

ANNUAL NITROGEN MANAGEMENT REPORT PHASE II

-Soil Sample and Fertilizer Data Information Due by **April 25**
-Completed Report Due by **December 31**



Landowner _____ Phone # _____

Certified Operator _____

Address _____

City _____ State _____ Zip _____

Well Registration No. _____

Total Acres Irrigated by this Well _____

Field Description (Legal) _____ 1/4, _____ 1/4, Section _____ Township _____ Range _____ County _____

Water Tested By:
Soil Tested By:
Manure Tested By:

CROP YEAR: _____

SOIL SAMPLE INFORMATION

	Sample 1	Sample 2	Sample 3	Sample 4
1. Soil Sample Identification Number				
2. Acres Represented per Sample (No more than 60 acres per sample)				
3. Residual Nitrogen (Lbs found to 3 feet.) (Average all samples and place on line 10.)				

FERTILIZER DATA

	Current Year	Year ()	Year ()	Year ()
4. Water Nitrate Results as ppm (NO ₃ -N) (Use ppm in formula on line 9.)				
5. Total Nitrogen Available from Manure Samples (Rate [Tons manure/acre] x Lbs N/Ton x %D.M. = Lbs/Acre)				
6. Crop Planted				
7. Yield goal (Bushels/Acre) (Past 5 year average + 5% recommended)				
8. Total Nitrogen Needed for Yield Goal (Lbs/Acre)				
9. Nitrogen Available from Water (Lbs/Acre) (ppm x .227 x 12 inches of water = Lbs/Acre)				
10. Residual Nitrogen Available in 3 ft. of Soil (Lbs/Acre) (If average is less than 35 Lbs – use 35 Lbs)				
11. Lbs of N/Acre Available from Manure for Year Applied (Total from line 5 multiplied by 50 percent)				
12. Nitrogen Available from Past Crop (Lbs/Acre)				
13. Nitrogen Recommendation (Lbs/Acre) (Total of line 8 minus 9, 10, 11, & 12)				
14. SPNRD Guideline: (If line 13 is zero (0) pounds and the surface sample analysis show less than 20 pounds, use 50 pounds as a maximum recommendation.) Nitrogen application for _____ bushels of _____ is _____ Lbs per Acre.				

FIELD DATA

Actual Nitrogen Applied _____ Lbs per Acre

Did you use split applications? YES / NO

Actual Yield _____ Bushels per Acre

Did you use an inhibitor? YES / NO

I certify to the best of my knowledge the above information is accurate and correct.

Signature (Certified Operator) _____ Date _____

UNL Fertilizer N Best Management Practices

Determining Total Nitrogen Requirement

Crop	Approximate Nitrogen Consumption
Corn	1.2 lb N per bushel
Wheat	2.0 lb N per bushel
Grain Sorghum	1.0 lb N per bushel
Sugar Beets	9.0 lb N per ton
Pasture	40 lb N per ton

INSTRUCTIONS FOR FILING ANNUAL NITROGEN MANAGEMENT REPORT

This report form serves two purposes:

(1) Lines 1-14 are designated to be completed before applying fertilizer, aiding the producer in planning nitrogen fertilizer use based on District approved best management practices. NRD employees, crop consultants, fertilizer dealers and Extension Educators can provide help with most of the information. **Information in these sections is due April 25.**

(2) The information below line 14, Field Data, must be completed after harvest and will provide a record for the producer and the NRD of the actual nitrogen use and yield. **The completed report is due December 31.**

Report forms are due by the producer based on the management phase requirement in the designated ground water management subarea.

Because the nitrogen application must be done by a certified operator, the report form asks for the name of the certified operator who will apply (or has applied) the nitrogen. The landowner needs to be certified only if he/she is responsible for the nitrogen application. Use the address of the certified operator.

Line 1. "Soil Sample Identification Number" This number will be provided by the testing laboratory.

Line 2. "Acres Represented..." The number of acres in the sample area. Only sixty (60) acres can be represented by any one composite sample for management areas designated in Phase II and forty (40) acres for management areas designated in Phase III. South Platte NRD requires that producers pull a composite sample which will consist of eight probes taken at each of two depths. The depths will be 0-10 inches and 10-36 inches. Results will be used in determining commercial fertilizer application rates. One form should be used for each tract.

Line 3. "Residual Nitrogen...Lbs found to 3 feet" These are the results of the soil tests before any nitrogen application. Results should be reported in pounds per acre. If your lab reports only in parts per million (ppm), you can convert that reading by multiplying the number in ppm by the factor of .3 and then by the soil depth samples (Example: 5 ppm times .3 times 10 inch soil depth = 15 Lbs/Acre, and 5.7 ppm times .3 times 26 inch soil depth = 44.46 Lbs/Acre for a total 3 foot sample of 59.46 Lbs/Acre).

(In this section on fertilizer data, use the "Current Year" column for the crop year being reported. Fill in the remaining columns on the form with data reported in previous years (if applicable) to provide a record of three consecutive years along with the current year to provide comparisons.)

Line 4. "Water Nitrate Results..." These are the results from samples taken before application of any nitrogen for the crop year being reported (to simplify testing, water samples can be obtained during the irrigation season, with the results to be used for the crop to be planted in the following year). Water samples should be collected at about the same time each year. List the results from the testing laboratory in part per million (ppm). If your field is irrigated with surface water only, enter "N/A" on this line. Irrigation water samples are required from ground water irrigation wells only. If you mix both ground water and surface water to irrigate your field, the water sample should only be from the ground water well. If you use more than one well to irrigate your field, a water sample is required from each well. Use an average of those results on line 4.

Line 5. "Total Nitrogen Available from Manure Samples..." is obtained by multiplying the manure application rate per acre (tons manure per acre) by the laboratory analysis report from the manure samples in Lbs nitrogen per ton on a dry matter basis. The manure analysis should be reported on a dry basis; however, if analysis is reported on an as-received moisture basis, percent dry matter will need to be eliminated to determine pounds of nitrogen per acre. Farm operators who use manure for fertilizer purposes are required to sample manure prior to application. The district maintains a list of commercial laboratories that provide a manure sampling and analyzing service.

Line 6. "Crop Planted" List the crop planted for the year being reported. If you are planting alfalfa, not irrigating, or no crop is planted, a report is not necessary. If the field is in a rotation, soil, water and manure samples must be taken as appropriate in order to use those results in calculating nitrogen recommendations for future crops.

Line 7. "Yield Goal" A reasonable yield goal can be determined by using the average of the yields for the past five years and adding five (5) percent.

Line 8. "Total Nitrogen Needed..." can be calculated in pounds per acre and is interpreted as the total amount of nitrogen from all sources such as soil, water, manure, fertilizer, etc. from which these credits can be deducted.

Line 9. "Nitrogen Available from Water" Multiply the number in ppm used on Line 4 ("Water Nitrate Results...") by the conversion factor of .227, and then multiplying again by 12 inches of irrigation water (Example: 14 ppm x .227 x 12 inches = 38.13 Lbs N per Acre).

Line 10. "Residual Nitrogen Available in..." is the average of soil samples taken for the field and listed on Line 3. (If that average is less than 35 Lbs per Acre – use 35 pounds on line 10.)

Line 11. "Lbs of Nitrogen per Acre Available from Manure for year Applied" is obtained by multiplying the results listed on line 5 ("Total Nitrogen Available from Manure Samples") by 50 percent. Approximately 50 percent of the total nitrogen remaining in manure after storage is potentially available to the crop during the year the manure is applied. Moisture content, handling, and application methods, etc., influence nitrogen contribution to a crop in the first year. Therefore, the nitrogen contribution can only be an estimate. Subsequently, nearly all of the nitrogen released (mineralized) during the second, third and fourth cropping years after application should be accounted for in the soil sampling analysis.

Line 12. "Nitrogen Available from Past Crop..." is probably ZERO unless the previous crop was alfalfa or beans. The Extension Educator, crop consultant, agronomist or fertilizer dealer can help you to calculate that amount.

Line 13. "Nitrogen Recommendation..." is the total from Line 8 minus the amounts on Lines 9, 10, 11, and 12.

Line 14. "SPNRD Guideline" This is a summary line of the calculation above. (If Line 13 is zero (0) pounds or under and the surface sample analysis (0" – 10" depth) shows less than 20 pounds, use 50 pounds as a maximum recommendation.)

The remaining section of the form, Field Data, needs to be completed, as appropriate, after the harvest. The certified operator is required to sign the form. The report(s) is due in the South Platte NRD office by the required due dates.

Send completed forms to: South Platte NRD, PO Box 294, Sidney, NE 69162