

Column Name- The Heartland Minute

By: Lindsay Shorter

K-State Research and Extension Greenwood County

Agriculture Extension Agent

*“Applying Anhydrous Ammonia to Dry Soils This Fall”*

It's no secret we continue to be dry in our area. The question has been asked over the last several weeks concerning potential nitrogen losses if applying Anhydrous Ammonia to these dry soils this fall. Will it be held in dry soil?

The simple answer is, Yes. Dry soil can still hold Ammonia.

Dr. Dorivar Diaz, Nutrient Management Specialist in the Agronomy department at Kansas State University shares this insight. As long as the ammonia is applied deep enough to get it in some moisture and the soil is well sealed above the injection slot. If the soil is dry and cloddy, there may be considerable losses of ammonia within just a few days of application if the soil is not well sealed above the injection slot and/or the injection point is too shallow.

Producers should be able to tell if anhydrous is escaping from the soil during application or if the ammonia isn't being applied deeply enough. If ammonia can be smelled, the producer should either change the equipment setup to get better sealing or deeper injection, or wait until the soil has better moisture conditions.

Be mindful of what is happening at application, especially if soil conditions are not ideal. If you make an application round in the field, and you can still smell ammonia from that application, then you should make adjustments or wait for better conditions. If the soil is breaking into clods, there isn't good coverage of the knife track with loose soil, and ammonia is escaping (remember your nose tells you if ammonia is escaping; a white vapor is condensed water vapor, not ammonia which is colorless), then stop and either change the way the equipment is working or is set up, or wait until the soil has better structure or moisture.

In short, producers can apply now even with dry soils, but need to apply it deeper and make sure it's well sealed to avoid serious losses.

For more information regarding Agriculture and Natural Resources, 4-H Youth Development, or K-State Research and Extension call the office at 620-583-7455, email me, Lindsay Shorter, at [lindsayshorter@ksu.edu](mailto:lindsayshorter@ksu.edu), or stop by the office which is located inside the courthouse. Be sure to follow K-State Research and Extension- Greenwood County on Facebook for the most up-to-date information on Extension education programs and the Greenwood County 4-H program.