



How long after an ammonia release should I wait to report it?

You have had a release of ammonia from your facility. Now what?

The owner or operator of the facility must report the leak. Many operators and owners are under the misconception that it must be reported within 24 hours. That is not the case, at least not any more. Reporting must occur within 15 minutes after discovery (EPA Region 7 Guidelines for reporting ammonia spills). This soon after a release, you may not know whether it is a reportable quantity or not, but it is far better to call in a "false alarm" than to not call in a reportable quantity.

Reporting requirements vary by jurisdiction and type of release, but could include the Local Emergency Planning Committee (LEPC), the Commission of Emergency Planning and Response (CEPR), the national response center, and local responders. Guidelines state that you should call your local responders first. To prepare for this, the person or persons responsible for reporting the spill should have a list of the phone numbers (The National Response Center is 800-424-8802), and should prepare answers to the questions that the authorities will ask. A follow up report is required within 7 working days.



Are you protected?

Government regulations require that Plant Safety Directors and personnel who respond to spills or leaks in ammonia systems must have specific training. OSHA Regulation 1910.120 requires 24 hours of Emergency Response Training for personnel who will plug, patch, or stop the leak. OSHA has been issuing citations and fines to employers who have failed to provide the necessary training.

Gartner Refrigeration, in cooperation with OSHA Certified Industrial Consultants, are pleased to bring this information workshop to the Upper Midwest. This workshop is geared towards setting up Emergency Response Plans and handling ammonia spills.

AMMONIA RESPONSE TRAINING DATES:
September 21-23rd · 24 Hr. Emergency Response
September 23rd · 8 Hr. ERT Refresher
September 24th · 8 Hr. ERT Refresher
September 24th · 8 Hr. Incident Commander Training

DON'T MISS THESE ADDITIONAL UPCOMING EVENTS!
August 19th · WIAMA Fall Conference
September 7-11th · MIAMA Fall Conference
September 23rd · Northern Plains Chapter of RETA Monthly Meeting

For more information, contact Kim McKane at 763-559-5880 or kimm@gartner-refrig.com

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GOING GREEN: C02/Ammonia Installation

In February 2009, Gartner's first C02/Ammonia installation started up in San Diego. The plant, a large West Coast food processor, decided on this type of system to keep the total charge of ammonia under 10,000 pounds and for energy efficiency on impingement and spiral freezers running at -40°F.

The plant has had a year of successful operation and the customer has greatly increased the production coming out of the facility to meet their growing customer base. Because of this success, Gartner Refrigeration & Mfg., Inc. has been recently awarded a five year service agreement to keep the plant operating trouble free and efficiently.

Greetings from the Parts Department!

Hi, my name is Ron Lovdal. I have been with Gartner Refrigeration for over twenty years. I will be your point man for your parts needs, with assistance from Colleen Hamilton and Shawn Penny. We have 35 years of combined experience dealing with parts for older

Trouble Shooting Oil Loss

Oil in ammonia refrigeration systems performs a useful and necessary task in the compressors. However when it gets out into the system, it can create a number of problems. It blocks heat transfer from the evaporators, can foul refrigerant pumps, and can cause level controls to stop operating accurately. Oil that gets into the system comes from the compressors. One of the most difficult problems to diagnose in screw compressor systems can be oil loss.



When analyzing an oil loss problem we characterize it into two categories - continuous/gradual or sudden/occasional. Following is a brief summary of what we see as the most common causes of oil loss in screw compressors. This may help you the next time you are looking into oil problems.

Sudden oil loss through the suction port:

- Suction check not holding will cause the compressor to back spin. Oil travels up suction line and dumps into the system.
 - Watch for coupling rotating backwards
 - Repair check valve
- Suction check valve by-pass line is opened too far.

Continuous oil loss through the economizer port:

- This is commonly caused by the economizer check valve not holding. Oil can end up migrating from one compressor to another. Repair the check valve or consider replacing it with a piston style check valve.

Continuous oil loss through the discharge port:

- The coalescing elements are the most likely cause of this. Oil ends up going to the condensers, and is carried back through the rest of the system.
 - Faulty / worn coalescing elements; replace coalescers
 - Coalescing elements may be loose; not installed correctly
 - Bulkhead is a blank plate; check gasket for leaks
- Oil can also be the problem with discharge port loss.
 - If the oil is foaming, then the oil can be carried out in foam
 - Wrong type of oil being used
 - Different types of oil getting mixed in the compressor
 - Liquid injection not set properly
 - Oil charge maintained too high; lower the oil level

Operating conditions can cause continuous or sudden loss of oil:

- Differential pressure too low causing high velocity across the separator.
- Discharge pressure is lower than original design, causing vapor velocity in the separator to be too high.
- Sudden drop in discharge pressure can cause oil foaming.
- Liquid carry over or slugging fouling the coalescing filters.
- Coalescing oil return to compressor not functioning.
 - Valve closed
 - Valve or line plugged

Super Savings!

One new technology that we are excited about are the "SuperCoalescers" from Frick by Johnson Controls. The new coalescers do a much better job at removing oil than the older style coalescers, are easier to install, and they improve separator efficiency to the point where in many systems they will pay for themselves in energy and maintenance savings. How old are your coalescing elements? Frick recommends they be changed at least every 30,000 hours.

Ultra High Efficiency Coalescing Element

A Frick Exclusive



This month Gartner is running a special discount on the new SuperCoalescers. Call Ron Lovdal or Colleen Hamilton at 1-800-328-5547 and say goodbye to your oil carryover problems!

compressor packages from Frick, York and Vilter, to name a few, as well as a working knowledge of their newer equipment. At Gartner Refrigeration, we have a vast collection of parts books better than most refrigeration manufacturers.

Let me tell you what you can expect to find in this section of the Gartner Refrigeration newsletter. Every issue that goes out will have news on what is going on in our Parts Department and anything new that may be going on in the industry. We will also have special discount offers available to our customers.



Please keep in mind we have a parts inventory over \$450,000 and that Gartner Refrigeration is a stocking distributor for Frick, York, R/S, Sullair, Sporlan, and Danfoss, along with several other manufacturers. If we do not have it in stock, we can get it for you quickly and easily. We also keep a few thousand pounds of R-22 on hand should you find yourself in need of an emergency charge.

Give us a call at 763-559-5880 and find out how Gartner Refrigeration Parts Department can make a difference for your company.

Used Equipment for SALE!

We have an excellent inventory of used equipment for sale!
To see a detailed list click [here!](#)

*Experience the
Difference*

Give Us A Call:
24-Hour Phone 763/559-5880
Toll Free 800/328-5547

Visit Us Online:
www.Gartner-Refrig.com

Join Our Mailing List

**FREE
GIFT!**

**Place a parts order, mention this ad and receive your
"Going Green" insulated grocery bag!**

Offer Expires: July 31, 2010
One bag per customer.