United States Department of Agriculture
Natural Resources Conservation Service 2012 Ranking Period 1

Water Quality Enhancement Activity – WQL05 – Apply nutrients no more than 30 days prior to planned planting date

Enhancement Description
This enhancement is for applying nutrients from fertilizer, manures and/or compost no more than 30 days prior to the planned planting date of the crop.

Land Use Applicability
Cropland

Benefits
Nutrient application timing is critical in order for nutrients to be available during critical crop growth stages and to meet crop yield goals. Nutrients that are land applied in excess of 30 days prior to the planned crop planting date are potentially lost to the environment causing water quality concerns and potential soil emissions of nitrous oxide, a potent greenhouse gas.

Conditions Where Enhancement Applies
This enhancement applies to only annually planted crop land use acres.

Criteria
Implementation of this enhancement requires:

1. Fertilizer, manure or any other organic by-products, regardless of form or application method must be applied no more than 30 days prior to the planned crop planting date, or after crop planting.
    - Utilized incorporation or injection where recommended by the Land Grant University (LGU)
2. The producer must have a current soil test (no more than 3 years old).
3. Nutrient application rates must be within the LGU recommendations based on soil testing and established yield goals and considering all nutrient sources.
4. Soil surface disturbance must be minimized by nutrient applications to stay within the site's residue management goals.

Adoption Requirements
This enhancement is considered adopted when all four criteria above have been met on the land use acre.

Documentation Requirements

For each year of this enhancement, provide documentation of the following:

1. A map showing the treated acres,
2. Target (planned) crop,
3. Planned planting date,
4. Actual planting date and crop planted,
5. Soil test results,
6. Manure analysis results (where appropriate),
7. Crop yields (both yield goals and measured yield), and
8. Nutrient application rates/amounts and application dates for each treatment area.

Note: In lieu of documenting each individual item listed in the Documentation Requirements, a Certified Crop Advisor plan that contains each of the items may be substituted.

References

Follett, R.F. 2001. Nitrogen Transformation and Transport Processes. pp. 17-44, In R.F. Follett and J. Hatfield. (eds.). 2001. Nitrogen in the Environment; Sources, Problems, and Solutions. Elsevier Science Publishers. The Netherlands. 520 pp.

Stevenson, F.J. (ed.) 1982. Nitrogen in Agricultural Soils. Agron. Series 22. ASA, CSSA, and SSSA, Madison, WI.

Michigan Supplement

WQL05

There are no additional criteria for Michigan.