HAZMAT HQ

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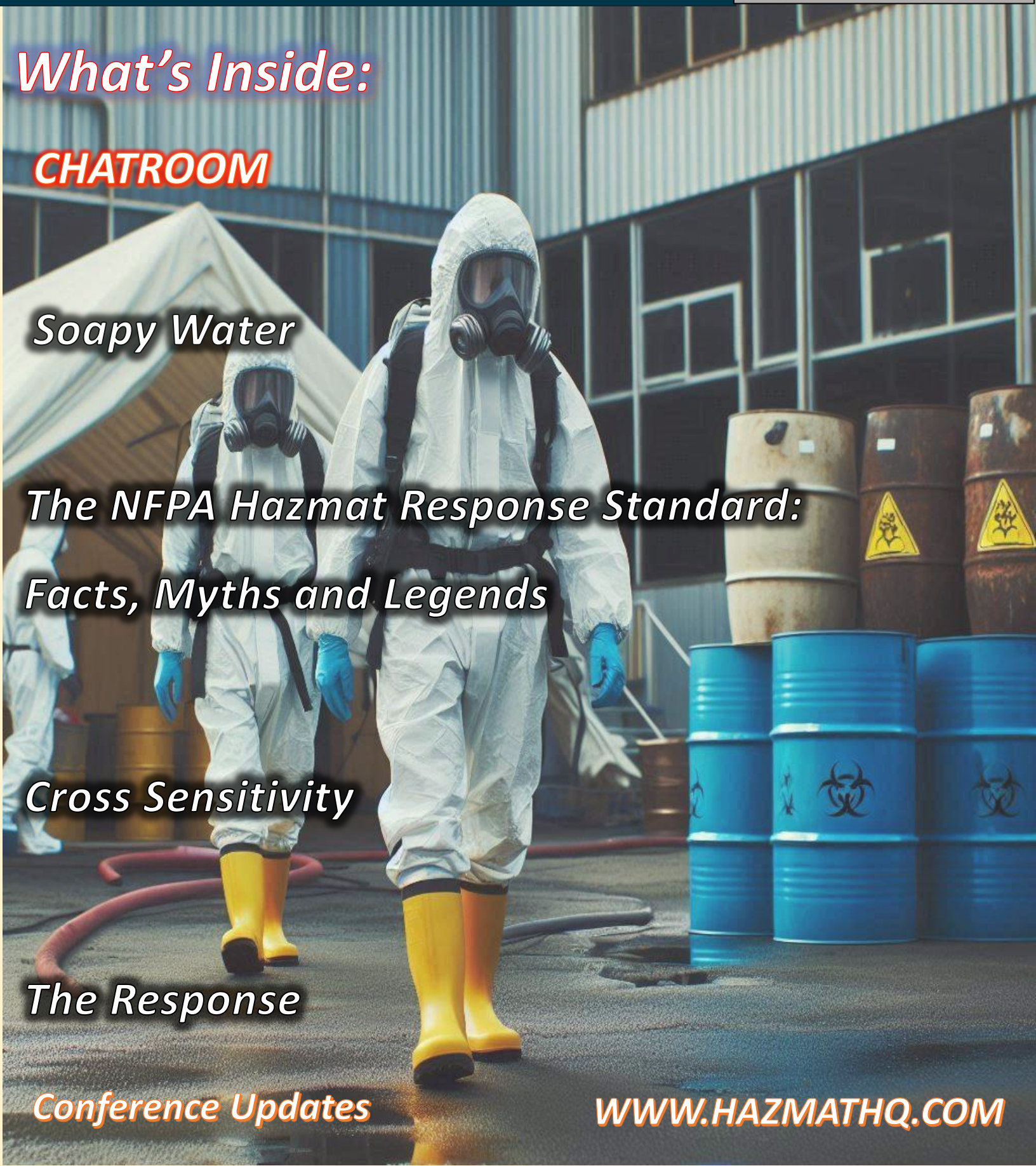

What's Inside:

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 If you would like to contribute an article want to advertise or have a question, please contact us at the following *submission@hazmathq.com*

2024 IAFC Hazardous Materials Conference: Where Expertise and Dedication comes together.

The 2024 International Association of Fire Chiefs (IAFC) Hazardous Materials Conference in Baltimore was not just an event; it was a testament to the unwavering commitment to safety and excellence in the field of hazardous materials management. The conference brought together experts, practitioners, and industry leaders from across the globe to share knowledge, discuss best practices, and forge a path forward in the ever-evolving landscape of hazmat operations.

The conference's agenda was robust, covering a wide range of topics pertinent to hazardous materials response. Workshops on the latest

detection technologies, case studies on recent hazmat incidents, and panels on regulatory updates provided attendees with a comprehensive understanding of current challenges and innovations in the field.

One of the highlights was the advanced training sessions, which offered the experience of cutting-edge equipment and techniques. These sessions underscored the conference's commitment to not only discussing theoretical knowledge but also providing practical skills that attendees could take back to their respective departments.

The exhibit hall was another focal point, showcasing the latest products and services in hazmat safety and response. Attendees had the opportunity to engage directly with vendors, ask questions, and see demonstrations of new technologies that could potentially revolutionize hazmat operations.

Networking opportunities abounded, with social events and informal gatherings fostering a sense of community among professionals who share a common goal. These interactions often lead to collaborations and partnerships that extend well beyond the conference itself.

As the conference concluded, it was clear that the exchange of knowledge and experiences had left a lasting impact on all who attended. The 2024 IAFC Hazardous Materials Conference was more than just a meeting of minds; it was a celebration of the spirit of service that drives the hazmat community.

In closing, we extend our heartfelt thanks to Chief Bob Royall IAFC HazMat Chair, Chris Hawley Conference Chair as well as both the hazmat and planning committees, and all the hazmat professionals who made the conference a resounding success.

SOAPY WATER

By: Kevin Ryan

Simplicity has always been one of the most effective tools in handling hazmat responses. Dynamic environments faced in the emergency response world demand simple and efficient solutions to solve problems encountered.

One of the most effective tools I have ever used is a bottle of soap and water. A soapy water bottle is the hazmatter's best friend when a gas is leaking from a cylinder or piping. Several incidents that the Baltimore City

FD has encountered have been mitigated with common sense and soapy water. On smaller scale incidents, carbon dioxide responses have increased in recent years. The use of CO2 and Nitrogen in restaurants, convenience stores and industry has become common place. A response in downtown Baltimore recently was triggered by a commercial fire alarm at a local restaurant. The first arriving crew quickly determined it was a CO2 and O2 alarm system that was ringing in. A hissing sound was heard in a cooler that contained beer kegs upon further investigation. The crew entered and their multi gas immediately

Carbon Dioxide Alarm Panel

showed O2 drop in the cooler. A crew member quickly recognized a keg that had a loose connection to the carbon dioxide supply and secured the leak. A bottle of soap and water was brought in to confirm the leak was stopped. A similar scenario played out in an East Baltimore convenience store. The carbon dioxide supply line to the fountain soda manifold came loose. The crew responding to that call saw a similar alarm system ringing in, had O2 drop on their meter and secured the manifold connection to stop the leak. A bottle of soap

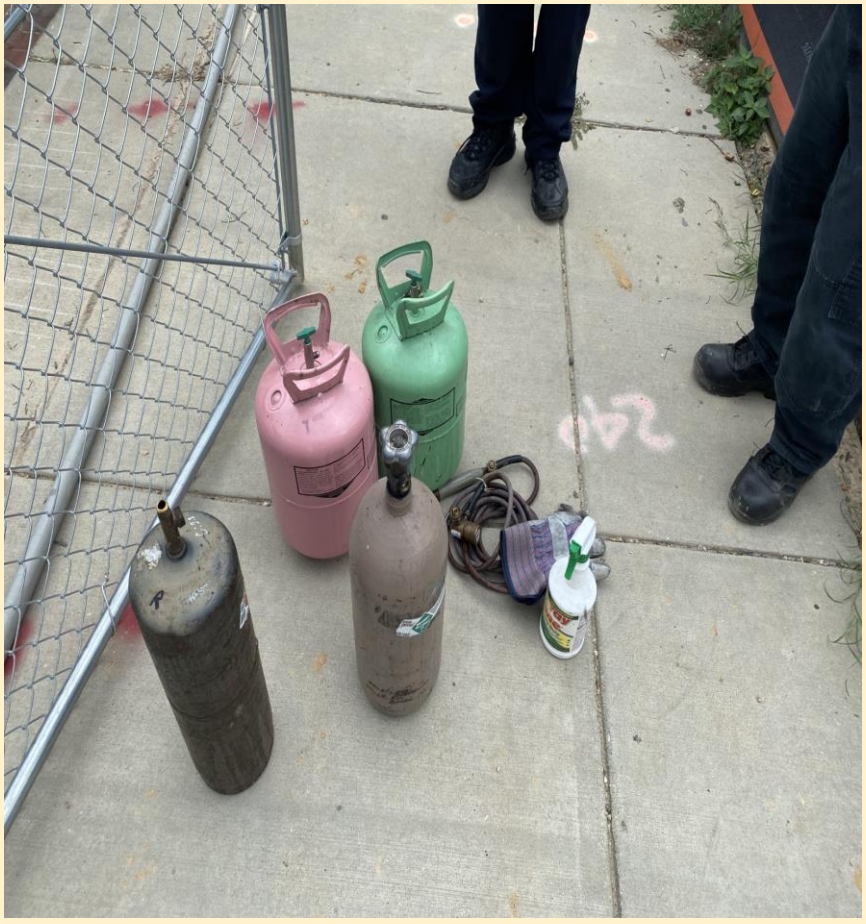
CO2 Cylinder

and water was also brought in to confirm the leak was stopped. You can find out more on CO2 hazards in this Hazmat HQ article by Mike Bloski from Manatee Co. FL. (https://www.hazmathq.com/2023/11/01/hazards-of-carbon-dioxide-dewar-containers-in-fast-food-type-occupancies/).

What makes soap and water so valuable? Soapy water can detect even the smallest of leaks from fittings and connections. Most multi gas meters would not be sensitive enough to see the smallest of leaks. The late Eugene Ngai even had a rate of leakage based on the bubbles created. I consider myself fortunate to have been in compressed gas classes he has taught over the years. The bang for your buck is bigger than any other piece of technology I have used. Dish detergent and water are all you need. A bottle of power wash is conveniently premixed for you to use as a leak checker. Every hazmat

team out there can put multiple bottles on their apparatus. You probably have dish detergent in your decon kit already. It is amazing that one of the most valuable tools you have costs you so little.

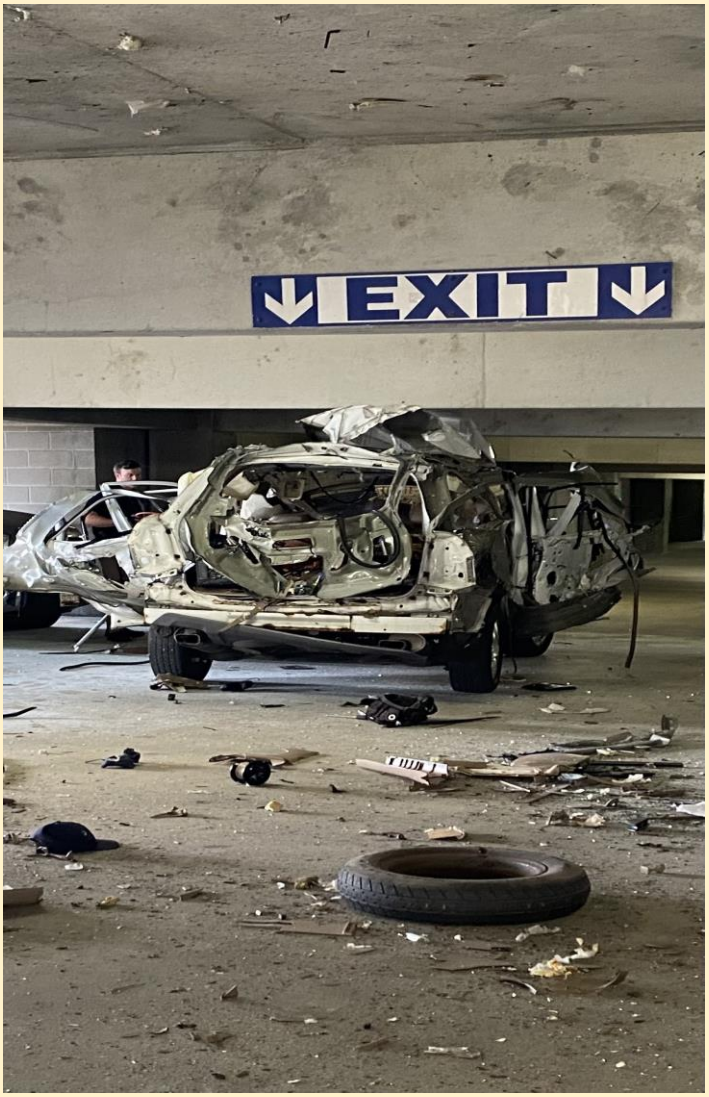
One of the highest profile incidents in the last couple of years for the BCFD Hazmat was an explosion in a parking garage. It was determined that acetylene leaking from a cylinder in an SUV used by an HVAC contractor was the cause. Several intact compressed gas



Cylinders from the Incident with a bottle of soapy water

bottles were still in the vehicle. The acetylene, nitrogen and refrigerant cylinders were removed to the exterior in an open construction lot for evaluation. The tool of choice for evaluation? You guessed it, a bottle of soapy water!!!

The acetylene cylinder was already empty. The remaining intact cylinders were quickly cleared of leak issues with soap and water. A multi gas meter may have sensitivity issues with this task. Soapy water is your best friend in a leak



SUV involved in Explosion

scenario. Keep a bottle handy and let the bubbles do the talking!!

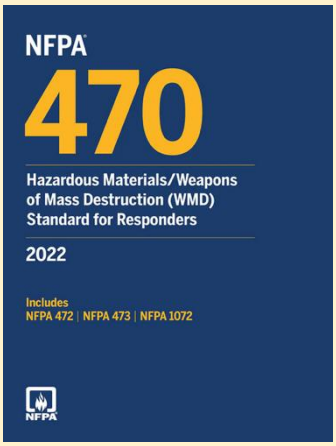
Kevin Ryan leads the Baltimore City FD Hazmat Operations Office. A 31-year veteran of the fire service with 26 years of experience in the world of hazmat response. He is a Level III instructor and adjunct at the BCFD Fire Academy.

The NFPA Hazmat Response Standard: Facts, Myths and Legends

By Rick Edinger,

The National Fire Protection Association (NFPA) has been around since the late 1800s and manages over 200 codes and standards. While these documents affect everything from electrical work to building codes to fire and hazmat training, many people don't understand how NFPA codes and standards are maintained or how to participate in the standards making process. Let's look at some facts, myths and legends specific to the NFPA codes and standards making process.

Fact: The NFPA Hazardous Materials/WMD Response Technical Committee is responsible for NFPA 470, *Hazardous Materials/Weapons of Mass Destruction (WMD) Standard for Responders.* The committee also maintains NFPA 475, *Recommended Practice for Organizing, Managing, and Sustaining a Hazardous Materials/Weapons of Mass Destruction Response Program.*



Fact: The NFPA hazmat standards underwent a consolidation process during the last revision cycle. The former NFPA 472 (training competencies), NFPA 1072 (Pro qual JPR training language) and NFPA 472 (EMS for hazmat) were all consolidated into NFPA 470 as of 2022. NFPA 475 which is a recommended

practice (“should” versus “shall”) remains a standalone document.

Myth: NFPA 470 dictates how to respond to a hazmat incident. False – NFPA 470 is not a response standard. This standard (using “shall” language) provides guidance on the *training* of hazardous materials responders. It is one of the few NFPA standards that provides both competency-based language as well as satisfying the professional qualifications community (ex. Pro Board) need for language written in job performance requirements (JPR) style. The committee strives to not be prescriptive in how to respond to a hazmat incident but rather provide guidance on the training needed to be proficient, safe and effective at various levels of hazmat responder competencies.

Fact: NFPA 470 is a minimum performance, *voluntary* consensus standard. It does not carry the weight of law or regulation unless adopted by reference by a political body or is mandated by an authority having jurisdiction (AHJ). Roughly half of the United States and all the Department of Defense (DoD) use professional qualification (Pro Qual) standards for certifying emergency responders. This means hazmat responders in these geographic areas and organizations are mandated to train, test and certify using the JPRs in NFPA 470.

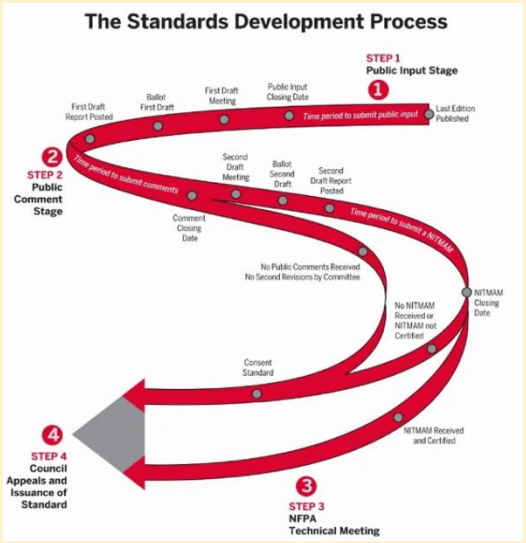
Myth: NFPA 470 does not supersede OSHA 1910.120, aka the federal Hazwoper regulations. OSHA regulations carry the weight of law where NFPA standards do not, unless adopted by an AHJ with authority to mandate adherence to local, state or regional requirements. Whereas OSHA 1910.120 was

last updated many years ago, the NFPA hazmat standard (470) and recommended practice (475) are revised every five years to allow the documents to remain timely and relevant to our response environment. Proficiency with the training competencies in NFPA 470 meet and often exceed those listed on OSHA 1910.120(q).

Legend: The NFPA Hazmat Response Committee was chaired for more than a decade by Chief John Eversole from the Chicago Fire Department. Chief Eversole is credited with bringing hazmat response to the forefront of emergency services awareness by advocating for better training and funding for hazmat response programs. Chief Eversole also simultaneously chaired the International Association of Fire Chiefs (IAFC) Hazmat

Committee, the only person to chair both committees.

Myth: The public has no say in what is included in NFPA codes and standards. This is inaccurate as all NFPA committees adhere to a strict process in developing and maintaining these documents. Included in this process are two transparent public input opportunities in which anyone can comment on the existing standard language and make suggestions for changes. Each one of these public inputs must be reviewed and acted upon by the committee. The results of each review are provided to the submitter and made available to the public via periodic reports during the document revision cycle.



Legends: The current NFPA Hazmat Response Committee has two plank holder members from the original committee, which formed in 1986. Charlie Wright, retired from Union Pacific Railroad, is a Member Emeritus and remains one of our go-to members for document review. Greg Noll, who succeeded John Eversole has chairman and served for 10 years in that role, remains an active member of the committee. Both provide a wealth of insight and history which serves to guide the committee in all activities.

Fact: NFPA committees are made up of volunteers. The NFPA carefully screens applicants and appoints members to

committees based on qualifications and the need to maintain a balanced group of members so that no one constituency or interest group may sway votes on document content. The NFPA Hazmat Response Committee is the second largest NFPA standards committee by numbers and is made up of a broad cross-section of hazmat professionals from public safety, industry, military, trainers and other interested parties (ex. book publishers). The size and make up of our committee ensures that we have a broad and diverse group of people who understand hazmat training and program management and recognize the needs of our responder community.

Myth: Non-committee members may not participate in the committee activities. This is false. All NFPA committee meetings are open to the public. Provided that you identify yourself

and your professional affiliation, anyone can attend meetings and participate in activities to include working on task groups to revise document language. The only restriction for non-members is that they are unable to vote on motions during the formal revision cycle meetings that occur every five years.

Legend: A foundation aspect for the training competencies in NFPA 470 is using a risk-based response posture. This simply means assessing the facts, science and circumstances of an incident to determine the safest and most effective approach to mitigating the incident. The theory of risk-based response was conceived by Ludwig Benner, Jr. Mr. Benner was an investigator for the National Traffic Safety Board (NTSB) in the 1970s and recognized from his investigations that firefighters and civilians were being

unnecessarily injured and killed due using a firefighting approach to hazmat incidents. Mr. Benner developed the risk-based response concepts and associated D.E.C.I.D.E and GEBMO models for decision-making during hazmat incidents.

Fact: People needing access to the codes and standards language need not purchase the document to view the content. Each code and standard have a view free access link on the document webpage. Simply go to the NFPA website at NFPA.org, type in the document number (ex. NFPA 470) in the search box, navigate to the Current and Prior Editions area at the bottom of the page and click the View Free Access link. Free access users are restricted to view only status meaning that you cannot copy, cut, paste or print the document contents. People needing better access may

subscribe to NFPA Link which provides full access to the codes and standards.

NFPA 470 and 475 are entering the next revision cycle early in 2025 with an expected next publishing date of early 2027. The public comment period for the upcoming revision cycle is open until September 6, 2024. We strongly encourage anyone who seeks input on changes to the documents to submit their comments now. The link to submit can be found on the document page under Next Edition.

Our committee encourages public input and participation in our meetings to ensure that our subject matter experts are writing the best training and program management guidance available for hazmat responders. These are

your documents; our job is to maintain them in the best way possible.

Rick Edinger, EFO, has served in public safety for more than 50 years as both a volunteer and career firefighter, medic, and hazmat responder. Following his retirement in 2018 as Deputy Chief of a large, all-hazards fire and EMS department in central Virginia, Chief Edinger (ret.) remains active in hazmat response and serves as the Chairman of the NFPA Technical Committee for Hazardous Materials Response Personnel. He continues to develop training course work, write, and provide instruction in the fire service and hazardous materials response fields. In addition to his hands-on experience, he holds a Bachelor of Science degree in Fire Science Technology from Columbia Southern University and is a graduate of the National Fire Academy's Executive Fire Officer Program.

The conundrum of cross sensitivity!

By Toby Bevelacqua

Let's first define cross sensitivity or sometimes called restrictive gases, or interference gases, either name suggests that when a gas other than the target gas has entered the instrument, that the reading is NOT the gas that the sensor is designed for, but rather a gas which the instrument responds to at some degree. An example of this and the most prevalent is hydrogen entering the carbon monoxide sensor. In this case the carbon monoxide sensor thinks hydrogen is CO and responds to that cross sensitivity. If the operator does not know about cross sensitivity or doesn't consider it, valuable time during the hazmat investigation will be lost.

Many hazardous vapors and gases interfere with the proper operation of monitoring instruments. These interferences can result in decreased instrument sensitivity or false readings as the one described above. For example, silicone sprays used to clean a variety of surfaces can attach to the Pellistor bead in your LEL sensor reducing the sensitivity of the LEL and giving you a false sense of security as the numbers will be muted. This same result on the LEL sensor occurs when metal fumes have entered the instrument changing the resistance values of the Catalytic Bead array. Humidity, and temperature changes can interfere with the readings of a photoionization detector, causing the window where the ultraviolet light comes out to have condensation, skewing the light energy thus reducing the electron volts

and lowering the potential electron release. High levels of CO_2, over a period of time, may degrade the oxygen sensor. Even your oxygen sensor has cross sensitives, not many, however the responder should be aware of these inconsistencies and plan your mission accordingly.

Cross Sensitivities

SENSOR	NH_3	CO	Cl_2	ClO_2	H_2	HCl	HCN	H_2S
Ammonia	100%	0%	-50%	N/A	0%	0%	5%	25%
Carbon Monoxide	0%	100%	-10%	N/A	22%	3%	15%	5%
Chlorine	0%	0%	100%	N/A	0%	2%	0%	-3%
Chlorine Dioxide	0%	0%	60%	100%	0%	0%	0%	-25%
Hydrogen	0%	20%	0%	N/A	100%	0%	30%	20%
Hydrogen Chloride	0%	0%	6%	N/A	0%	100%	35%	300%
Hydrogen Cyanide	0%	0%	-20%	N/A	0%	0%	100%	10%
Hydrogen Sulfide	0%	1%	17%	N/A	0.1%	0%	10%	100%

Abbreviated table of selected CS from Science Officer Technical Manual by AS Bevelacqua

But what we really want to talk about is the cross sensitives or interference gas/vapors (and included are inhibition gases) that you will see with electrochemical sensors. These sensitivities have caused responders to make inappropriate decisions based upon what they thought was occurring in the test environment (for discussion here the test environment is the environment that you are measuring to prove the level of safety). One simple overarching rule is that when you see the numbers especially with your electrochemical sensors the question to ask is “do they make sense”. One primary example is when extremely high levels of hydrogen sulfide is present you may not get a true reading however if you have a cyanide sensor within your instrument you will see the cyanide readings extremely high. This is

due to the cross sensitivity of the cyanide sensor and oversaturation of the hydrogen sulfide sensor.

In these cases of cross sensitivity, or better yet these types of HazMat alarms, one must ask whether you are dealing with a mixed gas environment or a single gas situation. The reason this is important is that cross sensitivities, the ones that are known to certain electrochemical sensors, have a variety of proportional interferences. What I mean by that is you may get a one to one, or a one to 10, ratio of sensitivity or you may get negative numbers. Mixed gases sometimes are displayed as the sum of those gases as the instrument interprets the chemistry and if the gas gives a negative sensitivity, then that may

offset the positive display of the electrochemical sensor. You may see positive increases and negative decreases on your display. An example of this is Sulfur dioxide has a negative response to nitrogen oxides, so when a sulfur dioxide sensor specifically sees nitrogen dioxide at say the same time as reading the SO_2 because of this negative response at low parts per million you will see zero on your meter thinking that the environment is safe. Additionally at higher concentrations of the Sulfur dioxide your readings may be skewed negatively when NO_x are present.

Depending on your instrument, it has a filter that tries to reduce the amount of interference to a specific chemical sensor. However, one must remember that every sensor has some level of cross sensitivity where if the machine has not been able to filter it out then there is going to be a reaction on the electrode giving you a reading. It is up to you to figure out is it a false reading?

All hazmat incidents have their challenges, one of the largest challenges is going to be the metering of the environment to identify potential hazardous substances and considering the area safe or to what degree it is safe. Some of the common sources of cross contamination or cross sensitivity or interference are going to be things like vehicle exhaust, carbon monoxide, sulfur oxides, nitrogen oxides, as examples. Cleaning chemicals (this would include your household cleaning chemicals as well and hand sanitizers – as an example some of the air fresheners have negatively skewed the oxygen sensor) can cause a variety of different interferences which will cause your instrument to alarm. Emergency generators (giving off CO, SO_x NO_x), battery chargers (Hydrogen the biggest

producer with liquid acid batteries, Computer UPS systems have been reported to produce mild levels of interference gases to the CO sensor). Within the general construction industry, site equipment and fuels all can lead to the alarm being sounded.

Another phenomenon that occurs is when you have a chemical that will inhibit the chemistry within the sensor. What is happening within the sensor is that the sensor does not respond to the target gas after it has been exposed to the inhibitor gas at the same time or in close time proximity to the sensor it will not react to the target gas. This inhibiting phenomenon can cause your meter not to respond for several days after incident. Hence a good reason to bump test before and after any meter use. An

example of this is chlorine sensor can become “desensitized” in the presence of Hydrogen Sulfide. In other words, the chlorine sensor may not work after exposure to H_2S.

OK so now that you have read this now, that you see this now, that you have digested this information; you're saying well what the hell! To be honest with you, it's not that bad. First of all, you must look at all the numbers you can't just rely on one specific sensor. How I like to look at an environment from a gross detection standpoint is to look at the volumetric first then the PID, then the electrochemical sensors. This gives me a good overview of the environment.

My volumetric sensors are the oxygen sensor and the LEL sensor. Both are based upon the

volume in the room or the environment. Now I will say the oxygen sensor is not a good sensor to describe a hazard. However, if I see my oxygen drop below 20.8% I am concerned don't wait till you get to 19.5% you should be concerned at 20.7% and do something!

The next sensor is my LEL sensor. Now with my LEL sensor even though I am blind to about 500 parts per million on the bottom end it will give me a decent amount of information in low level environments. Understanding that this sensor is giving me the level of flammability concern.

Next is my organic vapors, my PID numbers. If I have 10 parts per million on my VOC’s there is

a chemical in the room. At 25 parts per million I should take some form of an action that may be ventilating the space, or ensuring my personnel are breathing off their air pack. At 50 parts per million which is first alarm, I have moved towards 50% of the time weighted average for 50% of the chemicals that are out there. At 100 parts per million I've exceeded all time weighted averages. At 200 parts per million or second alarm I am approaching IDLH or LEL conditions.

From there I move on to my electrochemical sensors, specifically my carbon monoxide sensor. Back in the old days, this was considered a poor man's PID. The reason is because the carbon monoxide sensor has cross sensitivities to hydrogen, and petroleum

products. If you're in an environment that has either hydrogen or petroleum, consider the number on your carbon monoxide sensor and your LEL.

As stated, all electrochemical sensors - let me say all sensing technologies - have areas that are limited. Electrochemical sensors, oxygen sensors, LEL sensor, PID's all have their limitations. It is understanding what these limitations are and how we can use those limitations to our advantages during a hazardous materials event. When reading data from your instrumentation always question do these numbers make sense. Do not take them at face value. There is science behind all these sensors and all these sensors are performing if maintained properly to the level of how they

were designed. It is up to you to consider the scene, instrumentation data, and what people are telling you happened within the environment. All these data points are going to help you decide if you I have a true number on my sensor or is there a possibility of cross

Armando S. Bevelacqua is 37 plus year veteran of the fire service. Retired from City of Orlando Fire Department, Orlando Florida where he served as Chief of Special Operations, Homeland Security and Emergency Medical Services Transport.
Armando also teaches at local colleges, instructing Fire and EMS Classes. Armando lectures to fire departments throughout North America, Canada and Europe. He is an adjunct instructor through the Department of Defense as well as with several federal agencies involved with forced protection.
Chief Bevelacqua serves on several federal, state and local committees. He held membership to the Inter-

Agency Board (IAB) for Training and Exercise development. Technical Consultant and member to the NFPA 470 (472, 1072, 473), and 475 Technical Committees along with representation on the ASTM standards development committee for emergency response. Chief Bevelacqua has assisted in the development of standards and protocols such as with Rocky Mountain Poison Control for the development of standardized Medical Protocol for the WMD event and for the State Department for WMD training of embassy delegates.

His latest endeavor is to create educational videos and comics for the first response community. Educating new and seasoned responders to the ever-advancing technologies that are entering the first response arena.

The Response

By Rob Mercer

Things never happen in a way we anticipate. This fact could very well be called job security for those in Public Safety, as most don't wake up with a scheduled emergency for the day. Things just happen when and how they do. The same can be said for when we receive those calls, as we simply don't pick when calls for service occur. Otherwise, the largest hazardous materials response of my 19 year long career would not have occurred while I was over 800 miles away. It did though. At 7:00 PM on the day I arrived in Baltimore Maryland for the IAFC Hazmat Conference, the Department was rolling out to an acid spill on the interstate.

For context, we are a 112-member department running out of six stations and staffing an Airport Station located in South Georgia. As a Regional Response team that receives funding from the State in exchange for responding to other jurisdictions as needed, we cover a very large portion of southwest Georgia. Despite covering hundreds of miles of highway, hundreds of industrial sites, and countless acers of farmland, we run relatively few technician level responses. Despite a lack of frequency, our personnel reacted quickly and efficiently when notified of an incident at an initially unknown location.

As with any hazardous materials response, phone calls started going back and forth. Notifying the Shift Battalion, Fire Chief, State Coordinator, and trying to get more

information from the calling agency. We set up a research station with laptops and iPads in the lobby of the hotel and got to work figuring out what we could. It took approximately 45 minutes just to find the incident, and then it was in an entirely different county than previously reported. The driver was told numerous times to notify 911 so we could get to his location that way. I'm not certain he ever did. Once we learned he initially stopped at a rest area along the interstate, we knew his general location and notified the Fire Chief and Emergency Management Agency Director for the suspected county. They initiated a response and located the incident 38 miles North of where it was initially reported to be. Once the product was confirmed, copies of the shipping papers were texted to us along with a series of

questions about the product's properties and concerns.

Personally, I had never heard of fluorosilicic acid (UN: 1778) before this incident, so I didn't have any of the answers to the questions being directed my way. The more I tried each of the usual computer based technical references and found little to no information, the more anxious I became for the direction of the response. Coincidentally and fortunately, I was in the lobby of a hotel that was hosting the annual IAFC Hazardous Materials Conference. Scanning the room, I noticed one individual with experience that I felt I could trust, Chief Ben Herskowitz sitting a few chairs over. I walked over and admittedly interrupted a conversation to ask if he was familiar with the product we were responding to, and he said he

was. Chief Herskowitz retrieved his computer from the hotel room and proceeded to activate the very hazmat program he was presenting at the conference later in the week. To spoil the story a little, I quickly became a fan of his ***Tele Hazmat program***.

At approximately 8:00 PM, we were officially requested to respond by the AHJ where the incident was located. The incident was 33 miles from where our Hazmat Response Trailer is housed, so it was going to be a while before our personnel arrived on scene. A standard response for us includes the Hazmat Truck and Trailer, a Pumper, and a Command vehicle. This extended response allowed us and the Tele Hazmat program with several experienced hazmat technicians to do research and plot out the incident. A shared online file was set up

and continuously updated as new information was confirmed. At 8:15 PM, the Pumper went out-of-service on the interstate, delaying the arrival of the four of the hazmat technicians on board. A second Pumper was dispatched, picked up the personnel, and continued to the scene. Mutual-Aid was also requested from a second local department for additional technicians to supplement our own. Once

everyone arrived on scene and conducted a recon of the trailer, it was determined that one of the fifteen 250-gallon totes had a leak. It was of course, the tote at the very front of the trailer. Fortunately,

this incident location was removed enough from the main lanes of the interstate to not impede traffic, was at a very low use exit, and had spilled into an area comprised of concrete and sand for the most part. The container had lost its contents and the spill had reduced to residual amounts of acid dripping off the back of the trailer. The decision was made to place compatible absorbent materials on the ground around the back of the

trailer and standby for the contracted company to respond for mitigation. These decisions led to no further spills or mitigation efforts being required by our team.

With any Hazardous Materials response, especially from a department that doesn't respond to numerous technician level responses each year, we had some takeaways from this incident that I want to share. The first and biggest take-away for those who responded to the scene was their level of impressment with the Tele Hazmat operation. Our personnel have not seen that level of data, decision making assistance, or professional assistance in any other emergency we have responded to. We had a Chemist, two Hazmat Specialist, and a Tox Medic on a zoom call for over three HOURS, and Chief Herskowitz stayed

in the hotel lobby with me till nearly 1 AM. There were very few questions about fluorosilicic acid that were left unanswered and that enabled those on scene to do their job with confidence.

Truly paired up with the first takeaway is the importance of networking and being familiar with those who have more experience and knowledge in the industry. Had I and other personnel not previously attended the IAFC Hazmat and other conferences, I never would have seen and recognized anyone as potential help. The only way we can learn the who's who in this industry is to be present and involved. Join the social media groups, go to the conferences, never miss the hosted networking events after hours, and start learning who you can trust. This allows you to establish

professional contacts, and friendships that can grow through the years and make you a better responder, team leader, and instructor.

What I enjoyed most about this whole scenario was that a relatively new technician was attending the conference with me. While he would have rather been on scene doing work, he got to witness the selflessness of industry experts willingly to make our call safer and our decisions more informed at a time when they could have been enjoying their free time. The level of excitement and buy-in this incident created within that technician could never be acquired any other way and I hope that stoked fire of inspiration burns brightly for decades. So, we entered into our day 1 of the conference exhausted, grateful for a community of support, and excited to learn

more during our time with the most amazing people in Hazmat. I leave you with one challenge, to find a conference you can attend. It may be the next IAFC Hazmat Conference, a regional conference near you, or a state level symposium. Make sure you are actively pursuing something that builds your knowledge and experience in an increasingly complicated response discipline.

Robert Mercer has worked at the Valdosta Fire Department since June 2005 and has been the Special Operations Captain over Hazardous Materials and Technical Rescue since 2021. He has a Bachelor's of Applied Science in Fire Service Administration from Waldorf College, completed the Managing Officer Program at the National Fire Academy in 2015, and is an Adjunct Instructor for Hazardous Materials courses at the Georgia Fire Academy.

CONFERENCE DATES

Pennsylvania Hazardous Materials Conference

Aug 22 – 25 2024

Virginia Hazardous Materials Conference

Sept 17 – 20 2024

Florida Hazmat Symposium

Jan 14 – 17 2025