

Course title:

Ammonia Awareness Training

Introduction:

Operation and maintenance staff need to understand health & safety basics in the workplace when operating around ammonia facilities.

Our Ammonia Awareness training program has been developed to provide employers and employees with a general understanding of the threats to ammonia, help them to recognize the threats and vulnerabilities to their company's assets, and respond to them appropriately.

Duration 1 hour.

Course outline:

Lesson 1

- Introduction
- Natural occurrence
- History
- Physical and Chemical Properties

Lesson 2

- Why Ammonia is Important
- The Haber Bosch Process
- Global Ammonia Production rates
- Ammonia Storage and Transportation
- Risks Associated with the Supply Chain of Ammonia

Lesson 3

- The Health Effects of Ammonia

Lesson 4

- Ammonia Hazards in Industrial Plants
- Causes of Ammonia Leaks
- Two Major Incidents of Ammonia Leaks
- Identifying Unexpected Ammonia Releases

Author(s) / Trainer(s):



Venkat Pattabathula

Ammonia Process Consultant,

Venkat Pattabathula has more than 35 years of experience in nitrogen manufacturing industry in various parts of the world such as Asia, North America, and Australia.

Extensive experience in process design and engineering of world scale ammonia/urea projects valued at more than US\$ 600 million engineered by different process licensors and EPC companies.

A Technology Manager experienced in being responsible for economic evaluation and technology selection in plant upgrades and performance guarantees on all ammonia plant related projects.

A track record of identifying and documenting Best Practices in ammonia production processes to achieve world class safety and reliability standards.

Venkat is a chartered professional engineer (CPE) of Engineers Australia and a registered professional engineer of Queensland (RPEQ) and a life member of American Institute of Chemical Engineers (AIChE).

Venkat was elected to the AIChE Ammonia Safety Committee in 2005 and has been on the committee since then.

Venkat has published >130 papers with a focus on NH₃ process safety, plant incidents and technology developments.

He is also on the Editorial Advisory Board of Chemical Engineering Progress (CEP) magazine of AIChE.

- Controlling Ammonia Hazards in Industrial Plants

Lesson 5

- Responding to an Ammonia Hazard
- Your Responsibilities

Lesson 6

- Where to find more Information

Learning outcomes:

By the end of this training course you will understand:

- The importance of ammonia globally
- The impact on the human body of inhalation of ammonia
- What are the major causes of ammonia leaks
- How to identify unexpected releases of ammonia and how to respond to ammonia hazards

Who will benefit:

This course introduces the candidate to aspects of the health & safety at work in ammonia plants and is intended to help raise safety standards and awareness in the industry. By the end of the course, trainees will have a basic knowledge of the risks associated with ammonia releases.

Course materials:

- Hand-out presentation slides in PDF format

Price:

€ 120

Discounts:

- 2 places – 10% discount
- 3 places – 15% discount
- 4 or more places – 20% discount.

■ **In-company training:**

This course is also available as an in-company course (face-to-face or online) where content can be customised to meet your organisation's specific needs and delivered on a date/location that suits your requirements.

[Contact us](#) for more information.

■ **Training code:** AMO01