Chemical Inventory Lists Fatality File

Truck driver dies from exposure to ammonia vapor cloud

Following the death of a truck driver at Midwest Farmers Cooperative's grain handling facility in Tecumseh, OSHA has cited the company for 12 serious safety violations.

The driver, who was not provided a respirator or personal protective clothing, was overcome by anhydrous ammonia vapors March 20 while transferring the liquid from a semitruck to bulk storage tanks. In the lungs, liquid anhydrous ammonia causes destruction of delicate respiratory tissue. Exposure to ammonia vapor may cause convulsive coughing, difficult or painful breathing, congestion and death. The worker later died at the hospital from complications related to the ammonia inhalation.

Other workers, emergency responder injured

Three other workers were injured in the accident, which occurred when a 250-gallon water-bleeder tank ruptured, releasing anhydrous ammonia into the atmosphere and exposing the 63-year-old driver, who had worked at the facility for more than 10 years, to an ammonia vapor cloud. A second employee of Midwest Farmers Cooperative walked into the cloud and was treated and released from a local medical facility. An employee of Burlington Northern Santa Fe Railroad, who was performing maintenance on the adjacent railroad tracks, and a deputy sheriff responding to the scene, were also exposed, requiring medical evaluation.

"Midwest Farmers Cooperative and other employers using this common farm fertilizer must recognize the hazards their employees face as they transport, store and transfer anhydrous ammonia," said Bonita Winingham, OSHA's area director in Omaha. "With the growing season

in full swing, employers must train their workers to handle these chemicals properly and to protect against exposure to ammonia vapors.”

400,000 pounds of anhydrous ammonia

The Tecumseh grain-handling facility stores and sells corn, wheat and soybeans. The facility has an anhydrous ammonia storage capacity of 400,000 pounds. The cooperative sells the ammonia to area farmers.

Because of the investigation, OSHA cited Midwest Farmers Cooperative with 12 serious violations. Several violations involved OSHA’s Storage and Handling of Anhydrous Ammonia Standards, such as failing to provide an ammonia control system; provide employees with chemically impervious clothing; inspect and maintain ammonia equipment and piping to prevent potential leaks and system failure; and develop and train workers in an emergency response plan. The company was cited for storing the chemical in tanks located within 100 feet of a mainline railroad track.

Other violations involved respiratory protection standards, such as failing to ensure self-contained breathing apparatus and atmospheric monitoring equipment were provided and used for response to an emergency, as well as for failing to medically evaluate and fit test workers required to use respirators.

OSHA has proposed penalties of $62,101.

Greenwood Farmers Cooperative merged with Waverly Farmers Cooperative in January 2014 and operates as Midwest Farmers Cooperative. Before this inspection, the company was previously cited by OSHA twice in 2011, resulting in the issuance of eight citations.