NUTRIENT MANAGEMENT (590)

Precision Nutrient Management System

2016 Environmental Quality Incentives Program (EQIP)

Purpose: By implementing a precision nutrient management plan, producers will be able to improve efficiency and effectiveness of nutrients by utilizing precision techniques and tools, maintain or increase yields, and minimize nutrient losses from fields, thus helping protect surface and ground water supplies. Precision nutrient management techniques ensure that the 4 R's (Right rate, Right source, Right application method, and Right application timing) provide proper amount of nutrients to the crop where it is needed.

Eligible Land: Cropland that is 15 acres in size or larger.

Producer requirements for payment:

General requirements on a per field basis:

1. Develop a Nutrient Management Plan (590 Implementation Requirement Sheet) that documents the proper rate, source, application method, and application timing of recommended N, P, and K fertilizer application on a per field or sub-field basis. The P and K fertilizer recommendations must be provided as Variable Rate Prescription Maps based on UT Lime and Fertilizer recommendations. Refer to: https://ag.tennessee.edu/spp/Pages/soilfertilizerpubs.aspx
2. Plan erosion to tolerance "T" levels and to a positive soil conditioning index for the crop rotation.
3. Map(s) of the soil sampling locations. Grid soil sampling area shall be no larger than 3 acres.
4. Maps of soil sample analysis. Use current soil test results (less than one year for nutrient plan development) developed in accordance with University of Tennessee guidance.
5. Soil test analysis must be from UT or a certified lab approved by the North American Proficiency Testing Program (Soil Science Society of America) http://www.naptprogram.org/about/participants or Agriculture Laboratory Proficiency Program (ALP). Contact the State Agronomist for labs participating in ALP.
6. Soil test results must be based on UT soil testing procedures. For soil tests from approved certified labs utilizing Mehlich 3 soil test extractant for Phosphorus (P) and Potassium (K), the results must be converted to UT guidelines and fertilizer recommendations. Refer to UT guide sheet W229 for proper conversion: https://utextension.tennessee.edu/publications/Documents/W229.pdf
7. Variable Rate Prescription Maps for phosphorus, potassium, and lime **based on University of Tennessee recommendation guidelines.**
8. Nutrient budget shall be based on realistic yield goal (average of 3 out of 5 years) for each crop in rotation.
9. Record of all nutrient applications that includes dates, sources, analysis, rates, and methods of application.
10. Variable rate as-applied maps of P and K fertilizer and Lime applications that include the date of application for each product.
11. Yield data and harvest date. *If GPS Yield Monitor data is collected, then Yield Maps from the Yield Monitor data and harvest date must be submitted*.

TN NRCS Nutrient Recordkeeping Form for Precision Nutrient Management System Crop Year _____

Name and Address:	Tract #:	Farm #:	Equipment Calibration Dates:

Field No.	Acres Applied	Crop	Planting Date	VR Presciption Maps for P, K, and Lime for Grid or Zone *(attach maps to form)*	VR Application Source(s), Rate(s), and Date(s) of P, K, and Lime for Grid or Zone *(attach as-applied maps to form)*	Nitrogen					Harvest Date and Yield
						Recommendation (lbs/acre)	Source Used	Application Rate (lbs/acre)	Application Date	Application Method	