

**Climate Action Reserve Nitrogen Management Project Protocol V1.0
Public Comment Submission**

May 22, 2012

In regard to section B.2.5.2 (Switching from Fall to Spring Application), there is no mention about the potential for decreasing N rate due to improved N fertilizer recovery when moving to spring N application. Therefore, when applying N fertilizer in the spring, the N rate can be less than when applied in the fall to achieve the same level of corn production.

In addition, a nitrification inhibitor is always recommended when applying N fertilizer in the fall, while a nitrification inhibitor is not needed when applying near planting or for side-dressing. Therefore, the cost of producing and applying the inhibitor is always associated with fall application but should not necessarily be factored into spring or side-dress application.

In regard to the idea that this practice could have significant potential (for reducing nitrous oxide flux) in regions with winter freeze or spring thaw, I am confused. Fall N application is viewed as a possible practice only where there is a winter freeze and obviously a spring thaw. The farther north one travels in the Corn Belt, the more acceptable fall N application is. This is due to the fact that soils remain frozen during the winter and nitrification of ammoniacal fertilizers is limited. Here in central Illinois, fall N application may occur on more than 50% of the corn fields, but soils are rarely continuously frozen throughout the winter season (especially this past winter). The Illinois Agronomy Handbook discourages the use of fall N application on any soils south of Illinois Route 16 because the winters are too warm. Please clarify what is meant by the importance of a winter freeze and spring thaw in this section.

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