



Green Cross for Safety® Awards 2021 Finalist | Advocacy

Nutrien Ag Solutions

Anhydrous ammonia (NH₃) is a critical product used to fertilize growers' fields, increase crop yields and support global food security. However, it is also an extremely hazardous corrosive gas and exposure can be fatal. Proper personal protective equipment is a necessity for working with NH₃ – but effective training is the best tool for preventing incidents entirely and responding correctly if they do occur.

At Nutrien Ag Solutions, approximately 4,000 workers across 600 locations handle close to 1 million tons of anhydrous ammonia each year within our North American retail network. Given that the average capacity of a nurse wagon used to transport NH₃ to a grower's field is three tons, our workers are performing well over 500,000 process connections per year. If done incorrectly, this presents a lot of opportunities for exposure to an extremely hazardous product and the potential for serious injuries or fatalities.

After several exposure incidents occurred in a short time, the Nutrien Ag Solutions Safety, Health and Environment Team embarked on a purposeful mission to revamp our anhydrous ammonia training. We formed a collaborative and inclusive project team tasked with creating a comprehensive, in-house solution tailored to our needs and to the protection of our workforce in Canada and the U.S.

The team took a highly collaborative approach, putting people at the heart of the process, just as they should be in any safety matter. The team built trust by consulting stakeholders, enlisting subject matter experts and, most importantly, by involving front-line workers to ensure the solution worked for them.

Based on best practices shared across our diverse operations, the team created the new Anhydrous Ammonia Operating Standard, designed to be referenced by workers in the field. They partnered with our technical training team to deliver innovative e-learning modules designed to reach the most workers possible. In total, nine modules were created, and the team is now looking at advanced topics. The e-learning is reinforced by hands-on worker observations in the field to verify competency through open dialog, critical thinking and feedback – bringing to life our "Culture of Care" and focus on looking out for each other.

To date, 17,025 modules have been completed by 2,029 employees. Since implementation in July 2020, Nutrien Ag Solutions has not had any incidents involving exposure to anhydrous ammonia with a worker who has completed the new training program.

This industry-leading program is the result of advocating for the needs of thousands of workers who frequently handle this hazardous substance. In accordance with our core value of safety, and our vision to send everyone home safe every day, we believe better ammonia training will result in not only the protection of our own workers, but also growers, neighbors and communities.

Photos show general ammonia training (in-person, pre-COVID)

