# The Importance of Regularly Scheduled System Evaluations in Today's Climate

The Components of an Effective Ammonia Refrigeration System Evaluation

## Compliance in Challenging Times

Regulatory Response to COVID-19

**Temporary COVID-19 policy clarifies that the EPA expects regulated facilities to continue to comply with regulatory requirements.** OSHA and EPA have not suspended maintenance and compliance responsibilities related to ammonia refrigeration systems. Reduction in resources and/or contractor personnel could easily lead to an ammonia release. EPA does and has supported the concept of self-reporting compliance issues. Should you find yourself in a situation where compliance is impossible, you must contact your local compliance officials as soon as possible.

General FAQ's are provided at **epa.gov**

*SOURCE: US EPA Region 3; Refrigerating Engineers & Technicians Association (RETA)*

## EPA Oversight

National Compliance Initiative (NCI)

**Compliance and safety continues to be a high priority for the Environmental Protection Agency (EPA).** In 2016, EPA announced a series of National Enforcement Initiatives focused on improving safety in a variety of high hazard industries. Among these initiatives was an effort entitled "Reducing Accidental Releases at Industrial and Chemical Facilities", which has subsequently been renamed a National Compliance Initiative (NCI).

**2016** **NCI Announced**
Emphasis on reducing releases includes NCI, scheduled to run 2017-2019. Inspections at plants increase.

**2017-2018** **Cases Filed**
62 cases are filed against facilities for CAA § 112(r) non-compliance.

**2019** **NCI Extended**
NCI is extended to continue through 2023.

**"EPA has placed specific emphasis on ammonia facilities as part of the initiative."**

- Lowell Randel, IIAR Government Relations Director

## Ammonia Releases in the US

Food and Beverage + Cold Storage

**Reportable release incidents in the US continue to decline across all industries.** Data reveals that reportable release incidents have decreased by more than 50% from 2013 – 2018. This has been found both across all industries, and specifically with ammonia releases. However, releases at facilities with ammonia refrigeration systems still occur regularly, and many incidents are deemed preventable.

| | |
|---|---|
| 30 Days | Sept 2020<br>**5 Facility Releases, 2 Injuries** |
| 6 months | March - Sept 2020<br>**20 Facility Releases, 18 Injuries** |
| 12 months | Oct 2019 - Sept 2020<br>**38 Facility Releases, 39 Injuries, 1 Death** |

*Numbers reported are minimum. Info is collected from press/news outlets. RTK data is not available immediately post-incident.*

**Cause of Releases**

- 3% Natural/Environmental
- 7% Unknown
- 13% Piping Failure
- 33% Other Equipment Failure
- 44% Human Error

**46%** **Preventable with well-executed evaluations**

## GOAL

Perform a complete evaluation to mitigate risk and remain in compliance.

## ACTION

Consistently perform evaluations at regularly scheduled intervals to remain in compliance

**System Inspection** *1 Year Intervals*
Perform annually to identify potential areas of weakness in your system.

**System Testing** *5 Year Intervals+*
Perform every 5 years minimum to reveal areas of weakness that cannot be found with inspection, and as needed to validate weakness on suspect areas.

## RESULTS

**Managed Risk**
Issues in your system are identified so maintenance and replacements can occur prior to failure.

**Informed Decisions**
Budgeting and planning for mechanical integrity can be justified and prioritized with qualitative and quantitative data.

**Regulation Compliance**
Evaluation requirements for EPA and OSHA's required PSM and RMP programs, the ANSI/IIAR Standard 6-2019 and codes are met.