

Training Module: Towing Anhydrous Ammonia Tanks

Objective: To learn the necessary safety precautions for towing anhydrous ammonia tanks.

Trainer's Note: Review this module in advance. A demonstration of the proper way to tow anhydrous ammonia tanks can be done at the training session. Point out the selection of the proper hitch pin for the tank, SMV signs and other warning signs. If your nurse tanks are equipped with running lights make sure they are working properly during this demonstration. This module is intended as a refresher for employees who work with NH₃ and is not intended as a sole source of information on the safe use of this product. Contact your dealer for more information on in-depth training for your employees.

Background:

Highway and towing safety are important for the safe transport of anhydrous ammonia. Check the following items before towing the tanks to the field.

- **Running Gear** - Inspect the wagon frame tongue, reach poles, anchor devices, wheel bearings, knuckles, ball joints and pins for structural damage, cracks, excessive wear and/or needed adjustments.
- **Tires** - Check for proper inflation, cuts, bald spots, and signs of weathering. Assure that lug nuts are tight.
- **Lubrication** - Knuckles, wheels, tongues, or other applicable farm wagon equipment should be lubricated annually.

Follow these safety rules:

- **Towing Vehicle** - The towing vehicle should weigh at least as much as the tank. This balance of weigh increases the driver's ability to control the vehicles, minimizing the potential for an accident. If the towing vehicle is a tractor **two** tanks may be towed at a time, but if it is a pick-up truck only **one** tank may be towed at a time.
- **Speed Limit** -The speed limit for anhydrous ammonia tanks is 25 M.P.H.

Important information regarding the use of anhydrous equipment:

- **Operator's Manual** - This should be obtained and kept with the equipment for easy reference
- **Safety Type Hitch Pin** - A hitch pin with a safety chain attachment is essential for the tank wagons or running gear.

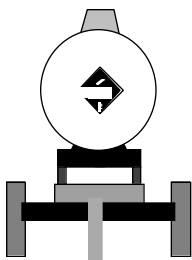
Safety Signs and Lighting:

- **SMV Sign** - With the mounted point up, place the sign on the vehicle 2-6 feet above the ground. Place the perpendicular plane to the direction of travel (+ -)10 degrees. Place the sign as near to rear center as possible.
- **Warning Lights** - Turn signals, flashing warning lights and a red brake light are recommended when towing an anhydrous ammonia tank wagon on public roadways. A standard seven terminal break-away connector plug should be used on the tank wagon to accommodate these lights.

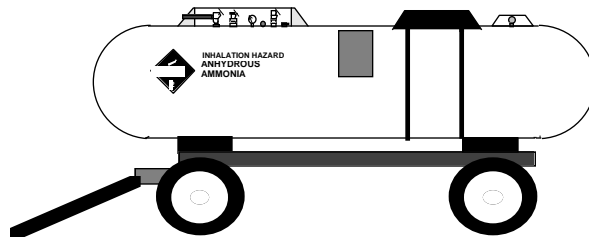
Appropriate lighting for roadway travel includes at least one red tail lamp and two amber flashing warning lamps. These lights must be on the towing vehicle or the tank wagon and visible from the rear. Additionally, the tank wagon must have at least two red reflectors visible to the rear.

- **Safety Sign** - At least one safety sign should be located between the control valves and the 5 gallon water supply.

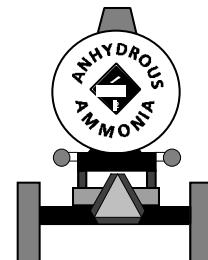
Proper safety and warning signs - Tanks operating on the highway must have the proper safety markings. Regulations require that a SMV sign be attached to the rear of the vehicle and visible from at least 500 feet. The words Anhydrous Ammonia (4 inches high) and Inhalation Hazard (3 inches high) must be placed on both sides of the tank. In addition, the anhydrous ammonia label must be placed on the rear of the tank. The words should appear in a color that contrast with the tank. The Dot placard (1005) for nonflammable gas should be placed on the front, back and sides of the tank.



Front



Side



Back

Review The Following Points

- Upkeep is mandatory for tanks.
- Know Ohio's highway requirements.
- Know the number of tanks which may be towed behind each vehicle.
- Keep the operator's manual with the equipment.
- Use safety signs and lighting.

True or False Answer Key

1. F, 2. T, 3. F, 4. F, 5. T

Towing Anhydrous Ammonia Tanks Quiz

True or False

Name _____

1. There are no standardized safety markings when towing NH₃. T F
2. It is acceptable to tow more than one NH₃ tank at a time depending on the type of vehicle towing it. T F
3. The speed limit for a NH₃ tank is 35 mph. T F
4. The towing vehicle should be lighter than the tank. T F
5. Keep the operator's manual near the equipment. T F