

## State of Delaware

# 18th Annual Hazardous Materials Training Workshop



**Workshop Training Sessions** 

# **Course Descriptions and Instructor Information**

**Thursday, May 08, 2025** 

7:15 am - 8:45 am: Registration - Continental Breakfast - Exhibitor Booths
8:45 am - 4:00 pm: Training Sessions
Delaware State Fire School
1461 Chestnut Grove, Dover, DE 19904
See Separate Course Descriptions for Workshop Classes to be held Friday, May 09, 2025
"Educating Responders for Today and Tomorrow"

Sessions A and G(8:45 am - 4:00 pm)

"Terrorism and Targeted Violence: Threats, Tactics and Trends, and Explosive Awareness Demonstration"

Instructors: Detective Christopher Nicholson, Detective Daniel Blomquist and Sergeant Frank Fuscellaro

Since 9/11, the threat of terrorism and mass violence has remained a constant factor in American society. Despite a robust security infrastructure, the United States has not been immune to terrorism. Terrorism and targeted violence demand constant vigilance against those who enact this violence, the tactics they use to sow chaos, and protection to potential victims. In *Terrorism and Targeted Violence: Threats, Tactics and Trends*, first responders will get a first-hand look at the terrorist groups (International and domestic) and violent extremists who encourage mass attacks against American citizens. This class will cover the violent attack methods used in targeted violence attacks, as well as tactics being used against critical infrastructure targets. This year's instruction will expand on the groups who target critical infrastructure and provide case studies on selected literature/attacks. Attendees will also be briefed on research-based, pre-violence indicators observed in mass shooting suspects, serving to help answer the question: How do active shooters behave *before* they attack? As first responders, we are tasked with removing potential violent offenders from the pathway to violence – this brief will address those behaviors through case studies in targeted violence. The second portion of the class, *Explosive Awareness Demonstration*, is designed to give first responders basic awareness of energetic materials and their dangers. Topics covered will include types of explosives, dangers posed by explosives, improvised explosive device (IED) awareness, and homemade explosive and precursor identification. The presentation includes a serial bomber case study. An explosive demonstration by the Delaware State Police Explosive Ordnance Disposal (EOD) Team will be conducted on the DSFS drill grounds.

#### **Instructor Bios:**

1. Detective Christopher Nicholson, Terrorism Liaison Officer, Delaware State Police

Detective Chris Nicholson has been employed by the Delaware State Police since 2009 and his assignments have included: Troop 5 (Bridgeville) Patrol, Troop 9 (Odessa) Patrol and a Criminal Intelligence Officer. He is currently assigned as the Terrorism Liaison Officer. Det. Nicholson has also been assigned to the Bomb Squad as a Public Safety Bomb Technician for 11 years. Det. Nicholson is a Certified Instructor for the Delaware State Police, a National Threat Evaluation and Reporting Office (Department of Homeland Security) Master Instructor, a Certified Firearms Instructor, a Trooper Recruiter. Additionally, Det. Nicholson has a Bachelor of History from the University at Buffalo. Det. Nicholson has also served 19 years in the Army Reserves as a Civil Affairs Officer and currently assigned as a Jumpmaster in the 352 Civil Affairs Command.

2. Detective Daniel Blomquist, Task Force Officer with FBI's Joint Terrorism Task Force, Delaware State Police

Det. Daniel Blomquist began his career with the Delaware State Police in 2010, after graduating with a Master's Degree in Public and International Affairs from the University of Pittsburgh. Upon graduation from the Delaware State Police Academy, he was assigned to the Patrol Division at Troop 3, located in Kent County, DE. In 2014, he transferred to the Troop 3 Criminal Investigations Unit (CIU). During his time in CIU, Det. Blomquist was responsible for investigating sexual assaults against adults and children, serious assaults, robberies, death investigations, child abuse, public corruption, missing persons and property crimes. From 2018 to 2020, he was also a member of the statewide Human Trafficking Task Force, which is responsible for all sex and labor human trafficking investigations throughout the state. In 2020, Det. Blomquist was assigned to the Delaware State Police Homeland Security Unit as the Terrorism Liaison Officer (TLO), where he was responsible for providing active shooter training to

public, private and government partners and coordinating with statewide critical infrastructure facilities on security and terrorism-related matters. In 2023, Det. Blomquist was assigned as the Delaware State Police's Task Force Officer (TFO) with the FBI's Joint Terrorism Task Force (JTTF). In addition to his full-time role as a TFO, Det. Blomquist has also been a member of DSP's Explosive Ordnance Disposal (EOD) Team since 2021.

3. Sergeant Francis "Frank" Fuscellaro, Explosive Ordnance Disposal Team Commander, Delaware State Police

Sergeant Francis "Frank" L Fuscellaro II is a 25-year veteran of the Delaware State Police and has been a Hazardous Devices Technician for 21 years. In July 2021 he became the EOD Team Commander for the Delaware State Police, currently supervises a twelve-member team with 11 certified techs covering the State of Delaware. Sgt. Fuscellaro has taken numerous courses throughout his tenure as a Bomb Technician involving Homemade Explosives, Large Vehicle Bombing, Advance Disposal of Explosive, Post Blast, Explosive Breaching, Advance Electronics, Manual Techniques, and Tactical Bomb Technician. Sgt. Fuscellaro is The International Association of Bomb Technicians and Investigators Delaware Chapter Director. He is also the OIC of the Delaware State Police Critical Incident Stress Management Team that focuses on the Mental Health of Divisional Members.

### Sessions B & H(8:45 am - 4:00 pm)

### "HazMat Officer Strategy and Tactics"

Instructor: Hazard 3

This 6-hour course will help prepare hazardous materials officers and experienced technicians to serve as the HazMat Group Supervisor or Branch Director at a HazMat incident including transportation emergencies. The HazMat Officer Strategy and Tactics 1 (HOST1) 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 HazMat 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. Students will participate in multiple HazMat incident tabletop simulations to practice rapid IAP development.

#### Course Topics:

- Using tactical worksheets and ICS forms
- Gaining situational awareness
- First 5 questions to ask
- Initial briefing with the incident commander
- Analyzing an incident
- Determining incident priorities
- Establishing response objectives
- Developing, evaluating, and recommending Establishing control zones

### Sessions C & I(8:45 am - 2:30 pm)

# "Biological Warfare Agents (BWA): From the Past to the Present and What Does It Mean For Our Future and a New Kid on the Block"

Instructor: Carrie A. Poore, Ph.D., ., Advanced CBRNE Training Branch Chief, Biologist, Research and Operations Directorate, DEVCOM Chemical Biological Center (CBC) at Edgewood

This course will provide an overview of traditional biological warfare agents such as bacteria, viral materials and toxins. In depth case studies from various biological agent events throughout history. Both naturally occurring and bad actor biological examples will be discussed. Students will be shown simulated laboratory processes that could be employed by bad actors to enhance visual recognition of the most-likely synthesis routes for clandestine and sophisticated preparation of biological agents. Instructor will place special emphasis on the clandestine synthesis and terrorist employment of biological agents. In addition, future methodologies for the genetic manipulation of biological materials will be proposed. At the conclusion of the biological portion of the talk (mid-afternoon), a new chemical threat agent will be introduced and discussed.

# <u>Instructor Bio:</u> Carrie A. Poore, Ph.D., Advanced CBRNE Training Branch Chief, Biologist, Research and Operations Directorate, DEVCOM Chemical Biological Center (CBC) at Edgewood

Dr. Poore serves as the Branch Chief for the Advanced CBRNE Training Branch within the Directorate of Research and Technology for the U.S. Army Combat Capabilities Development Command Chemical Biological Center. She has over 16 years of postgraduate experience at ECBC. As the Branch Chief, she leads the execution of training programs and also trains the biology portions of the courses for customers throughout Department of Defense, Department of Justice, Department of State, National Guard Bureau and other federal, state, and local assets involved in the counter-WMD fight. Dr. Poore led the training program for the 20<sup>th</sup> Support Command's Heavy Mobile Expeditionary Laboratory that covered the entire suite of analytical instrumentation, shelter, and supporting equipment. She also has experience in the development of biological agent detection platforms and has evaluated existing bio detection systems including: a DHS funded program for the development of a microtiter screening tool for the screening of biological agents in suspicious powders, an FDA funded method of validation study for the detection of biological material in various food matrices using electrochemiluminescence, a Smiths Detection funded *Ricinus communis* DNA method evaluation, and a DHS funded evaluation of

three generic screening tools for the analysis of biological agents in suspicious powders. She had the lead scientific role in the development of several mobile laboratories and kits for the following customers:  $20^{th}$  Support Command DNA Identification Lab, New York City Public Health All Hazards Receipt Facility (BSL-2/3), Defense Threat Reduction Agency (DTRA) Divable Chem/Bio Sampling Kit, and DTRA Biological Assessment Mobile Laboratory (BAML). She operated and validated the BAML as the lead biologist during an Advanced Test Demonstration.

# Sessions D and J (8:45 am - 4:00 pm) "Risk Based Response to Battery Emergencies Parts 1 & 2"

#### Instructor: Tobias Frost

This 6-hour course includes classroom and hands-on training to prepare responders to conduct risk-based response to battery emergencies for multiple types of batteries including Lithium-Ion (Li-Ion). The course covers batteries found in transportation including passenger vehicles, ground transport, air and sea shipping, as well as residential, commercial, and industrial settings. COURSE TOPICS

- Battery construction and chemistry
- Recognition and identification
- Understanding direct current (DC)
- Battery hazard and risk assessment
- Recognizing and responding to thermal runaway
- Response considerations
- Air monitoring
- Battery fire strategy and tactics

## Instructor Bio:

#### **Tobias Frost**

Toby Frost began working in the hazmat industry in 1987 as a remediation project manager in university and industrial settings. After transitioning to commercial construction, he joined the fire service in 1999. Toby Frost is currently a Battalion Chief with the Lafayette Fire Department in Indiana. He is a Team Leader for their HazMat Team and is the founder of their Illicit Lab Response Team. He is a department instructor for fire fighters, recruits, and local industry teaching fire science, technical rescue and hazardous materials. He is a continuing lecturer at Purdue University in the School of Natural Resources and Environmental Sciences. He has presented across the country at hazmat conferences including the IAFC International Hazardous Materials Conference, The Hot Zone, and at the Fire Department Instructors Conference (FDIC). In 2018, Toby was recognized by the IAFC Hazardous Materials Committee with their "Level A" Award and in 2019, the "In the Zone Award", at the Houston Hot Zone Conference. As a contract instructor Toby has helped train federal, state and local responders across the country and internationally, including at the National Fire Academy. Toby serves as a HazMat Manager and Rescue Specialist for FEMA -INTF-1. Toby is a principal member of the NFPA Hazardous Materials Committee and a current Board Member for the Indiana Alliance of Hazardous Materials Responders. Toby is a graduate of Eastern Kentucky University with a BS in Fire Science Engineering Technology and a graduate of the NFA Executive Fire Officer Program. Toby is a Training Program Manager for Safeware, Inc./Hazard 3.

# Sessions E and K (8:45 am - 4:00 pm) "Every Thing Leaks" - Part 1 & 2

#### **Instructors – Darryl Meade and Mike Edwards**

This course is set into four different sessions where each session will require students to repair or transfer various containers and leaks. Session one will deal with small packages and piping. Session two will deal with IBC and special fittings for transfers. Session three will work on DOT tank trucks, And Session four will work on Railcars. As the title says. Everything will leak. Students will get hands on training with the leaks and hopefully will learn techniques for stopping the leaks.

#### Instructors Bios:

#### Darryl Meade:

Darryl Meade has over 40 years in the Fire Service. He currently serves as Assistant Chief for the FMC Company in Newark, Delaware. Meade is HAZMAT, Rope Rescue, Firefighter Pro Board-Certified Instructor II. Assistant Chief Meade has been an Instructor at the Delaware State Fire School over 20 years, a member of New Castle County Industrial Hazardous Materials Response Alliance and serves on its training committee. He serves as a trainer and is part of New Castle County Special Operations HazMat Decon Team. Meade served for Nottingham and Oxford townships as Radiological HAZMAT Officer. He formerly was a responder of the Chester County, PA HazMat Response Team, and was past member of West Grove Fire Company. He is currently a member of Chesapeake City Fire Company, MD.

#### Mike Edwards:

Sessions F and L (8:45 am -4:00 pm)

# "Anhydrous Ammonia Parts 1 & 2 - Taming The Tiger In The Tank - Tactics and Response For Anhydrous Ammonia"

#### Instructor: Dave Binder and Staff

Get prepared to handle ammonia incidents from start to finish, beginning with an overview of anhydrous ammonia properties, transportation/containers, types of releases, trouble shooting incidents, and response recommendations, control and containment tactics from both offensive and defensive perspectives. Lessons learned will be discussed through brief illustrations of case histories involving both stationary facilities and transportation incidents as well as live release training footage.

Following a drill and safety briefing, the second half of the day will be on the drill field with live agent (anhydrous ammonia) release training, primarily performing tarp and cover operations for control and containment.

All students will receive a customized guide card for anhydrous ammonia which follows the sequence of a hazmat incident and provides specific reminders and information for anhydrous ammonia responses.

#### Instructor Bio:

David Binder is the Director of Quality, Safety & Regulatory Affairs and the Training Director of the Ammonia Safety & Emergency Response Training (ASERT<sup>SM</sup>) program with Tanner Industries, Inc. in Southampton, PA.

David facilitates safety and emergency response training programs throughout the world for industry, fire department, emergency response and emergency management personnel. He also speaks and presents at numerous Federal, State and Industry Association conferences. He is very involved and in leadership positions with various industry associations and has served on various standards committees and emergency response working groups.

David is the Chair of the Philadelphia, PA Local Emergency Planning Committee. He has served in leadership positions with the Alliance for Chemical Distribution (former National Association of Chemical Distributors) including the Responsible Distribution Committee. David serves on the National TRANSCAER Task Group and chaired the curriculum committee that put together the Anhydrous Ammonia training program.

David is a long-time faculty member of Global Cold Chain Alliance Institute programs including those at the University of Oklahoma, Georgia Institute of Technology (Georgia Tech University), University of California – Los Angeles (UCLA), and Arizona State University.

## "No Cost" for Workshop Attendees!

State of Delaware – 18<sup>th</sup> Annual Hazardous Materials Training Workshop
Hosted by
Delaware State Fire School – 1461 Chestnut Grove, Dover, DE 19904



"Educating Responders for Today and Tomorrow"

For Questions Regarding this Workshop Contact:
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### Workshop Partners include:



















