

## **Title 160 - STATE FIRE MARSHAL**

### **Chapter 1 - SCOPE**

001. These regulations shall apply to the loading, unloading or transporting of anhydrous ammonia in tanks or containers over the public highways or rail lines of the state.

Legal Citation: Title 160, Ch. 1, Nebraska State Fire Marshal

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### Chapter 2 - CONVERSION FOR ALTERNATE USE

001. Prior to converting any tank or container with a water gallon capacity of under three thousand (3,000) gallons, which is or has been used to contain anhydrous ammonia for use to contain propane, the following steps must be performed:

001.01. The tank shall be purged by either steam treatment or by flushing with hot water. If flushing with hot water, the tank must be completely filled and drained three times. If steam treatment is used, a tank shall be used only when successfully completing the following contamination test:

001.01A. Allow a moderate vapor stream of the product to be tested to escape from the container. A rotary, slip tube or fixed level gauge is a convenient vapor source.

001.01B. Wet a piece of red litmus paper (available at drug stores) by pouring distilled water over it while holding it with clean tweezers. Do not touch litmus paper with fingers.

001.01C. Hold the wetted litmus paper in the vapor stream from the container for 30 seconds.

001.01D. The appearance of any blue color on the litmus paper indicates that ammonia is present in the product and the test is not successful.

001.02. One vapor withdrawal valve shall be removed and replaced with a LP vapor relief valve of at least 1-1/4 inch in diameter.

001.03. All anhydrous ammonia hoses (as prescribed by ANSI K61.1-1981) shall be removed for conversion purposes and LP gas hose (as prescribed by NFPA 58-1983) or proper piping shall be installed in its place.

001.04. Anhydrous ammonia decals or stenciling shall be covered or removed and propane or LP gas decals or stenciling shall be installed on all four sides of the tank or container, in accordance with NFPA 58-1983. No initials or chemical nomenclature may be used. Lettering must be 4" in height and in a contrasting color.

001.05. If non-compliance with these regulations is suspected, the owner or manager of the tank or tank facility shall have the burden of demonstrating compliance to the State Fire Marshal.

001.06. If proof of non-compliance is discovered, documentation proving compliance may be required. Violation of any provision of Chapter 2, Section 001 constitutes a Class III misdemeanor.

002. All tanks or containers converted under these regulations shall be handled in the following manner and shall conform to the following requirements:

002.01. Such tanks or containers shall not be transported on public highways with more than 5% liquid in the tank.

002.02. When stationary, tanks shall be secured in a manner that insures that the tank will not roll.

002.03. All flammable and combustible materials (e.g., weeds, rubbish, etc.) shall be removed from around and under the tank.

Legal Citation: Title 160, Ch. 2, Nebraska State Fire Marshal