January 2005



Nutrient Management Requirements on Your Dairy Operation

We developed this guideline to help you understand and comply with the requirements of your Nutrient Management Plan regarding soil tests, manure tests, and manure application records. Your Nutrient Management Plan is required by RCW 90.64 Dairy Nutrient Management. It was developed for your farm by you and your local conservation district, NRCS, or by a private provider; they can provide assistance with the implementation of your plan.

Soil Test

Soil tests are used to determine the soil's ability to supply plant nutrients. Your soil test program is most valuable to you when the tests are taken the same time of year. We recommend sampling after harvest and prior to nutrient application. The following chart will help you determine your **soil testing requirements**. Clearly identify your soil samples relative to the fields they represent. We recommend you retain all previous soil sample results; but a minimum of the last three samples should be available for inspections. Your operation may benefit from testing more often or testing for other nutrients specific to your cropping system.

Fastarn Washington	NO ₂ -N NH ₄ -N	Annually
Lastern wasnington	1003-10, 10114-10,	
	Р, К, ОМ, рН,	Exceptions:
	EC	IF
		Your farm receives less than 25" of
		rainfall + irrigation
		OR
		You are growing a perennial crop
		(the crop is planted once and
		harvested several times over a
		period of years)
		THEN
		Test every 3 years
Western Washington – Specific	NO ₃ -N	Annual Fall Report Card Soil Test
criteria are established in EM8832-E		is required to measure NO ₃ -N in the
Post-Harvest Soil Nitrate Testing for		1 st foot for all cropping systems.
Manured Cropping Systems West of		
the Cascades (May 2003) contained	P, K, OM, pH,	Annually for annual crops
in Section 7 of your Nutrient		Every 3 years for perennial crops
Management Plan.		Recommendation: Test at the same
-		time as Fall Report Card Soil Test

NO₃-N = Nitrate Nitrogen, NH₄-N = Ammonium Nitrogen, P=Phosphorus (Western WA-Standard Bray, Eastern WA-Olsen/Bicarb), K=Potassium, OM = Organic Matter, pH = Soil Acidity, EC = Electrical Conductivity

Manure Testing

Manure tests are used to determine the nutrient value of your manure. At a minimum, you are required have your manure, both solid and liquid, tested by a laboratory annually prior to land application. The following chart will help you determine your **manure testing requirements**.

Eastern Washington	Laboratory Testing Annual Requirement
Annual laboratory testing prior	Manure, Liquid – Test for NH ₄ -N, Organic N, P ₂ O ₅ , K ₂ O
to land application	Manure, Solids - NH ₄ -N, Organic N, P ₂ O ₅ , K ₂ O, % Solids
Western Washington	
Annual laboratory tests.	On-Farm Testing (quick test methods) include
In addition, you are required to	hydrometer or nitrogen meter.
complete on-farm testing of	
your manures twice per year.	
Test prior to land application.	

Nutrient Application Records

Nutrient sources include such materials as solid manure, liquid manure, compost, starter fertilizers and commercial fertilizers that are added to supply plant nutrients to grow a crop. Nutrient Application Records are to be maintained for at least three years. Your records should include the following for each field that manure is applied to:

Field Identification, Year Crop, Predicted Crop Yield, Crop Nutrient Needs, Current Soil Test Values All Nutrient Sources (including commercial fertilizers) Nutrient Analysis of Each Source, Amount Applied to Field, Date Applied Actual Crop Yield Forage Nutrient Testing as required by Nutrient Management Plan

Manure removed or transferred to offsite locations: Transfer information should include who and where the manure was transferred to, amount of manure transferred, and when the manure was transferred. Records are to be maintained for at least three years.

This information was developed by the Livestock Operations Education Outreach Committee to provide clear and concise guidance to livestock operators. Contacts for this fact sheet include Laurie Crowe, South Yakima and Chuck Timblin Whatcom Conservation Districts; Joel Poore, Natural Resources Conservation Service; Joe Harrison and Robert Stevens, Washington State University Extension, and Nora Mena, Washington State Department of Agriculture Livestock Nutrient Management Program.