Planning ...Training ... and Preparation are the Keys to Success

By: David "Safety Man" Bennett

My wife and I went camping a few nights ago and the low temperature was supposed to be 39 degrees with a forecast of clouds and rain moving in during the morning hours. With that information, we knew a couple of things had to be accomplished before nightfall, which was in an hour. We had to clear a site to make camp, set up a tent, get a fire started and gather enough firewood to last the night for heat. My wife and I have camped together many times and I have trained her on these essentials. Not only have I trained her, she has also practiced each of these safety items many times. She knows how to build her own shelter and she can start a fire with a knife and a flint. She would know what to do and be prepared in almost any situation.

Proper planning, training and preparation is important in your workplace as well. Let's examine the second element in the Process Safety Management program covered under the C.F.R 1910.119 Appendix C. This element is the Employee Involvement in Process Safety Management and is covered under Section 304 of the Clean Air Act. In my opinion, this element is of utmost importance. It involves the training of your employees in the workplace and how they are going to respond in a hazardous situation.

When I’m in class, I always pose this question: “Do your supervisors know what to do in a chemical release?” The answer I frequently receive is “probably not”. The supervisors that oversee evacuating employees to safety have not been trained on how to handle a situation involving a hazardous chemical. We also run a lot of tabletop scenarios with plant supervisors and fire departments in our classes. At the end of the training, we generally conclude that lack of training and practice are the reasons for human error. Making poor decisions in hazardous atmospheres is a major contributor to a worst-case scenario outcome.

The best way to avoid a detrimental outcome is through training with all employees that oversee others in the plant. Proper training will help them make better decisions under stressful circumstances when it comes to the safety of employees.

Furthermore, it is key to include various scenarios. I like to offer three or four different ways to approach an event at your plant. This will prepare you for a couple options instead of just always approaching the same one. Hazardous situations, like severe weather and outdoor elements while camping, are unpredictable. Because you do not know exactly which direction your hazardous event will unfold, it is imperative to have options and be properly trained to use any and all of them if the situation warrants it. The more training you do with upper management and supervisors, the more prepared you will be if a hazardous situation presents itself at your plant.

And the same was true for my wife and I on our camping adventure. We were prepared. We had practiced. Thus, we survived the severe weather and came out of it with a great story to tell. Proper training and practice are the keys to success!

Don’t Be Late!

By: Blake Vandegrift

It’s 8 o’clock, and you’ve been sitting at your favorite restaurant for the last three months waiting on your date to show up! Seems absurd right? No one is crazy enough to wait three months for a dinner date. And no one should be crazy enough to wait three months past the due date to update important safety documents. Waiting to update could prove hazardous. Just like a date making you wait three months could prove hazardous to your love life.

Whether you’re going on a date with a loved one or your PSM revalidation periods are coming up, you always want to be on time, or early! A common issue throughout the auditing process is that revalidation dates are frequently missed, many times by months.

Your Process Hazard Analysis (PHA) is to be revalidated at least every five years, Compliance Audits every three years, and your Risk Management Program (RMP) needs to be resubmitted every five years (or more). If there is a change that affects the PHA and/or there was a revised off-site consequence analysis performed, then you will need to make an update before the five-year deadline. Additionally, if a change is made to the operation of your equipment, complete your Management of Change and update your applicable elements of Process Safety Management (PSM) even if your deadline is not upon you.

Don’t be late. Safety deadlines are in place for a reason and are meant to keep everyone at your facility safe. And it’ll be safer if you show up to dates on time too!

Training Opportunities

We provide both on-site or off-site classes and are willing and able to create programs customized to your needs.

For your convenience, we’ve provided you with a list of pre-organized classes (see page 3). Or, if you prefer a more personal approach, give us a call at 1-918-274-8639 and let us work a little magic for you!
The Level I Ammonia Refrigeration Operator Training is designed for all personnel who manipulate the ammonia refrigeration system. After completing this course, you should have a basic understanding of ammonia refrigeration principles (classroom) and demonstrate proficiency and competency with the operating procedures for your facility. You will be awarded a certificate of completion after satisfactorily passing the examination given at the end of class. Refresher training should be conducted every three years or more often as necessary depending on the complexity and operation of the ammonia system.

INSTRUCTOR
James Price, Sr., RAI

DURATION
32-hour Course — March 2 - 5, 2020

TOPICS COVERED / SCOPE OF COURSE
• Theory of refrigeration including refrigeration cycles
• Fundamentals related to the design and operation of a refrigeration system
• Main components that make-up a refrigeration system
• Condensers and the effect weather has on the operation
• Compressors and the variations in operation
• Piping and controls
• Engine room safety covering proper ventilation and relief valves
• Purgers and purging of non-condensables from the system
• Properties of ammonia; how to properly handle it; and the use of personal protective equipment
• Methods of defrosting
• Troubleshooting your system
• Water treatment, including different types of fouling that can cause problems

WHO SHOULD ATTEND
Refrigeration operators and technicians, refrigeration and maintenance managers, safety, production, maintenance, security and other personnel wanting to gain a better understanding of ammonia refrigeration.

REGISTRATION INVESTMENT – $875
Successful completion of the class provides attendees with 32 professional development hours (PDH)

Investment includes materials and continental breakfast. Class size will be limited to 8 participants to ensure the highest quality of hands-on experience.

COURSE LOCATION
Isotherm, Inc.
7401 Commercial Blvd., E.
Arlington, TX

CONTACT & REGISTRATION INFORMATION
Industrial Consultants
PO Box 833 • Owasso OK 74055
www.ammonia.com
Tel: 918-274-8639 • FAX 918-274-8816
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Industrial Consultants, LLC has been training safety and operating personnel for more than thirty years. Thousands have benefitted from our current, comprehensive, complete and accurate training.
# 2020 Training Schedule

**Your Compliance Connection**

PO Box 833 • Owasso, OK 74055
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Email: info@ammonia.com

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## February 2020

**Fort Wayne, IN**
- Feb. 3-5: 24 Hr Emergency Response
- Feb. 6: 8 Hr ERT Refresher
- Feb. 7: 8 Hr ERT Refresher

**Plymouth, MN**
- Feb. 11-13: 24 Hr Emergency Response*
- February 13: 8 Hr ERT Refresher*
- February 14: 8 Hr ERT Refresher*

## March 2020

**Arlington, TX**
- Mar. 2-5: 32 Hr Level I Refrigeration Operator

**Kulpsville, PA**
- Mar. 24-26: 24 Hr Emergency Response
- Mar. 25: 8 Hr ERT Refresher
- Mar. 26: 8 Hr ERT Refresher

## April 2020

**Bridgeville, DE**
- Apr. 6-8: 24 Hr Emergency Response
- Apr. 7: 8 Hr ERT Refresher
- Apr. 8: 8 Hr ERT Refresher
- Apr. 9: 8 Hr Incident Command

**Warre_nvile, IL**
- Apr. 21-24: 32 Hr Level I Refrigeration Operator
- Apr. 21-23: 24 Hr Emergency Response
- Apr. 23: 8 Hr ERT Refresher
- Apr. 24: 8 Hr Incident Command
- Apr. 24: 8 Hr ERT Refresher

## July 2020

**Warre_nvile, IL**
- July 21-23: 24 Hr Emergency Response
- July 23: 8 Hr ERT Refresher
- July 24: 8 Hr Incident Command
- July 24: 8 Hr ERT Refresher

## September 2020

**Clive, IA**
- Sept. 15: 8 Hr ERT Refresher
- Sept. 16-18: 24 Hr Emergency Response

**Plymouth, MN**
- Sept. 22-24: 24 Hr Emergency Response*
- Sept. 24: 8 Hr ERT Refresher*
- Sept. 25: 8 Hr Incident Command*
- Sept. 25: 8 Hr ERT Refresher*

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## Select Class of Interest to Access Details and Registration Information

### October 2020

**Mechanicsburg, PA**
- Sept. 28-30: 24 Hr Emergency Response
- Oct. 1: 8 Hr ERT Refresher
- Oct. 2: 8 Hr ERT Refresher

**Yuma, AZ**
- Oct. 6: 8 Hr ERT Refresher

**Warre_nvile, IL**
- Oct. 20-22: 24 Hr PSM/RMP Workshop
- Oct. 20-23: 32 Hr Level I Refrigeration Operator
- Oct. 22: 8 Hr ERT Refresher
- Oct. 23: 8 Hr Incident Command
- Oct. 23: 8 Hr ERT Refresher

## November 2020

**Middle River, MD**
- Nov. 3-5: 24 Hr Emergency Response
- Nov. 4: 8 Hr ERT Refresher
- Nov. 5: 8 Hr ERT Refresher

**Hillard, OH**
- Nov. 11-13: 24 Hr Emergency Response*
- Nov. 13: 8 Hr ERT Refresher*

## December 2020

**Santa Maria, CA**
- Dec. 7-9: 24 Hr Emergency Response*
- Dec. 10: 8 Hr ERT Refresher*
- Dec. 11: 8 Hr ERT Refresher*

**Bridgeville, DE**
- Dec. 8: 8 Hr ERT Refresher

*Special Pricing Applies to these classes.

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## About Us...

Industrial Consultants, LLC is celebrating our third decade of service providing the training needs for companies like yours. Companies that must comply with health and safety regulations enacted by the Occupational Safety and Health Administration and the Environmental Protection Agency.

Industrial Consultants, LLC is focused on the cold storage and food industries, due to the large number of refrigeration systems using anhydrous ammonia, for which safety and health regulations are very strict. These regulations are ever changing, with nearly every aspect of your business being impacted by OSHA and EPA. Expertise is needed at all levels to ensure compliance. We continue to provide this expert assistance and guidance to help meet all your compliance needs.

We are totally dedicated to assisting you in achieving your compliance goals, taking the mystery out of compliance, and helping you gain control of your safety and training needs.

Let us be Your Compliance Connection™.

### Compliance Without Confusion:

- Emergency Response Training
- Incident Commander Training
- Ammonia Refrigeration Training
- RETA CARO/CIRO/CRES Training
- Process Safety Management (PSM)
- Process Hazard Analysis (PHA)
- Compliance Audits
- EPA Risk Management Programs
- Safety Support Services
- Boiler Operator Training
- Plant Optimization Programs
- Mechanical Integrity Inspections

Each of these widely differing programs must meet specific OSHA and / or EPA requirements for training your operating and safety personnel. This is the essence of compliance. However, continuing annual compliance is certainly not simple. Industrial Consultants, LLC can take the mystery out of compliance and help you gain control of your safety and training needs.

We have been training safety and operating personnel for more than 30 years. Thousands have benefitted from our current, comprehensive, complete and accurate training. You may rely on Industrial Consultants, LLC to keep your organization current on the ever changing OSHA and EPA training requirement for your facility.

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**Cancellation Policy**

Industrial Consultants reserves the right to cancel any course due to insufficient enrollment. Students enrolled in a cancelled course are entitled to a full refund or the payment may be transferred to another course. If you choose to withdraw from a course, you must do so no later than 15 days prior to the course start date. No refunds will be made if the student drops the course after this time. If you fail to cancel and do not attend the class, your payment will be forfeited, and may be subject to a cancellation fee. A person who is registered and is unable to attend, may at no additional cost, send a substitute.

rev 01-29-20