

## Water Quality Enhancement Activity – WQL07 – Split Nitrogen Applications, 50% After Crop Emergence



### Split Nitrogen Applications

Apply no more than 50% of total crop nitrogen needs within 30 days prior to planting and apply the remaining 50% or more of the total nitrogen needs after crop emergence.

### Land Use Applicability

This enhancement is applicable on cropland.

### Benefits

Timing of nitrogen application can be used to ensure adequate amounts of N are available during critical crop growth stages. Application rates can also be adjusted based on crop conditions to refine yield goals. Split application of 50% or more of the total N needs allows for more efficient plant uptake and increases nutrient utilization, resulting in a reduction in the potential loss of N through leaching and other nitrogen-based compounds like the greenhouse gas nitrous oxide to the environment.

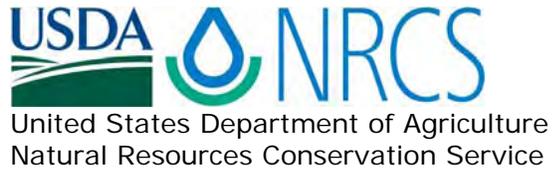
### Criteria for Split Nitrogen Applications

Implementation of this enhancement requires:

- 1) Regardless of form or application method (fertilizer, manure or any other organic by-products), apply no more than 50% of crop N needs within 30 days prior to planting and 50% or more of the N needs after crop emergence.
- 2) Post emergence N application rates can be reduced based on crop scouting reports that would suggest lower yield potential. Scouting reports need to be provided.
- 3) Producer must have annual manure analysis (if organic nutrient sources are used)
- 4) Nutrient application rates must be within the “Land Grant University (LGU) recommendations based on soil testing and established yield goals and considering all nutrient sources.
- 5) Soil surface disturbance must be minimized.

### Documentation Requirements for Split Nitrogen Applications

- 1) Written documentation for each treatment area (field) and year of this enhancement describing these items:
  - a. Acres
  - b. Planned crop



- c. Planting date and crop planted
  - d. Dates of crop emergence
  - e. Annual manure analysis results (if organic nutrient sources are used)
  - f. Crop yields (both yield goals and measured yield)
  - g. Nutrient application rates/amounts and application dates for each treatment area
- 2) A map showing where the activities are applied.



United States Department of Agriculture  
Natural Resources Conservation Service

NE-WQL07

**Water Quality Enhancement Activity – WQL07 – Split Nitrogen Applications, 50% After Crop Emergence**

**State Criteria**

- Regardless of form or application method (i.e. commercial fertilizer, manure or any other organic by-product), apply no more than 50% of crop N needs within 30 days prior to planting and 50% or more of the N needs after crop emergence.
- Post emergence N application rates can be reduced based on crop scouting reports that would suggest lower yield potential. Scouting reports need to be provided.
- Soils shall be sampled and analyzed in accordance with Practice Specification for Nutrient Management (S-590) or NebGuide “Guidelines for Soil Sampling” (G1740).
- All soil samples must be taken prior to applying fertilizer or manure.
- If applicable, manure shall be sampled and analyzed annually in accordance with Practice Standard 633 – Waste Utilization and Nebfact “Manure Testing: What to Request” (NF02-507).
- Nutrient application rates are within University of Nebraska recommendations based on soil tests and established yield goals considering all nutrient sources (refer to Practice Standard 590 and Practice Specification (S-590) for Nutrient Management).
- Minimize soil surface disturbance during nitrogen application.

**Documentation Requirements**

1. Provide a map indicating where the activities were applied.
2. Provide copies of soil test results.
3. Provide copies of manure analysis, if applicable.
4. Provide copies of any scouting reports.
5. Complete the nutrient and fertilizer application table on the following page.

**I certify that the following information meets specifications and has been provided to NRCS:**

1. Written documentation of the activity performed per documentation requirements.
2. Copies of dated receipts for equipment or services purchased.

I understand that it is my responsibility to obtain all necessary permits and to comply with all laws, regulations and ordinances pertaining to the application of these activities.

**Certified by:** \_\_\_\_\_ **Date:** \_\_\_\_\_



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Field Information				Commercial Fertilizer and Manure Information									
Tract & Field	Acres	Crop & Yield	Planting Date (m/d/yr)	Crop Emergence Date (m/d/yr)	Date Applied (m/d/yr)	Form of Commercial Fert. or Manure	Rate (lb/a)	Application Method	If Manure, Days to Incorp.	N Avail. (lb/a)	P Avail. (lb/a)	Total N Avail. (lb/a)	Total P Avail. (lb/a)
T1234 & F1	78.9	Crop	4/30/09	5/14/09	4/2/09	32-0-0 Liquid	20gal/ <sup>a</sup>	Broadcast	na	70	0	151	39
		Yield			5/30/09	32-0-0 Liquid	20 gal/a	Broadcast	na	70	0		
		Yield			190	10-30-0 liquid	10 gal	planting	na	11	39		
		Crop											
		Yield											
		Crop											
		Yield											
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