

## ***Act 165 Update***

*Track:* General

*Instructor(s):* Jeffrey Boyle

*Description:* This will be a PEMA discussion regarding the process of rewriting of PA Act 165. For the last several months a working group of individuals from across the Commonwealth and Commonwealth agencies have been working on developing recommendations for rewriting this important legislation. The working group is in the final stages of developing our recommendations and are hoping to start introducing this to the general assembly for consideration soon.

## ***Alternative Fueled Vehicles (AFV) Level 3***

*Track:* Transportation

*Instructor(s):* Tim Ferretti

*Description:* A crash course into the world of alternative fueled vehicles encompassing primarily CNG, LNG, and Hydrogen systems as each fuel type brings its own unique challenges. Fuel characteristics, component identification, operations, and tips/tricks. This workshop is not set up to be a presentation, but a hands-on training to familiarize attendees with some of the systems they will approach and be forced to deal with.

*Class Limit:* 30

## ***Beyond Checking the Boxes? Training to Succeed by Thinking Outside the Box***

*Track:* General

*Instructor(s):* Jaime Bero & Darin Virag

*Description:* This presentation will be the part two to last fall's "Are We Training Quality Firefighters/First Responders? Or Just Checking the Boxes?" Attendance at last fall's session is not required. It will be a roundtable discussion of what is currently happening in the field concerning training to succeed. The presenters are prepared to talk about all areas of the volunteer and career services: firefighters, emergency medical services, hazardous materials teams, and other roles.

Last year, the class identified concerns in the field including training structure, IEPs, JPRs, NFPA Standards, recruitment, retention, mentorship, and incentives. While any of these topics can be revisited, this presentation focuses on training solutions including jurisdictionally-appropriate and/or position-specific training that can be completed in-house, during times of funding

limitations. What's important and what's not for training will be shared. How can you develop the ability to make training modifications and think on your feet during instructional sessions will be highlighted.

### ***Chemical (Detergent) Suicides***

Track: General

Instructor(s): Jaime Bero & Darin Virag

Description: An overview of the growing trend of chemical (detergent) suicides will be discussed. While being a similar emergency response as an overdose but due to their intentional nature, what are the additional responder safety considerations when dealing with this type of event. How are these events decontaminated? What common household chemicals are used? Recognition and mitigation of these calls will be discussed to emphasize responder safety.

### ***Critical Connections: Bridging Heavy Duty Wrecker and Hazmat Team Operations***

Track: Transportation

Instructor(s): Robert Moore

Description: In incidents involving hazardous materials, rapid, coordinated responses are essential for protecting lives, the environment, and property. The collaboration between heavy-duty wrecker operators and hazardous materials (hazmat) response teams is crucial for safely managing and mitigating risks associated with incidents like chemical spills, tanker rollovers, or vehicle accidents involving hazardous substances. This course aims to bridge the knowledge and operational gaps between these two specialized fields, ensuring that participants understand the vital role of teamwork and coordination in complex and potentially dangerous situations.

This condensed course is designed to provide participants with an understanding of both heavy-duty wrecker operations and hazmat response procedures, focusing on the benefits of inter-agency collaboration.

### ***Enhancing Statewide Hazardous Materials Response through PA-SHIELD***

Track: General

Instructor(s): Benjamin Herskowitz & Joey Pordash

Description: The Pennsylvania Specialized Hazmat Incident/Event Logistics & Deployment (PA-SHIELD) initiative represents a groundbreaking collaboration between Hazmat 2 Environmental

Fire Rescue Company (HM2) and key stakeholders in Pennsylvania's hazardous materials response community. PA-SHIELD is designed to address critical gaps in logistics, resource deployment, and inter-agency coordination for large-scale hazmat incidents and events.

This presentation will introduce the PA-SHIELD concept, detailing its operational framework, including its Memorandum of Understanding, membership structure, and financial model. PA-SHIELD unites Type I and II hazmat teams, supported by contributions from member agencies and participating organizations, to enhance readiness and provide a scalable response across jurisdictions.

Join us to explore how PA-SHIELD is redefining collaboration in hazardous materials response, fostering enhanced preparedness, and creating a robust support network for responders statewide.

### ***Fentanyl: Painkiller or Potential Crowd Killer***

Track: General

Instructor(s): Jaime Bero & Darin Virag

Description: Fentanyl is a powerful synthetic opioid used to manage severe pain. However, when misused it has a high rate of overdose and fatality. This session will be an open forum to discuss community vulnerabilities and first responder responsibilities. Potential for Fentanyl as a weapon of mass destruction (WMD) and mitigation and response options will be discussed. In-house training options will be deliberated. First responder care to avoid exposure will be proposed. This will be a highly interactive session.

### ***Fire On The Factory Floor! Rapid Fire & Spill Response for Industrial Facilities***

Track: General

Instructor(s): Adam McFadden

Description: In this industrial firefighting tactical response session, the student will increase their understanding of various firefighting and hazmat response tactics when dealing with active hazmat, fire and spill emergencies in commercial or manufacturing facilities.

This will include an overview of incident command strategies for factory or plant emergencies, industrial firefighting tactics and objectives for site-fires including water supply, large diameter hose-handling review, tactical ventilation, fire protection and suppression systems shutoffs, hazardous materials risk assessments, fixed facility spill response procedures, dealing with hazardous materials fires, and general preparedness for emergency incidents in the areas of oil and gas, industrial factory and commercial firefighting. This program will also cover joint-

response coordination with local fire departments and emergency medical services, as well as local authorities and environmental companies.

### ***Flawed Situational Awareness: A Detrimental Mistake to Operating in Hazmat Environments***

Track: General

Instructor(s): Jeremy Saul

Description: Most emergency service providers or general industry workers who work around hazardous materials may know intuitively that strong situational awareness is an important aspect of safety. However, many do not understand how detrimental it can become when your situational awareness erodes or becomes flawed. This program focuses on some of the most pervasive and detrimental situational awareness barriers first responders and hazmat team members will face while operating in stress-filled, dynamically changing hazardous environments. Attendees of this program will learn what the SA development process is, specific examples of detrimental barriers that can erode situational awareness and the best practices to overcome these detrimental barriers.

### ***G320 Fundamentals Course for Radiological Response***

Track: Radiological

Instructor(s): Benjamin Herskowitz, Joey Pordash, & Darius Allman

Description: The purpose of this course is to provide the coursework to help qualify participants to serve as a Radiological Officer (RO). This course meets the Operations Level Competency for first responders and hazardous materials teams who may encounter or be called to manage radiological incidents. This course addresses Nuclear Power Plant, Transportation, Nuclear Weapons, WMD and Hazardous Material hazards. Participants will be able to support planning, emergency response, recovery activities, evaluation, NIMS/ICS applicability and exercising a radiological protection system (RPS) in preparation for a radiological incident. This course will include Pennsylvania specific information and requirements. It provides participants with an understanding of the roles and responsibilities of the Radiological Officer including administrative, equipment, team and advisory responsibilities. The course describes the framework within which the radiological response team functions, and provides fundamental knowledge of radiation and its affects, while building on the participant's previous training and experience and including the proper response and pre-recovery procedures for a radiological incident. This class will also include a 16 hour Full Modulator Emergency Response Radiological Transportation Training (MERRTT). This class will give 2 certificates, 1 MERRTT Certificate and 1 G320 Certificate. Persons also attending the Hazmat Response Scenarios class

will also receive credit for a functional exercise for initial Radiological Officer certification. Participants will be required to bring their own radiological monitor for this course.

### ***HazMat for EMS***

Track: General

Instructor(s): Bad Day Training

Description: Participants in this course begin by recognizing signs and symptoms of Hazmat exposure, routes of exposure, and chemical properties. They will then learn about specific antidotes and their indication/contraindications, dosing and route. Several realistic scenarios are part of this training to reinforce lecture material.

### ***Hazmat Response Scenarios with Hands on Scenarios***

Track: General

Instructor(s): Benjamin Herskowitz & Joey Pordash

Description: To complement the Pennsylvania Specialized Hazmat Incident/Event Logistics & Deployment (PA-SHIELD) initiative Program, this training program offers a dynamic blend of classroom instruction and hands-on experience tailored to enhance the readiness and skills of Pennsylvania's hazardous materials response teams.

The program begins with a concise classroom session, providing participants with a primer on PA-SHIELD's operational framework, response protocols, and the integration of regional resources. This session equips responders with the theoretical knowledge to navigate complex hazmat incidents effectively.

The classroom segment transitions seamlessly into practical, scenario-based exercises utilizing the local props specialized hazmat equipment, graded against Attachment 10 from the States HMRT Certification Packet. These scenarios simulate real-world challenges, from chemical spills to multi-jurisdictional responses, allowing participants to apply classroom concepts in a controlled, high-fidelity environment.

Designed for responders of all experience levels, the program fosters a deeper understanding of resource deployment, incident command integration, and the critical decision-making skills required during hazmat incidents. By combining foundational education with hands-on practice, this initiative strengthens the capabilities of hazmat teams and ensures alignment with PA-SHIELD's mission of unified, efficient response across the Commonwealth.

Attendees will leave this session equipped with enhanced practical skills, a clearer understanding of PA-SHIELD operations, and the confidence to tackle real-world hazmat challenges.

### ***HazMat Response to Odors***

Track: General

Instructor(s): Chris Hawley

Description: HazMat teams respond to reports of odors all the time, and many of these calls can be challenging. This session focuses on how to determine the cause of the common odors, the unusual odors and the weird odors. There are true sick buildings and there are buildings with a chemical problem, one can be easily solved by a response team, the other requires more substantial work. This session will cover examples of both and provide strategies and case studies to handle these types of situations.

### ***HazMat Tabletop***

Track: Transportation

Instructor(s): Michael Krzeminski

Description: In this training program, students will conduct a functional exercise on the tabletop. Instructor Mike Krzeminski has created an entire town of models, with everything from a basic residence to a main street of commercial buildings, to industrial facilities, transportation infrastructure, and of course the emergency vehicles that accompany an emergency response. Just as reading the containers is important for understanding and preparing for a hazmat incident, this “city” gives responders the chance to “read the incident” in a compressed time and space. The processes of Incident Management in general and the 8-step process can be put to the test, practiced and discussed as the incidents play out on the tabletop. This is a highly interactive class, chairs will be available, but participants will be moving around and placing resources to respond, manage and mitigate the incident. There will be two offerings of this tabletop with session one focusing on a transportation incident occurring on a highway and session two focusing on a transportation incident occurring on a railway.

Session #1: The scenario will involve a transportation incident occurring on a highway. There will be a number of issues that will need to be addressed. We will focus on using the 8-step process and consider recommendations that Hazmat experts can make to the emergency management staff. Traffic Management will also need to be addressed.

Session # 2: The scenario will involve a transportation incident occurring on a railway. There will be a number of issues that will need to be addressed. We will focus on using

the 8-step process and consider recommendations that Hazmat experts can make to the emergency management staff. In addition, the research capabilities and knowledge of reactivity of products will be a focus, in addition to the recognition and hazard mitigation of other mechanical and physical hazards, which are common to railway incidents will need to be addressed, beyond just the hazmat scene.

Class Limit: 30

### ***Hazard Identification Testing System (HITS) Course***

Track: General

Instructor(s): Mike Bloski

Description: The basics of research is one of the most important but confusing subjects on hazardous materials incident. Using the Hazardous 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 field papers, flammability, and solubility the technician then may move into advance 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. The chart provided is a collective group of information that before was scattered among accepted reference sources. The HITS system brings this information together in for easier access. This course addresses competencies in NFPA 470 and designed for experienced technicians familiar with most terms and equipment used in hazardous materials response. The format will be instructor lead, in-class with practical demonstrations.

Target Audience: Fire Service (Hazardous Materials Technician or higher), Emergency Management field response personnel, Law Enforcement, and Industrial Emergency Response Personnel.

Class Limit: 25

### ***How do we teach these kids? I've never heard of a Pokémon.***

Track: General

Instructor(s): Joseph Scaglione

Description: In the world of Tik Tok, Myspace, and Instagram, do we know how to teach the next generation? As a millennial instructor, I have to say no. Not only what Pokémon they're trying to catch, the millennial and generation z technicians need different teaching techniques in order to learn. In this dynamic and interactive session, participants will explore innovative

teaching strategies specifically designed to engage Millennials and Generation Z in the critical field of hazardous materials response. As digital natives, these learners thrive in environments that encourage collaboration, technology integration, and real-world application. By the end of this session, attendees will be equipped with actionable strategies and resources to effectively train Millennial and Generation Z hazmat technicians, paving the way for a safer and more competent future in hazardous materials management.

### ***Instructor “Rehab”: Enhancing Firefighter Instruction Through Effective Learning Objectives***

Track: General

Instructor(s): Josphe Scaglione

Description: Our training program is designed to rehabilitate fire service instructors by reinforcing the fundamental instructional concept of learning objectives and their practical applications. This program builds on the success of our four-hour scenario-based training session and is tailored to instructors of all experience levels.

### ***Kindergarten taught me all I needed to know about HazMat***

Track: General

Instructor(s): Chris Hawley

Description: This keynote speech provides a retrospective of a HazMat responders journey and focuses on the basic kindergarten lessons that apply to HazMat response. Think of it as – had I known this when I started, responses would have been much easier. Lessons learned, case studies, and some good, bad, and ugly aspects of being involved in HazMat response.

### ***National Weather Service (NWS) HazMat Support Services***

Track: General

Instructor(s): Fred McMullen & Jonathan Guseman

Description: This presentation will cover HazMat support services offered by the National Weather Service (NWS) with Fred McMullen from the Pittsburgh office and Jonathan Guseman from the State College office.

### ***Propane Incidents – Let’s Talk Tactics***

Track: Transportation

Instructor(s): Ron Huffman

Description: As the title of the course says, “Let’s Talk Tactics”. 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.

### ***Propane Response 101 to Advanced Tactics: An Overview***

Track: Transportation

Instructor(s): Ron Huffman

Description: The shorted 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. We’ll discuss tried and true response practices and emerging technologies and tactics. The course title, "Propane Response, 101 - to Advanced Tactics" describes the path we will follow from beginning to end. 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.

### ***Propane Tactics – Water Injection to stop vapor production and increase responder safety***

Track: Transportation

Instructor(s): Ron Huffman

Description: This conference presentation is designed to provide the student with general information regarding the use of WATER to manage a liquid propane leak. What is it, how and why does it work, when can it be used and when it’s not the right tool for the job. What if you could use Water to stop vapor production, empty an auto-refrigerated tank, use it to lift liquid propane up to the piping inside an MC-331 that’s on its side to empty it faster. Instead of having a flaring truck incident that lasts days, we can use Water Injection to reduce the impact on the community and your department. Let’s discuss some options.

## ***Risk Based Response***

Track: General

Instructor(s): Chris Hawley

Description: 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.

## ***Saving Our Selves (SOS)***

Track: General

Instructor(s): The Meter Guys

Description: 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!

## ***The Situational Mindset of Hazardous Materials – Part 1 of 2***

Track: General

Instructor(s): Jeremy Saul

Description: Many emergency service providers and general industry workers in hazmat understand, perhaps intuitively, that having situational awareness is important. But most have received no formal training on how to develop it, how to maintain it, how to realize it is being impacted, or how to regain it once it has eroded. Part one of this program will breakdown What Situational Is by providing an in-depth review of the SA Developmental Process and how important having a strong SA Mindset is in Hazardous Materials.

## ***The Situational Mindset of Hazardous Materials – Part 2 of 2***

Track: General

Instructor(s): Jeremy Saul

Description: In Part 2 of this 2-part program we will dig into why situational awareness matters when it comes to making good decisions on the scene of hazmat events. This class will begin with a short video that will illustrate several factors (barriers) that can impact your mindset while working on the scene of a hazardous material event. The class will conclude by providing advice to help build your Situational Awareness Mindset while operating with Hazardous Materials.

## ***Tank Talk – The Nuts and Bolts of Highway Tank Construction***

Track: Transportation

Instructor(s): Robert Moore

Description: In this two-hour course, hazmat responders will learn about highway tank construction and the different types used in hazardous material transport. The session also includes discussions on practices like grounding and bonding, and basics of product transfer operations. Designed for a quick yet comprehensive understanding, this course is ideal for professionals seeking to enhance their knowledge of highway tank operations.

### ***“When Meters Matter” (Express)***

Track: General

Instructor(s): The Meter Guys

Description: Through our program the student will learn about each individual sensor in the 4-Gas Meter (LEL, O2, CO, H2S) so they better understand what their meter is telling them while on an emergency response on highway tanker accidents, as well as gas leaks, confined space, CO and other calls where first responder safety could be at risk. They will understand and physically experience the meter alarms during the course with meters that are brought with us for your First Responders to use. We also will be happy to review your meters during this class. By bringing our own meters we spare you the problem of having to recalibrate your meters due to the amount of chemicals we expose the meters to during class. If you want us to use your meters during the class, we will be happy to do so understanding your meters will need calibration at the end of the class

Class Limit: 30

### ***You’re the “First on the Scene to a Propane Incident and have nothing to work with, or do you?”***

Track: Transportation

Instructor(s): Ron Huffman

Description: 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.

### ***Zero-Hour HazMat: Precision Tactical Response for Downrange Firefighters***

Track: General

Instructor(s): Adam McFadden

Description: It is vital on every hazardous materials emergency scene, we have an incident command system in place to ensure that all downrange - fireground tasks are completed, to safely and effectively mitigate any hazardous material and its effects. This includes critical decisions to perform rescues, or plug leaks and deal with dangerous chemical spills.

Incident Command is the standardized structure that allows for a cooperative response within various groups or agencies to coordinate hazmat 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 downrange objectives are met.