

# Equipment prep for fall nitrogen applications

For nitrogen applications this fall, now is a great time to check over equipment and make any necessary repairs. Taking a little bit of time now can ensure readiness to roll as soon as the weather is right and the soil is fit for fall nitrogen. Anhydrous ammonia and liquid manure are the nitrogen fertilizer types that are most often applied in fall. In this article, Andrew Luzum, a Nutrient Maximizer Strategic Account Manager for Corteva Agriscience, has tips to prepare to apply either.

## Anhydrous application prep

It's probably been awhile since an anhydrous ammonia applicator has been used, so Luzum recommends looking over every piece of it very carefully. He says to look for signs of wear and tear and replace anything that looks broken or worn.

Three smaller components Luzum recommends giving extra attention are gaskets, hoses and valves. He says these components can wear out easily for several reasons.

"Sunlight, kinks and cuts can shorten hose life and leave soft spots that could break under pressure and put safety at risk during application," says Luzum. "Anhydrous ammonia can be a dangerous product when not handled correctly. By doing these preventative maintenance pieces, safety issues can be avoided and time can be saved at application." Luzum recommends making sure all necessary personal protective equipment is ready to go for anhydrous applications in advance just to save a little bit more time.

Additionally, Luzum advises calibrating the anhydrous application equipment, "I would always ensure calibration with the first tank of the year. Anhydrous ammonia is such a costly input in today's market, the last thing we want to do is unintentionally misapply." And, because nitrogen fertilizer is so expensive right now, Luzum says it's a good idea to consider protecting fall anhydrous with N-Serve® nitrogen stabilizer.

"Nitrogen prices have risen drastically in the past 12 months, and it appears fall input prices will still be close to record highs. Nitrogen will likely be the highest input cost of a corn crop for 2023, excluding land cost," he says. "It's important for the grower to do what is economically viable."

N-Serve is powered by Optinyte® technology, which is shown to reduce nitrogen leaching and denitrification—and increase yield potential by an average of 7% when used with fall applications.<sup>1</sup> Protecting fall anhydrous with a proven stabilizer like N-Serve can help maximize return on investment.

## Liquid manure application prep

When it comes to liquid manure applications, as with anhydrous ammonia, Luzum recommends taking out the application equipment, looking it over for any worn or broken parts and calibrating it for proper application rates.

Luzum says it's also a good idea to do other prep for liquid manure. "I recommend farmers take manure samples to know the analysis and amounts of each nutrient in the manure beforehand," he says. "This measurement will help determine rates with their manure management plan and let them plan ahead if they need to make additional applications of any of the nutrients."

Luzum also recommends protecting liquid manure with a proven nitrogen stabilizer this fall. He says Instinct NXTGEN® nitrogen stabilizer is powered by Optinyte technology and brings the same powerful protection to liquid manure that N-Serve brings to anhydrous ammonia. He says if Instinct NXTGEN is used to protect manure, the farmer will likely mix the stabilizer into the pit themselves. So, it's a good idea for them to do the math on their application rate ahead of time as well.

"One would just want to make sure the pit gallonage is accurately figured so they can decide the rate. The rate is decided by first taking the number of gallons in the manure pit, dividing it by gallons of manure applied per acre, and then taking that number and multiplying it by the Instinct NXTGEN use rate," Luzum explains. "For example, say a pit is 1,000,000 gallons and they will be applying 4,500 gallons to the acre, that's 222 acres. The use rate of Instinct NXTGEN is 24 ounces per acre and there are 128 ounces in a gallon. So, a farmer would need to put roughly 41 gallons of Instinct NXTGEN in the pit. Put this as evenly around the pit as possible to ensure as much uniformity as possible when the pit begins to get agitated," Luzum advises.

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