From: Estebo, Perry
To: Gunderson, Larry (MDA)
Cc: Estebo, Perry
Subject: Draft Nitrogen Rule Public Comments
Date: Tuesday, July 18, 2017 2:53:58 PM

Hi Larry,

I had an opportunity to attend the public meeting in Marshall on June 22 and thought I would follow-up with the following comments for consideration:

- The Dept. of Ag is testing wells as a way to monitor water quality in regards to nitrates, however it is impossible to determine if the elevated nitrates are a result of commercial fertilizer, conversion of organic matter, manure application or something else.
- Fall applied phosphorus and potash is a widely adapted measure across MN for many reasons. If a grower is applying DAP and is limited to 20# of N then he can only apply about 50 units of P---well short of a 240 bu./acre removal of 84# P/acre. If we are held to the 20 # rule many retailers will consider switching to a MAP based phosphate to allow them to apply a crop removal P rate. If a significant switch is made across MN from DAP to MAP, I'm not sure the industry is positioned to supply such a change.
- I feel we have a balance across much of MN as some crop nutrients are applied in the fall (P, K and some N) and some is applied pre-plant, as well as side-dress nitrogen application. If we can't apply more than 20 # N, many of those acres will try to push to a spring application for their whole program—N, P, and K. In some cases this may mean that application rates of a total program that will reach over 700 #/acre----are we concerned that we could then run into potential surface run-off issues if a significant rainfall event occurred after the crop nutrient application was made?
- On site crop nutrient storage and spring workload is a real concern. Most retailers utilize their storage facilities in the fall and re-fill them for the spring application season. If the majority of the business is pushed to the spring season, they will need to add additional storage space as the logistics of receiving product in-season makes the business impossible. Additional labor to apply more crop nutrients, in an already busy spring season, is very hard to find. An additional investment in more floaters and tender trucks will also be needed. The cost of all of these upgrades will be more than the average retailer could bear.
- I'm not sure enough credit is given to the work that MN retailers and farmers do in managing their crop nutrient applications. Site specific technology is used across many MN acres. They monitor the yield maps and look at yield potential across the fields. They then apply crop nutrients to match to the yield potential---taking into consideration the soil types and fertility levels. With the tight ag economy, growers are managing their input costs to try and maximize their return on investment. They are not over-applying nitrogen "to make sure they have enough mentality".

In closing, I would say we all want to have clean water for our children, grandchildren, and future generations of MN residents. It is easy to assume those involved in crop production are responsible for nitrates in the water because they apply nitrogen to their crops. Our farmers are working to provide food for our world, and are producing more food with less nutrients---they are already

managing crop nutrients to the best of their ability for the future generations.

Thanks,

Perry Estebo
MN Account Manager
CHS Agronomy

perry.estebo@chsinc.com
Cell: 507-430-5421
Fax: 888-225-8835

37086 337th Street Redwood Falls MN 56283
Visit us at chsinc.com

Farmer-owned with global connections

Any information, materials and opinions (together, "CHS Materials") presented by CHS to the recipient of such CHS Materials, whether in written or oral form, is for general information purposes only and does not constitute legal or other professional advice and should not be relied on or treated as a substitute for specific advice relevant to particular circumstances. CHS makes no warranties, representations or undertakings, whether express or implied, about any CHS Materials (including, without limitation, any as to the quality, accuracy, completeness or fitness for any particular purpose of any CHS Materials). Recipient agrees that CHS shall not be liable to recipient relating to or resulting from the use of any CHS Materials or any inaccuracies or errors therein or omissions therefrom.