

INTEROFFICE MEMORANDUM

DEPARTMENT OF CONSUMER AND BUSINESS SERVICES

OCTOBER 1, 1993

TO: OR-OSHA Managers  
OR-OSHA Safety & Health Staff

FROM: Marilyn Schuster, Manger, Standards & Technical Services

SUBJECT: Anhydrous Ammonia

We have received a number of phone calls recently regarding the scope of the Anhydrous Ammonia Standard 1910.111. The scope (a)(1)(i) says that the standard applies to the design, construction, location, installation, and operation of anhydrous ammonia systems including refrigeration ammonia storage systems. In (a)(ii)(b), it states that refrigeration plants where ammonia is used solely as a refrigerant is exempt from the standard. There is confusion between “refrigerated ammonia storage systems” and where “ammonia is used solely as a refrigerant.”

The anhydrous ammonia standard covers storage tanks where ammonia is being extracted for a process, which means that it is an open system.

Refrigerated storage systems refers to systems that are refrigerated to maintain the level of ammonia required for a given process or to maintain it in a liquidized state.

A refrigeration system exempted from this standard is a closed system such as a refrigerator.

The anhydrous ammonia standard is based on ANSI standard K 61.1. This standard under the exemption of refrigeration plants goes on to explain that closed refrigeration systems are covered by ANSI standard B 9.1, refrigeration systems.