



January 2013

## Nutrient Management Recordkeeping Requirements



### Keep five years worth of records to:

- Track agronomic applications to ensure good crop production and protect water from leaching or runoff
- Help evaluate application results
- Help plan future applications
- Meet state requirements per [WAC 16-611](#)

### Required Records to show Agronomic Rate of Nutrient Application

In October 2012, [WAC 16-611](#) clarified what records must be kept, and set penalty levels (not to exceed \$5,000 per calendar year) for lack of records.

**Soils:** Talk to your planner about taking representative soil samples.

- Annual post-harvest soil nitrate nitrogen analysis
- Every 3 years include
  - Organic matter
  - pH
  - Ammonium nitrogen
  - Phosphorus (Method: Bray-1 for soil pH <7, and Olsen for soil pH >7)
  - Potassium
  - Electrical conductivity

**Manure Transfer:** Records for manure imports and exports must include the following:

- Date of transfer
- Amount of nutrients transferred
- Name of person supplying/receiving nutrients
- Nutrient analysis of manure transferred

**Irrigation:** Irrigation water management records must include:

- Field identification
- Total amount of irrigation applied to each field, each year

**All Nutrient Sources:** Complete nutrient analysis for organic and inorganic materials supplied for crop uptake, including but not limited to manure and commercial fertilizer.

Manure and other organic sources of nutrients must be analyzed annually for:

- Organic nitrogen
- Ammonia nitrogen
- Phosphorus

### **Application Records**

- Field ID and year of application
- Crop grown in each field where application occurred
- Crop nutrient needs based on expected crop yield
- Nutrient sources available from residual soil nitrogen, including soil organic matter, legume crops, and previous organic nutrient applications
- Date and method of application; nutrient sources, nutrient analysis, amount of N and P applied and available for each source
- Annual total amount of N and P applied to fields
- Weather conditions 24 hours prior to, and during applications

**“Agronomic rate”** means the application of nutrients to supply crop or plant nutrient needs to achieve realistic yields and minimize the movement of nutrients to surface and ground waters

**Why apply nutrients at agronomic rates?** Over application of nutrients may lead to high crop uptake and plant nutrient imbalance, which can impact herd health. Excess nutrients may also lead to *reduced* crop yields. Over application of manure and excess nutrients can leach into groundwater and run off into surface water, polluting drinking water and lakes and streams.

Agronomic applications of nutrients, regardless of source, maximize plant growth *and* protect water quality. Applying the right nutrient source, at the right time, at the right rate, and in the right place are components of agronomic nutrient applications.



**Why keep so many records?** Protect your operation: Good records showing agronomic applications of nutrients demonstrate you are a responsible operator, using manure beneficially.

Compliance: Complete records tell the story of your nutrient management practices. Combined with a facility visit, records help Inspectors assess compliance with the Dairy Nutrient Management Act.

**Retain five years worth of records** as required by:

- The Dairy Nutrient Management Act (RCW 90.64.010)
- The Washington CAFO General NPDES Permit

**Keep nutrient application records in a notebook or on a calendar**

For example, if applying with a tanker, note the gallons applied with each load, such as 4,800 gallons. Combined with nutrient analysis, soil tests and crop nutrient needs, your records should demonstrate agronomic application of nutrients.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6	7
	Loads: IIII (lagoon 1) Field: 3			Loads: IIII (lagoon 2) Field: 6		
Sunny	Sunny	Showers	Sunny	Sunny	Sunny	Rain



If you have questions about recordkeeping requirements, please contact your regional Nutrient Management Plan Inspector:  
**Southwest Region @ 360.902.1928**    **Northwest Region @ 360.354.7421**  
**Eastern Region @ 509.969.7140**    **Puget Sound Region @ 360.202.3257**