

## Anhydrous Ammonia

### Regulatory Requirement References

MIOSHA Part 78, Storage and Handling of Anhydrous Ammonia

MIOSHA Part 91, Process Safety Management of Highly Hazardous Chemicals

Estimated Time Required	2 hrs.
Requalification Period	Annual
Pre-Requisites	Hazard Communications
Minimum # Students	2
Maximum # Students	20
Additional Course Material	N/A

### General Overview

This course will review the common uses of and the physical characteristics of anhydrous ammonia. Students will be able to identify the hazards associated with anhydrous ammonia for each of the following: skin exposure, inhalation, exposure to eyes, and ingestion. Given a concentration of ammonia in air, determine the protection requirements per regulatory standards. Describe the designed safety features required for anhydrous ammonia loading stations. Describe the actions to be taken for the following: accidental release, fire involving anhydrous ammonia, personnel exposure. Discuss the potential hazards created by exposure of anhydrous ammonia to non-compatible substances.

### Expected Outcomes

Students will become familiar with the physical characteristics and uses, exposure hazards, safety precautions, and the storage requirements for anhydrous ammonia. They will also learn the Client's site specific emergency response requirements for an ammonia release.

### Topics Covered

Regulations related to storage and handling of anhydrous ammonia  
Personal Protective Equipment  
Health Hazards and First Aid  
Storage design criteria  
Uses of anhydrous ammonia  
Non-compatible materials  
Emergency response

### Implementation Mechanism

Training shall consist of a combination of formal instruction (e.g., lecture, discussion, video presentation, written material), and evaluation of the student's performance.

### Client Supplied Items:

Client policies and procedures related to anhydrous ammonia.  
An outline of activities and locations where anhydrous ammonia may be present.  
Client Specific MSDS/SDS  
Site Emergency Plan  
DVD Player and corresponding viewing equipment