

# 2023 The Continuing Challenge:

Batteries can be the cause of many problems



## The 34<sup>th</sup> Annual

### CONTINUING CHALLENGE

#### HazMat Emergency Response Workshop

The Nation's Leading Hazardous Materials  
Emergency Response Workshop

## September 5-8, 2023

at the DoubleTree by Hilton Hotel Sacramento, California

Online registration opens

In June 2023 @[www.hazmat.org](http://www.hazmat.org)

# Thank you Sponsoring Agencies

## Moving Forward

The Continuing Challenge HazMat Workshop Committee would like to invite you to attend the 34th Annual Haz Mat Workshop. This year's workshop will be September 5th through the 8th, 2023. There are many new and exciting classes at this year's workshop for you to attend. The classes will include lectures, hands on and outdoor demonstration. This year there has been many railroad accidents with hazardous materials involved. This is just one of many different types of incidents you will face in your career. The Continuing Challenge HazMat Workshop offers the latest and best in training, new products for your review and new techniques and allows you to talk to the manufacturers. The instructors at this year's workshop come from across the country and are the best in the hazmat business.

The workshop provides you with outstanding lunches on Wednesday, Thursday and Friday and on Wednesday night is the Bar-B-Que. The lunches and Bar-B-Que is a time for you to meet old friends and network with your peers. Networking is one of the most important parts of the workshop to get names and phone numbers in case you ever need information from someone who has experienced an incident that you are involved with.

The Workshop Committee is always looking for new and better ways of providing you training so you are well informed to handle many different types of incidents safely. Please join us this September for the 34th Annual Continuing Challenge HazMat Workshop in Sacramento, California. This is a high tech workshop with a kick back attitude. Looking forward to seeing you in September.



**Thank You  
Sacramento  
Fire  
Department**

Dennis Smith,  
Continuing Challenge  
Committee Chairperson  
Fire Chief, (Retired)  
Sacramento Fire  
Department

Throughout our catalog you will see Logos from our Committees' Sponsoring agencies. These agencies support our mission to provide safe response training for all emergency responders to hazardous materials incidents

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Follow us on Facebook:  
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ContinuingChallenge](https://www.facebook.com/TheContinuingChallenge)

*Save the Date* The 35<sup>th</sup> Annual  
September 3-6, 2024  
DoubleTree by Hilton Hotel Sacramento, California





## A Special Mini Track Class, One Day Only



## Live Propane Fire / Propane Emergency

### Instructor Rob Scott


The WPGA Live Fire Training school is self-contained. Certified, experienced WPGA firefighters teach the course. We will be demonstrating the flaring of a Propane Transport Tanker that has rolled over and how, if there is leaking, the use of freeze patching to reduce the amount of product released. Each session covers propane's combustion characteristics, system safeguards, valving, and firefighting technique information. The Propane Emergency Class is comprehensive. It is designed to help emergency responders develop the skills necessary to manage a propane emergency in transportation or at fixed facilities.

Thursday.

**T417** (Class 1 of 2) Will start outside in front of the Hotel in the morning, (AM) 4 hours

**T456** (Class 2 of 2) Will move inside in the El Camino Room for the final (PM) 4 hours

# Workshop At-A-Glance

Monday September 4	Tuesday September 5	Wednesday September 6	Thursday September 7	Friday September 8
	<p>Check in: Exhibitor Instructor Student Room - Maxi's 6:30 a.m. - 11:00 a.m. 1:00 p.m. - 5:30 p.m.</p> <p>Check in continues after lunch</p> <p>8-hour Classes begin 7:30 a.m. - 11:30 a.m.</p> <p>Morning Break 9:15 a.m. - 9:45 a.m.</p> <p>(Classes continue after lunch). Lunch is on your own.</p>	<p>Check in: Exhibitor Instructor Student Room - Maxi's 6:30 a.m. - 11:00 a.m. 1:00 p.m. - 5:30 p.m.</p> <p>Check in continues after lunch</p> <p>General Store Exhibitor Area 7:30 a.m. - 4:00 p.m.</p> <p><b>Opening Ceremony</b> • <b>Keynote Speaker</b> • <b>Awards Presentation</b> Grand Ballroom 7:30 a.m. - 9:30 a.m.</p> <p><b>Morning Break &amp; Exclusive Exhibitor Time Exhibitor Area 9:30 a.m. - 11:30 a.m.</b></p>	<p>Check in: Exhibitor Instructor Student Room - Maxi's 6:30 a.m. - 11:00 a.m. 1:00 p.m. - 5:30 p.m.</p> <p>Check in continues after lunch</p> <p><b>LAST DAY</b> General Store Exhibitor Area 7:30 a.m. - 12:00p.m.</p> <p>4-hour Classes begin 2-hour Classes begin 7:30 a.m. - 9:15 a.m.</p> <p>Exhibitor Displays Open Exhibitor Area 9:00 a.m. - 12:00 p.m.</p> <p>Morning Break Exhibitor Area 9:15 a.m. - 9:45 a.m.</p> <p>4-hour Classes continue 2-hour Classes begin 9:45 a.m. - 11:30 a.m.</p>	<p>Check in: Instructor Student Room - Maxi's 7:00 a.m. - 11:00 a.m.</p> <p>General Store - Closed</p> <p>4-hour Classes begin 2-hour Classes begin 7:30 a.m. - 9:15 a.m.</p> <p>Morning Break 9:15 a.m. - 9:45 a.m.</p> <p>4-hour Classes continue 2-hour Classes begin 9:45 a.m. - 11:30 a.m.</p>
	<p><b>Lunch</b> (on your own) 11:30 a.m. - 12:45 p.m.</p>	<p><b>Lunch &amp; Exhibitor Showcase Grand Ballroom 11:30 a.m. - 12:45 p.m.</b></p>	<p><b>Lunch</b> Grand Ballroom 11:30 a.m. - 12:45 p.m.</p>	<p><b>Lunch</b> Grand Ballroom 11:30 a.m. - 1:30 p.m.</p>
	<p>Check in: Exhibitor Instructor Student continues Room: Maxi's 1:00 p.m. - 5:30 p.m.</p> <p>8-hour Classes continue 1:00 p.m. - 5:00 p.m.</p> <p>Afternoon Break 2:45 p.m. - 3:15 p.m.</p>	<p>Check in: Exhibitor Instructor Student continues Room: Maxi's 1:00 p.m. - 5:30 p.m.</p> <p>Exhibitor Displays Exhibitor Area Open Until 6:00 p.m.</p> <p>4-hour Classes begin 2-hour Classes begin 1:00 p.m. - 2:45 p.m.</p> <p>Afternoon Break Exhibitor Area 2:45 p.m. - 3:15 p.m.</p> <p>4-hour Classes continue 2-hour Classes begin 3:15 p.m. - 5:00 p.m.</p> <p>Bar-B-Que &amp; "Name that Unknown" Contest Grand Ballroom 6:30 p.m.</p>	<p>Check in: Exhibitor Instructor Student continues Room: Maxi's 1:00 p.m. - 5:30 p.m.</p> <p>Exhibitor Displays Exhibitor Area Open until <u>12:00 p.m.</u></p> <p>4-hour Classes begin 2-hour Classes begin 1:00 p.m. - 2:45 p.m.</p> <p>Afternoon Break 2:45 p.m. - 3:15 p.m.</p> <p>4-hour Classes continue 2-hour Classes begin 3:15 pm - 5:00 p.m.</p>	<p>Closing Ceremony Grand Ballroom 11:30 a.m. - 1:30 p.m.</p>
	<p>Exhibitor, Instructor, &amp; Student Check in Room - Maxi's 3:00 p.m. - 5:30 p.m.</p>			



# History & Exhibitor Information

## KEYNOTE SPEAKERS THROUGH THE YEARS

1990	John Eversole	Chicago Fire Department
1991	Capt. Michael Callan	Wallingford Fire Department
1992	Ron Coleman	California State Fire Marshal
1993	Greg Noll	Reading Fire Department, Pennsylvania
1994	Mr. Al Smith	Law Firm of McRae, Secrest, and Fox Atlanta, Georgia
1995	Gordon Graham	California Highway Patrol
1996	Cliff Harvison	President, National Tank Truck Carriers, Inc.
1997	Commander Shane Ishiki	Commanding Officer National Strike Team, U.S. Coast Guard
1998	Robert Born	Special Agent FBI
1999	Mike Callan	Fire Training Associates
2000	Dwight Williams	Williams Fire Suppression
2001	Michael Pritchard	Motivational Speaker
2002	Phil McArdle	New York City Fire Department
2003	Harry Cusick	Philadelphia Fire Department
2004	Michael Callan	Callan and Company Response Training
2005	R. David Paulson	Director U.S. Fire Administration
2006	James Lee Witt	James Lee Witt Associates
2007	Rem Gaade	Toronto Fire Department
2008	Matt Krimsky	San Francisco Police Department
2009	Michael Callan	Callan and Company Response Training
2010	Chief Richard Brooks	Director of Emergency Services Cecil County Maryland
2011	Nick Vent	County of San Diego
2012	Harold Schapelhouman	Menlo Park Fire Protection District
2013	Mark Neveau	Federal Coordinating Officer FEMA
2014	Michael Callan	Callan and Company Response Training
2015	Timothy Butters	USDOT/Pipeline and Hazardous Materials Safety Administration
2016	Michael Pritchard	Motivational Speaker
2017	Jamie Hyneman	American Special Effects Expert
2018	Matt Krimsky	Cal OES, California Specialized Training Institute (CSTI)
2019	Michael Callan	Callan and Company Response Training
2020	Tina Casola	First Alarm Wellness CANCELLED DUE TO Covid-19
2021	Tina Casola	First Alarm Wellness CANCELLED DUE TO Covid-19
2022	Jeff Dill	Firefighter Behavioral Health Alliance (FBHA)
2023	Robert Rezende	San Diego Fire-Rescue

### Exhibitor Index (as of June 12, 2023)

Advanced Entertainment Technology  
Berkeley Nucleonics Corporation  
Curtis  
Environics  
Gasmeter Technologies Inc.  
Hazmat Resource  
Mallory Safety and Supply  
ORTEC - AMETEK  
RedWave Technology

Safeware Inc.  
Thermo Scientific Portable Analytical  
Instruments  
Newson Gale



**Thank You**  
**California**  
**Department of Toxic**  
**Substances Control**

### Elements of a Course Listing

Course Number & Title

(Note: Letter code indicates the day of week or track.)

1st number indicates the total class hours)

Instructor(s)

Course Description

Course Level & Prerequisites, if any

### Z801 Hazcat. Classify, Identify and Verify using Wet Chemistry with the Hazcat Kit

Daniel Keenan, Maria Duazo  
Wet Chemistry is your best tool for assessing the Hazard Classifications and for determining the compatibility of hazardous wastes prior to bulking. Hazcat's system is your best tool for classifying, identifying and verifying hazardous wastes. Learn a strategy to identify the components of commercial formulations and mixed wastes. Attendees will use the new HazCat 2.0.1 System. You can learn the system in one day; and if you already know your stuff, here is an opportunity to see what is on the horizon for Field ID of unknown substances.

**Basic. Haz Mat Technician Module 1A Basic Chemistry, or equivalent, is recommended.**

### Z802 Managing Ethanol and Ethanol-Blended Fuel Incidents Safety Seminar

Joel Hendelman

This course was developed to give first responders, hazmat teams, fuel transporters, bulk storage operators, ethanol production facility operators and other safety personnel with statutory responsibilities or functional capabilities at an ethanol-blended fuel incident an in-depth look at proper training techniques needed when responding to an ethanol-related emergency. The course objectives are:

- Reviewing Chemical & physical characteristics of ethanol/ethanol blended fuels
- Transportation modes for ethanol/ethanol blended fuels
- Transfer operations for handling ethanol/ethanol blended fuels
- Basics of foam operations at an ethanol/ethanol blended fuel incident
- Suggested responder tactics & strategies
- Environmental issues, concerns and considerations

**Basic.**

### Z803 Ammonia tabletop to demonstrate ammonia and chlorine One Plan CONOPS

Gary Smith, Will Grass, Michael Chapman

ASTI instructors will demonstrate how to use an ammonia and chlorine CONOPS template to create effective hazmat command team coordination with industry and the local emergency manager. The objective is to enhance a faster and more effective containment and control of the chemical release. The CONOPS includes information on how to use the FEMA ChemResponder platform to display ALOHA and IMAAC plume models. ChemResponder will also provide critical information needed by the command and hazmat teams. The CONOPS shows how to utilize critical emergency response information from the industrial response team and the liaison with the local emergency manager.

**Intermediate. ASTI trains to the "Tripod" to enhance relations between industry, government, and public safety. Any individual that works for or is associated with a Tripod agency is welcome to attend.**

### Z804 CSTI Haz-Mat IC Upgrade/Bridge to Haz-Mat IC Pro Board

Daniel Casner

This 8-hour course is for those that want to upgrade their CSTI Haz-Mat IC (16-hour) certificate to a CSTI Haz-Mat IC-PB certificate. Course will consist of Incident Commander refresher concepts and practices and will also include a group project.

**Intermediate. CSTI Haz-Mat Incident Commander**

### Z805 Propane Response – 101 to Advanced Tactics

Ronald Huffman

Class consists of classroom instruction using on screen presentations, display props and product demonstrations. Topics of discussion include propane properties, when and when not to use some tactical options including rolling/inverting a tank, flaring liquid and vapor, water injection, vehicle orientation, plumbing/piping systems, assortment of tank options/attachment points, valving, pressure management, transportation options, liquid volume, and temperature control and more.

The students will participate in on scene operations on an assortment of tanks or cylinders that we supply that include, identifying tank volume, liquid and vapor flaring and the use of water as a tactical option.

**Intermediate. To participate in practical evolutions each student will be required to have the appropriate PPE.**

### Z806 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 hazmats.

**Basic.**

### Z807 Masters of Gas Detection

Chris Wrenn

A comprehensive course in the fundamentals of handheld gas detection for use in confined space entry and HazMat. It explains why we need gas detection, a short discussion of chemical properties, how gas detectors work and an understanding of exposure limits is included. Trainees are taught to look through the "eyes" of the gas detector to better solve gas detection problems by using all the detection "angles" available to them. Detection options (tubes, O<sub>2</sub>, LEL, electrochemical, NDIR, PIDs, FIDs, MOS), sensor specifications, sampling techniques, calibration, intrinsic safety requirements and datalogging may be discussed.

**Intermediate. • This course is designed to provide a foundation for intermediate and advanced users of gas detectors for use in industrial applications such as confined space entry and in HazMat response.**

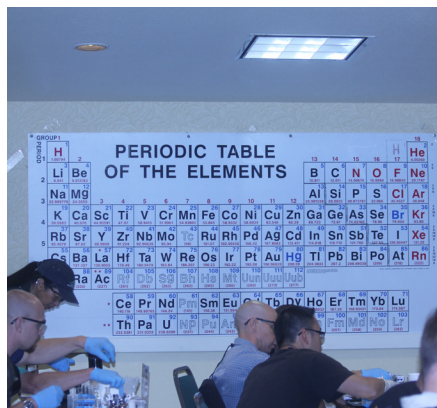
- Attendees will gain a basic understanding of how these devices work and the parameters under which they operate properly and poorly.
- Course attendees should leave with a better understanding of how to increase the speed from detection to decisions.
- This one day course covers a lot of ground and unfortunately does not provide for hands-on breakout sessions.

### Z808 Haz-Mat FRA/FRO - Refresher

JP Robles

A brief refresher on the basics of Hazmat initial response.

**Basic. Initial FRA/FRO certificate**



**Z809 HAZWOPER 8-Hour Refresher - Regulatory Personnel**

Kenneth R. Beutler

Provides refresher training certification for those who have completed initial HAZWOPER training required to work on hazardous waste sites. The ideal audience is regulators who visit hazardous waste sites to conduct contractor oversight, monitoring, sampling, inspections, and other duties associated with hazardous waste work. [This training fulfills the requirements of CCR 1910.120(e)(8) and equivalent state regulations.]

**Basic.**

an emergency response. The Meter Guys program is tailored to our audience, making the information easy to grasp and comprehend, thereby meeting your training needs. There is no other hands-on meter class of this caliber. Our students will tell you so!

**Intermediate.**

Awards Nominations for 2024 are being accepted now at [hazmat.org](http://hazmat.org), under the about us tab. Nominate someone you know today for that special award.

**Z810 OSHA 5600 Disaster Site Worker**

Gary Havner, Gilbert Wong

The Disaster Site Worker Outreach Training Program is a training program for Disaster Site Workers who provide skilled support services, (e.g. utility, demolition, debris removal, or heavy equipment operation) or site clean-up services in response to natural and man-made disasters. Specifically, it is recognized that all workers at disaster sites need to be aware of the differences between disaster sites and regular construction or demolition worksites and be able to inspect, don, and doff air-purifying respirators. Also, the program will make management and labor aware that pre-incident training is essential for ensuring disaster site worker safety and health.

**Basic. The class prerequisite is either an OSHA 10 in General Industry or Construction.**



Thank You  
California  
Conservation Corps

**2012 CCC Crew****Z811 CSTI Instructor Recertification**

Vance Bennett, Krystal Masalta

Are you a CSTI certified instructor who has been de-certified because you didn't teach the required 4 hours a year? If so, you can get re-certified by taking this class.

**Basic. Must have been a CSTI certified hazmat instructor.**

**Z812 The Meter Guys When Meters Matter! Air Monitoring for Responders**

Scott Russell, Ben Bosley, Dan Warchol

The Meter Guys  
When Meters Matter!  
Air Monitoring for Emergency Responders

The Meter Guys is an innovative simultaneous hands-on lecture meter training program focused on Emergency Responders, Hazmat Personnel, and Industrial workers. This class provides students with the skills and competencies on how to properly use a Multi-Gas Meter, understand the readings, and interpret the implications of such during



Thank You  
California Department  
of Corrections and  
Rehabilitation



Thank You  
Global Vision Consortium



# Wednesday Morning



## Opening Ceremonies 7:30-9:30 Keynote Speaker Robert Rezende

Robert Rezende is a Battalion Chief for the San Diego Fire-Rescue (SDFD) Department with 16 years of service. Chief Rezende holds a bachelor's degree from Penn State University and two master's degrees from San Diego State University in Exercise Physiology and Nutritional Sciences. Chief Rezende is currently assigned to Special Operations as the Hazmat Program Manager. He is a CSTI Hazmat Instructor teaching first responders and hazmat technicians in the public and private sectors throughout California. He has been a proud member of SDFD Special Operations since 2008 as a member of the FEMA Urban Search & Rescue Team, Technical Rescue Team, Hazardous Incident Response Team, and the US Forest Service's All Hazard Incident Management Team.



Thank You  
California Department of Transportation

**9:30 - 11:30**

**Break time and  
Exclusive Exhibitor  
Time,  
Both Inside and Static  
Displays Outside**

Please join our exhibitors as they display and demonstrate the latest and greatest equipment and techniques available.

As you know, the Exhibitors that participate at the Continuing Challenge bring the latest, greatest products to the workshop for your review. It is important that you visit with the Exhibitors so you can see, touch, and handle the products that the Challenge instructors are telling you about.

## The Continuing Challenge Awards Presentation

Robert P. Turkington  
**Innovation  
and  
Technology**

Sponsored by  
Bauer & Associates

James H. Meidl  
**Instructor of  
the Year**

Co-Sponsored by  
California Specialized  
Training Institute  
& California State  
Fire Marshal

Continuing Challenge

**Medal  
of  
Valor**

Sponsored by  
The Continuing  
Challenge  
Committee

William J. Patterson  
**Lifetime  
Achievement**

Sponsored by  
Sacramento Fire  
Department

Leo K. Najarian  
**Responder of  
the Year**

Sponsored by  
California State Fire  
Fighters Association



**Exhibitors will be both inside  
and outside in the parking lot.**



**Don't forget to nominate  
that deserving person for an  
award.**

## 4-Hour Classes 1:00-5:00

### W451 Mercury Response

Eric Nold

Mercury response will be a 4 hour class that will instruct participants on the unique properties of mercury that cause responders to make many common mistakes that can exacerbate mercury releases. Tricks of the trade over years of experience will be relayed and expanded upon.

**Intermediate. general hazmat response awareness**

### W452 Practical Hazmat Chemistry for First Responders

Patrick Ryan

Regardless of experience level, team size, or equipment inventory, having a solid, deployable understanding of practical Hazmat chemistry is necessary to succeed as a Hazmat team member. Having a street-smart, practical, real-world understanding of Hazmat chemistry gives you an edge over the book-smart only crowd. Such an understanding enables you to recognize what makes instrumentation work and be able to generate actionable information using simple, rapid tests, and procedures during a Hazmat incident. You will leave this class with immediately deployable Hazmat chemistry skills to take home to your team, along with a confidence you did not have when entering.

**Basic.**

### W453 Basic CAMEO for HazMat Responders

Tom Bergman

This course covers the basic operations of the 4 CAMEO Suite programs that are routinely utilized during chemical incidents. Participants will use CAMEO Chemicals to obtain SDS-style information for chemicals along with using the associated Reactivity Worksheet to determine potential reactions between identified chemicals. Participants will use ALOHA to examine potential downwind contamination zones and will plot multiple ALOHA plumes onto the MARPLOT program. Also, participants will review using the CAMEO ofm program to manage Facility, Resources, and Special Location information.

**Basic.**

### W454 TRANSCAER LNG Safety & Emergency Response Training

Scott Walden, Joel Hendelman

Center for Liquefied Natural Gas (CLNG) and TRANSCAER present LNG Safety & Emergency Response Training. Through this course, attendees will gain an understanding of the basic safety and

response considerations for emergencies involving the potential or actual release of liquefied natural gas.

**Basic.**

## 2 Hour Classes 1:00-2:45

### W251 Raiders of the (un) Secured Source (ROSS)

Juan Garcia, Tanya Ridgle

The instructors will provide an overview of the FEMA Radiological Operation Support Specialist (ROSS) program. Topics will include what tasks a ROSS can perform and the necessary requirements to get certified. Some examples of data products ROSS will be evaluating to provide briefings or recommendations to Incident commanders or elected officials will be presented and discussed.

Tanya Ridgle, a health physicist from LA County and a certified ROSS, will present on what a ROSS could have been used for in the case of the Australian lost source from January 2023.

**Basic.**

### W252 Access/Personal Liability in Environmental Response and Investigations

Ylan Nguyen

This course will focus on concepts related to access for use in environmental response and investigations, including general access authorities, scope of access, means of access, civil access verses criminal access, and consent to access. This course will also address concepts related to personal liability for officials engaged in environmental response and investigations in the criminal and civil context, such as torts, statutory violations, and constitutional violations.

**Basic.**

### W253 Blowing Up Can Ruin Your Whole Day: Understanding the Options for Detecting and Measuring Combustible Gases

Chris Wrenn

Combustible gases and vapors are one of the most common gaseous threats for HazMat responders. However, many responders don't fully understand how their combustible gas sensors operate and what their limitations are. This course will discuss the operation and limitations of Wheatstone bridge catalytic bead LEL sensors, infrared combustible sensors, thermal conductivity combustible gas sensors, dilution fittings and even using Photoionization Detectors (PIDs) for assessing combustible environments. It

will help you understand when to trust and use each technology.

**Intermediate.** •This course is designed to provide a foundation for intermediate and advanced users of gas detectors for use in industrial applications such as confined space entry and in HazMat response.

•Attendees will gain a basic understanding of how these devices work and the parameters under which they operate properly and poorly.

•Course attendees should leave with a better understanding of how to increase the speed from detection to decisions.

### W254 Hybrid Decontamination Awareness

Frank Roberts, Corey Collings

Hybrid Decon will allow you and your team to conduct decon using the newest technologies, save time, personnel, logistics, and space in your compartments. Hybrid Decon can be used in all temperature ranges and this course will teach you how to reduce or eliminate water usage and waste. 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 skin. Chemical and Physical properties can pose individual challenges and should be a consideration on type of decon setup.

**Basic. HazMat Technician is recommended.**

### W255 Incorporating Isotope Identifiers into Basic HazMat Response

Jordan Malacaman, Mark Slattery

The ability to transmit spectral data in real time via the use of bluetooth and WiFi protocols has changed the landscape of radiological response for first responders. In this course, Berkeley Nucleonics intends to teach how non-HazMat personnel may engage with isotope identification and data transmission in the field when a radiological / hazmat event occurs. The course is taught through the perspective of BNC's own RIIDs, the SAM 950 and SAM 940+, but the protocols and controls therein can be applied across a wide variety of instruments found in the field.

**Basic.**

### W256 You're the First on the Scene at a Propane Incident and Have Nothing to Work With, or Do You?

Ronald Huffman

What will this course provide? We intend to provide you with tactical and operationally achievable response options for a propane incident even if you don't have specialized propane response equipment. As a firefighter you have the potential to be dispatched to something

# Wednesday Afternoon (continued)

new or a call you don't have specialized equipment for. What happens when you're the first department on scene to a propane incident and have nothing to work with? During this program we'll discuss tactical options for just such an incident. You have more than you think, would be my guess.

**Basic..**

**2:45-3:15**

## Afternoon Break

in the Exhibitor Area both inside and outside

## 2-Hour Classes

**3:15 - 5:00**

### W271 HazMat Incident Case Study

Winston Perez

(ER Case Study) Los Angeles County Fire Health Haz Mat responded to a fully engulfed electric vehicle (Tesla) and how the incident was assessed, handled and mitigated and other extenuating circumstances that occurred during the response.

Case study on Fentanyl incident and BHO labs.

**Basic.**

### W272 Drones In Hazmat Response

Steven Hamilton, Diana Nguyen, Alvin Dong

This course will cover how the LAFD built their drone program and go into detail on requirements for becoming a drone pilot, pertinent FAA regulations and licensing requirements, types of drones, use scenarios, and data management software. In addition, the course will discuss how hazmat meters and thermography can be integrated for use during hazmat incidents. During this class we will demonstrate the use of hazmat meters on the drones.

**Basic.**

### W273 Getting the Most From Toxic Gas Sensors: The workhorses for detecting toxic gases

Chris Wrenn

Toxic gas sensors are the workhorses for detection of various gases. These sensors are reasonably specific and accurate. This course describes how these sensors work and how their specifications may impact decision-making. It also discusses how they can be fooled by gases to which they may be cross-sensitive. For advanced users, cross-sensitivity can be advantageous particularly when cross-referenced with other technologies like colorimetric tubes and on-scene clues.

**Intermediate.** • This course is designed to provide a foundation for intermediate

and advanced users of gas detectors for use in industrial applications such as confined space entry and in HazMat response.

• Attendees will gain a basic understanding of how these devices work and the parameters under which they operate properly and poorly.

• Course attendees should leave with a better understanding of how to increase the speed from detection to decisions.

### W274 Flame Spectroscopy Technology for Simultaneous Detection of Chemical and Biological Threats Including Opioids, A Series Agents, and Toxins.

Scott Hartley, Luke Sloan

This course will provide an overview of Flame Spectroscopy also commonly referred to as Flame Photometric Detection (FPD) or Atomic Emissions Spectroscopy, which is an important tool that first responders can use to identify trace amounts of chemical and biological materials in gas, vapor, liquid or solid forms. An overview of how the technology works along with various detection examples will be discussed including detection of common HAZMAT materials, Opioids, 4th Generation Agents (Novichok) and CB threats.

**Intermediate.**

**Basic understanding of gas detection**

**Basic understanding of detectors**

**An understanding of chemistry and various common chemical/biological threat materials** **Basic.**

### W275 HazMat IQ Above the Line/ Below the Line

Brett Bigger

The HazMat IQ Above the Line/Below the Line System

is a patented 4-step system to allow responders to size up chemicals in 10 seconds, conduct chemical research in 2 minutes, select the appropriate PPE/ meters, and operate safely in the hot zone.

**Intermediate**

### W276 You've Got Gas! (and the Vapors) - Now What?

Chris Weber

Come take a journey through incident response to gas and vapor emergencies. We'll take a close look at the behavior of chemicals in the air, how to detect their presence, what their various hazards are, and the importance of - and how to - identify them. We will look at actual incidents and use chemical samples to help us understand and plan for the real incidents we're bound to respond to..

**Basic.**



## Shop the Continuing Challenge General Store

Hours:

7:30 a.m.-4:00 p.m.

Wednesday & Thursday  
Near the indoor Exhibitors

Get the latest and greatest

Exclusive  
Memorabilia

Only available at this  
year's workshop!



Thank you California  
Department of Fish and  
Wildlife



# Wednesday Evening & Thursday Morning

## BAR-B-QUE GRAND BALLROOM

6:30PM

Don't miss the fun, food, and  
networking!



Cost included  
in your  
registration  
fee.

## 6:30pm — Grand Ballroom “Name that Unknown”

Wednesday evening following the Bar-B-Que  
Show your understanding and mastery of Field Chemistry, the core of HazMat,  
by assembling your team and registering online NOW for the  
25<sup>th</sup> year running of the “Name that Unknown” contest.

Establish your agency as top professionals in this field. Bring whatever  
identification methods or equipment you will need — e.g., your agencies field  
methods, 5 steps, HazMat IDs, Hapsites, etc. We will provide HazCat® Kits (for  
use during the contest) to all contestants that do not bring their own equipment.  
The unknowns will consist of 4 solids and 4 liquids of unmixed products.

Assemble your team and Register NOW!

Team registration information and forms are available  
online at <https://www.hazmat.org>  
under the About Us tab, then down to “Name That Unknown” contest page.

## Equipment Demos and Static Equipment Displays are located in the Front Parking Lot

### Thursday 4-Hour Classes 7:30-11:30

#### T411 Hazardous Materials Incident Command: Writing the Incident Action Plan

Daniel Talbot, Timothy Murphy

This course will provide participants  
with the opportunity to assemble  
an Incident Action Plan (IAP) for a  
multi-operational period hazardous  
materials emergency. Students will  
receive instruction on writing SMART  
objectives, completing ICS forms, and  
conducting an incident briefing. Most of  
the course will be dedicated to writing  
and reviewing the IAP.

**Intermediate. Students should have ICS  
200, 700, and 800. ICE 300 and IC Haz  
Mat are recommended**

#### T412 Advanced Radiation for Emergency Response

Carl Palladino

Your awareness and operational  
level radiation training may not fully  
prepare you for an actual radiological  
emergency. You will learn advanced  
techniques to protect responders and  
the public, and how to properly respond  
to and control a radiological emergency.  
Then you will apply these tools to a  
simulated emergency response exercise  
with live, highly radioactive agents-  
they will make your instruments  
scream! Bring your radiation  
instruments to class, if possible.

**Advanced. 8-hours of awareness or  
operational radiological training**

#### T413 Advanced Air Monitoring Techniques

Amanda Wagner

This 4-hour Advanced Air Monitoring  
course is designed to instruct  
participants about planning, designing,  
and implementing air monitoring  
instrumentation to effectively monitor  
for toxic environments from unplanned  
releases of hazardous materials  
and during large scale social events  
(marathons, sports games, dignitary  
visits, etc.) and for emergency response  
activities. This course will include  
discussions on available technologies,  
selection of appropriate direct reading  
instruments, proper instrument  
placement, instrument telemetry and  
remote monitoring systems (VIPER and  
CBRN specifically), air sampling and  
confirmatory techniques including site  
clearance requirements, and case studies  
detailing real-life events.

**Intermediate.**

#### T414 Effectively Using the ALOHA Program Before, During, and After Chemical Incidents

Tom Bergman

ALOHA is an “air dispersion”  
computer program that predicts  
downwind concentrations of dangerous  
atmospheres for some 850 chemicals.  
ALOHA also performs a number of  
calculations that can be a great assistance  
to first responders, such as “how long  
will it take for this tank to stop leaking”,  
or “how long will it take for this puddle  
of chemical to evaporate”, or “how much  
product will remain in the damaged  
container”, and many other items.  
This course explores many uses of the

ALOHA program, and the appropriate  
methods to utilize it before, during, and  
after chemical releases.

**Intermediate. Basic CAMEO for First  
Responders**

#### T415 Oil Spills 101

Fred Stroud

Class will provide overview of the Oil  
Pollution Act of 1990, the National  
Contingency Plan, and the Federal Role.  
Presentations will include: oil chemistry  
for oil spills, description of equipment  
utilized to contain and recover oil from  
the waterway, strategies for containing  
oil, simple containment technology,  
disposal of recovered oily material,  
costs associated with oil cleanup,  
environmental issues associated with oil  
spills, relevant case study and question  
and answer time.

**Basic.**

#### T416 HazMat IQ FRO (First Responder Offensive)

Brett Bigger

HazMat IQ FRO will provide first  
responders with a system to identify  
hazards, select appropriate PPE, and  
utilize monitoring equipment to  
operate safely at a haz-mat incident.  
The students will be provided with  
HazMat IQ system, a set of charts, that  
will help them quickly determine the  
hazard based on chemical name, placard  
and labels, or container shape. The  
charts will also provide information on  
metering to operate safely as well as PPE  
selection to operate safely..

**Basic.**

# Thursday Morning (continued)

## T417 (This is the outside part of T456 )Live Propane Fire / Propane Emergency!

Rob Scott

This is a 2 part class. The WPGA Live Fire Training school is self-contained. Certified, experienced WPGA firefighters teach the course. We will be demonstrating the flaring of a Propane Transport Tanker that has rolled over and how, if there is leaking, freeze patching can be used to reduce the amount of product released. Each session covers propane's combustion characteristics, system safeguards, valving, and firefighting technique information. The Propane Emergency Class is comprehensive. It is designed to help emergency responders develop the skills necessary to manage a propane emergency in transportation or at fixed facilities.

**Basic.**

## 2-Hour Classes 7:30-9:15

### T211 Legal Aspects of Fire/Hazmat Response

Alan Finkelstein

This class will provide an overview of the legal ramifications of fire department hazmat response. Among the topics covered will be environmental and workplace regulations, agencies involved, and legal rights and responsibilities. Basic legal concepts will be discussed with case studies presented as illustration.

**Basic.**

### T212 Water Treatment Plant Haz-Mat Emergency Response: what are the common chemical hazards and uses

Gonzalo Barriga, David LeDuff

Haz-Mat Emergency Response to a water treatment plant. What you need to know: what are the commonly used hazard chemicals/materials at water treatment plants, how are these hazard chemicals/materials stored and used in the treatment process. This course will discuss some of the industry's most commonly used chemicals and what they are used for in the process for water treatment.

**Basic.**

Thank you everyone  
for being with us in  
2023.

## T213 Emerging Zoonotic Diseases and the First Responder

Gail Obeso

Did you know that 3 out of every 5 new human sicknesses come from bugs or other animals?

We live in a highly mobile, increasingly global society where an infectious disease outbreak is only a plane flight away.

Combine community interconnectivity with climate change and it's only a matter of time.

What can we do as responders to protect ourselves while providing services to our communities in these uncertain times?

Come join the discussion on current infectious diseases of concern for our responders..

**Basic.**

### T214 Using Water Injection to Mitigate a Liquid Propane Leak and More

Ronald Huffman

Using water injection to mitigate a liquid propane leak and more

**Basic.**

9:15 - 9:45

## Morning Break

in the Exhibitor Area

## Static Displays

Front Parking Lot Area

## 2-Hour Classes

9:45-11:30

### T231 Building the Plane As We Fly It - Li-Ion Batteries In Practice

Robert Rezende, Robert Salvesen

The news has exploded with news of battery incidents lately. No place on Earth has been experiencing more than New York City. Take a journey with the guys who are on the ground handling the incidents, how the process has evolved, what we are currently doing, and where this is going. Plenty of time will be allowed for discussion.

**Basic.**

### T232 Incompatible Chemicals and What To Do With Them

Michael Pixton

During a response action knowing how to deal with incompatible chemicals can make the difference between a bad situation and disaster. This course will give several examples of incompatible chemicals and discuss how to deal with them

**Basic.**

## T233 Respiratory Protection Standard-What it is and How to Comply

Nick Vent

This course addresses general respiratory hazards, i.e. air purifying vs. atmosphere supplying, and how to determine which is appropriate to use. Discussion includes the revised federal/state respiratory standard and an update on revisions to 29 CFR, 1910.134. and GISO Title 8 Section 5144. Letters of interpretation from OSHA providing clarification and a fill-in-the-blank respiratory protection program will both be made available to participants to ensure compliance. Many students have been newly assigned the duties of respiratory compliance for their agency or facilities. We will discuss how to get into compliance if you are not sure how.

**Basic. Best suited for those that are responsible for their department or companies Respiratory Protection Programs**

### T234 Introduction to Exposure Assessment with Case Studies in Emergency Response

Karen Riveles, Wes Smith

This introductory course will cover the basic concepts of exposure assessment including: exposure media, routes and pathways of exposure, environmental fate and transport, and how to estimate exposure in the general population using monitoring or sampling data. The instructors will also cover the use of Health Guidance Values with exposure data to characterize risk and protect public health and communities with discussion of specific case studies and emergency scenarios from hazardous materials releases such as an oil spill, a refinery release, and a site contaminated by pesticides.

**Basic.**

### T235 Legal Aspects of Fire/Hazmat Response

Daniel Wright

This class will provide an overview of the legal ramifications of fire department hazmat response. Among the topics covered will be environmental and workplace regulations, agencies involved, and legal rights and responsibilities. Basic legal concepts will be discussed with case studies presented as illustration.

**Basic.**



## 4-Hour Classes 1:00-5:00

### T451 EFFECTIVE USE OF PORTABLE INFRARED & RAMAN DETECTORS

Dana Von Kolen

Infrared & Raman detectors are indispensable to the First Responder CBRN toolbox. They enable rapid classification and or identification of the unknown chemical hazards. Upon completion of the workshop the students will have an understanding of the strengths and limitations of Infrared & Raman technologies..

**Basic.**

### T452 Get to Know Chemical Processes used in Illicit Labs

Chris Weber

Illicit labs are often complex incidents to respond to due to the presence of a variety of chemicals, glassware, equipment, and chemical processes. Hazmat responders are typically unfamiliar with these situations which increases the danger to responders and the public. We will explain how these chemical processes work and show the chemical processes in action. Students will have the opportunity to engage in recon, air monitoring, sampling, and chemical identification activities at simulated labs running active systems. Come join us to gain real world experience before you find yourself on such an incident.

**Basic.**

**Follow us on Facebook:**  
[www.facebook.com/TheContinuingChallenge](http://www.facebook.com/TheContinuingChallenge)



**Thank You  
California  
Department of  
Public Health**

### T453 CAMEO, WISER, Google Earth, Microsoft Office, and ArcView

Tom Bertman

Have you ever wished you could use CAMEO to create a "chemical plume" and share that with responders who are using iPhones and Tablets? How about diagram an evacuation area on MARPLOT at the EOC and send it to the field responders as a Google Earth file? This course will instruct participants on a number of effective methods to exchange data and map information between the EOC and the field personnel, between various laptops and other devices, and between different software programs..

**Basic. Participants must have a basic knowledge of the CAMEO, EXCEL, and WORD programs. Participants may satisfy the prerequisite by taking the Basic CAMEO for HazMat responders offered at this workshop**

### T454 Battery IQ

Brett Bigger

The Battery IQ course will prepare responders to safely and effectively respond to incidents involving Lithium Ion batteries. The course will prepare students to identify incidents involving Lithium Ion batteries and battery packs. The course will cover incidents involving small devices such as cell phones, mobility devices, electric vehicles, Energy Storage Systems and Solar (Photo Voltaic). Students will receive a Battery response guide that will provide tactics for Lithium Ion battery incidents. Students will also be provided a guide for developing a Battery Response Program in their department.

**Basic.**

### T455 Asbestos Exposure: Fires, Floods, Earthquakes. -Responders Health and Safety

M. Haynes

Emergency Response Professionals and Firefighters Face Exposures. We now know with every Fire, Flood or Earthquake, Emergency Responders continue to face Asbestos hazards in their line of work. An occupational group i.e. ER professionals, Firemen and Law Enforcement continue to overlook the Risk of an Asbestos Exposure, which can lead to illness. Asbestos Containing Materials or Asbestos Containing Wastes Materials are encountered at damaged buildings, due to Demolitions, Fires and Construction activities. Now Structural damage from illegal Grow/Extraction operations are added to the list.

**Basic.**

**Thank You  
Blue Water &  
Associates**

### T456 (This is part 2, the inside part of T417) Live Propane Fire / Propane Emergency

Rob Scott

The WPGA Live Fire Training school is self-contained. Certified, experienced WPGA firefighters teach the course. We will be demonstrating the flaring of a Propane Transport Tanker that has rolled over and how, if there is leaking, freeze patching can be used to reduce the amount of product released. Each session covers propane's combustion characteristics, system safeguards, valving, and firefighting technique information. The Propane Emergency Class is comprehensive, It is designed to help emergency responders develop the skills necessary to manage a propane emergency in transportation or at fixed facilities.

**Basic.**

### T457 Enhanced Functionality in CBRN Environments

John Day

Traditional HazMat ensembles can be hot and cumbersome, but with advancements in PPE there are better options than traditional encapsulating suits. Participants will have the opportunity to personally experience the protection, performance and functionality of the latest CBRN PPE, during an offsite paintball exercise. Transportation will be provided.

**Basic.**

## 2-Hour Classes 1:00-2:45

### T251 Assessing Tank Car Tank Damage

Charlie Wright

Identifying and interpreting the type and extent of damage to railroad tank cars is critical to analyzing the problem at emergencies involving hazardous materials. Responders to emergencies involving tank cars should be able to identify the different types of tank cars, types of tank damage, and extent of that damage in order to determine the hazards and risks associated with the problem. They should be able to interpret the significance of that damage and tactical options available to address the problem.

**Intermediate.**



**CalEPA**  
California Environmental  
Protection Agency

**Thank You  
California  
Environmental  
Protection Agency**



# Thursday Afternoon (continued)

## **T252 Grace Under Fire: Managing Crisis Communications during an Oil Spill**

Steve Gonzalez

Steve Gonzalez, Communication Manager CDFW – Office of Spill Prevention and Response (OSPR)

Would you know what to do if your department was facing an unexpected, highly visible public emergency? As OSPR's communications manager, Steve is an expert at coordinating public affairs and managing media in high-pressure situations. He'll explain how the Joint Information Center emergency response model works, including the process of collaborating with multiple agencies and jurisdictions, and provide tips on how you can prepare before a crisis erupts.

**Intermediate**

## **T253 Field Detection of Pesticides: Suicide, Seizures and Sickness**

Jeremy VanAuker

Pesticides are becoming a more prevalent problem for hazardous materials responders. Historically organophosphate pesticides have been the culprit in medical emergencies and suicides. Identification of the pesticide is critical to patient treatment and keeping responders safe. We will examine the identification tools we have in our toolbox to detect and identify pesticides at a range of concentrations. We will look at both the acute and chronic hazards of pesticide exposure to the public and first responders, and come up with strategies and tactics so we are prepared to handle the incidents involving pesticides we will undoubtedly be dispatched to.

**Basic.**

## **T254 When Hazmat Meets the Wildfire Interface**

Pete Jensen

This session will share examples of when hazardous materials environments are impacted or were impacted during wildfire events. We will discuss what some of the impacts can be, or were, and mitigation options. This course will also include some tabletop group exercises to practice some of the concepts discussed.

**Basic.**

**Thank You  
Hazmat Transportation  
Consultant**



## **2:45-3:15 Afternoon Break**

## **2-Hour Classes 3:15-5:00**

### **T271 Improvised Explosive Devices-First Responder Awareness**

Sheldon Fung, Nick Concolino

The class will briefly cover the types of explosions, the effects of explosions and their danger to 1st responders followed by the components of an Improvised Explosive Device (IED) and the various ways they can be initiated. Numerous inert IEDs and videos will be utilized to illustrate the above. Safety guidelines for the first responder will be discussed.

**Basic.**

### **T272 Hazardous Materials Monitoring and Instrumentation**

Amanda Wagnre

Students will gain overview of equipment and instrumentation used for hazardous materials response and their limitations.

**Basic.**

### **T273 The Joint Hazard Assessment Team Concept**

Bob Dunivin

The LAFD operates a successful Joint Hazard Assessment Team (JHAT) to solve the full scope of the intentional or accidental release of chemicals in any form. The JHAT is only effective when assembled with pertinent regional partners from Law, Health, and the FBI. The JHAT assembles in "prevent" and "response" missions. The JHAT actively cultivates regional partnerships full time while constantly evaluating and revising response best practices. This course will provide an outline of proper JHAT partnerships, and challenge students to make contact with necessary partners PRIOR to an incident.

**Intermediate.**



**Thank You  
California Office of  
Environmental Health  
Hazard Assessment**

### **T274 Virtual Reality: Weapons of Mass Destruction Laboratory and Equipment Awareness Workshop**

Michelle Littlejohn, Caitlin Filippi

FBI - Weapons of Mass Destruction Directorate personnel will deliver an interactive workshop where attendees will utilize a novel Virtual Reality computer platform to explore a variety of virtual WMD laboratory environments. Attendees to see, interact with and learn about chemicals, materials and laboratory equipment that might be found in clandestine chemical, biological, explosive or synthetic drug laboratories. Attendees will increase their ability to recognize this equipment and materials and will practice downrange protocols and communication procedures to maintain situational awareness and safety. Due to the interactive nature of this workshop, a small class size is preferred.

**Basic.**



**Thank You  
California Specialized  
Training Institute**



**Cal OES**  
GOVERNOR'S OFFICE  
OF EMERGENCY SERVICES

**Thank You  
California  
Governor's Office of  
Emergency Services**

## Friday 4-Hour Classes 7:30- 11:30

### F411 Bio-101: The Basics Of Biological Response & Cleanup

Mark Durno

The knowledge learned from this introductory course will provide a baseline for responders to evaluate an environmental biological situation. The course will also offer examples of remediation technologies that can be employed to reduce risks of bacteria, toxins, and virus. Lessons learned from case studies will guide the course and will emphasize how to size up a response while working toward clean-up and clearance. The depth of experience and insights garnered by the EPA and its instructors will empower the attendees to have a full understanding of the hazards and risks that are required to successfully respond to biological incidents..

**Basic.**

### F412 MC306/DOT406 ROLLOVER RESPONSE or What happens when they park the truck dirty side up instead of down

Nick Vent

This course will primarily focus on the needs of the Hazmat team but will also be applicable to the first in Engine Companies that will get the initial dispatch. A DOT 406 tanker will be available during the class to walk around the vehicle to explore what we will have talked about in class.

**Basic. This course is meant for FRO, IC and Tech level responders but should not be limited to any one group.**



Thank You  
California State  
Firefighters' Association

### F413 Haz Mat Command-Setting Up for Success, Avoiding Pitfalls & Leading From the Front

Daniel Talbot, Chuck Tobias, Timothy Murphy

The goal of the class is to provide students with real-world information concerning the management of hazardous materials incidents. The course will cover pre-incident preparation, managing the event, and avoiding common pitfalls. The points illustrated during the lecture will be reinforced during two scenarios based on actual hazardous materials emergencies. The instructors combined have over 60 years of experience in the fire service. In addition, each instructor has managed multiple significant hazardous materials events.

**Basic.**

### F414 Virtual Response to Real Life Hazmat Incidents

Chris Weber, Dana Von Kolen

We will look at actual incidents and involved products and then formulate response objectives including rescue, recon, and mitigation as a table top exercise. Using detection and identification equipment on the chemical(s) involved, we will hone response skills by comparing our response to what actually occurred.

**Basic.**

### F415 BioTech IQ

Brett Bigger

Bio Tech IQ provides responders with a simple system to determine the hazards of biological agents as well as the appropriate PPE to respond safely. Students will use scenarios to "respond" to incidents involving biological agents including bacteria, virus, and toxins. Students will be provided with a Biological Response Guide BRG that will assist with these incidents. Students will be able to research new and emerging biological agents with the provided BRG.

**Basic.**



### F416 Taking the Mystery Out of the CSTI Pro-Board Accreditation and Process

Daniel Casner, Dennis Sliney

CSTI is accredited by Pro-Board! What does that mean? What is now required for Haz-Mat Instructors? Exam evaluations, skill sheets, evaluator scripts, written exams via the CSTI's Learning Management System and so much more; there is a lot to unpack and absorb. This awareness course is to help take the mystery out of the CSTI Pro-Board accreditation and help guide Haz-Mat Instructors towards the future of Haz-Mat education, instruction and certification.

**Basic.**

### F417 Fentanyl and other Designer Drugs

Brian Escamilla, Jerry Bucklin

This course provides a broad historical review of drug labs in the United States and California specifically. Emphasis is placed on chemicals used, popular manufacturing methods, hazards that are presented to on-site personnel, and current trends in illegal manufacturing. The dangers of fentanyl, highly toxic synthetic opioids, and diversion of veterinary drugs will also be addressed.

**Basic.**

### F418 Congrats on Your Promotion- Now Here is the Program-Good Luck

Pete Jensen

You have just been promoted and they have given you the hazmat program to run. You have never run a full function program before, nor have they trained you for it. This session will touch on most facets of running/managing a hazmat program. We will discuss concepts from the NFPA 475 guidance document and mix in some real life examples of lessons learned from the instructor's experience over his 33 year career, along with the many group examples. There will be an open forum discussion on topics from training, to R & D, to purchasing to incident management.

**Intermediate.**

### F419 Radioactive Easter Egg Hunt - Radiological Hands-On Exercise

Carl Palladino

This fun, hands-on workshop will focus on proper use of radiological instrumentation, interpretation of readings, conducting experiments to demonstrate nuclear radiation concepts, and simulating a radiological emergency response. Several fascinating radiological case studies will also be reviewed.

**Basic.**



# Friday Morning

## Friday 2-Hour Classes 7:30- 9:15

### F211 Behavioral Health Mayday: First Responder Behavioral Health Awareness

Richard Alamo, Susan Feenstra

This course raises awareness of the behavioral health impacts of being a first responder. Critical incidents are explored, occupational and personal stressors are identified, and opportunities for positive self-action are introduced. This training further strives to reduce the stigma of seeking help for behavioral and mental health issues and reconfirms that seeking support is a sign of strength – not of weakness.

**Basic.**

### F212 Research-What is It and Why Do We Do it?

Alan Finkelstein

This session will demonstrate computer-based research capabilities using a variety of free and proprietary software, both currently available and in development. There will also be a discussion on integration of software research with other modalities.

**Basic.**

### F213 Data-Driven Emergency Response

Solana Foo

During an emergency response there are a lot of moving parts. Keeping everyone on the same page is essential. Online dashboards, web maps, and visualization tools provide a central location for viewing operational data. They can share real-time progress metrics and field data, promote worker safety, and get managers important information for planning. In this course we'll share how we've applied these tools in large-scale wildfire responses, train derailments, battery fires and mercury responses. We'll cover the entire workflow-from collecting data in the field to sharing it on internal and external dashboards and viewers. No prior knowledge of technology needed.

**Basic.**

## 9:15 - 9:45 Morning Break 2-Hour Classes 9:45-11:30

### F231 Marijuana Cultivation Awareness: Safety Issues for First Responders and Hazardous Materials Teams

Philip White

This instructor-led course is designed to inform hazardous materials team personnel how they can support first responders and law enforcement who encounter legal/illegal marijuana cultivation facilities while responding to emergency incidents. Because health and safety regulations have not kept pace with the legalization of marijuana cultivation, unregulated quantities of toxic chemicals used as herbicides, insecticides, rodenticides, antimicrobial agents, and bio pesticides are commonly encountered at cultivation sights.

**Basic.**

### F232 How to Work With Your Local Trauma Centers During a Field Hazmat Event

Kathryn Ann Dollarhide

At the end of this demonstration/lecture the participant will learn how one local Long Beach City works in a HAZMAT coalition. The presenter will describe how hospital staff are trained, discuss regional decontamination drills and inter agency cooperation. Multi agency drills will be discussed as an opportunity to train field response teams with hospitals. Examples of drills will include templates on Purified Air Powered respirators and Mark- 1 Duodote competencies for non traditional first responders. This presentation will also discuss communication and planning for rave drugs, fentanyl and meth exposure in the field.

**Basic.**

### F233 Who's Afraid of the Dark - Public Health, Emergency Response, and Community Engagement in Mercury Response and Exposure Reduction Activities From Skin Lightening Creams

Lori Copan, Anya Cross

Mercury exposures from skin lightening creams has led to serious illness and hospitalizations in users of these products and in their young children. This course will focus on the range of experience the CDPH Environmental Health Investigations Branch (EHIB) has with responding to mercury incidents within an environmental public health framework. Participants will learn about interesting cases of mercury poisoning, the mutually beneficial collaborations with emergency response agencies, and innovative approaches for working with responders and community-based organizations to stem the availability of mercury-containing products.

**Basic.**



Thank You  
California Department  
of Corrections and  
Rehabilitation Fire



Lunch & Closing  
Ceremonies:  
Grand Ballroom  
11:30 - 1:30



# Pictures from the Past



**Thank You  
Office of Homeland  
Security State of  
Hawaii**



**Thank You  
California State Fire  
Marshal**



**SACRAMENTO COUNTY  
ENVIRONMENTAL MANAGEMENT  
DEPARTMENT (EMD)**

**Thank You  
Sacramento County  
Environmental  
Management  
Department**



**Sacramento Area Firefighters  
Local 522 Honor Guard**





# More from the past



Thank You  
Federal Bureau of  
Investigation



# FEMA

Thank You  
United States  
Department of  
Homeland Security



Thank You  
California  
Highway Patrol

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## CO-INSTRUCTORS

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Tom Bergman .....	W453
Ben Bosley.....	Z812
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Michael Chapman .....	Z803
Corey Collings .....	W254
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## CO-INSTRUCTORS

Name .....	Course number
Caitlin Filippi .....	T274
Will Grass .....	Z803
Dan Guillory .....	T212
Joel Hendelman .....	W454
David LeDuff.....	T212
Krystal Masalta .....	Z811
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## CO-INSTRUCTORS

Name .....	Course number
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Luke Sloan .....	W274
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# Workshop Registration Information & CEUs

## EARLY BIRD REGISTRATION OPENS online at: [www.hazmat.org](http://www.hazmat.org)

The Middle of June 2023

COST IS \$650

## LATE REGISTRATION BEGINS:

August 16, 2023

COST INCREASES TO \$750

Due to limited space,  
be sure to register right away.

Registration fees include:

- Workshop
- Lunch: Wednesday-Friday
- Dinner: Wednesday only

Payments MUST accompany registration.

## Meals

Lunch Wednesday - Friday, and dinner on Wednesday are included in the cost of registration. Join the rest of the attendees at these meals for an opportunity to network with emergency responders from around the world.

## On-Site Check-In Room -- Maxi's

Check in to receive workshop materials, class schedule/location, and additional information:

Monday, September 5<sup>th</sup>

3:00 p.m.-5:30 p.m.

Tuesday, September 6<sup>th</sup>

6:30 a.m.-5:30 p.m.

(closed for lunch 11:00-1:00)

Wednesday, September 7<sup>th</sup>

6:30 a.m.-5:30 p.m.

(closed for lunch 11:00-1:00)

Thursday, September 8<sup>th</sup>

6:30 a.m. - 5:30 p.m.

(closed for lunch 11:00-1:00)

Friday, September 9<sup>th</sup>

7:00 a.m.-11:00 a.m.



## Continuing Education Units (CEUs)

The Continuing Challenge HazMat Committee would like to thank Gary Pirkig who has served as our "go to" for Ems, General, and REHS CEU's for the past several years Gary has been with us since 1999. Unfortunately for us, Gary has decided to pursue other endeavors and will no longer be available to provide his services. Therefore, the Continuing Challenge HazMat Workshop cannot at this time offer CEU's to students.

We wish Gary all the best in his future pursuits.

Again, Thank You  
Gary Pirkig and the  
CPR LifeHouse  
Training Center for  
your years of hard  
work and support.



Thank You  
United States  
Environmental  
Protection Agency



## Registration Questions?

E-mail [info@hazmat.org](mailto:info@hazmat.org) or  
call (916) 433-1688

Why should you create a Member Profile?

It's easy and quick and will help you stay up-to-date about the Continuing Challenge. You will need a member profile to submit forms online at this site.

NOTE: We never sell, give away, or distribute our mailing list in any form.

## Cancellation & Refund Policy

Registration fees will be refunded (less a \$100 processing and administrative fee) for written cancellation requests postmarked no later than August 10th.

- Refunds will not be issued for cancellations made or postmarked after August 10th.
- Refunds will not be issued for workshop no-shows.
- If you are unable to attend and wish to send a substitute you may do so at no extra charge if you provide substitute name and contact information via email at [info@hazmat.org](mailto:info@hazmat.org) prior to August 17, 2022. After that date, substitute must appear in person at the workshop and request the change.

Please note that if you do not cancel and do not attend, you are still responsible for payment.





# Continuing Challenge HazMat Workshop Crew



2014



2014



2010 CCC Crew



2012 Continuing Challenge Committee



2009



# Awards & Photo Contest

Awards Nominations for 2024 are now being accepted at [www.hazmat.org](http://www.hazmat.org). Under the “About Us” tab, click on “Awards”, where you can nominate someone you know for a deserving award!

## Robert P. Turkington Innovation and Technology

Sponsored by  
Bauer & Associates

## James H. Meidl Instructor of the Year

Co-Sponsored by  
California Specialized  
Training Institute  
& California State  
Fire Marshal

## Continuing Challenge Medal of Valor

Sponsored by  
The Continuing  
Challenge  
Committee

## William J. Patterson Lifetime Achievement

Sponsored by  
Sacramento Fire  
Department

## Leo K. Najarian Responder of the Year

Sponsored by  
California State Fire  
Fighters Association

## The Continuing Challenge HazMat Photography Contest

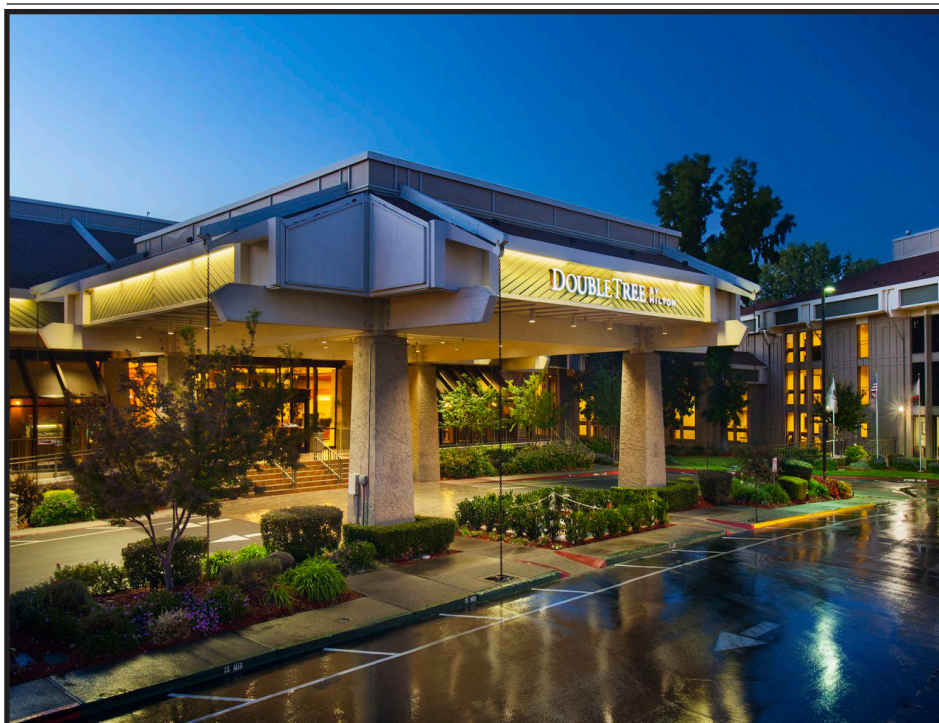
**Enter Our HazMat Photography Contest for a chance to win...**

Enter your photo online at [www.hazmat.org](http://www.hazmat.org). Under the “About Us” tab you will click on the “Photo Contest” tab where you will find all the contest rules and be able to enter your photo and information about your photo.





# Lodging Information



## The DoubleTree by Hilton Sacramento is our Host Hotel

The address of the DoubleTree by Hilton Sacramento is below. The Fairfield Inn Sacramento Cal-Expo-Marriott and the Hilton Sacramento Arden West Hotel are our overflow hotels.

Host hotel  
**DoubleTree  
by Hilton  
Sacramento**  
2001 Point West Way  
(916) 929-8855  
or 800-686-3775

Overflow hotel  
**Fairfield Inn  
Sacramento  
Cal Expo-  
Marriott**  
1781 Tribute Rd  
(916) 920-5300  
or 800-321-2211

Overflow hotel  
**Hilton  
Sacramento  
Arden West  
Hotel**  
2200 Harvard St  
(916) 922-4700

The host hotel for the Continuing Challenge is the DoubleTree by Hilton, Sacramento, California. The Continuing Challenge HazMat room rates are: Single \$96 // Double \$96

For internet reservations, use our [www.hazmat.org](http://www.hazmat.org) website, and go under the workshop tab, then down to lodging there is a link for the DoubleTree. This link will give you the discounted room rate.

Telephone Reservations may be made by calling The DoubleTree by Hilton (916) 929-8855 for the front desk or toll free at (800) 686-3775. Ask for the HazMat "Continuing Challenge" group rate "HAZ".

These Workshop rates will be available until all available rooms are reserved, but no later than August 1<sup>st</sup> 2023.

Please note: Generally the hotel is sold out 60 days in advance.

Make your reservations now!



Thank You  
Honolulu Fire



Thank you  
for attending the  
34<sup>th</sup> Annual  
Continuing  
Challenge  
HazMat  
Workshop.

Your continued  
support helps us  
provide the best  
training possible!

**We are Looking  
forward to seeing you  
in 2024**

**Save the Date:  
September 3-6, 2024**



Continuing Challenge  
c/o Don Braziel  
11097 Grenache Way  
Elk Grove, CA 95624

These courses are designed for all individuals in the hazmat industry.

Our Mission: To provide safe response training for all emergency responders to hazardous materials incidents affecting public health and the environment.

## The Continuing Challenge Workshop Committee

Dennis Smith, Chair

Blue Water & Associates  
Terry Joslin, (Retired)

California Conservation Corps  
Melinda Allen

California Department of  
Corrections & Rehabilitation Fire  
Jesse Corrales

California Department of Fish and Wildlife,  
Office of Spill Prevention and Response  
Mike Kirchner,  
Jim McCall

California Department of  
Public Health  
Ginger Hilton,  
Willy Jenkins (Retired)

California Department of Transportation  
George Avila

California Environmental  
Protection Agency (CalEPA)  
Jason Boetzer,  
John Elkins,  
Paul Penn (Retired),  
Kristi Placencia

CalEPA California  
Department of Toxic Substances Control  
Trevor Anderson,  
Alan Ito (Retired),  
Nancy McGee,  
Ivan Rodriguez

Cal EPA Office of  
Environmental Health Hazard Assessment,  
(OEHHA)  
Karen Riveles,  
Wes Smith

California Governor's Office of Emergency  
Services (Cal OES)

Cal OES, California Specialized  
Training Institute (CSTI)  
Mike Mudgett,  
James Tate,  
Paul Andrews

Cal OES, Fire, Rescue & Hazmat Division  
Brian Mancebo,  
Fred Mehr,  
Charles Tobias

Cal OES, Law Branch  
Sheldon Fung

California State  
Firefighters' Association  
Bob Hamilton

California Highway Patrol (CHP)  
Robert (Joey) Daniels,  
Reid Erickson,  
Benjamin Minick

CPR LifeHouse Training Center  
Gary Pirkig

Enmachine  
Paul Penn

Federal Bureau of Investigation (FBI)  
Sheldon Fung (Retired)

Hazmat Transportation Consultant  
Paul Horgan

Honolulu Fire  
Dean Randall, (Retired),  
Wes Toniyyama (Retired)

Merced Fire Department  
Derek Parker

Office of Homeland Security  
State of Hawaii Department of Defense  
Sonny Maguire

Office of the State Fire Marshal (OSFM),  
State Fire Training  
Kris Rose

Sacramento County Environmental  
Management Department  
Heather Tanner,  
Ryon Artz

Sacramento Fire Department  
Jerry Apodaca, (Retired),  
Don Braziel, (Retired),  
Andy Ramos,  
Doug Ross,  
Dennis Smith, (Retired)

United States Department of Homeland  
Security (DHS), Federal Emergency  
Management Agency, Region IX  
John Woytak

United States Environmental Protection  
Agency  
Greg Bazley,  
Rob Wise