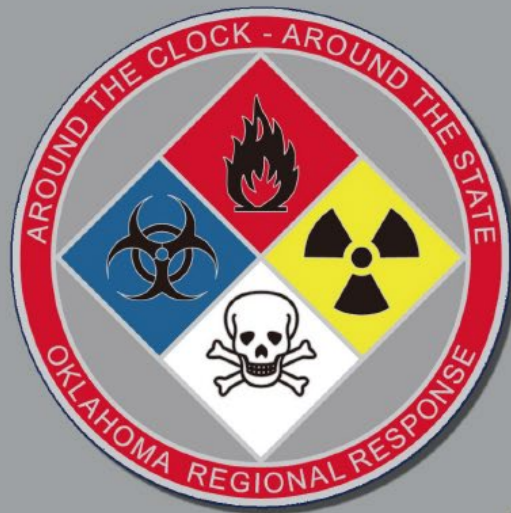


# 2024 OKLAHOMA HAZ-MAT CONFERENCE



Providing Hazardous Materials training and education to those who are involved in the response to emergencies involving hazardous substances. This model for hazardous materials training is designed to protect responders, workers, and the communities they serve from the impact of hazardous materials release.

Register at [WWW.OSU.FST.ORG](http://WWW.OSU.FST.ORG)



Conference Dates :  
May 15-18, 2024



Hilton Garden Inn  
2833 Conference Drive  
Edmond, OK 73034



## **OKLAHOMA HAZARDOUS MATERIALS CONFERENCE**

### **Course Descriptions – May 15,2024 - Day 1**

#### **Back to Basics – Grounding and Bonding – Glen Rudner**

The program will follow the recommendations as set by the NFPA 470 standard and discuss the misunderstand of what ground resistance is why we do it first. Then, by demonstration, the instructor will show how we set up a grounding field for the damaged container, grounding field for the recovery container and appliances and how to bond them together. This is an interactive program that will ask the student to discuss the subject. You can bring your ground density meter with you and make sure you how it works.

#### **Back to Basics Air Monitoring – Bill Hageman**

In this class we will discuss:

- Basic monitoring methods including colorimetric (pH and Colorimetric Tubes), direct reading instruments (Combustible Gas Indicator, Chemical Specific, Photo Ionization Detector)
- Advantages, use and limitations on basic monitoring method technology, approach technique, response time (Passive vs Active), observed results (chemical specific and interferences)
- Triaging the source material
- Interpreting the results
- Additional consideration (Thermal imaging cameras, radiation, hierarchy of monitoring method)

The goal of this course is to give the participant an opportunity to troubleshoot (while incorporating the use and limitations of the monitoring methods), triage and identify if a hazardous materials condition exists or is absent, while interpreting the results.

### **Can I Become the Incredible Hulk? – Tony Janke & Bill Hageman**

In this presentation, we will discuss basic knowledge of radiation.

- Bad Days – looking back when radiation took a wrong turn
- What is radiation and where does it come from, manmade vs natural
- When was it first discovered and by whom
- Basic terminology
- Uses, good and bad
- Protection from radiation
- Health effects

### **Curbside Chemist – David Raynor & Tyler Broughton**

Curbside Chemist is an 8-hour class that focuses on the classification of an unknown product using chemical test strips and other items that can be found around the fire station. Participants will be instructed in the use of chemical test strips to identify an unknown sample. Participants will have the opportunity to use these techniques in the classification of several unknown products. The course will also demonstrate advanced sampling techniques using FTIR and RAMAN technologies in conjunction with test strips.

### **Deficiencies in Hazmat – Anthony Perrone**

Deficiencies in hazmat education requires ongoing efforts to improve curriculum standards, enhance practical training opportunities, allocate sufficient resources, stay updated on emerging hazards, and provide holistic support for hazmat responders. Collaboration among government agencies, educational institutions, industry stakeholders, and professional associations is essential to drive these improvements and ensure the effectiveness of hazmat education programs.

### **Hazardous Identification Testing Systems (HITS) – Bob Coschignano**

The basics of research is one of the most important but confusing subjects on a hazardous materials incident. Using the Hazardous Materials Identification System (HITS) the technician will be able to identify chemical properties of a substance or compound by simple field testing. Conducting basic testing such as field papers, flammability, and solubility the technician then may move into advanced testing with detection equipment to classify a chemical into a chemistry group. Although the technician may not be able to know the exact name following the HITS system, they should be able to recognize the general group in under 15 minutes.

### **HAZWOPER Refresher- Dan Newbury**

This refresher course is designed for employees who are involved in cleanup operations both volunteer and emergency, along with storage, disposal and treatment of hazardous substances uncontrolled waste sites.

### **Hierarchy of Detection – Bring It All Together for a CBRNE Event – Bill Hageman**

In this class we will discuss:

- Review basic monitoring methods
- Review the use of technical source material
- Introduce Detection (and monitoring) Plan
- Introduce the use and application of Exposure Levels and Limits
- Introduce use of Qualitative for Go-No Go versus Quantitative for Confirmation
- Interpreting the results
- Application of Detection (and Monitoring) Plan
- Additional Consideration

The goal of the course is to give the participant and opportunity to understand the key components of a detection and monitoring plan; develop a foundation of quantitative versus qualitative methods and limitation, interpret results and application of the detection (and monitoring) plan for emergency response.

### **Hybrid Decon Awareness – Frank Roberts**

Used by hundreds of Military, Fire, HazMat, EMS, Police and other response agencies across the world! This Decon method is built upon decades of research by the military and federal agencies. Hybrid Decon will allow you and your team to conduct decon using the newest technologies and allows you to save time, personnel, logistics, sustainment costs, and space in your compartments. Learning this method will increase both safety and effectiveness and lower the cost of disposal for your agency or the responsible party. If your HazMat team, Response Agency, or Clean-up company is looking to improve your response to Chemical and Biological calls; learn the Hybrid Decon system. This simple system will reduce the set-up time and personnel required to operate a decon line. Hybrid Decon can be used in all temperature ranges and this course will teach you how to reduce or eliminate water usage and the need to contain the grey water waste. Learn why this method is proven effective for Chemical Warfare Agents (CWAs), Biological Warfare Agents (BWAs), Toxic Industrial Chemicals + Materials (TICs + TIMs), Synthetic Opioids, Emerging Threats, Unknowns. Learn about the latest in decon concepts such as the "bar" method and "plate" concept. Decon methods have not kept up with new emerging technology! Solids, Liquids and Gasses all pose unique decon challenges and cannot be treated the same! Learn why Synthetic Opioids, TICs and TIMs, BWAs and Unknowns should not be spread or liquified on the skin during decon. Chemical and Physical properties can pose individual challenges and should be a consideration on type of decon setup!

### **Industrial Fire& Spill Response for Manufacturing Facilities - Adam McFadden**

This course provides: Industrial, Manufacturing, Oil & Gas Firefighting Tactics Overview of Commercial Building Fire Response Strategies Large Area Search & Rescue, Fire Behavior & Ventilation Tactics Incident Command ICS 200 Review Protocols Water Supply, Interior & Exterior Operations & Hose Stretch Tactics Radio Communications & Fireground Tactical Benchmarks Tactical Safety, Industry Best-Practices & Safety...

### **Instructor Series – How Not to Suck When Teaching Hazmat (Part 1) – The Hazmat Guys**

We've all been in a class where the teacher was more toxic than the chemicals being discussed. We like to call this "Acute Toxic Instructor Syndrome." In this course, we discuss different methods of instruction that will help keep students more engaged. We outline various methods to help attendees remember key points and maintain attention throughout any lecture. This class will transform how you instruct, change how your students learn and raise the hazmat training of your department.

If you are a confident instructor, plan to have your confidence crushed!

### **Instructor Series – Modernize Your Classroom (Part 2) – The Hazmat Guys**

We take a look at some alternate course methods using some new technology to make classes memorable. We will explore both static and dynamic applications of technology. From expanding PowerPoint applications to digital classroom recording and integrations. If you are looking to make your content engaging and interactive, bring your notebook because there will be a lot to take home!

### **Lithium-Ion Response Awareness – Chris Pfaff**

This class will introduce responders to the hazards presented by Lithium-Ion batteries. We will present a short history on the problem, why these fires are so difficult to put out and provide tools on how to effectively and safely respond to emergencies involving Lithium-Ion batteries. Topics covered: Battery types and light chemistry discussion, battery platforms and uses, Fire Code limitations, response options and tools, disposal considerations and fire investigation considerations.

### **Physical & Chemical Properties for Risk Based Response – Brian Ramsey**

Hazards, risks and consequences during this 8 hour highly interactive class, participants will understand the significance in using physical and chemical properties to assess hazards encountered at hazardous materials incidents, apply physical and chemical properties to manage risk during hazardous materials incidents, and understand consequences of how things can go wrong on hazardous materials incidents. During this lecture, flash point, 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 street smart chemistry of hazardous materials and how to apply physical and chemical properties to Risk Based Emergency Response!

### **Propane Response – 101 to Advanced Tactics – Ron Huffman**

The course is designed to provide the student with the information needed to respond to liquid and vapor leaks involving bulk transportation vehicles (rail, MC331 tanker & bobtail), bulk storage (250 gallon and larger), portable tanks, common residential above and underground. The course title, “Propane Response, 101 – to Advanced Tactics” describes the path we will follow from beginning to end. Using my 30+ years’ experience working with and responding to propane issues we’ll discuss tried and true response practices and emerging technologies and tactics. What is propane, what are the hazards, preplanning, response, and mitigation tactics that include: doing nothing, vapor dispersion, product control, product transfer, flaring and water injection. The second half of the course is all practical evolutions, BRING YOUR GEAR and an SCBA if you participate in the hands on or come stand back and observe.

### **Scenario Based Training – Running Out of Ideas? – Glen Rudner**

Scenario based training has become the most common way of training response teams to work together. However, the challenges that are always present include: the same ideas, little variation, lack of realism and not setting attainable goals. Through a series of questions and discussions the presenters will guide you through the obstacles described and help you to develop more effective whole skill exercises and drills to improve your team and the others that respond with you.

### **So You Want to be a HazMat Medic? – Armando “Toby” Bevelacqua & Michelle Murphy**

The purpose of the course is to apply emergency medical response to a hazardous materials incident for Pre-Hospital Response Team by exploring the toxicology and the medical response from initial response to the effects on body systems, injuries and treatment modalities. The modalities used are the ones used by the Orlando Fire Department and are state level procedures written by the presenter.

### **Tactical Chemistry – Chris Weber**

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 hazardous materials.



## **OKLAHOMA HAZARDOUS MATERIALS CONFERENCE**

### **Course Descriptions – May 16,2024 - Day 2**

#### **Back to Basics Air Monitoring – Bill Hageman**

In this class we will discuss:

- Basic monitoring methods including colorimetric (pH and Colorimetric Tubes), direct reading instruments (Combustible Gas Indicator, Chemical Specific, Photo Ionization Detector)
- Advantages, use and limitations on basic monitoring method technology, approach technique, response time (Passive vs Active), observed results (chemical specific and interferences)
- Triaging the source material
- Interpreting the results
- Additional consideration (Thermal imaging cameras, radiation, hierarchy of monitoring method)

The goal of this course is to give the participant an opportunity to troubleshoot (while incorporating the use and limitations of the monitoring methods), triage and identify if a hazardous materials condition exists or is absent, while interpreting the results.

#### **CO2 Emergency Response – Chris Pfaff**

This discussion will go over Carbon Dioxide in a total aspect. We will begin with the physical properties of this NON-cryogenic liquified gas. We will discuss the difficulties with identification via containers and how previous knowledge may have to be revised with this product. We will then discuss what the fire code has done to address this hazard and how this can assist first responders that may need the tools on their rig to quantify the hazard. We will close out with a discussion on how to approach and address a CO2 emergency for agencies of any size.

#### **Presentation Objectives**

Learn the physical and chemical properties of Carbon Dioxide. Identify containers that may be found that will contain Carbon Dioxide. Identify options on how to respond to CO2 emergencies safely and even use CO2 for effective response.

## **Detection of CWAs, PBAs, TICs and TIMs with Flame Photometry – Luke Sloan**

Come learn how flame photometry can be useful in detection of CWAs, PBAs, TICs and TIMS in the gas, vapor, aerosol, liquid and solid states.

## **Devil is in the Details – Bob Coschignano & Derek Schaumann**

It is often the small details which can make incidents difficult or challenging. These details can prolong an operation or foil an otherwise straightforward response. In this course we will identify commonly confused information and other simple errors that can have costly consequences.

### **OUTLINE**

- Discussion of the strategy and tactics and the attention to detail needed during potential hazmat events.
- Examination of case studies with interactive participation using audio and visuals from scenes and common reference material.
- Review of options and considerations based on actual incidents with known outcomes.
- Introduction of several different hazmat community social media sites and the community of first responders regularly discussing all things hazmat from those currently 'sitting in the seat.

### **PRESENTATION OBJECTIVES:**

- Scene Size up
- PPE selection
- Air Monitoring selection and strategies
- Identification
- Dispel myths and provoke discussion on response options.

## **You're the First on the Scene to a Propane Incident and Have Nothing to Work With, or do You? – 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 to see what happened and what we can learn from them and much more. One of your best tools is sitting on your shoulders, let's put some more fuel for thought in it.



### Hold My Matches and Watch This – Brian Ramsey

Hold your matches and watch this! A highly interactive demonstration of the physical and chemical properties of flammable liquids and flammable gasses. During these sessions, participant 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.

### Hydration, You’re Either a Hero or a Hemorrhoid – Armando “Toby” Bevelacqua

**Session Description:** This session 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.

**Session Abstract:** With so much attention on firefighter health and wellbeing there has been a lot of effort on reducing the exposure to toxic materials at emergency incidents. Whether the scene is a hazardous materials 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 in the detoxification process as well as the importance of maintaining hydration to prevent after incident heart attacks and strokes.

In this session we will explore why the sauna is NOT an option for “sweating it out”, investigate hydration drinks and powders, talk about the sweating process, and how these issues influence the health and wellbeing of the first responder

#### **Enabling Objectives:**

The participant shall:

- A. Use basic understanding of pathophysiology of hydration and sweating
- B. Describe the advantages and disadvantages of different hydration fluids
- C. Describe how without proper hydration strokes and heart attacks can occur
- D. Describe the safety concerns when dealing with hydration issues.

### Hazmat Fires & You: Considerations to Think About During Large Scale Flammable & Combustible Liquid Fires – Chris Pfaff & Adam McFarland

In this hazmat session, the student will increase their understanding of various firefighting and hazmat response tactics when dealing with Flammable & Combustible Liquids. This will include an overview of Incident Command Strategies for Flammable Liquid Hazardous Materials events, the use of firefighting foam and preparation for emergency incidents in the areas of residential, transportation, industrial and commercial firefighting.

This program will cover the basics regarding emergency response techniques, spill response operations, dealing with control valve leaks and shutoffs, as well as foam proportioning devices and application techniques. We will also discuss new hybrid technical decon methods for dealing with flammable liquid events. We will review the various challenges in fighting all types of fires and hazmat spills from railcars, tanker trucks, combustible storage tank facilities, and manufacturing process areas.

### Modular Metering – The Hazmat Guys

Metering can be confusing, but we have a knack for detangling the mess. We will explain it simply and have member leave with a full understand of how and why metering is done. In this conference length presentation on metering, we will review the metering technologies of electrochemical, catalytic bead, photoionization detection. Come check out the short version of our full day course.

### Moving From HAZMAT Tech to HAZMAT Specialist in WMD Incidents – N.G. 63<sup>rd</sup> CST

**Purpose:** This instruction block is formatted to assist the first-in fire service officer, law enforcement agency, or emergency manager in understanding how to leverage domestic military support assets during WMD, illicit clandestine laboratory, or significant industrial hazmat disasters. The course aims to break the stigma of requesting domestic military support and enhance the local incident commander's ability to make the right calls, at the right time.

**Scope:** The course will cover pertinent information to include considerations during scene size-up to help determine the need or utility of requesting military assets, what assets are available to an IC once the request is made, what to expect upon arrival of the asset/s, and the proper channels for requesting these assets. This class will include a review of multiple cases when military hazardous materials technicians were used to quickly identify hazards, advise and assist the incident commander in bridging the gap between local, state, and federal assets, and assess risk to the community

## **Comprehensive Post-Accident Investigation and Return-to-Work Management for Safety Professionals – Dan Orr**

This course is specifically tailored for safety professionals and managers, focusing on the critical aspects of post-accident investigation and the management of the return-to-work process. Participants will learn techniques in incident analysis, best practices to identify root causes, develop corrective actions communication strategies, and effective methodologies for facilitating the return of injured employees to the workplace and prevent future accidents.

Key Objectives:

1. Understanding the Accident Investigation Process: Learn the step-by-step process of conducting an accident investigation, including immediate response actions, evidence collection, and witness interviews.
2. Root Cause Analysis: Gain skills in various root cause analysis techniques.
3. Legal and Regulatory Compliance: Understand the legal aspects and OSHA requirements related to workplace accident investigations.
4. Communication Skills: Enhance your ability to communicate effectively with all stakeholders, including employees, management, and external agencies.
5. Report Writing and Documentation: Creating clear, concise, and comprehensive investigation reports that outline findings, conclusions, and recommendations.
6. Preventative Measures and Safety Culture Enhancement: Learn strategies to develop and implement corrective actions that strengthen the safety culture and prevent future incidents.
7. Case Studies and Real-world Scenarios: Engage in interactive case studies and simulations to apply learning in real-world contexts.
8. Technology in Accident Investigation: Explore the use of technology, such as digital documentation tools and incident management software, in streamlining the investigation process.

Target Audience: This course is ideal for safety managers, supervisors, safety committee members, and any personnel involved in workplace safety and accident investigations.

Why Take This Course: Accidents in the workplace can have serious consequences, both human and financial. This course empowers professionals with the knowledge and skills to conduct effective investigations, promoting a safer work environment and safeguarding against future incidents.

## **Propane Response 101 to Advanced Tactics, An Overview – Ron Huffman**

The shortened conference presentation is designed to provide the student with general information needed to respond to a propane leak involving a bulk transportation vehicle (rail, MC331 tanker or bobtail), bulk storage (250 gallon and larger), common residential and portable tanks.

## **Railroad 101 – Understanding Railroad Operations and Safety – Glen Rudner**

This workshop will give the responders from Awareness to Technician the ability to work with the railroad within the railroad right-of-way safely and to be given an understanding of railroad operations. Additional content includes all types of Railcar Construction and features.

## We Got This! Is Your Department Really Ready - Bob Coschignano & Derek Schaumann

Whether you are a training officer, Battalion Chief or the Fire Chief, this class is for you! This presentation asks and answers the question, “is our department REALLY prepared to recognize and respond to a hazmat incident, especially those that arrive on scene first”? Too many times we think our department is prepared only to learn the hard and costly way that they are NOT!

- Discuss the difference between operational response and that of a hazmat team.
- What training is required?
- How to prepare the first arriving units of a potential hazmat scene to include CO emergencies, Natural gas leaks, fuel spills etc.
- What actions can we take.

## What Could Possibly Go Wrong - Armando “Toby” Bevelacqua & Michelle Murphy

**Session Description:** This session looks at several scenarios with discussion about each potential outcome. It looks at events that have already occurred, although we will not review, these events discussed are real scenarios.

**Session Abstract:** In many cases the discussion is focused around the idea of a singular issue. We tend to approach the problem with a monoptic view. In general HazMat response is regarded as a complicated topic. When in reality it is just like any of the rescue disciplines a refined art, however as with any art review of the issues within context is how we learn.

We will identify a process towards, analyzing and thus controlling the risks and hazards that are present or may become a part of your incident. Discussing tactical problems, safety concerns and community impact. It is a balanced approach weighing the risk benefit towards a strategy and/or scene mitigation tactic.



## **OKLAHOMA HAZARDOUS MATERIALS CONFERENCE**

### **Course Descriptions – May 17,2024 - Day 3**

#### **Chemical and Physical Properties for Risk Based Response – The Hazmat Guys**

##### **Abstract:**

We take a very different look at the basis for all of our operations. Chemical and physical properties. Seemingly basic and fundamental, we go beyond where the instructors stop and explain how and why they matter. We will take a look at them from multiple different perspectives and see how they all correlate with tactical advantages.

##### **Objective:**

Have a deeper understanding of the Chemical and Physical properties and:

- ☑ Our ability to modify scenes to suit our needs
- ☑ Explore a completely different way to imagine a scene
- ☑ Understanding on how to take control of the incident

#### **Downrange Objectives: Tactical Incident Command Strategies for Hazmat Events – Adam McFadden**

It is vital on every hazardous materials emergency scene, we have a system in place to ensure that all downrange - fireground tasks are completed, to safely and effectively mitigate any hazardous material and its effects.

Incident Command is the standardized structure that allows for a cooperative response within various groups or agencies to coordinate response activities, without compromising any decision making or safety. Focusing on a risk-based response through the chain of command, and utilizing tactical checklists as an Incident Action Plan in a way to identify roles, and tasks to ensure scene objectives are met. This roundtable group session will identify how to better assess the situation through scene size-up, with objectives including product identification, the use of chemical detection monitors, choice of personal protective equipment along with on-scene decontamination strategies and procedures.

We will discuss the importance of having a Hazmat Safety Officer; and tactical priorities to make key decisions on-scene, such as rescue, recovery or spill response mitigation issues to consider. We will also review radio communication benchmarks for product related actions for fires or spills, life protection strategies for public safety and assistance requests for local mutual aid agencies.

### **Emerging Technology for Hazmat Teams – Chris Pfaff**

During this presentation, we will discuss current and emerging technologies within the world of hazmat. From the lessons Chris has learned working with his 60-member team in Washington State, he will discuss the basic history of his team in relation to training and equipment. We will then move on to some new technologies that have been recently available and emerging training formats that have grown in the past few years. We will then go over an analysis that your team may need and, more importantly, what they may NOT need. This will be based on an appropriate hazard risk and vulnerability assessment.

### **Hazmat with Intent: Terrorism & Weapons of Mass Destruction Response Tactics – Adam McFadden**

My session will include specific highlighted learning objectives, identify key speaking topics in the areas of Terrorism Response Procedures, CBRNE & Weapons of Mass Destruction Chemical Detection & Mitigation Equipment, which will also include an interactive group participation module. All participants will be provided handouts of my PowerPoint, including various tactical worksheets to use during our group mock table-top exercise.

#### **Curriculum Overview of Training Session:**

- Review of Domestic & International Terrorism Events in North America
- Review and Discussion of Incident Command Systems for CBRNE & WMD Events
- Understanding the Use of a Tactical Hazmat Worksheet to Manage the Incident
- Mitigation Response Strategies for Bomb Threats, Chemical & Nuclear Attacks
- Joint Response Team Initiatives for Fire, Police and Paramedics
- Review of Tactics (Accountability and Entry Control, RECCE, Decon Techniques, Extraction, FTT, IC & Emergency Management Operations)
- Group Case Study Discussions: Do we perform a snatch and grab rescue; or do we isolate the area to mitigate the hazardous material?
- Hazmat and CBRNE Communication Benchmarks, Assigned Tasks (Command, RECCE in Hot Zone, PAR status, Decon Setup, Emergency Decon Established, FTT)
- Practical Table Top Scenarios, Group Discussion & Group Questions

### **Initial Monitoring for First Arriving Hazmat Responders – 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.  
Common mistakes using air monitoring equipment.

### Lithium-Ion Fire Investigation – Chris Pfaff

With this presentation, we will go over the code challenges to fire inspectors and firefighters in relation to Lithium-Ion battery storage in various occupancies. Chris will go over the updates to the International Fire Code, and what it means to fire investigators. We will also discuss what firefighters and hazmat technicians need to know to spread the message to the public and other agencies to ensure a full collaborative effort is made for DDR (Damaged, Defected, Recycled) batteries from inception to use to disposal/damage, and disposal.

### Moving From HAZMAT Tech to HAZMAT Specialist in WMD Incidents – N.G. 63rd CST

**Purpose:** This instruction block is formatted to assist the first-in fire service officer, law enforcement agency, or emergency manager in understanding how to leverage domestic military support assets during WMD, illicit clandestine laboratory, or significant industrial hazmat disasters. The course aims to break the stigma of requesting domestic military support and enhance the local incident commander's ability to make the right calls, at the right time.

**Scope:** The course will cover pertinent information to include considerations during scene size-up to help determine the need or utility of requesting military assets, what assets are available to an IC once the request is made, what to expect upon arrival of the asset/s, and the proper channels for requesting these assets. This class will include a review of multiple cases when military hazardous materials technicians were used to quickly identify hazards, advise and assist the incident commander in bridging the gap between local, state, and federal assets, and assess risk to the community

### Product Sampling – Mike Parsons

The hazardous materials product sampling class will be a scenario-based training session designed to guide the student through the process of testing samples utilizing multiple technologies and methods.

### Responding to an H2S Oil & Gas Emergency – Tara Porter

This presentation will focus on what first responders need to know when responding to an oil and gas location involving H2S.

- We will discuss the various oil & gas locations and the differences
- How to identify and know what hazards may be present on certain locations
- Discuss the possibility of dealing with a well control incident in addition to an H2S release
- Case Studies – review and discuss incidents involving H2S from the Permian Basin as well as a well blowout incident in eastern Oklahoma

### **Responding to Railroad Incidents – Hazmat Isn't Always the Problem – 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!

### **Surviving and Thriving a Career as a 1st Responder – Warriors Rest Foundation**

This presentation discusses the "Common Reactions" to workplace stress and trauma to illustrate the pitfalls of the First Responder work environment. The effects of job-related trauma as well as how to take control of your "off-duty" time will also be discussed. This course is easily adapted for presentation to different types of First Responder groups who may have different assignments and duties but often share similar "Common Reactions to Stress and Trauma". Class interaction is encouraged by the Course Instructor.

- Workplace stress comes in many forms that are often presumed to be "part of the job". We discuss the cumulative toll these stressors have while providing useful tools to build resistance. Cumulative Career Traumatic Stress (CCTS) often accumulates for First Responders through their entire career and doesn't automatically "expire" upon retirement.
- Trauma comes in many forms and can be more or less severe to individuals or groups even though they were at the same event. Understanding that both positive and negative reactions to trauma are normal provides relief to those who are often reluctant to share their concerns. Encouraging open conversations and discussing events with peer support, family, and friends is an important part of the course.
- The course also provides First Responders with tools and resources to aggressively build a resilient lifestyle.



## The Lost of Art of Mentorship, Are We Failing Our Own - Bob Coschignano & Armando "Toby" Bevelacqua

Session Summary: At the firehouse we have many conversations around the kitchen table. It does not matter if it was a complicated extrication, HazMat incident, Fire or even a bread and butter incident. But if you really were listening, you were listening to generational experience. Sometimes the senior person starts the conversation, or the junior responder asks a question. However it starts, you are in the process of a mentorship, a relationship, a valued time of learning and you may not even realize it. The conversations that transpires around the kitchen table are as valuable as initial training, and in some cases more so. A conversation that is basically mentorship spiced with education and a bond between responders. Do you have a mentorship program, a system for secession, or informal display of future leadership. In this session we will share several ways mentorship can occur. We will discuss, how one can start a program, but more important are the details of how to start the conversation. Lets have a conversation.....

**Course Objectives:** This session will look at the following objectives:  
Upon completion the responder should.

- Value how a mentorship program can influence the next generation
- Illustrate similar experiences for a positive secession plan
- Describe ideas for starting the conversation and the directions outlined
- Recognize the discussion for learning lessons and building relationships

## The Politics of Hazmat – Bob Coschignano & Derek Schaumann

The goal of this class is to teach the student about people issues that will affect your hazmat call, team and agency. It's about the people. IT'S ABOUT TRUST... Without the right people in the right position on the right day making the correct decision or being allowed to implement the correct course of action, everything will be more difficult and possibly fatal. Human Interaction (Politics) prior to the call, during the call and after the call in some cases will be the focus of the class. Politics both externally and internally as it relates to your hazmat team is critically important.

## Up in Smoke, Marijuana Grow House Response – Clint Greenwood & Bob Billen

Marijuana grow houses are houses or other locations in rural, urban, and residential areas that are converted for the purposes of growing marijuana. Indoor marijuana grow operations are regularly found by law enforcement and appear to be increasing in numbers. This course is intended to bring to light the hazards and assist in developing an incident action plan when responding to these types of incidents.



## **OKLAHOMA HAZARDOUS MATERIALS CONFERENCE**

### **Course Descriptions – Mayday 18,2024 – Day 4**

#### **Clean and Mean: Haz Mat Decon – Anthony Perrone**

The course provides an overview of hazardous materials decontamination procedures and protocols. Students will learn the principles of decontamination, including identifying and containing hazardous materials, implementing decontamination procedures and ensuring the safety of individual and the environment. Topics covered include decontamination equipment, personal protective equipment (PPE), decontamination methods and decontamination site management.

#### **Curbside Chemist – David Raynor & Tyler Broughton**

Curbside Chemist is an 8-hour class that focuses on the classification of an unknown product using chemical test strips and other items that can be found around the fire station. Participants will be instructed in the use of chemical test strips to identify an unknown sample. Participants will have the opportunity to use these techniques in the classification of several unknown products. The course will also demonstrate advanced sampling techniques using FTIR and RAMAN technologies in conjunction with test strips.

#### **Deficiencies in Hazmat – Anthony Perrone**

Deficiencies in hazmat education requires ongoing efforts to improve curriculum standards, enhance practical training opportunities, allocate sufficient resources, stay updated on emerging hazards, and provide holistic support for hazmat responders. Collaboration among government agencies, educational institutions, industry stakeholders, and professional associations is essential to drive these improvements and ensure the effectiveness of hazmat education programs.

### **Hierarchy of Detection – Bring It All Together for a CBRNE Event – Bill Hageman**

In this class we will discuss:

- Review basic monitoring methods
- Review the use of technical source material
- Introduce Detection (and monitoring) Plan
- Introduce the use and application of Exposure Levels and Limits
- Introduce use of Qualitative for Go-No Go versus Quantitative for Confirmation
- Interpreting the results
- Application of Detection (and Monitoring) Plan
- Additional Consideration

The goal of the course is to give the participant and opportunity to understand the key components of a detection and monitoring plan; develop a foundation of quantitative versus qualitative methods and limitation, interpret results and application of the detection (and monitoring) plan for emergency response.

### **HTAC – Hazmat Tactical Analysis Cards, Using the Science, Not the Fear in Hazmat Response – Clint Greenwood**

This course is designed to prepare local emergency responders to systematically organize and operate during hazardous materials situations. This one-day course uses a systematic algorithm to disseminate chemical properties using the NIOSH Pocket Guide, Safety Data Sheets (SDS's) and many other chemical resources that may be used during a hazardous materials incident. With these skills it will make the emergency responder aware of the significant decision-making points responders will need for critical thinking for site safety for emergency responders and the public. The student will learn to develop incident action plans, tactical objectives, and determine safe operations by interpreting chemical properties found in the NIOSH Pocket Guide or any other chemical property reference material. This course will aid in improving plans for emergency response operations throughout incident response. In addition, this course will assist in devising a system for operational planning to support decision-making skills in the early hours of a hazardous materials incident.

### **Navigating a Statewide Foam Taskforce – Chris Johnson**

We will examine the framework within which New York State assembled its taskforce, highlighting key stakeholders, legislative mandates, and operational protocols. We will discuss the hurdles encountered along the way, including budget constraints, and stakeholder resistance, and explore the strategies employed to overcome these obstacles.

Additionally, with the growing call to transition to fluorine-free foam solutions, this course will delve into New York State's approach to embracing innovative alternatives. We will discuss the evaluation criteria for alternative foams, the process of implementation, and the ongoing monitoring and adaptation required to ensure effective firefighting capabilities while minimizing environmental impact.

**In the Heat of the Moment: A Guided discussion of On-Scene Risk Management – Chris Johnson**

We always try to plan our responses but often we forget about Mr. Murphy. Risk Management is more than just coming up with SOPs and SOGs. This guided discussion will look at various scenarios and real life incidents, where despite our best plans, we had to adapt for the safety of our responders while still meeting the needs of the IC. It will be a chance for participants from various backgrounds to discuss how they might attempt mitigation and to learn from each other.

**Static Electricity “Common Problem” and “Uncommon Knowledge” – Brian Ramsey**

In this session we will examine the risk factors of non-managed static discharges involving flammable liquid vapors and flammable gases. During the lecture we will examine past events and discuss the factors and lack of De-Risking that led to fires and explosions. We will discuss in detail the importance of conductive and non-conductive flammable liquids and the hidden hazards of each.

**Register at [www.osufst.org](http://www.osufst.org)**