

# COMPLIANCE CONNECTION

Mar/Apr 2018

Vol 2 Issue 2

A bimonthly newsletter designed to help you navigate the ins and outs of compliance and the safe practice of industrial refrigeration.

## SPRING - Mother Nature's time of good & bad news

Spring is the time of new beginnings, winter thaw, floods, tornados and the time to take a good, long look at your incident command status, emergency response and process safety programs.

### **Incident Command**

The reality of a chemical incident, fire, tornado, or some other type of disaster is typically addressed administratively.

However, the person who must take control of the incident to protect the employee, community, and environment may not be as prepared as they should be. Many times the personnel trained to take command of the ammonia incident is expected to take control of the other incidents as well. Therefore, we must remember that those types of incidents create a different complexity and expectations.

The incident commander must identify and train for all anticipated incident situations specific to their geographic area. This individual (responsible for all incidents) must be familiar with the response planning to deal with the different strategies and tactics in order to assure the safety of everyone involved.

A successful incident commander:

- Updates response plans on a regular basis
- Maintains active training for him/herself as well as the incident response team
- Establishes and maintains clear communication both internally and externally

### **Emergency Response & Process Safety Management**

For many, the spring of 2018 is the time to improve their emergency response and process safety management programs.

Many people have produced a list of action items that might include some training for the ammonia refrigeration operators so they can get the coveted RETA certification - CIRO or CARO. Another option might be to do some table top exercises with your emergency response and supervisory personnel to help assure the safety of all personnel at the facility. And finally, another opportunity for improvement is to review your safety programs, training for employees and any other mandatory submission programs so the due dates do not slip by and cost you unnecessary stress due to compliance citation possibilities.

What is on your list? Take some time to review your program and prioritize your spring cleaning options. Once you've set your priorities, identify the actions and timing required to make those priorities a reality and schedule your activities. Let's raise the bar for the ammonia industry in 2018 through good training and a strong dedication to safety.

## Mark Your Calendar!

Please make note of the following . . . we want to see you there!

**April 23-24, 2018**  
**Refrigeration Review Course for RETA Certification Prep**  
Ft. Smith, AR

*See attached details.*

*If you are planning to become RETA certified soon, this review course is for you. Register at [www.ammonia.com](http://www.ammonia.com).*

*Note: Registration includes attendance of the 2018 DFW/ Ft. Smith, AR RETA Regional Conference.*

**April 24-25, 2018**  
**2018 DFW/Ft. Smith, AR RETA Regional Conference**  
Ft. Smith, AR

*See attached details.*

**April 24-27, 2018**  
**SOPs, PMs & MOPs Workshop**  
Chicago, IL

*See attached details.*

**Oct. 23-25, 2018**  
**Valve Workshop**  
Chicago, IL

*See attached details.*



**Your Compliance Connection™**

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# Industrial Consultants

Your Compliance Connection™

## 2018 REFRIGERATION REVIEW COURSES

**April 23-24, 2018  
Ft. Smith, AR**

**August 26-27, 2018  
Orlando, FL**

Instructor  
Chris Harmon, RAI  
Industrial Consultants



This special two-day course is held in conjunction with two RETA Chapter Hosted Regional Conferences:

**DFW / Ft. Smith**  
**Ammonia Refrigeration Regional Conference**  
Ft. Smith Convention Center  
Ft. Smith, AR  
April 23-24 in Ft. Smith, Arkansas  
Room Reservations at the Courtyard by Marriott:  
\$89/night (plus applicable tax)  
*Click here to be connected to the on-line reservation desk and take advantage of the negotiated group rate.*

And

**Central Florida**  
**Ammonia Refrigeration Regional Conference**  
August 26-27, 2018  
Embassy Suites by Hilton Orlando Lake Buena Vista S.  
Kissimmee, FL  
Room Reservations: \$119/night (plus applicable tax)

This course is designed as a review course addressing materials that may be included in the RETA certification exam(s). This course is **not** intended to walk the attendee through the exam(s).

**See Next Page For Full Course Outline**

Who Should Attend

Industrial refrigeration operators • technicians • consultants  
end-users • plant managers • plant or process engineers

Registration Investment \$395

*Successful completion of the class provides attendees with 16 professional development hours (PDH)*

Investment includes lecture materials (review textbook) and daily lunch. It is recommended for students to have reviewed and bring the following textbooks: *RETA Industrial Refrigeration One and Two (IR1 and IR2)* and *Basic Electricity 2 (BE2)* - available at <http://www.reta.com>.

**Special for attendees** — All review course attendees will be enrolled in the Regional Conference associated with the class for which they are enrolled. Regional Conference enrollment provides for (but may not be limited to) receipt of Regional Conference attendees materials as well as participation in Exhibit Hall hours.

Enrollment is limited to 30 students.

Orlando, FL  
August 26-27

[Click Here](#)

REGISTER  
ONLINE  
TODAY!

Ft. Smith, AR  
April 23-24

[Click Here](#)

Contact Information

For questions regarding the Refrigeration Review Course, please contact:

**Industrial Consultants**

**PO Box 833 • Owasso OK 74055**

**www.ammonia.com**

**Tel: 918-274-8639 • FAX 918-274-8816**

**Email: info@ammonia.com**

RETA CIRO or CARO Certification Exam  
Course attendees may elect to sit for a RETA certification exam (CIRO or CARO) following the course. Test candidates must preregister (*submitting all paperwork and payment*) for the certification exam at least 2 weeks in advance of testing date. **For details on how to register and arrange for your RETA certification exam, go to the RETA website at <http://www.reta.com>.** If you have questions regarding the Certification Exam, please contact Dan Reisinger at RETA HQ (email [dan@reta.com](mailto:dan@reta.com)) or 541-497-2955.

# Refrigeration Review Course Outline

## Refrigeration Fundamentals Review

### *Basic Refrigeration Terms and Principles*

- Units of measurement: area, volume, specific volume, rate (CFM, GPM), temperature, pressure (psia, psig) pressure/temperature chart
- Heat: conduction, convection, radiation, BTU, sensible heat, latent heat, specific heat, latent heat of vaporization/conduction, specific heat, subcooling, superheating, saturation, water heat curve
- Ton of refrigeration, heat calculations

### *Heat Flow in Refrigeration Systems*

- Factors that affect conduction of heat: area, temperature difference, thermal conductivity, distance the heat passes through
- Conditions which increase/decrease effect of evaporator performance
- Pressure-enthalpy or Mollier Diagram

### *The Basic Refrigeration Cycle – Heat Flow*

- The flow of heat through the four main components
- Basic P&ID for a system
- Heat of compression, compression ratio, pressure drop, noncondensable gases

### *Properties of Refrigerants*

- Refrigerant selection factors
- Refrigerant operating characteristics: evaporator pressure, condensing pressure, theoretical discharge temperature, refrigerating effect (BTU/lb), Mass flow (lb/min/ton)
- Advantages/disadvantages of refrigerants
- Saturated refrigerant table: explanation of each column

### *Compressors*

- Types of compressors:
  - Positive displacement, dynamic displacement
  - Open drive, hermetic
  - Reciprocating, rotary
- Reciprocating compressor: horizontal, VSA, V-W
- Rotary vane compressor
- Rotary screw compressor: compression cycle, oil
- Loading of a compressor
- Two stage compression and booster compressors
- Operation and maintenance: oil, oil heaters, slugging, log sheets

### *Lubrication*

- Function in a refrigeration system, quality
- Types: splash, force-feed
- Oil and an ammonia system: draining oil and its dangers
- Oil pots, oil stills, oil scrubber
- Oil cooling

### *Evaporators/Cooling Units*

- Function
- Fluid cooling, air cooling, forced convection, blast freezing, plate freezing
- Secondary coolant

### *Condensers*

- Function and general types
- Shell and tube condenser
  - Causes of elevated head pressure
  - Cleaning, leaking, re-tubing
- Evaporative condenser
  - Basic design components and flow of refrigerant
  - Effect of humidity
  - Scale, corrosion
  - Head pressure control, fans, motors, dampers

### *Receivers*

- Function
- Typical receiver connections and their functions
- King valve
- Overpressure protection

### *Purging*

- Function
- Sources of noncondensables
- Types: manual, on-line, automatic
- Hansen purger

## Refrigeration System Operations

### *Low Side Feed Valves and Controls (Evaporator Feed)*

- Hand expansion valve (HEV)
- Thermostatic valve (TXV):
  - forces that drive the valve
  - nine basic points of operation
  - equalization
- Solenoid valve
- Float switch/level sensor
- Float valve
- *Direct Expansion System (DX)*
  - Basic design
  - Slop-over/slugs
  - Top feed/bottom feed
  - Suction line accumulator

### *Flooded Systems*

- Basic design
- Oil accumulation
- Resistance to heat transfer: product side/refrigerant side
- Causes of over-fill
- Consequences of slop-over (slugs)

### *Pumped Liquid Recirculation Systems (Liquid Overfeed)*

- Basic design and recirculation ratio
- Pumps: mechanical and gas operated
- Basic rules for operation of centrifugal pumps

- Gas pumper systems: single, double, constant pressure
- Pump sizing, line sizing
- Refrigerant charge
- Start-up and basic operation, oil removal
- Advantages/disadvantages

### *Secondary Coolant Circulation System*

- Direct vs. indirect
- Common secondary coolants
- 2 pipe/3 pipe system
- Defrost of secondary coils
- Pump types for secondary refrigerant
- Heat exchangers:
  - Open tank
  - Shell and tube
  - Plate and frame and its advantages

### *Two Stage System*

- Basic design of operation
- Horsepower savings
- Compression cycle: booster compressor/high stage compressor
- Intercooler function: shell & coil, flash type
- Noncondensables
- Cascade System

### *Coil Defrost*

- Moisture content, pump down, fan delay, pressure equalization
- Air defrost
- Electric defrost
- Water defrost
- Continuous defrost
- Hot gas defrost operation and guidelines
- Causes for excess of ice buildup

### *Measuring System Performance*

- Measurements: horsepower, BTU, HP/ton, Kilowatt, Kw/ton, Kw demand
- Calculation: compression ratio, cost and efficiency

### *Electricity*

- Fundamentals: Ladder Diagram
  - Rungs of the ladder
  - Symbols
  - Switches
  - Circuits



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# DFW/AR Ammonia Refrigeration Regional Conference

April 24-25, 2018 • Ft. Smith, AR



## NH<sub>3</sub> REFRIGERATION REGIONAL CONFERENCE



Registration - \$55 per person includes:

- 2 full days of technical sessions
- Daily box lunch • breaks • reception
- Fall Safety Training
- Scissor Lift / Forklift / Boom Lift Certification Class
- Live HAZMAT Response
- 18,000 sq ft exhibit hall
- Compressor workshops
- Hands-on workshops
- Attendee materials

**\$55 per person** registration fee provides 2 full days of training ...

REGISTER AT <https://www.eventbrite.com/e/dfwar-reta-regional-2018-tickets-43127494497?aff=es2>

# Details at a Glance

## Fees

### Attendee Registration

\$55 per person *regardless of RETA membership status.*

Fees include attendee materials, daily breaks and box lunches in the Exhibit Hall and Tuesday evening reception.

## Venue

### Ft. Smith, AR Convention Center

55 S. 7th Steet  
Ft. Smith, AR 72901  
Tel: 479-788-8932

## Hotel Accommodations

### Courtyard by Marriott Ft. Smith Downtown

900 Rogers Ave.  
Ft. Smith, AR 72901  
Tel: 972-831-0000  
Website: [www.marriott.com](http://www.marriott.com)  
**\$89/night (plus taxes) sgl**

### Reservations

Click here to be connected to the online reservation desk and take advantage of the negotiated group rate.

All reservations are to be prepaid in full with credit card. Refunds will be made only for cancellations received prior to April 2, 2018. Cancellations received after that date will be subject to forfeiture of prepayment.

All reservations must be received by April 2, 2018.

## Exhibition Hours (May be subject to change)

### Monday • April 23

1 - 6 pm Exhibitor Move-in

### Tuesday • April 24

6 - 7 am Exhibitor Move-in  
7 - 8:50 am Continental Breakfast  
Hall Open  
11:45 am - 1 pm Box Lunch • Hall Open  
3:40 - 5:30 pm Reception • Hall Open

### Wednesday • April 25

11:45 am - 1 pm Box Lunch • Hall Open  
1 - 5 pm Exhibitor Move-out

Please note: Exhibit Hall will be locked down during non-show hours.

## Opportunity Drawings

The DFW and Ft. Smith Chapters have gathered together a plethora of drawing prizes to bestow upon a few lucky attendees. All registrants will be eligible to win. Details available on site.

## Weather

Weather in Ft. Smith, AR during this time of year averages between the mid-70s and low 80s during the day and dipping down to the low-50s in the evening. We recommend layered attire.

# PROGRAM / AGENDA

*Program may be subject to change*

## Tuesday, April 24 2018

|                  |  |
|------------------|--|
| 6:45 am          | REGISTRATION OPEN  |
| 7 - 8:45 am      | CONTINENTAL BREAKFAST <small>Served 7-8 am</small><br>Sponsored by Howden Compressors<br>EXHIBIT HALL OPEN   |
| 8:45 - 9:30 am   | WELCOME & INTRODUCTION & KEYNOTE (1 PDH)<br><i>Epic Fails</i> - Arlie Farley, CIRO, CARO, Farley's Frigeration   |
| 8:45 - 11:35 am  | HANDS-ON TRAINING (4 PDH) <small>Limited seating - Maximum class size 20 (first come; first seated)</small><br><i>Valve Training</i> - Dan Connelly, RAI, WMI  |
| 9:30 am          | BREAK - Sponsored by Kolbi Pipe Marker Co. and Delta Tee International Inc.  |
| 9:45 - 10:35 am  | HANDS-ON TRAINING (1 PDH) <small>Limited seating - Maximum class size 20 (first come; first seated)</small><br><i>Manufacturer-specific Workshop - Plate Heat Exchanger Break-down/Re-assemble</i> - Danny Hauenstein, Alfa Laval  |
| 9:45 - 10:35 am  | TECHNICAL SESSIONS (1 PDH)<br><i>Why Should the Operator/Technician be Concerned with OSHA Compliance</i> - Kent Harmon, Industrial Consultants<br><i>Insulation for Effectiveness and Efficiency; Goal or Reality?</i> - Nate Brink, Polyguard Products<br><i>Ammonia Delivery</i> - Ken Williams, Chemical Transfer  |
| 9:45 - 11:35 am  | HANDS-ON TRAINING (2 PDH) <small>Limited seating - Maximum class size 20 (first come; first seated)</small><br><i>Compressor Tear-down</i> - Lee Evans, Howden Compressors<br><i>Principle Use and Applications of Fall Protection</i> - Representative from Rooftop Anchor<br><i>Equipment Certification (Forklift • Scissor Lift • Boom Lift)</i> - Gene Gore, M&G Safety  |
| 10:45 - 11:35 am | TECHNICAL SESSIONS (1 PDH)<br><i>Glycol Based Heat Transfer Fluids</i> - Brian Hughes, Houghton Chemical Corporation<br><i>That's Not a Problem ... Is it? (What not to do in ammonia refrigeration)</i> - Representative from Tyson<br><i>Cost Impact of Under Performing Evaporators</i> - Joshua Martin, Evapco   |
| 10:45 - 11:35 am | HANDS-ON TRAINING (1 PDH) <small>Limited seating - Maximum class size 20 (first come; first seated)</small><br><i>Manufacturer-specific Workshop - Plate Heat Exchanger Break-down/Re-assemble</i> - Danny Hauenstein, Alfa Laval  |
| 11:35 am - 1 pm  | BOX LUNCH & OPPORTUNITY DRAWING - EXHIBIT HALL OPEN<br>Lunch Sponsored by Polyguard and Farley's Frigeration<br>Opportunity Drawing Sponsored by Core Insulation   |
| 1 - 1:40 pm      | GENERAL SESSION (1 PDH)<br><i>Cyber and Infrastructure Protection</i> , Chad Johnston, Homeland Security   |
| 1 - 3:40 pm      | HANDS-ON TRAINING (4 PDH) <small>Limited seating - Maximum class size 20 (first come; first seated)</small><br><i>Valve Training</i> - Dan Connelly, RAI, WMI  |
| 1:50 - 2:40 pm   | TECHNICAL SESSIONS (1 PDH)<br><i>Preparing for an RMP/PSM Inspection/Audit</i> - Brian Chapin, RC&E, Inc.<br><i>Oh No You Didn't!</i> - Jack Piho, PE, Piho Engineering<br><i>All About OSHA - Who, What, Where &amp; Why</i> - Carlos Reynolds, OSHA<br><i>How to Read a Blueprint; Is It Greek to You?</i> - Joseph Crisp, Intercool USA<br><i>Intro to Certified Refrigeration Energy Specialist (CRES) Why is it necessary?</i> Jeff Sloan, RAI, WMI |
| 1:50 - 3:40 pm   | HANDS-ON TRAINING (2 PDH) <small>Limited seating - Maximum class size 20 (first come; first seated)</small><br><i>Compressor Tear-down</i> - Lee Evans, Howden Compressors<br><i>Equipment Certification (Forklift • Scissor Lift • Boom Lift)</i> - Gene Gore M&G Safety  |
| 2:40 pm          | BREAK - Sponsored by Kolbi Pipe Marker Co. and Delta Tee International Inc.  |
| 2:50 - 3:40 pm   | TECHNICAL SESSIONS (1 PDH)<br><i>Management of Change</i> - Jeff Cato, Walmart<br><i>Non-destructive Testing; What Every Operator/Technician Should Know</i> - Jim Kovarik, Gama Graphics Services<br><i>The Unseen Causes of Oil Carry Over in Screw Compressor Oil Separators</i> , Doug Sweet, Synergy Refrigeration<br><i>Valve Repair and Troubleshooting</i> - Todd Metsker, Parker-Hannifin, Division of R/S                                      |
| 3:40 - 5:30 pm   | RECEPTION & OPPORTUNITY DRAWING - EXHIBIT HALL OPEN<br>Reception Sponsored by Airgas and Marking Services<br>Opportunity Drawing Sponsored by Core Insulation  |

**Click Here to REGISTER TODAY!**

# NEW THIS YEAR - GET CERTIFIED! EQUIPMENT CERTIFICATION CLASS FORKLIFT • SCISSOR LIFT • BOOM LIFT

**Wednesday, April 25, 2018**

|                        |   |
|------------------------|---|
| <b>7 am</b>            | <b>REGISTRATION OPEN</b>  |
| <b>8 - 9:50 am</b>     | <b>REGIONAL RUNAMUCKUS (2 PDH)</b> - <i>Industrial Refrigeration Presentation &amp; Trivia Contest</i><br>Sponsored by Farley's Frigeration & Piho Engineering<br>John (Jack) Piho, PE, Piho Engineering and Arlie Farley, CIRO, CARO, Farley's Frigeration   |
| <b>8:45 - 11:35 am</b> | <b>HANDS-ON TRAINING (4 PDH)</b> <i>Limited seating - Maximum class size 20 (first come, first seated)</i><br><i>Valve Training</i> - Dan Connelly, RAI, WMI  |
| <b>9:50 am</b>         | <b>BREAK</b> - Sponsored by Howden Compressors  |
| <b>10 - 10:55 am</b>   | <b>TECHNICAL SESSIONS (1 PDH)</b><br><i>Management of Change</i> - Jeff Cato, Walmart<br><i>The Unseen Causes of Oil Carry Over in Screw Compressor Oil Separators</i> , Doug Sweet, Synergy Refrigeration<br><i>Glycol Based Heat Transfer Fluids</i> - Brian Hughes, Houghton Chemical Corporation  |
| <b>10 - 11:50 am</b>   | <b>HANDS-ON TRAINING (2 PDH)</b> <i>Limited seating - Maximum class size 20 (first come, first seated)</i><br><i>Compressor Tear-down</i> - Chris Calvert, NTSC LLC<br><i>Principle Use and Applications of Fall Protection</i> - Representative from Rooftop Anchor<br><i>Equipment Certification (Forklift • Scissor Lift • Boom Lift)</i> - Gene Gore M&G Safety   |
| <b>11 - 11:50 am</b>   | <b>TECHNICAL SESSIONS (1 PDH)</b><br><i>Manufacturer-specific Workshop</i> - Todd Metsker, Parker-Hannifin, a Division of R/S<br><i>Why Should the Operator/Technician be Concerned with OSHA Compliance</i> - Kent Harmon, Industrial Consultants<br><i>Insulation for Effectiveness and Efficiency; Goal or Reality?</i> - Nate Brink, Polyguard Products<br><i>That's Not a Problem ... Is it? (What not to do in ammonia refrigeration)</i> - David Rook, Tyson |
| <b>11:50 am - 1 pm</b> | <b>BOX LUNCH &amp; SECOND CHANCE SCRATCHER TICKET DRAWING</b><br><b>EXHIBIT HALL OPEN</b><br>Lunch Sponsored by Farleys Frigeration & Evapco<br>Drawing Sponsored by NTSC   |
| <b>1:10 - 3:40 pm</b>  | <b>HANDS-ON TRAINING (4 PDH)</b> <i>Limited seating - Maximum class size 20 (first come, first seated)</i><br><i>Valve Training</i> - Dan Connelly, RAI, WMI  |
| <b>1:10 - 2 pm</b>     | <b>HANDS-ON TRAINING (1 PDH)</b> <i>Limited seating - Maximum class size 20 (first come, first seated)</i><br><i>Manufacturer-specific Workshop - Plate Heat Exchanger Break-down/Re-assemble</i> - Danny Hauenstein, Alfa Laval  |
| <b>1:10 - 2 pm</b>     | <b>TECHNICAL SESSIONS (1 PDH)</b><br><i>Non-destructive Testing; What Every Operator/Technician Should Know</i> - Jim Kovarik, Gama Graphics Services<br><i>Preparing for an RMP/PSM Inspection/Audit</i> - Brian Chapin, RC&E, Inc.<br><i>Valve Repair and Troubleshooting</i> - Todd Metsker, Parker-Hannifin, Division of R/S<br><i>System Evacuation</i> - Ken Williams, Chemical Transfer  |
| <b>1:10 - 3 pm</b>     | <b>HANDS-ON TRAINING (2 PDH)</b> <i>Limited seating - Maximum class size 20 (first come, first seated)</i><br><i>Compressor Tear-down</i> - Chris Calvert, NTSC LLC<br><i>Equipment Certification (Forklift • Scissor Lift • Boom Lift)</i> - Gene Gore M&G Safety  |
| <b>2:10 - 3 pm</b>     | <b>TECHNICAL SESSIONS (1 PDH)</b><br><i>Cost Impact of Under Performing Evaporators</i> - Joshua Martin, Evapco<br><i>Legionella and ASHRAE 188 in Industrial Facilities</i> , David Crow, Garratt-Callahan<br><i>RMP Changes; EPA Update</i> , Michael Chapman, Stellar<br><i>Daily Rounds and Troubleshooting</i> , James A. Price Jr., RAI Intercool USA   |
| <b>2:10 - 3 pm</b>     | <b>HANDS-ON TRAINING (1 PDH)</b> <i>Limited seating - Maximum class size 20 (first come, first seated)</i><br><i>Manufacturer-specific Workshop - Plate Heat Exchanger Break-down/Re-assemble</i> - Danny Hauenstein, Alfa Laval  |
| <b>3 pm</b>            | <b>BREAK</b> - Sponsored by Howden Compressors  |
| <b>3:10 - 4 pm</b>     | <b>GENERAL SESSION HAZMAT RESPONSE (1 PDH)</b><br>Hazmat Response Fort Smith Fire Department Hazmat Team  |

## Review and Register

- Please take a few moments to review the program, noting items of particular interest to you and which classes or events specify limited seating. These will fill up quickly. Plan to have an alternate choice just in case.
- **Register online** at: <https://www.eventbrite.com/e/dfwar-reta-regional-2018-tickets-43127494497?aff=es2>

Or, use the registration form on page 4 of this brochure – your payment of \$55 per registrant (or \$135 per 3 registrants) is required at time of registration.

- Pick up your attendee materials on site. All attendees must stop by the Registration Desk at the Ft. Smith, AR Convention Center to pick up their badge and attendee materials.

### Registration Desk Hours:

Mon. April 23: 1 - 6 pm (*exhibitors*)

Tues. April 24: 7 am - 5 pm

Wed. April 25: 7 am - 2 pm

## RETA Certification Maintenance

### Professional Development Hours (PDH)

*Earn up to 13 RETA PDH from the Regional Conference program.* Be sure to sign in at each session attended. Certificates of attendance will be emailed to attendees following the event.

*The RETA Code of Conduct requires all RETA certification holders to participate in appropriate certification and training activities to acquire, demonstrate and maintain their competence in the refrigeration industry. Each RETA certification expires three years after it is issued. Recertification candidates may establish that their knowledge and skills are still current for their level of RETA certification either by taking the current examination for that classification or by providing RETA with the required documentation of his/her qualifications for recertification.*

*Professional development hours can be earned by documenting participation in professional training related to RETA certification at RETA Chapter meetings, the RETA annual National Conference, employer-sponsored training and refrigeration training seminars. Procedures for documenting training credits to apply for recertification are available on the RETA website at: [www.reta.com](http://www.reta.com)*

*A minimum of 24 PDH must be earned during the renewal period.*

You must *sign in* at each session you attend at the Regional Conference. Without your signature on the form, the Show Management will not include the class or PDH in your certificate of attendance — no exceptions.

# DFW/AR Ammonia Refrigeration Regional Conference

April 24-25, 2018 • Ft. Smith, AR

## REGISTRATION INFORMATION

Register online at: <https://www.eventbrite.com/e/dfwar-reta-regional-2018-tickets-43127494497?aff=es2>

OR .... if paying by check, use this form.

Complete Attendee Information (print clearly and legibly and provide one form per registrant)

Please indicate one:  Attendee  Exhibitor Booth Staff  First Responder

|                            |                      |                               |         |
|----------------------------|----------------------|-------------------------------|---------|
| FIRST NAME (REQUIRED)      | LAST NAME (REQUIRED) | NICKNAME FOR BADGE (REQUIRED) |         |
| COMPANY NAME (REQUIRED)    |                      |                               |         |
| MAILING ADDRESS (REQUIRED) |                      |                               |         |
| CITY (REQUIRED)            | STATE (REQUIRED)     | ZIP (REQUIRED)                | COUNTRY |
| PHONE (REQUIRED)           | CELL PHONE           | EMAIL (REQUIRED)              |         |

## PAYMENT DETAILS AMOUNT ENCLOSED (\$55 per registrant or \$135 for 3 registrants)

Payment by check (payable in US Funds) — Payable to DFW Chapter of RETA

Mail registration form and payment to:

David Phillips • DFW Chapter of RETA • 9109 Breezy Road • Krum, TX 76249

OR Bring completed form along with check and register on-site.

The event is held at the Ft. Smith, AR Convention Center located at 55 S. 7th Street in Ft. Smith, AR.

## ATTENDEE WAIVER

By registering for and participating in the DFW/AR Ammonia Refrigeration Regional Conference you agree to uphold the association's Code of Conduct; abide by the rules of the event, including but not limited to, DFW/AR Ammonia Refrigeration Regional Conference 2018 Exhibitor Rules & Regulations; and grant the DFW Chapter of RETA and Arkansas River Valley Chapter permission to use photographs (or videos) taken at this event in any and all publications, marketing materials and on the website. Registrant waives any right to inspect or approve the aforementioned use of the image now or in the future. Registrant agrees to release and hold harmless DFW Chapter of RETA, Arkansas River Valley Chapter and show management (Sharlon Wildt Consulting) from and against any claims, damages or liability arising from or related to the use of the images, including but not limited to any distortion, blurring, alteration, optical illusion or use in composite form, either intentionally or otherwise, that may occur or be produced in production of the finished product. Registrant is 18 years of age and competent to contract in own name or that of minor child. Registration for this 2018 DFW Chapter of RETA and Arkansas River Valley Chapter event indicates the attendee/registrant has read this release before registering for this Conference and fully understands the contents, meaning and impact of this release. I understand that I am free to address any specific questions regarding this release by submitting those questions in writing prior to registering for the event, and I agree that my failure to do so will be interpreted as a free and knowledgeable acceptance of the terms of this release. The association's Code of Conduct and are available on RETA's website at [www.reta.com](http://www.reta.com). The 2018 Exhibitor Rules & Regulations and are available by contacting show management at [swconsulting71@gmail.com](mailto:swconsulting71@gmail.com). I agree and acknowledge that I am participating in the DFW Chapter and Arkansas River Valley Chapter of the Refrigerating Engineers Technicians Association (RETA) hosted DFW/AR Ammonia Refrigeration Regional Conference on my own accord. I give this acknowledgement freely and knowingly and I represent and warrant that I am physically and mentally fit and able to participate, and I do hereby assume responsibility for my own well-being. I am fully aware that possible physical injury might occur to me as a result of my participation, including but not limited to injury which may occur as a result of my training on refrigeration equipment. I agree to assume the full risk, including risk which is not specifically foreseeable, of any injuries, including death, damages or loss regardless of severity, which I may sustain as a result of participating in any and all activities connected with or associated with the Course. In consideration of the right to participate in the Course, I hereby waive any and all rights or claims I may have as a result of participation in the Course against the DFW Chapter of RETA a Texas not-for-profit corporation and Arkansas River Valley Chapter, an Arkansas not-for-profit corporation that represent refrigerating engineers and technicians, RETA, the show management (Sharlon Wildt Consulting), Fort Smith Convention Center and their respective directors, officers, employees, members, staff, and all individuals assisting in instructing and conducting these activities, and I hereby fully release and discharge them from any and all claims resulting from injuries, including death, damages or loss, which may accrue to me or my heirs arising out of or in any way connected with my participation in the Regional Conference. I further agree to indemnify, defend, and hold harmless the DFW Chapter of RETA, Arkansas River Valley Chapter of RETA, RETA, the show management (Sharlon Wildt Consulting) and the Fort Smith Convention Center and their respective directors, officers, employees, members, staff, and all individuals assisting in instructing and conducting these activities, from any and all claims resulting from injuries, including death, damages, or loss, which may accrue to me or my heirs arising out of or in any way connected with my participation in the Course.



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# SOP/PM/MOP WORKSHOP

April 24-27, 2018  
Chicago, IL



Your Compliance Connection

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**REGISTER  
TODAY!**

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# VALVE WORKSHOP

Oct. 23-25, 2018  
Chicago, IL

*An in-depth dive into the world of SOPs PMs and MOPs! Bring your P&IDs, SOPs, PMs (including frequency and content basis) to this hands-on workshop.*

The purpose of this four (4) day workshop is to develop an understanding of the requirements for developing and maintaining Proper Standardized Operating Procedures (SOPs) and proper Preventive Maintenance (PMs) frequencies, tasks and procedures (MOPs) that will meet the requirements of our industry and that of OSHA and EPA.

This workshop will allow the attendee to bring their current SOPs, PMs and MOPs and review them to ensure they meet all the requirements (and identify any shortcomings) or to understand how to develop SOPs, PMs and MOPs such that they will be correct and meet all the requirements.

## INSTRUCTOR

Chris Harmon, RAI



## TOPICS COVERED:

- What OSHA and EPA will be looking for
- Checklist for building SOPs, PMs, MOPs.
- Example SOP (Template)
- Example list of PM frequencies and tasks (Template)
- Example MOP (Template)
- How to document PM frequencies and tasks
- How to review and certify SOPs
- Verification and documentation of the accuracy of SOPs
- Verification and documentation of the accuracy of MOPs
- Training requirements for SOPs
- Training requirements for MOPs

## HANDS-ON WORKSHOP:

- Developing and writing SOPs
- Developing and documenting PM frequencies
- Developing and documenting PM task (content)
- Developing and writing MOPs

## WHO SHOULD ATTEND

PSM coordinators • industrial refrigeration operators technicians • end-users plant managers • plant or process engineers

## REGISTRATION INVESTMENT – \$875

*Successful completion of the class provides attendees with 32 professional development hours (PDH)*

Investment includes materials and continental breakfast.

*Bring your Questions!  
Tools will be provided.*

The purpose of this *Hands-on workshop* is to develop an understanding of the function, troubleshooting, maintenance and repair of all type of valves used in our industry. This three (3) day workshop will include the most common valves manufacturers:

**HANSEN • PARKER/RS • DANFOSS**

## INSTRUCTOR

Chris Harmon, RAI



## TOPICS COVERED:

- Overview of each valve and valve type
- Function
- Maintenance
- Troubleshooting
- Repair
- Problems
- Tips
- Hands on – actual valve repair
- Electronic controllers
  - o Operation
  - o Adjustments
  - o Troubleshooting
  - o Issues
- Latest development in valves

## WHO SHOULD ATTEND

End users • industrial refrigeration operators and technicians • plant managers • plant or process engineers

## REGISTRATION INVESTMENT – \$715

*Successful completion of the class provides attendees with 24 professional development hours (PDH)*

Investment includes materials and continental breakfast.

## CONTACT & REGISTRATION INFORMATION

Industrial Consultants

PO Box 833 • Owasso OK 74055

[www.ammonia.com](http://www.ammonia.com)

Tel: 918-274-8639 • FAX 918-274-8816

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