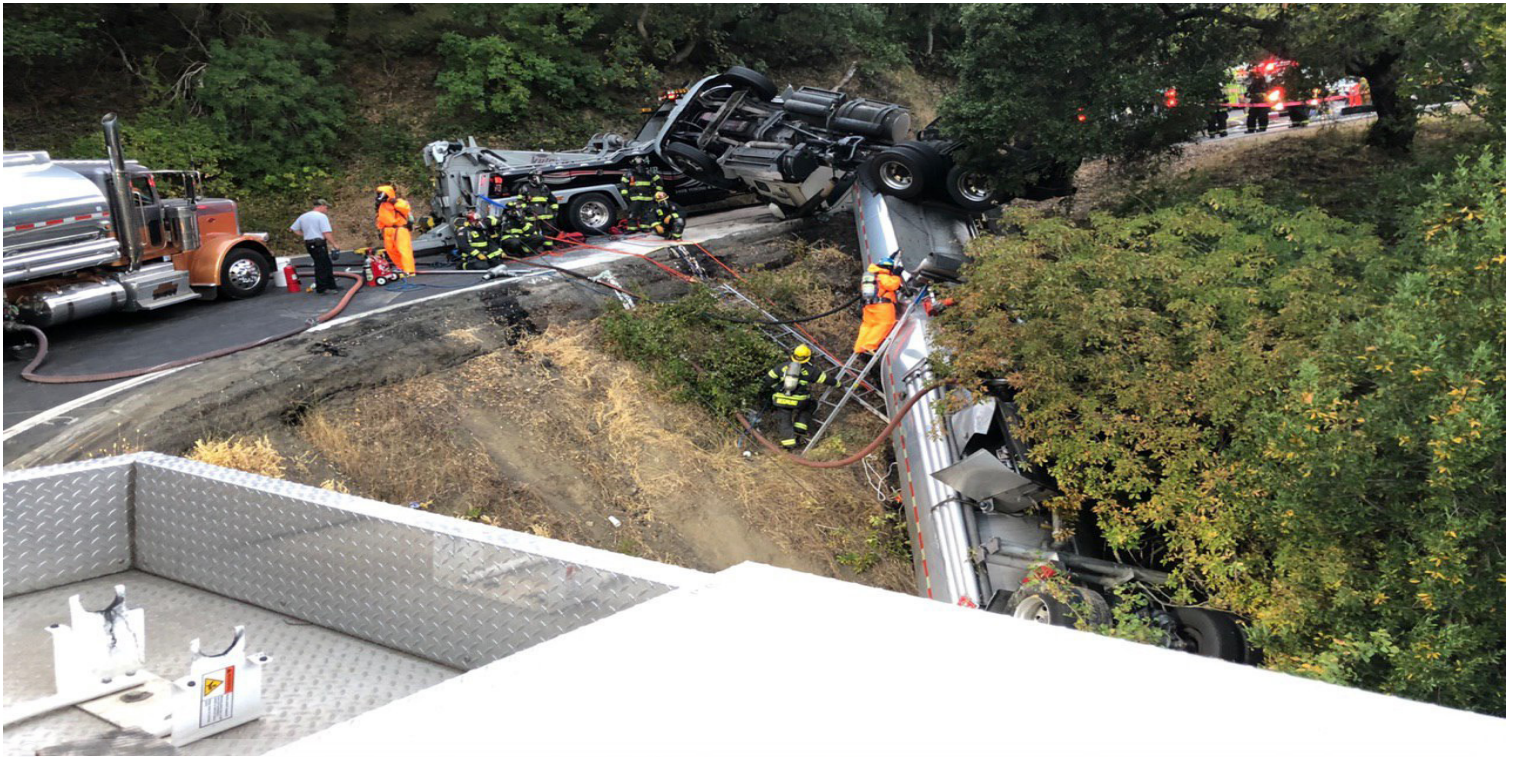


2022 Theme

The Continuing Challenge: The Challenge Continues

Stinger operation performed by Contra Costa Health Services, Hazardous Materials Programs in response to a 9,000-gallon overturned gasoline tanker during a mutual aid for the Marin County JPA HazMat team. Submitted by photo contest winner Ellen Dempsey, Contra Costa Health Services, Hazardous Materials Programs.



The 33rd Annual

CONTINUING CHALLENGE

HazMat Emergency Response Workshop

The Nation's Leading Hazardous Materials
Emergency Response Workshop

September 6-9, 2022

at the DoubleTree by Hilton Sacramento, California

Online registration opens

June 1, 2022 @ www.hazmat.org

Thank you Sponsoring Agencies

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.



**Thank You
Global Vision Consortium**

A Special Mini Track Class Assistant Safety Officer-Hazardous Materials

This course is a 'mini-track' connected to the Tuesday Component. This course in Hazardous Materials response for the Assistant Safety Officer complies with the requirements for the State of California's Hazardous Substances Incident Response Training Education Program (Gov. Code Section 8574) CCR Title 8-Section 5192 (q) CCR Title 19-Section 2520.

This will be a 16-hour class in length. Class will be conducted on Tuesday and Thursday. Students will need to attend all 16 hours to receive a Certification. Students will also need to register at www.CSTI.org and provide the CSTI staff with copies of the Technician/Specialist Certification prior to the start of class.

In order to receive a completion certificate from CSTI you must attend all 3 classes.

(Class 1 of 3) Assistant Safety Officer-Hazardous Materials, Tuesday 8 Hours

(Class 2 of 3) Assistant Safety Officer-Hazardous Materials, Thursday 4 Hours (AM)

(Class 3 of 3) Assistant Safety Officer-Hazardous Materials, Thursday 4 Hours (PM)

Save the Date The 34th Annual
September 5-8, 2023
DoubleTree by Hilton • Sacramento, California

The logo is a diamond-shaped emblem. At the top, a yellow banner reads "THE CONTINUING CHALLENGE". In the center, a red circle contains the word "HAZMAT" in white, with "EMERGENCIES" in smaller white text below it. At the bottom, a yellow banner reads "HAZMAT WORKSHOP SACRAMENTO, CA".

Moving Forward

On behalf of The Continuing Challenge Committee, welcome.

This year we will be celebrating our 33rd year of HazMat training. We will have over 74 classes that will include lectures, hands-on, and outdoor classes to provide you with the best training experience possible. The exhibitors will be displaying the latest HazMat equipment, offering training classes, and some governmental agencies will be providing information on how they support HazMat.

Hazardous materials emergency response has evolved dramatically since our first Continuing Challenge 33 years ago.

Our training workshop offers the latest and best of the best in training, products, and techniques while providing a sense of comradery and support for the industry.

Yes, hazmat is an industry. Look around at any incident and you will see new gadgets, safety gear, and personal protective equipment (PPE). Those garments and gear are supplied by vendors who understand exposure and want to do whatever possible to protect those most at risk – hazmat responders. At the Challenge, equipment is state of the art and prototypes are developed constantly and sometimes unveiled during the workshop.

The Wednesday night Bar-B-Que is a good time to see old friends while having a great dinner. This is a time to network with your fellow HazMat teams and learn what new things they are doing. Don't forget the Bar-B-Que is part of your workshop package at no extra cost to you, so please join us for a fun evening.

We are not here to rest on our accomplishments but to continually answer the challenge of how to do those things we need to do better. Please join us at the 33rd Annual Continuing Challenge in Sacramento. This is a high tech workshop with a kick back attitude.

We look forward to seeing you in September.

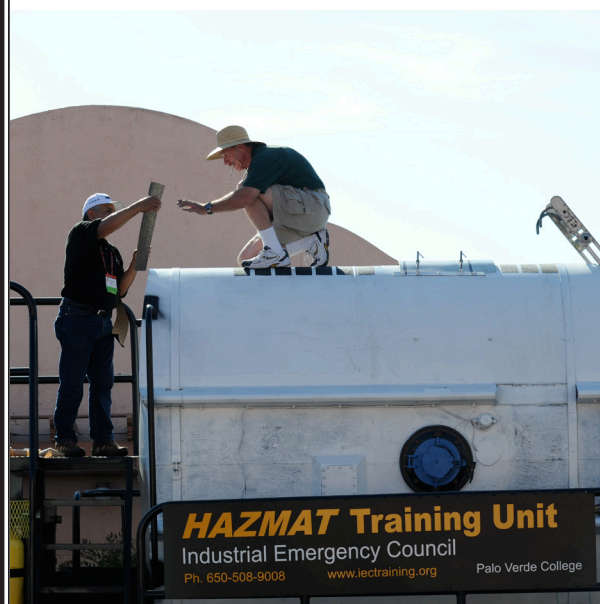
Dennis Smith,
Continuing Challenge Committee Chairperson
Fire Chief, (Retired)
Sacramento Fire Department




**Thank You
Sacramento Fire Department**

Table of Contents

A Special Mini Track Series	2
Workshop at a Glance	4
Keynote Speakers Through the Years.....	5
Exhibitor Index.....	5
Tuesday Classes	6-7
Wednesday Morning Opening Ceremony	8
Wednesday Classes & Events	9-11
General Store Information.....	10
Name that Unknown Contest Information...	11
Thursday Classes/Events	11-14
Friday Classes & Closing Ceremony	15-16
Pictures from the Past.....	17, 18, 21
Instructor Index.....	19
Workshop Registration Information & Continuing Education Units (CEUs)	20
Awards Information	22
Photo Contest Information	22
Lodging Information	23



Workshop At-A-Glance

Monday September 5	Tuesday September 6	Wednesday September 7	Thursday September 8	Friday September 9
	<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 7:30 a.m. - 4:00 p.m. (Near registration)</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)</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>Opening Ceremony • Keynote Speaker • Awards Presentation Grand Ballroom 7:30 a.m. - 9:30 a.m.</p> <p>Morning Break & Exclusive Exhibitor Time Exhibitor Area 9:30 a.m. - 11:30 a.m.</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>LAST DAY General Store Exhibitor Area 7:30 a.m. - 4:00 p.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. - 1:30 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>Lunch (on your own) 11:30 a.m. - 12:45 p.m.</p>	<p>Lunch Grand Ballroom 11:30 a.m. - 12:45 p.m.</p>	<p>Lunch & Exhibitor Showcase Grand Ballroom 11:30 a.m. - 12:45 p.m.</p>	<p>Lunch 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 & "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>1:30 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, & 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)

Exhibitor Index (as of July 1, 2022)

908 Devices

Advanced Entertainment Technology

Agilent Technologies

AristaTek

Berkeley Nucleonics Corporation

Columbia Southern University

Curtis

Edwards and Cromwell Spill Control

FarrWest

Frontier Energy Inc.

Hazmat Resource

HazTech Systems, Inc

Honeywell

Kappler, Inc.

ORTEC

PROENGIN, Inc.

RedWave Technology

Safe Environment Engineering

Safeware Inc.

TRANSCAER/CHEMTREC

W.L. Gore & Associates, Inc.

Zumro



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.

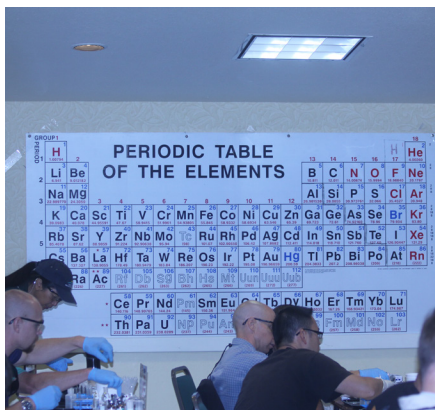
Basic. Haz Mat Technician Module 1A Basic Chemistry, or equivalent, is recommended.

Z802 Risk-Based Response to Battery Emergencies

Gary Sharp

This 8-hour workshop includes classroom and hands-on training to prepare responders to conduct risk-based response to battery emergencies for multiple types of batteries including Lithium Metal and 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. Students will gain knowledge and skills needed for battery incident assessment, developing an action plan, fire suppression, air monitoring, and overpacking damaged lithium battery cells.

Intermediate. HazMat operations, technician, or specialist training recommended.



Z803 Container Sampling: Soup to Nuts

Robert Wise

This course will be an abbreviated version of EPA Emergency Response's 24 hour Advanced Site Characterization Course. The class will cover sample collection of containers, soil and water. It will include a brief discussion of sample planning and the technical aspects of sampling. The class will then go outside to practice the practical application of those skills. The students will practice the collection of container sampling and the processing of samples for enforcement purposes. This practice will include sample collection in Level D, Level C and Level B.

Advanced. Students must be HAZWOPER compliant.

Z804 HEINZ 5-STEP FIELD IDENTIFICATION

Brian Heinz, Brad Haldeman

The HEINZ 5-Step™ portable field laboratory can provide information about an unknown substance to determine the DOT or IMDG hazard classification and may also give specific identity of certain unknown liquid and solid samples as well as their approximate concentration (both qualitative and quantitative testing abilities). The information gathered from the use of this kit will allow hazardous materials personnel to make vital safety decisions in the field.

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

Z805 HazMatIQ Above the Line/ Below the Line (New Version 20)

Chris Aguirre

This workshop will include the new HazMatIQ Version 20, with new chemical families, updated hazards, and new incident case studies. The HazMatIQ 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.

Basic.

Z806 Ammonia and chlorine tabletop emergency events used to demonstrate One Plan response system effectiveness

Gary Smith, Scott Milton, Manny Ehrlich, Greg Bazley

ASTI and EPA Region 9 instructors will demonstrate how to use the EPA created One Plan and ALOHA plume modeling system to support effective operations for first responders during the Discovery and Initial Response stages. We will demonstrate how the FEMA

ChemResponder platform provides a platform that tracks your emergency response, situations status, and links to critical information for field command and the emergency management team. The training will show how the Dept. of Defense IMAAC advanced plume modeling system can improve the ability of field command and emergency management teams to realistically assess escalating factors their will shape their action plans.

The training will demonstrate how field command can effectively use the local emergency manager for a Level 3 chemical release. The emergency manager is a significant player when coordinating with regional, state, and federal response agencies. The utilization of teaming agreements between the industrial facility and local responders will significantly improve first responder and hazmat tech service delivery for all four stages of response.

Basic.

Z807 (Class 1 of 3) Assistant Safety Officer-Hazardous Materials

Michael Mudgett, Paul Andrews, Roy Segovia

This course is a 'mini-track' connected to the Tuesday Component. This course in Hazardous Materials response for the Assistant Safety Officer complies with the requirements for the State of California's Hazardous Substances Incident Response Training Education Program (Gov. Code Section 8574) CCR Title 8-Section 5192 (q) CCR Title 19-Section 2520.

Advanced. Hazardous Materials Technician/Specialist, and Class 1, 2, and 3 are required to receive a certificate.

Z808 SCBA Visual Inspection

Myles Tenbroeck

This certification course teaches the basics of conducting the annual visual inspections of solid wall and composite SCUBA and SCBA cylinders. This 6 to 8 hour course is suited for those new to visual inspection as well as those who have been inspecting without formal training through its wide range of inspection subjects including damage limits, neck cracking, and laws affecting inspectors. Additionally, this course meets the OSHA and DOT requirements for employee HAZMAT training. Previously certified inspectors may attend this full course under the VCIR for re-qualification. Participants receive certification as Visual Cylinder Inspectors upon course completion.

Basic.

Z809 Radioactive Material Incident Response Simplified

John Lund

This 8-hour training program is designed to take the complex topic of a radiological accident response and break it down into 7 easily understood modules and hands-on practical exercises for firefighters, EMS, haz mat teams, and emergency managers.

Basic.

Z810 HAZWOPER 8-Hour Refresher - Regulatory Workers

Ken Beutler, Michael Pixton

This course provides required refresher training certification for those who have completed initial HAZWOPER training to work on hazardous waste sites. The ideal audience is regulators who must visit hazardous waste sites to perform contractor oversight, conduct monitoring/sampling, and perform other duties associated with hazardous waste work. This training is provided in accordance with CCR 1910.120(e)(8) and equivalent state regulations.

Basic.

Z811 CSTI Instructor Recertification

Vance Bennett, Dan Casner

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.

Z812 Tactical Chemistry

Chris Weber

Tactical decisions during 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 to help things 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 pulled from the news to illustrate the chemistry of hazmats.

Intermediate. Hazmat Technician



**Thank You
California Department
of Corrections and
Rehabilitation**



**Awards Nominations
for 2023 are being
accepted now at
hazmat.org, under the
about us tab. Nominate
someone you know
today for that special
award.**



**Thank You
California
Conservation Corps**



2012 CCC Crew

Wednesday Morning

Opening Ceremonies 7:30-9:30

Keynote Speaker Jeff Dill



In 2010, Jeff Dill founded Firefighter Behavioral Health Alliance (FBHA).

Jeff travels the United States & Canada holding workshops to educate firefighters & EMS about behavioral health awareness and suicide prevention. In 2010, FBHA began tracking and validating data on all FF, EMS and dispatcher suicides across the United States. In addition, FBHA offers seven workshops for first responders, counselors/chaplains, and family members preparing for retirement.

Jeff Dill holds a Master's Degree in Counseling and is a retired Fire Captain at Palatine Rural Fire Protection District in Inverness, Illinois.

On July 1st, 2021 Jeff was appointed the new Behavioral Health Administrator for Las Vegas Fire & Rescue. He is the head of the Peer Support Team and speaks internationally about his work. Over the past ten years he has traveled over 750,000 miles. His message offers hope and inspires all to enjoy life by understanding their own behavioral health.

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 HazMatIQ: AdvancedIQ

Chris Aguirre

This course builds upon the knowledge gained from our flagship Above the Line/Below the Line program. The course will cover: 1. A brief review of the foundational Above the Line/Below the Line System. 2. Using complex scenarios, students will be challenged to think critically, expanding on the knowledge and skills gained from the Above the Line/Below the Line system. 3. Going Beyond Red 1! a. Red 1, is the play for responding to unknowns, no match, or not sure. Utilizing an additional chart, students will be able go from a Red 1 to the correct "play", using chemical trade names, synonyms and/or chemical formula.

Intermediate.

W452 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.

Intermediate. Basic nuclear radiation knowledge required.

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 CAMEOfm program to manage Facility, Resources, and Special Location information.

Basic.

EXHIBITOR SHOWCASE during Thursday Lunch



W454 Maritime 101 for the Haz-Mat First Responder

Robert Chedsey

An introductory/overview session introducing the attendee to the commercial maritime industry; the facilities, vessels, and operations that may present unique challenges in regulatory inspections and incident response. The commercial maritime industry can be a unique, almost foreign environment for the uninitiated. One doesn't need to have jurisdiction on the coast or a seaport to be exposed to this environment; mutual aid responsibilities may draw you in as well. Better to know what you're getting into- and know what you DON'T know....

Basic.

W455 Hazmat/CBRN Performance Standards & Next Generation PPE

Jennifer Wise

Hazardous materials emergencies can occur anywhere, involve any number of substances, and result in a diverse set of challenging environmental and operational response conditions (e.g. train derailments, chemical spills from tanker trucks, CBRN terrorism incidents, etc.). First Responders and Hazardous Materials technicians must be adequately and properly protected to respond to these incidents, whether performing life safety or emergency mitigation missions. This educational/demonstrational program will review applicable NFPA standards and next generation PPE for the First Responder to Hazardous materials emergencies.

Basic.

W456 HazMat Team Typing for California & FIREScope

Chuck Tobias, Brian Mancebo, Jon Poganski, Jack Fry

The Cal OES continues to type HazMat Teams throughout California to support the State's Fire & Rescue Mutual Aid System. The course will provide an open forum discussion along with the FIREScope working group highlighting the changes, benefits, barriers, and overall status of the HMTT Program including the Cal OES supported HazMat Teams. The program manager will discuss the new virtual typing process. A panel discussion on the guidance, understanding, and rewards of this process will take place. In addition, the FIREScope HazMat Working Group will provide an open forum meeting and Q&A.

Basic.

2 Hour Classes 1:00-2:45

W251 Wildfires and Vulnerable Communities in California

Sauda Yerabati

Overview of vulnerable communities, impacts of hazmat incidents and strategies to improve response effectiveness.

Basic.

W252 Analyzing HazMat/CBRN Incidents: The Process, Problems, Avoiding Traps and Black Swans

William Miller

Effective and safe HazMat/CBRN response requires the ability to accurately evaluate data, assess hazards and build a plan. In this class, students will examine and explore the analysis process as it applies to HazMat/CBRN response. Emphasis will fall on avoiding biases and traps that are often part of analysis conducted by humans. Unrecognized and unaccounted for, these traps (e.g. misuse of narratives, undetected and ignored data, silent experts, discounting newer/non-conforming data) can lead to extreme unforeseen events (Black Swans). The instructor will use the response to an actual HazMat incident to illustrate the analysis process and its traps.

Basic.

W253 An Internal Size-Up

Jeff Dill

This presentation involves a careful examination of behavioral health awareness for Firefighters, EMS and Dispatchers with an emphasis on understanding emotional and physical stressors, communication skills, addictions, depression, PTSD, suicide statistics, retirement and Moral Injury. FBHA has been tracking and validating FF, EMS and Dispatcher suicides in the U.S. since 2010.

Basic.



Thank You
California State
Firefighters' Association

Wednesday Afternoon (continued)

W254 Flame Spectroscopy Technology for Simultaneous Detection of Chemical and Biological Threats

Scott Hartley

This course will provide an overview of Flame Spectroscopy also commonly referred to as Flame Photometric Detection (FPD), 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. General understanding of chemical/biological detection technologies (Trace vs bulk detection methods) General Chemistry knowledge.

2:45-3:15

Afternoon Break

in the Exhibitor Area both inside and outside

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

W271 Hazmat Response and Emergency Support Function 8 (ESF 8) aka the Public Health and Medical System

Sauda Yerabati

Introductory level course to provide overview on the Public Health and Medical system or Emergency Support Function 8.

Basic.

W272 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.

W273 Taking the Mystery Out of the CSTI Pro Board Accreditation

Daniel Casner

CSTI is now accredited by Pro Board!

What does that mean? What is now required for Haz-Mat Instructors? Exam evaluations, skill sheets, evaluator scripts, written exam via the CSTI's Learning Management System and so much more; there is a lot to 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. Open to Haz-Mat Instructors or potential Haz-Mat Instructors. CSTI Haz-Mat Outreach Instructor recommended but not required.

W274 Waiting for the Toxicology Report: Toxicology and Human Health Risk Assessment in Emergency Response

Karen Riveles

Have you ever heard on the news, "We are waiting for the Toxicology report?" What does that even mean? What are the different types of toxicology? How do we assess the risk to human health from toxic chemicals? This class will explore basic introductory concepts in the study of Toxicology. We will also cover the basic steps of the Human Health Risk Assessment process as it relates to toxic chemicals. Real-world examples and case studies will show how these concepts relate to emergency response and recovery.

Basic.

W275 Applying FTIR gas measurement technology to identifying "Unknown Gases & Vapors" at Incident Sites

Jim Cornish

Instruments based on FTIR (& Raman) are being used by Hazmat teams to identify solids & liquids at incident sites. However, utilizing the powerful FTIR technology to identify & quantify gases & vapors at very low concentrations in a portable instrument has only become possible in the last few years. This hands-on course will focus on a class team approach with the technology to identify "unknown" gas & vapor samples. At the completion of each test, a class discussion follows on the interpretation of results.

Intermediate

**Thank You
Hazmat Transportation
Consultant**



**Thank you
Merced Fire Department**

**Shop the
Continuing
Challenge
General Store**

Hours:

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

**Tuesday — Near Registration
& Wednesday & Thursday
Near the indoor Exhibitors**

Get the latest and greatest

**Exclusive
Memorabilia**

**Only available at this
year's workshop!**



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
24th 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 ChemResponder's Network Effect: Leveraging Technology to Improve Chemical Preparedness and Response

Megan Callan, Dante Stellar

ChemResponder and the Interagency
Modeling and Atmospheric Assessment
Center (IMAAC) are tools sponsored
by the FEMA CBRN Office and its
federal partners. ChemResponder
is a free tool for all Federal, State,
Local, Tribal, and Territorial (FSLTT)
response organizations designed
to provide real-time chemical data
collection, management, and sharing.
IMAAC is a complementary no-cost
modeling resource also available to
FSLTT officials, first responders,
and emergency managers. With the
creation and activation of the IMAAC
Portal within ChemResponder,
atmospheric dispersion modeling
products are seamlessly uploaded to
ChemResponder's geospatial event
space to be viewed alongside ground
truth data and incident information.

**Intermediate. Both new and experienced
ChemResponder users are encouraged
to attend! All that is required is a
ChemResponder account and a laptop/
mobile device. Accounts can be created
on-site, but it is recommended to set
them up ahead of time at <https://www.chemresponder.net/#account/request>.**

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 that will make
your instruments scream! Bring your
radiation instruments to class, if possible.

Advanced.

T413 Advanced CAMEO

Tom Bergman

The Advanced CAMEO course is
designed for those who have basic skills
in the CAMEO software program. By the
end of this class, students will know how
to use advance features of CAMEO for
chemical searches, chemical interaction
analysis, plume and explosion modeling,
mapping, and tracking of information for
haz mat facilities in their jurisdictions.
Students will also learn how to modify
and customize CAMEO to their needs.
We will also cover the entirely new
MARPLOT 5 Mapping Program.

**Basic. Experience and/or training in
using the CAMEO Chemicals & ALOHA
programs of the CAMEO Suite of
programs.**

T414 Asbestos Exposure: Fires, Floods, Earthquakes and Explosions ..OH MY

Michael Haynes

Emergency Response Professionals
and Firefighters Face Exposures. We
now know after 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 Waste
Materials are encountered at damaged
buildings due to Demolitions, Fires
and Construction activities, and now
Structural damage from illegal Grow/
Extraction operations are added to the
list.

Basic.



Thank You
California Department of
Corrections and Rehabilitation
Fire

Thursday Morning (continued)

T415 (Class 2 of 3) Assistant Safety Officer-Hazardous Materials

Michael Mudgett, Paul Andrews, Roy Segovia

This course is a 'mini-track' connected to the Tuesday Component. This course in Hazardous Materials response for the Assistant Safety officer complies with the requirements for the State of California's Hazardous Substances Incident Response Training Education Program (Gov. Code Section 8574) CCR Title 8-Section 5192 (q) CCR Title 19-Section 2520.

Advanced. Hazardous Materials Technician/Specialist and Class 1, 2, and 3 are required to receive a certificate.

T416 The Challenges of Complex Plugging and Patching

Jon Poganski, Pat Johnson

This class is designed to mitigate the most commonly used components for emergency and temporary leak stoppage of liquid or bulk hazardous materials due to punctures, gashes, cracks or surface rotting in most of the common containers. Each student will receive hands on training on at least five different kits.

Intermediate. Hazmat Technician or Specialist.

2-Hour Classes 7:30-9:15

T211 Hazmat and the Fire Code-Best of Friends

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 Common Sense Isn't

Monique Lewis

In the world of safety and hazardous materials response, in particular, we hear the phrase "use common sense" quite a bit. The problem with "common" sense is that it's only common to the person whose sense is in question. Certified Safety Professional Monique Lewis takes a humorous yet practical look at the pitfalls of relying on common sense and will then show participants how to develop a consistent, effective, and relevant training program that will help bring everyone's sense to the same level so that it can indeed be considered "common".

Basic.

T213 Field Identification of Controlled Substances: Case Studies from the Field

Jeremy VanAuker, David Godin

With highly potent, chemically complex synthetic opioids, cannabinoids, cathinones, and psychoactive substances emerging in the illicit drug market, identifying controlled substances in the field is increasingly difficult. Even "traditional" controlled substances such as cocaine and heroin often contain increasingly dangerous amounts of designer synthetic drugs. Learn through a series of case studies about how trace detection technology can be used to identify cut or low-concentration threats outside the scope of other technology, establish probable cause in new and novel ways, all while minimizing exposure to keep responders safe in the field.

Basic.

T214 Selection, Care, and Use of Chemical Protective Clothing

Miller Opolka

This course will cover the chemical protective clothing selection process, fabrics, seams, and styles of current PPE. A review of current NFPA and ASTM standards, and hazard assessments.

Basic.

T215 FBI WMD Case Studies-Dr. Larry Ford and James Malcolm

Sheldon Fung

The course provides 2 WMD case studies the FBI conducted that involved Hazmat, Public Health, Bomb Squads, the FBI's WMD team, and overseas intelligence operations.

Basic.



**Thank you
California Department of
Fish and Wildlife**

9:15 - 9:45

Morning Break

in the Exhibitor Area

Static Displays

Front Parking Lot Area

2-Hour Classes

9:45-11:30

T231 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.

T232 Hazmat by Highway: Transporting Petroleum Fuels

Robert (Joey) Daniels

This course will familiarize students with the requirements to transport petroleum fuels by highway. It will cover hazard familiarization, communication and exposure to the different packages authorized for these products. This course will also address the new and emerging trends in fuel transportation, specifically mobile fueling services.

Basic.

T233 Outclassing Emerging Threats with Emerging Technology: FGAs, PBAs, and Aerosols

Chris Weber

Emergency responders are faced with a diverse and continuously evolving threat landscape. Novichoks and pharmaceutical based agents demonstrate that chemical warfare has continued to evolve. The ability to detect Novichoks and opioids at tactically meaningful concentrations is limited. Come see how and why these emerging threats challenge legacy equipment, and how emerging technology can help not only detect but identify these materials in the solid, liquid, vapor, and aerosolized forms. Real time, tactical decision-making regarding PPE, casualty management, sampling and identification, critical facility protection, and decontamination are critical to keeping emergency responders and the public safe.

Basic.

Thursday Morning and Afternoon (continued)

T234 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. Letters of interpretation from OSHA providing clarification and a fill-in-the-blank respiratory protection program, both available to participants, will ensure compliance. We will discuss how to get your facility into compliance if you are not sure how.

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

T235 Radiation Hunting. Hands on with radiation detection equipment and more!

Juan Garcia

Get hands on experience with various radiation detectors and meters. Also discuss community reception centers. * Attempt to detect gamma, alpha, and beta radiation * Friskers * Meters * Detectors * Portal Monitors * Radioisotope Identification Devices (RIIDs) * Community Reception Center walkthrough * Resource Handouts.

Basic.

T236 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.

Intermediate. Basic understanding of chemistry.



**Thank You
California
Department of
Public Health**

4-Hour Classes 1:00-5:00

T451 Pandemic Response After Action Review and Next Step Planning

Monique Lewis

In 2020 the National Pandemic Influenza Plan moved from the theoretical to the practical and we've all seen the successes and failures of planning efforts at all levels. This workshop is an opportunity for participants to discuss what worked and what didn't in your departments, local governments, and communities. Participants can use this cross-jurisdictional "Hot Wash" to assist in future planning efforts for their own locations.

Intermediate.

T452 CAMEO, WISER, Google Earth, Microsoft Office, and ArcView

Tom Bergman

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.

Advanced. 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.

T453 Hazardous Materials Incident Command: Writing the Incident Action Plan

Daniel Talbot

This course will provide participants with the opportunity to assemble two Incident Action Plans (IAP). One IAP will be for a simple hazardous materials incident, and the other will be for a complex hazardous materials incident. Additionally, 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 IAPs.

Basic. ICS 200 HazMat FRO Preferred ICS 300 HazMat IC.

**Thank You
Blue Water &
Associates**

T454 Common Spills

Mark Bridges

This course begins with a review of the basic "need to know" information required of a hazmat team member. We then move on to discussing how to handle the ten most common types of hazmat incidents. Incidents like illegal dumping's, pool truck rollovers, odor investigations and radioactive diapers. A spreadsheet showing how to handle these types of incidents will be given to each student as well as command worksheets and many other useful forms and check-off lists.

Basic.

T455 Propane Emergency

Rob Scott

This course has been designed to help emergency responders develop the knowledge and skills necessary to safely and effectively manage a propane emergency in transportation or at fixed facilities. It is aimed at firefighters and members of the Hazardous Materials Response Teams, propane marketers, propane industry product and container specialists, and private or emergency response contractors and based upon commonly used practices, references to nationally recognized engineering practices, regulations and consensus standards, and training programs.

Basic.



**Thank You
California Department
of Transportation**

Follow us on Facebook:
www.facebook.com/TheContinuingChallenge



**Thank You
California
Environmental
Protection Agency**

Thursday Afternoon (continued)

T456 (Class 3 of 3) Assistant Safety Officer-Hazardous Materials

Michael Mudgett, Roy Segovia, Paul Andrews

This course is a 'mini-track' connected to the Tuesday Component. This course in Hazardous Materials response for the Assistant Safety Officer complies with the requirements for the State of California's Hazardous Substances Incident Response Training Education Program (Gov. Code Section 8574) CCR Title 8-Section 5192 (q) CCR Title 19-Section 2520.

Advanced. Hazardous Materials Technician/Specialist, and Class 1, 2, and 3 are required to receive a certificate.

T457 Kitchens of Death Still Cookin'

Bill Wennhold

At the end of this program the student will understand the chemicals involved, the cooking process, and the hazards associated with manufacturing methamphetamine, homemade explosives, and THC oils.

Basic.

2-Hour Classes 1:00-2:45

T251 Improvised Nuclear Detonation Response Considerations

Chuck Tobias, Mike Warren, Bill Potter, Sheldon Fung

Do you know what to do to keep you safe during an Improvised Nuclear Detonation? Our present response culture may injure or kill those tasked with being first on scene. California is on its own for up to 72 hours; our initial response actions will determine whether we survive or become an additional casualty. This two-hour presentation and discussion will introduce concepts that will give you the best chance at making life-saving decisions.

Basic.

T252 Catastrophic Releases of Liquefied Compressed Gasses - The Jack Rabbit Project Results

Andy Byrnes

Large-scale releases of Chlorine were conducted to determine the atmospheric implications of catastrophic releases of compressed liquefied gasses (TIH). SME's engaged in the trials to determine: ERG validity; characterizing upwind conditions; effect on urban surfaces; emergency response tactical alternatives; effect on combustion engines; use of detection methods in high concentrations; sheltering in place (vehicles and buildings); capturing video of the plume from altitude; and more. This workshop provides an overview of the results and observations from the Jack Rabbit Team of the impact on first responders, Fire, Law Enforcement and Hazmat Teams.

Basic.

T253 "Medic One en route with a radiologically contaminated patient"

John Lund

When EMS transports a patient who is potentially contaminated with radioactive material, the transfer between prehospital care and first receiver care can be smooth and without delay. PPE, technical support, decontamination, and preparation for patient care are addressed in both the prehospital and hospital setting.

Basic.

2:45-3:15 Afternoon Break

2-Hour Classes 3:15-5:00

T271 Incorporating Isotope Identifiers into Basic HazMat Response

Cody Cole, 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 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.

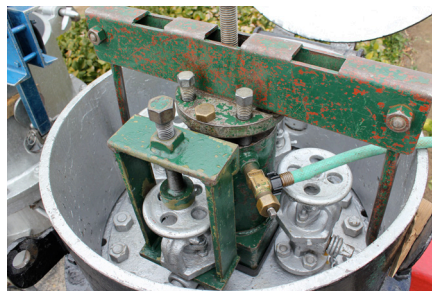
Basic.

T272 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.



T273 Liquid Oxygen Reactivity and Mechanical Impact Studies at UVU

Andy Byrnes

In 2021 & 2022, researchers at Utah Valley University studied the reactivity and impact sensitivity of liquid oxygen in an attempt to satisfy the mythology and procedures surrounding releases of liquid oxygen and the potential impact on the emergency response. This presentation begins with a historical perspective on LOx response and includes the data, photos, IR and ultra-high-speed video of the impact and reactivity experiments. The session concludes with an open discussion regarding the way forward in LOx response procedures and the impact this new information may have.

Basic.

T274 Field Detection of Pesticides: Suicide, Seizures and Sickness

Chris Weber

Pesticides are becoming a more prevalent problem for hazardous materials responders. Historically, organophosphate pesticides have been the culprit in medical emergencies and suicides. Pesticides on the market now include: organophosphates, carbamates, pyrethroids, and neonicotinoids, which affect the nervous system, but in different ways. Identification of the pesticide is critical to patient treatment and keeping responders safe. We will discuss many recent incidents involving pesticides and will examine the identification tools we have in our toolbox to detect pesticides at various concentrations so we are prepared to handle the incidents involving pesticides we will undoubtedly be dispatched to.

Basic.



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

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

F411 CBRN Sampling Fundamentals for Public Safety

Robert Neumann

This course will discuss sampling fundamentals and various sampling techniques within the FBI 12-step evidence collection framework to provide suitable samples for analysis by qualified supporting laboratories. Techniques to prevent cross-contamination, properly package samples and to establish chain of custody are discussed. Students will perform each of the discussed sampling techniques during an instructor led practical exercise. This course will provide first responders with the competencies to collect samples of possible CBRN contamination in order to allow laboratories to conduct highly reliable scientific analysis of samples.

Basic. Basic understanding of PPE for entry operations for unknown CBRN situations.

F412 Ethanol Emergency Response

Joel Hendelman

Upon the completion of this course, participants will have knowledge related to ethanol and ethanol-blended fuels including the use, chemical and physical characteristics, transportation modes, transfer operations, basics of foam, suggested responder tactics and strategies and environmental issues.

Basic.



Cal OES
GOVERNOR'S OFFICE
OF EMERGENCY SERVICES

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



HazMat on the Water

F413 Psychology of Command - Decision making under pressure in a HAZMAT incident

Gareth Black, Chris Scott

This session allows delegates to explore how the impact of stress affects our ability to make rational, informed decisions and seeks to understand how to improve the outcomes of decisions we make when responding to any time-critical, high-risk situation, such as a HAZMAT incident. We aim to delve into the mind of the HAZMAT responder when faced with an incident, and to leave delegates with an understanding of their reaction to stress and pressure and equip them with tools and knowledge to improve their decision making.

Basic.

F414 RECON to DECON: Detection and Identification Tactics

Chris Weber

The interplay of detection and identification equipment - from papers to mass spectrometry - comes into clear focus in this hands-on workshop. We will examine the effect of chemical class, concentration, and the complexity of mixtures on detection and identification. The contents of your detection toolbox often make the difference between success and failure. Come see for yourself what the capabilities and limitations of the different meters are, and how to make sure you don't run into a capability gap on your team.

Basic.

F415 BiolQ - Street Smart Response to BioTerrorism and Biological Emergencies

Chris Aguirre

Each participant will receive a copy of the patent pending Biological Response Guide (BRG). Upon completion of this session attendees, while using the BRG and its integral Biological Safety Data Sheets, will be able to rapidly and confidently size up known and unknown biological agents as well as develop a rapid IAP while choosing effective PPE, decontamination, monitors, meters, and test kits, and medical treatment. Interactive. Table-top exercises are included.

Intermediate. Haz Mat First Responder Operational.

F416 Radiation Incident - Rescue, treatment, and transport of a patient potentially contaminated with radioactive material

John Lund

This course will help you assess the potential risks in handling contaminated patients at radioactive material transportation incidents. It also covers preparing patients for transport from the incident scene to the hospital and will increase your understanding of unique aspects of pre-hospital patient care during a radioactive material transportation incident.

Basic.

F417 BIO 101--Fundamentals of Bio Response

Christine Tomlinson, Mark Durno, Elise Jakabhazy

This session will introduce participants to the fundamentals of responding to a biological incident. The knowledge learned from this introductory course will provide a baseline for responders on how to evaluate an environmental biological incident. The course will also offer examples of remediation technologies that can be employed through the understanding of biological basics and the risks of bacteria, toxins, and viruses. The lessons learned from case studies and EPA's extensive experience will guide the remainder of the course. The session will emphasize how to size up a response while working toward clean-up and clearance.

Basic.



**Thank You
California Specialized
Training Institute**

Friday Morning

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

F211 Deployment of standoff chemical-specific detectors to identify and image the release of chemicals from 3 miles away

George Lane

Students will learn the operation and advantages of standoff chemical-specific detectors in a case study that occurred in 2019 in which chemicals were released and then ignited at a tank farm operating on the Houston Ship Channel not equipped with standoff chemical detection. The instructor will compare the operation of existing chemical detectors by examining their methodologies. Students will learn that standoff chemical-specific detectors could have detected the release of chemicals from up to 3 miles away an hour before the chemicals ignited, which closed the Houston Ship Channel, costing the national economy over \$1 billion per day.

Basic.

F212 Understanding NFPA 1990 Hazmat Standard Consolidation

Miller Opolka

NFPA 1991, NFPA 1992, and NFPA 1994 have now been consolidated under NFPA 1990. We'll cover each standard, review any changes or updates, and discuss the changes within the group.

Basic.

F213 Research-So Much to Do, So Little Time!

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.

F214 Contrasting and Comparing Ammonium Nitrate and Anhydrous Ammonia Incidents

Manny Ehrlich

Since 1947 there have been catastrophic events world wide involving ammonium nitrate. In several instances these events have been "blamed" on anhydrous ammonia. This presentation is designed to inform the participant with information on these events and to contrast behavior of ammonium nitrate with anhydrous ammonia. Additionally, it is designed to provide a take away to the participant for them to take back to their organizations

and communities to discuss prevention of future incidents.

Intermediate. An intermediate to advanced understanding of hazmat chemistry and associated hazards.

F215 Hazard Communication Standard (29CFR 1910.1200) and fun ways to teach the subject = with prizes

Nick Vent

The Hazard Communications Standard was updated. Sixteen (16) part SDS and Labels do not look the same. Pictographs are now included to make the US compatible with the rest of the world to a degree. We will go over all of the changes and I will even leave you with the electronic version you can use for your own HazCom Plans. OSHA does cite agencies and departments for non-compliance with the standard. Come find out if you are in compliance with the standard. And pick up a few tricks to teach the topic for your workplace.

Basic.

9:15 - 9:45 Morning Break

2-Hour Classes 9:45-11:30

F231 EPA Emergency Response or DTSC Emergency Response: Who do you call?

Rob Wise, Adam Palmer

This class will provide an overview of the EPA and DTSC Emergency Response Programs and how they are accessed.

Basic.

F232 Confined Space: HazMat or Technical Rescue?

Monique Lewis

Confined spaces offer unique challenges. How often do you think your department has been listed on an entry permit without you being notified? In case studies injuries during Confined Space Emergency are almost never due to lack of knowledge that a hazardous material is present nor lack of understanding of the behavior of hazardous materials. Certified Safety Professional, Monique Lewis, will discuss such case studies and scenarios she has encountered. You'll receive information beyond general confined space awareness with regard to common hazards and tactics for identifying when hazards exist or have the potential to exist so you can better prepare.

Intermediate.

F233 Radiation in your neighborhood, who you gonna call? Maybe ROSS...or another Friend?

Juan Garcia

Participants will get an understanding of what notifications and messaging efforts should occur after a radiological incident. After the response phase of the emergency is over we'll cover what happens in the intermediate phase and recovery phase and what types of agencies should be involved. The instructor will also briefly cover how the California Department of Public Health Radiologic Health Branch can assist your agency during our outside of radiological emergencies. Also, an overview of what the FEMA Radiological Operation Support Specialist (ROSS) is and how you can become one.

Basic.

F234 Hazmat Urban Legends

Vance Bennett

Was that alligator in the sewer really a mutant caused by exposure to methyl-ethyl-diforsuranol? Find out the answers to this and other mysteries as we skewer conventional wisdom and expose outright prevarication in this light-hearted look at what "everyone knows".

Basic.

F235 PEAC Software

Scott Bunning

This hands-on workshop will educate students on how to most effectively use PEAC software during incident response and planning. We will review PEAC's four main features - Technical Reference, Facilities, Hazard Modeling and Incident Manager/ICS-NIMS. We will take an in-depth look at both desktop and cloud-based PEAC and the different uses for each platform. Upon completion students will know how to access, use, and distribute the data included in PEAC, and will be given a complimentary login to our cloud-based PEAC-WEB.

Basic. This course is designed for those who have used and those who have never seen the software.



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

Follow us on Facebook:
www.facebook.com/TheContinuingChallenge



Instructor Index

LEAD INSTRUCTORS

Name	Course number
Aguirre, Chris	Z805, W451, F415
Bennett, Vance	Z811, F234
Bergman, Tom	W453, T413, T452
Beutler, Kenneth R.	Z810
Black, Gareth	F413
Bridges, Mark	T454
Bunning, C. Scott	F235
Byrnes, Andrew	T252, T273
Callan, Megan	T411
Casner, Daniel	W273
Chedsey, Robert	W454
Cole, Cody	T271
Cornish, Cody	W275
Daniels, Robert (Joey) ..	T232
Dill, Jeff	W253
Ehrlich, Manny	F214
Finkelstein, Alan	T211, T231, F213
Fung, Sheldon	T215, T272
Garcia, Juan	T235, F233
Hartley, Scott	W254
Haynes, Michael	T414

LEAD INSTRUCTORS

Name	Course number
Heinz, Brian	Z812
Hendelman, Joel	F412
Keenan, Daniel	Z801
Lane, George	F211
Lewis, Monique	T451, T212, F232
Lund, John	Z809, T253, F416
Miller, William	W252
Mudgett, Michael	Z807, T456, T415
Neumann, Robert	F411
Miller, Opolka	T214, F212
Palladino, Carl	W452, T412
Pixton, Michael	T236
Poganski, Jonathan	T416
Riveles, Karen	W274
Ryan, Patrick	W272
Schlags, Michael	F217
Scott, Rob	T455
Sharp, Gary	Z802
Smith, Gary	Z806
Talbot, Daniel	T453
TenBroeck, Myles	Z808

LEAD INSTRUCTORS

Name	Course number
Tomlinson, Christine	F417
Tobias, Charles	W456, T251
VanAuker, Jeremy	T213
Vent, Nick	T234, F215
Vianu, Libby	F253
Weber, Chris	Z804, T274, T233, F414
Wennhold, Bill	T457
Wise, Jennifer	W455
Wise, Rob	Z803
Yerabati, Sauda	W251



CO-INSTRUCTORS

Name	Course number
Andrews, Paul	Z807, T456, T415
Bazley, Greg	Z806
Casner, Dan	Z811
Concolino, Nick	T272
Duazo, Maria	Z801
Durno, Mark	F417
Ehrlich, Manny	Z806
Fry, Jack	W456
Fung, Sheldon	T251

CO-INSTRUCTORS

Name	Course number
Godin, David	T213
Haldeman, Brad	Z812
Jakabhazy, Elisa	F417
Johnson, Pat	T416
Mancebo, Brian	W456
Melton, Scott	Z806
Murphy, Timothy	T453
Newmann, Robert	F411
Palmer, Adam	F231

CO-INSTRUCTORS

Name	Course number
Pixton, Michael	Z810
Poganski, Jon	W456
Potter, Bill	T251
Scott, Chris	F413
Segovia, Roy	Z807, T456, T415
Slattery, Mark	T271
Stellar, Dante	T411
Warren, Mike	T251



Workshop Registration Information & CEUs

EARLY BIRD REGISTRATION OPENS online at: www.hazmat.org

June 1, 2022

COST IS \$575

LATE REGISTRATION BEGINS:

August 16, 2022

COST INCREASES TO \$675

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 5th

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

Tuesday, September 6th

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

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

Wednesday, September 7th

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

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

Thursday, September 8th

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

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

Friday, September 9th

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



**Thank You
United States
Environmental
Protection Agency**



Continuing Education Units (CEUs)

EMS CEUs are available through CPR LifeHouse Training Center, an approved CA EMS CE Provider (#07- 0023). A fee of \$95 establishes and maintains a record of attendance for 4 years through CPR LifeHouse Training Center. All courses are approved for EMS CEU's.

General Continuing Education Units (CEUs) are available. A fee of \$95 establishes and maintains a record of attendance for 4 years through CPR LifeHouse Training Center. All courses are approved for General CEU's.

Registered Environmental Health Specialist (REHS) contact hours are available. A fee of \$95 establishes and maintains a record of attendance for 4 years through CPR LifeHouse Training Center and includes both REHS continuing education contact hours and General CEUs. All courses are approved for REHS contact hours.

CEU's units will match the sum of hours listed for each class.

COST

EMS CEUs - \$95

Generals CEUs - \$95

REHS CEUs - \$95

CEUs are no longer requested during the registration process at our Workshop.

Registration for all CEUs is now handled through the CPR LifeHouse Training Center CEU Coordinator by contacting the Training Center at: cprlifehouse@gmail.com or text 707-771-9321.

A registration form will be sent to you requesting the following information:

1. Your name (as it is to appear on the Certificate)
2. Contact Information (ie. Cell phone, email, etc)
3. Type of CEU requested
4. Course number and/or name you have registered for
5. Method of payment (cash on site, credit card before or during the workshop, check or P.O.#).

If you have questions regarding registration or payment, contact the CPR LifeHouse Training Center by email, text or telephone. If you still have question, you may also speak to the CEU coordinator during your on-site check-in prior the start of classes.

Registration Questions?

E-mail 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 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.



**Thank You
CPR LifeHouse
Training Center**

Continuing Challenge HazMat Workshop Crew



2014



2014



2010 CCC Crew



2012 Continuing Challenge Committee



2009

Awards & Photo Contest

Awards Nominations for 2023 are now being accepted at 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. 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



Thank You
Honolulu Fire



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

Thank you
for attending the
33rd Annual
Continuing
Challenge
HazMat
Workshop.

Your continued
support helps us
provide the best
training possible!

Looking forward to
seeing you in 2023

**Save the Date:
September 5-8, 2023**

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 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 12th 2022.

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

Make your reservations now!



Continuing Challenge
c/o Sacramento Fire Department
5770 Freeport Blvd, Suite 200
Sacramento, CA 95822

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
Jason Ortiz

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

Cal OES, Fire, Rescue & Hazmat Division
Brian Mancebo,
Fred Mehr,
Erika Olsen,
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