diversion models based on past incidents and are welcome to bring in their own examples for discussion. The program will be available for installation.

G 3: Radiation Everywhere

Part 2 of 2

Paul Christensen

Radiation is always present in our daily lives through both natural and artificial sources. The purpose of this course is to provide a basic understanding of radiation for the first responders serving our community each day. Having this knowledge can promote safe practices when the call comes in. We will discuss basic skills surrounding ALARA, detection, and response considerations when dealing with some of our known radioisotopes. We will also be discussing the accident at Chernobyl. Chernobyl remains one of the most infamous incidents in history, vividly illustrating devastating consequences of mishandling radioactive materials. In conclusion, we will be doing a hands-on lane using the Argon system to display radiation environments for the purpose of detection and survey. The Argon system proves capable of simulating high RAD environments for responder training, without the risk of exposure.

G 4: New: Not Your Ordinary Decontamination 90 Minutes

**Butch Hayes
Ricky Smith**

Decontamination for persons with special needs—such as individuals with physical, sensory, cognitive, or behavioral challenges—requires adapted procedures to ensure their safety, dignity, and comfort during emergency situations involving hazardous materials (HAZMAT), chemical, biological, radiological, or nuclear (CBRN) exposure.

- **Key Principles**

- **Respect and Dignity:** Prioritize privacy, comfort, and communication throughout the process.
- **Modified Procedures:** Use tailored equipment and approaches for different abilities.
- **Supportive Personnel:** Involve caregivers or specially trained staff when possible.
- **Clear Communication:** Use accessible formats (visuals, simple language, sign language).

G 5: New: Oxidizers and Swimming

Part 2 of 2

**Tom Murdock
Brian Ramsey**

Pool Chemicals

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 and water treatment facilities. Swimming pool chemistry is discussed in terms of recognizing what chemicals and equipment you may expect to see and what has gone wrong when your hazardous materials response team has been summoned to an evacuation at a local pool. Several videos have been prepared that show violent reactions when incompatible materials are mixed with common pool chemicals. Organic peroxides, including hydrogen peroxide, (DOT Hazard Class 5.2) are widely used in pulp and paper manufacture, sanitizing surfaces in food processing plants, a variety of polymerization processes and synthetic organic reactions. Physical and chemical properties (The HazMat Dirty Dozen) and reactivity of organic peroxides are discussed and observed with video demonstrations. Students will learn to assess chemical hazards and risks using the APIE risk assessment model (Analyze, Plan, Implement and Evaluate) and develop the appropriate tactical response to those hazards during spills and fires involving inorganic and organic oxidizers in compliance with the advanced chemical risk assessment and analysis competency outlined in Chapter 38 of NFPA 470 (2022). This knowledge will allow students to provide their IC with recommendations for PPE, Zones and Perimeters Delineation, Monitoring, Decontamination, Respiratory Protection, Site Safety Plan, Evacuation vs Shelter-in-Place, etc.

G 6: New: La Porte Suicide Pipeline Incident 90 Minutes

Richard Lawhorn

This presentation explores the tragic pipeline suicide incident that occurred near LaPorte and Deer Park, Texas in 2024. This is a case study of a man who intentionally caused a rupture in a high-pressure pipeline as a means of ending his life while causing a devastating impact on the local community. We will examine the type of pipeline(s) involved, emergency response actions surrounding the event, and how local first responders worked together with many agencies to lessen the potential risks to nearby residents, businesses, and many other industrial pipeline infrastructures.

G 7: What Has Two Centuries of HazMat 90 Minutes

Mike Callan

**Response Done For Us ... Are We Wiser,
Smarter. Or Just Luckier?**

How has our response in the 20th century and 25 years into the 21st changed us? After over 50 years of response, training, and planning, Mike Callan has examined whether we are better at it, what made a difference, what actually changed our perspective on Emergency Response to Haz Mat, or whether we are still playing the “Lucky” card. Mike Callan will examine lessons that have changed the hazmat response and responders over the years, called “Incidents of Significance.” Experiences that have shaped how we look at response and how we should proceed in the future. We have learned we need planning, but most lessons aren’t from schools and books. They were born from experiences called “Street

Smart” or experienced-based learning. Wisdom comes with experience, but most responders often don’t process those incidents without the skills to positively learn from them. Even more critical, Responders today must still want to pass these lessons along, given the new, powerful training and education tools of their generation.

G 8: Developing the Incident Action Plan

Part 2 of 2

Dave Donohue

In this workshop, participants will develop an incident action plan and work documents to support an emergency incident, aid in recovery, and provide the basis for cost recovery documentation. At the conclusion of this session, the participant will be able to:

- Develop work products to support the development of an incident action plan.
- Develop an IAP to support incident operations.
- Describe benefits of the IAP development process.
- Identify IAP elements that can aid and enhance cost recovery.

**G 9: Hydration; You are Either a Hero
or a Hemorrhoid**

90 Minutes

**Michelle Murphy
Toby Bevelacqua**

This Workshop focuses on the health and safety of emergency crews when operating in hot environments. The temperatures can be anywhere from 70 degrees Fahrenheit to 120, the issues are the same. With so much attention on firefighter health and wellbeing, there has been a lot of effort on reducing exposure to toxic materials at emergency incidents. Whether the scene is a hazmat event, or a residential fire, repeated exposure to toxins can cause long term diseases such as cancer. This presentation will focus on the need for proper hydration and the importance of maintaining hydration to prevent any heart attacks and strokes that may occur after responding to an incident.

**G 10: New: Using Rail Commodity Flow Data
For Pre-Incident Planning and Training**

90 Minutes

**David Bierling
Rick Meehan
James “Bear” Wilson**

Railroads move substantial amounts of hazardous materials in the State of Texas and nationally. Although railroads are safer than trucks on a ton-for-ton or accident rate basis, the amounts and types of hazmat moved by rail can result in a complex and sustained response operation if a significant release does occur. While railroads and their contractors will lead the eventual clean-up, local officials may have limited external resources available during the first hours and operational period of the incident. Class I railroads will provide, upon request, annual hazmat shipment summaries (commodity flow data) to local emergency planning and response leaders. The data can be used to identify the most common shipments and those with other special response considerations. All departments with rail operations in or near their jurisdiction can use this information, including departments that do not have hazmat technician level capabilities. The presenters will review sources of rail hazmat commodity flow data, types of data provided in rail hazmat commodity flow reports, and location and scale that the data can be used. Attendees will learn about how they can request data, how they can use data to identify hazards and inform fire and hazmat pre-incident planning and training, and ideas about closing gaps and sustaining preparedness within departments and with other community response partners.

G 11: New: Forecasting the Future of HazMat

90 Minutes

Christina Baxter

Where are we now and where do we need to be in 2030? The threats that we face in the hazmat field continue to evolve from the ever-changing CBRN threat to alternative fuels, are we ready? Are we ready for the changes in clandestine laboratory response that will be fueled by tightening the borders (supply and demand)? Are there other threats we should be following?

In parallel, the response technologies are changing at a rapid pace. What will new protective equipment look like and what changes should we expect in protection as we "break up with PFAS"? In the detection sphere, the introduction of gas phase FTIR changed the detection landscape. With gas phase Raman on the horizon, what changes should we expect? What about Raman microscopes? As smaller and lighter sensors become available, the amount of data will increase causing us to rely more on data analytics and, by default, machine learning and AI for decision making.

There is much in store for us in the next 5 years, let's start planning for the good, bad, and ugly now!

**G 12: New: High Hazard Cargo Incidents:
Bulk & Non-Bulk Containers**

90 Minutes

Joel Calfee

Course Descriptions

Saturday, October 18, 2025

1:00 PM

H1: Hold My Matches and Watch This **Part 1 of 2**

Brian Ramsey

Hold my matches and watch this! A highly interactive demonstration of the physical and chemical properties of flammable liquids and flammable gases! During these sessions, participants will witness flash point, flammable range, vapor pressure, boiling point, and vapor density. Additionally, we will be demonstrating the dynamic tendencies of flammable vapors when they encounter oxygen and ignition sources to create the "Boom" that tends to surprise us if we don't fully understand the hazards of our response situation!

H2: New: Hot Zone Meets Bot Zone: **Part 1 of 2**
Building an AI Workflow for Hazmat Response

John Holtan

Toby Bevelacqua

This workshop will be a hands-on, participant-driven training using smart devices to build and test potential outcomes and workflows in real-time. The session will combine artificial intelligence with hazardous materials response in a first-of-its kind workshop. Attendees will explore structured vs. unstructured data, create effective prompts for hazmat incidents, and contribute to the development of a custom responder GPT.

H3: New: Animal Decontamination **90 Minutes**
In Disaster Response

Debra Zorn

Decontamination in working canines, and companion animals is an important aspect of disaster response and is unfortunately often not done at all due to the challenges this process brings or is done but not with safety of the people and animals in mind. The Texas A&M VET has developed a number of protocols and processes for animal decon formed from experiences and our own internal research efforts. This workshop will discuss companion animal and working canine decon – bringing the latest information to the listener on this subject.

H4: PPE Selection **90 Minutes**

Christina Baxter

The landscape of chemical protective clothing is rapidly changing with the removal of many products from the market as well as the availability of new materials. In parallel, the NFPA 1990 standard is currently undergoing a review cycle. The main topics under discussion for the new standard update include new and expanded classes of protective ensembles for low levels of threats, further qualifications for current ensembles, updated test methods, and expansions to accommodate future products. How do these changes affect PPE selection today and in the near future?

**H5: New: You're the First on Scene
To a Propane Incident and Have
Nothing to Work With Or Do You?**

90 Minutes

Ron Huffman

As a firefighter you have the potential to be dispatched to something new or a call you don't have specialized equipment for. What happens when you're the first department on scene to at a propane incident and have nothing to work with. This program will discuss tactical options for just such an incident. You have more than you think would be my guess. We will look at evacuations, vapor management, management of heat sources allowing a tank to cool or manage how much it warms up. We'll discuss the why, where, and how to correctly apply water. We will discuss freeze patching and the challenges of making it work well. We'll look at past incidents and see what happened and what we can learn from them and much more in the classroom. Then we'll take a tour around several different size small cylinders including a side mount motor fuel tank, a MC-331 Bobtail and Transport prop and Underground tank system all while discussing tactical options for all of it. One of your best tools is sitting on your shoulders, let's put some more fuel for thought in it.

H6: Risk Based Response: What is it?

90 Minutes

Chris Hawley

Confronted by a HazMat response and you want to make quick response decisions – how do you determine your actions? How do you determine PPE? Isolation distances? How bad is the situation? Using basic devices and a basic risk assessment process responders can make safe, but quick decisions. The process focuses on fire, corrosive, toxic and radioactive hazards. If you were provided the on-scene detection readings how quickly could you make a response decision? After a short review of the process, scenarios will be discussed to apply the lessons learned.

**H7: New: Responding to Railroad Incidents;
Hazmat Isn't Always the Problem**

Part 1 of 2

Glen Rudner

The railroads move many different products each and every day which include hazardous materials. But every incident that occurs that requires a response does not. This program explores and shows through case study's that the incidents that involve non-Haz Mats can be just as challenging. The program will discuss the environmental impacts and the decisions that must be to mitigate the incident safely. Sometimes thinking outside the box to mitigate an incident Is a good thing!

H8: Tank Truck Emergencies

Part 1 of 2

Rick Meehan

Richard Lawhorn

Review of various types of highway cargo tanks and how they hold up after rolling over a few times or flying off a freeway overpass.

**H9: New: Lithium-Ion Batteries:
State of the Union**

90 Minutes

Bobby Salvesen

The HazMat Guys

Join us for a comprehensive after-action review of our recent lithium-ion battery destruction testing. This presentation features video and audio documentation from various tests, showcasing existing and emerging techniques for safely handling lithium-ion batteries. Through live discussion and video analysis, we'll explore what worked, what didn't, and the lessons learned. This course is designed to provide practical insights and enhance safety protocols.

H10: New: Joint Hazard Assessment Teams**90 Minutes****Kevin Johnson****From the County Fair to National Special****Security Events**

This workshop will discuss the history and evolution of Joint Hazards Assessment Teams (JHATs) deployed during special events. Topics will include JHAT planning, staffing, roles and responsibilities, recommended equipment, response management, hazard assessment procedures, and communication considerations. Special focus will be given to the challenges posed by National Special Security Events (NSSEs) to include Federal agency coordination, the Fire, Life Safety, and Hazmat (FLaSH) subcommittee, the role of the All Hazards Center, and the unique response changes these large events pose.

H11: Conquering Chemical Plant Emergencies**Part 1 of 2****Keith Silverman****Bill Cullen**

"Inside the fenceline" emergencies are far from routine, often leaving even experienced responders feeling underprepared. This isn't just about hazardous materials; it's about complex facilities, unique challenges, and the critical need for specialized knowledge. Join us to transform your approach and get armed with the knowledge to confidently tackle industrial incidents. You'll learn to master size-up by quickly identifying common processes, containers, and potential hazards in chemical facilities; develop effective tactics for spills, releases, fires, and even uncontrolled reactions; and prepare for unique rescue scenarios within industrial environments. This is the workshop that will elevate your readiness for the most demanding hazardous material incidents.

H12: New: EPCRA: "Keeping it Simple" For**90 Minutes****Bill Hageman****HazMat Teams**

This presentation provides an overview of the Emergency Planning and Community Right-to-Know Act (EPCRA), including its core principles and its relevance to both the public and private sectors, with a particular focus on its importance to Hazardous Materials Response Teams. Highlight essential program tools—such as E-Plan and the CAMEO suite—that support effective collaboration between Hazmat teams, EPCRA Tier II facilities, first responders, and other stakeholders.

Saturday, October 18, 2025**3:00 PM****J1: Hold My Matches and Watch This****Part 2 of 2****Brian Ramsey**

Hold my matches and watch this! A highly interactive demonstration of the physical and chemical properties of flammable liquids and flammable gases! During these sessions, participants will witness flash point, flammable range, vapor pressure, boiling point, and vapor density. Additionally, we will be demonstrating the dynamic tendencies of flammable vapors when they encounter oxygen and ignition sources to create the "Boom" that tends to surprise us if we don't fully understand the hazards of our response situation!

J2: New: Hot Zone Meets Bot Zone:**Part 2 of 2****John Holtan****Building an AI Workflow for Hazmat Response****Toby Bevelacqua**

This workshop will be a hands-on, participant-driven training using smart devices to build and test potential outcomes and workflows in real-time. The session will combine artificial intelligence with hazardous materials response in a first-of-its kind workshop. Attendees will explore structured vs. unstructured data, create effective prompts for hazmat incidents, and contribute to the development of a custom responder GPT.

J3: New: Sample Identification in Illicit Lab Processes**90 Minutes****Chris Weber****J4: Street Smart Haz Mat Response****90 Minutes****Mike Callan****Safe, Unsafe or Dangerous?**

Responding to emergencies are present, are some of the common emergencies we face IDLH situations. Haz Mat responders, especially technicians are trained to recognize Risk. Remember Risk is “any situation, atmosphere or condition that is fatal, can permanently injure or interferes with the person’s ability to escape.” Mike Callan has been training responders to the IDLH conditions and the risks of flammables products like Propane, Natural Gas and the IDLH conditions and the risks of flammables products like Propane, Natural Gas and especially the “Dangerous” conditions of electricity. Hazardous material responders are risk analyzers in a world of response risk takers. You as the Hazardous Material technician are the first step to protecting your personnel. Taking this session will help you stay alive around IDLH conditions exist when utilities are present.

J5: New: The HazMat Rookie; From the Classroom to the Field**90 Minutes****Edward Perez**

Stepping out of the classroom and into the high-stakes world of hazardous materials response can feel daunting, regardless of your experience level. Whether you’re a newly certified technician or someone with years under your belt looking to build confidence, The Hazmat Rookie is here to help. This class is designed for emergency service personnel transitioning into the demanding environment of a HazMat unit. In this workshop, participants will gain a practical framework to develop their skills and navigate their roles effectively. From honing core competencies and understanding team dynamics to tackling real-world challenges, this class offers actionable insights for building confidence and proficiency. Whether just starting your HazMat journey or refining your approach, The Hazmat Rookie bridges the gap between theory and practice, setting up every technician for long-term success in their department.

J6: New: After the Fire: Then What?**90 Minutes****Joel Calfee**

This workshop will facilitate an open discussion about what happens after the Fire Service leaves the scene of a HazMat incident to a contractor.

J7: New: Responding to Railroad Incidents; Hazmat Isn't Always the Problem**Part 2 of 2****Glen Rudner**

The railroads move many different products each and every day which include hazardous materials. But every incident that occurs that requires a response does not. This program explores and shows through case study’s that the incidents that involve non-Haz Mats can be just as challenging. The program will discuss the environmental impacts and the decisions that must be to mitigate the incident safely. Sometimes thinking outside the box to mitigate an incident is a good thing!

J8: Tank Truck Emergencies**Part 2 of 2****Rick Meehan
Richard Lawhorn**

Review of various types of highway cargo tanks and how they hold up after rolling over a few times or flying off a freeway overpass.

J9: New: HazMat Officer Strategy & Tactics**90 Minutes****Toby Frost**

Hazmat events develop quickly, and the first step is a solid plan. It can be overwhelming with information flying at you and questions unanswered. The HazMat Officer Strategy and Tactics course focuses on working with the incident commander and supporting agencies to develop quick, "street level" incident action plans (IAP) for small to large HazMat incidents. Participants will learn a simple, repeatable, process for IAP development and documentation that is easy to implement and is consistent with the National Incident Management System (NIMS) and NFPA 470 APIET (analyze, plan, implement, evaluate, and terminate) process.

J10: New: Level Up Your Learning:**90 Minutes****Corbin Fowler****Gamification in Emergency Response Training**

This workshop will review new routes of training involving "Gamification." Gamification is the action of taking training processes and making them interactive and rewarding for the participants as well as the instructor. Data acquired from gamified training sessions shows acceptance of new concepts, increases retention, problem-solving skills, and helps participants understand positive and negative outcomes with the material provided. In addition, research has shown that gamified training sessions have produced major impacts that classical training has not achieved. This presentation/workshop will cover and provide:

- An introduction to gamification with the training process
- An introduction to game design for HazMat Team training
- Examples using interactive media
- Research data on employee retention and knowledge after a gamified training session.

J11: Conquering Chemical Plant Emergencies**Part 2 Of 2****Keith Silverman****Bill Cullen**

"Inside the fenceline" emergencies are far from routine, often leaving even experienced responders feeling underprepared. This isn't just about hazardous materials; it's about complex facilities, unique challenges, and the critical need for specialized knowledge. Join us to transform your approach and get armed with the knowledge to confidently tackle industrial incidents. You'll learn to master size-up by quickly identifying common processes, containers, and potential hazards in chemical facilities; develop effective tactics for spills, releases, fires, and even uncontrolled reactions; and prepare for unique rescue scenarios within industrial environments. This is the workshop that will elevate your readiness for the most demanding hazardous material incidents.

J12: New: HazMat In Inclement Weather Events**90 Minutes****Bill Hageman**

This workshop provides an overview of the critical role a well-structured Hazardous Materials (Hazmat) contingency program (Hazmat, City, County, and State) plays during inclement weather events. It highlights key models and tools essential for effective preparedness, planning, response, and mitigation of Hazmat incidents. The discussion includes how these components support both public and private sector stakeholders. Real-world applications and performance metrics from Hurricanes Helene and Milton will also be reviewed to demonstrate practical implementation and outcomes.