How to Survive a Dairy Inspection

or

What to Expect when Ecology Takes a Look at Your Farm

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Why is Ecology conducting dairy inspections?

The 1998 Dairy Nutrient Management Act was a big step toward providing the state's dairy industry with an understandable and predictable process. It made several changes to the previous dairy legislation, including:

- Replacing complaint-driven inspections with required inspections of all dairy farms. Ecology must conduct at least one initial inspection of every dairy within Washington State by October 2000 and conduct follow-up inspections after that.
- Requiring a Dairy Nutrient Management Plan (DNMP) to be written specifically for each farm in the state, approved by the Conservation District by July 1, 2002, and fully implemented by December 31, 2003. A DNMP provides you with site-specific guidelines for managing dairy manure as fertilizer, protecting water quality on your farm. (See page 11 for DNMP Approval Checklist.)

Please refer to RCW 90.64 for all details of the current Washington State dairy program. For the exact language of the law, go to http://conserver.org/law/rcw9064.shtml

What's the purpose of a dairy inspection?

- To survey for evidence of existing or potential violations of water quality standards. These violations may involve surface or ground water, or both.
- To identify any needed immediate corrective actions;
- To check on the development of the DNMP for your farm - and how closely you follow it; and
- To identify dairy producers who would benefit from technical assistance programs.

What are the benefits of a dairy inspection?

- It tells you exactly what we expect under state and federal water quality laws;
- It can be the vehicle for beginning your nutrient management planning process.
- It helps clean up and protect the waters and aquifers of your watershed from pollution.
- It can result in some legal protection for you from potential third-party lawsuits under the Clean Water Act, **if you are following the law exactly, developing and following your approved DNMP**.

Who from Ecology conducts the dairy inspections?

A water quality specialist from our field office. Usually, only one inspector will be present. Additional inspectors may come if the inspection involves more than one area of expertise. You may ask the local Conservation District staff to attend.

How can I best prepare for my inspection?

- Make sure your workers are familiar with the requirements of your dairy nutrient management plan, if you already have one. Keep a copy handy for easy reference by everyone. If you still only have your "farm plan" (dating from before April 1, 1998), it would be a good idea to have it available during the initial dairy inspection.

- Prepare a list of any questions you want to ask the inspector.

- Get out your camera, if you like. The inspector will normally take pictures, and may take water samples. If you want to take your own pictures, that is fine.

- Be prepared to receive information or feedback you might not want to hear. Our inspectors genuinely respect the work you do, and they deserve reciprocal respect from you for their work. Please remember that we are carrying out the legislation developed with input from the dairy industry and made into law by the legislature and the governor.

What will the inspector be looking for?

The most obvious areas of concern are direct discharges of nutrients to surface or ground water. **Fix these before your inspection!!** If we observe a direct discharge of pollutants to surface waters, the federal Clean Water Act requires that you get a NPDES (National Pollutant Discharge Elimination System) permit. The permit requires you to develop and implement a dairy nutrient management plan in order to limit future discharges of pollutants.

Some of the more common water quality problems are:

- Exposed concrete slabs where manure runs out into a field next to a ditch or stream;
- Silage leachate running to surface waters or open fields;
- Manure storage pond filling too quickly from uncontrolled rain runoff;
- Manure storage pond that is still full at the end of the growing season;
- Lack of vegetated buffers next to streams, ditches or wetlands; and
- Animal access to surface waters.

If you have a long-term storage pond, make sure you are removing and agronomically applying the manure water and solids to farm lands - before the onset of the wet season - so that the level reaches the low point prior to the winter months.

Will I get notification of my inspection ahead of time?

We will schedule all initial inspections in advance at both parties' convenience. But if we have received a complaint about your dairy, we may do an unannounced inspection to find out if a water quality violation is occurring.

The inspection will usually take about two to three hours. You may have questions about Best Management Practices (BMPs) or other areas of farm management that affect the environment.

So what's the process?

There are three main parts to a dairy inspection.

- **Entrance Interview** - a question/answer/interview format. Using a standard inspection form (see pages 8 - 10), we will ask you for specific information. Questions will relate to the size of your farm (number of animals and acres), whether or not you have a nutrient management plan and if you're following it; and the way you collect, store and apply the nutrients produced on your farm.
- **Physical Inspection** - a tour of the working aspects of the dairy, including manure storage and application areas, composting areas, and any water bodies located on the property or immediately downstream. We may also inspect any off-site application areas or off-site dry cow or heifer operations. We take photos and water samples at this time if we observe an apparent discharge of pollutants to a stream, drainage ditch, or other surface water.
- **Exit Interview** - We will thoroughly review the results with you before leaving and let you know if a follow-up inspection or an enforcement action is likely. This is an excellent time for you to ask any questions.

You will receive a copy of the completed inspection form either at the end of the inspection, or mailed to you along with copies of any photos or lab results - as soon they are available. Make sure you get the inspector's telephone number in case you have questions later.

At the end of your inspection, you should have a clear understanding of the results based on the inspector's observations. If you disagree with the findings, or feel you cannot work effectively with this inspector, contact their supervisor and perhaps arrange a meeting where you can express your concerns.

Some form of enforcement action may be necessary to correct water quality problems if we find a significant potential for pollution or an actual pollution discharge. About 25 percent of the farms we inspect receive some kind of enforcement action or are required to get a waste discharge permit.

Ecology's response to potential or documented pollution can take the following forms:

- **Notes on the inspection form (these are advisory only)**
- **Notice of Correction (informal enforcement action requiring you to do something)**
- **Notice of Violation (asking you for more information - to be followed by Order or Penalty)**
- **Administrative Order (formal enforcement action requiring you to do something - may include requiring you to get a permit)**
- **Dairy General Permit (farms discharging manure or contaminated runoff to surface or ground waters must strictly limit such discharges by following the requirements of their permit)**
- **Penalty (up to $10,000 per day, per violation).**

These actions have definite due dates for compliance or appeals. Call your dairy inspector if you have any questions. (See next page for list of phone numbers.)

What if I disagree with the inspector?

It is very important that everyone listens carefully to each other during the inspection and respects each other's point of view. Clear communication can help avoid misunderstandings.

If there is a concern regarding an enforcement action or permit, you may appeal it to Ecology or to the Pollution Control Hearings Board. The appeal procedure is described in the enforcement document or the permit you receive.

What happens after my dairy inspection?

If actual or imminent water quality discharges were identified during your initial dairy inspection, you may have a follow-up inspection shortly afterward.

It is also common to have a follow-up inspection several months to two years later to make sure you have completed any necessary changes or improvements to your nutrient management practices, and that your DNMP is working properly to protect both surface and ground water.

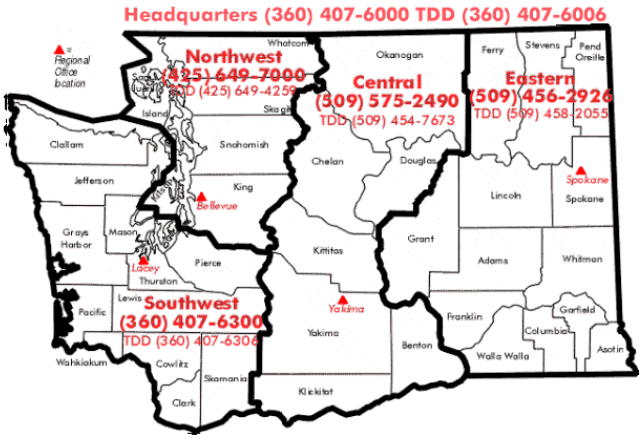
FOR MORE INFORMATION ABOUT DAIRY INSPECTIONS

Contact your local dairy inspector.

Northwest Regional Office:
Belinda Hovde (425) 649-7167
Brad Murphy (425) 649-7041

Nooksack Office (Whatcom County):
Mark Kaufman (360) 738-6248
Andrew Craig (360) 676-2217

Southwest Regional Office:
Gary Smith (360) 407-6298



Central Regional Office: DouGlas Palenshus (509) 575-3991

Eastern Regional Office: Michael Hepp (509) 456-6309

FOR INFORMATION ABOUT DAIRY NUTRIENT MANAGEMENT PLANNING

Contact your local Conservation District. The CD and the US Natural Resources Conservation Service (located in the same office) are the recognized technical experts in this area. There are also private firms that specialize in farm planning.

Note: If you have specific concerns about your dairy nutrient management plan and what it requires, talk to your CD or NRCS office.

For general guidance, here is a list of resources you may find helpful:

1. **Manure Management Guidelines for Western Washington** - WSU Cooperative Extension. Available as a hardcopy manual or on disk from Wym Matthews at Thurston Conservation District, (360) 754-3588, wym-matthews@wa.nacdnet.org

2. **Dairy Waste Handbook for Arid Regions**. NRCS and South Yakima Conservation District. This handbook is available from the South Yakima Conservation District, Zillah, WA. It focuses on systems of nutrient handling for a climate that is generally drier than average. It covers production, storage, treatment, and utilization considerations. Available from Laurie Crowe, (509) 829-3003.

3. Various publications on waste management and facility considerations, most under $20. From Natural Resource, Agriculture and Engineering Service (NRAES),

Cooperative Extension, 152 Riley-Robb Hall, Ithaca, NY 14853-5701. Phone #(607)254-8770 email: nraes@cornell.edu website: www.nraes.org

4. **NRCS Fact Sheets on Soil Quality**. This Fact Sheet series discusses soil quality, pH, and factors that affect nutrient application to croplands. Available through NRCS and Conservation District offices. On Internet - http://www.statlab.iastate.edu/survey/SQI/sqiinfo.shtml - or call (509) 323-2985.

5. **Livestock Waste Facilities Handbook** (1997) This book is available from Midwest Plan Service, Iowa State University, Ames, IA. 50011-3080 or (515) 294-4337) A very helpful book on facilities design, including collection, solid separation, and manure storage. $12.

6. **Dairy Manure Applicator Fieldbook** - available from WSU Cooperative Extension - (509) 335-2857 - publication #PNW506 - November 1997 - $5.50 - a great help in keeping good records.

7. **From End to Beginning: The Manure Resource Guide for Farmers and Gardeners in Western Washington** - August 1999 - published by WSU Cooperative Extension - free through Thurston Conservation District, (360) 754-3588, Lewis County Extension, (360) 740-1295, and Thurston County Extension (360) 786-5445. A guide to bring together people who can utilize the valuable nutrient resource of manure with livestock producers who supply more manure than they can use on their own farms. This guide also contains information on how to apply appropriate amounts of manure to various crops. Produced by Carol Miles, Ph.D., & Tamera Flores, WSU Cooperative Extension, in collaboration with William Matthews & Julie Clougherty, Thurston Conservation District. Also online at http://agsyst.wsu.edu/livestck.htm#manure

8. Pierce Conservation District's website, including local manure exchange information: http://www.piercecountycd.org

The new "sod injection" from Europe has rapidly caught on in some areas as a way to apply the nutrients in manure to pastures and hay fields. An improvement over overhead spraying, it reduces the potential for water pollution since the liquid waste is distributed evenly into the soil and only goes 4 inches deep. It also reduces odor. The slurry is pumped from the lagoon to the tractor through a hose up to one mile long.

Photos courtesy of the Washington Dairy Federation and House of Representatives Staff Photography.

WASHINGTON STATE DEPARTMENT OF ECOLOGY

Washington Department of Ecology

DAIRY INSPECTION FORM

Inspection Type: *(check one)*

☐ Initial 90.64 Inspection
☐ Dairy Follow Up Inspection
☐ Dairy Complaint
☐ Dairy Technical Assistance

Name of Dairy: _____ Dept. of Agriculture License No: _____

Property Owner's Name: _____ Phone No: _____

Dairy Operator's Name: _____ Phone No: _____

Address of Dairy: _____ GPS: Lat. _____ North; Long. _____ West

Date of Inspection: _____ Ecology Inspector(s): _____ ERTS No. _____

County: _____ Drainage, WRIA: _____

Arrival Time _____ Departure Time _____

I. Farm Plan Information	Yes	No	Don't Know
1) Does the Farm have a nutrient management plan ?	____	____	____
2) Is the Plan Approved by a conservation district under 90.64 RCW?	____	____	____
3) Is the Plan Certified by a conservation district under 90.64 RCW?	____	____	____
4) Is the Plan Certified by the dairy producer under 90.64 RCW?	____	____	____

II. Inspection History			
1) Has Ecology inspected this farm before ?	____	____	____
2) Has or is the farm currently under an formal enforcement action ?	____	____	____
3) Is the farm covered by a waste discharge permit ?	____	____	____

III. Current Inspection Outcome			
1) No action taken	____	____	____
2) Operation well managed	____	____	____
3) Follow-up needed	____	____	____
4) Compliance action possible	____	____	____

(Check those that may apply) ___ NOC ___ NOV ___ ORDER ___ PENALTY ___ PERMIT

Complete following sections as appropriate.

Problem / Observation	Comments / Due Date

Technical Assistance Needed ? ☐ **Yes** ☐ **No**

Technical Assistance Comments: _____

Comments: _____

Name of Dairy: _____ **Date:** _____

Farm Inventory	
Milking Cows	
Dry Cows	
Heifers	
Calves	
Total Animals	
Total Spreadable Acreage	

Weather Conditions: _____

A. Planning

1) Is the Nutrient Management Plan on site? ☐ Yes ☐ No

2) Date of Plan: _____.

3) What herd size and acreage was the plan developed for? _____

4) Who developed the plan? _____

Comments: _____

B. Waste and Silage Collection

1) Number of days per year animals are confined _____.

2) Approximate distance from waters of the state (ft.) _____.

3) Is all manure in the confinement area contained and directed to storage? ☐ Yes ☐ No

4) Is roof runoff diverted away from all contaminated areas? ☐ Yes ☐ No

5) Is milk parlor/milking barn wash down water collected and transferred to storage? ☐ Yes ☐ No

6) Is silage leachate collected and transferred to storage? ☐ Yes ☐ No

7) Is silage leachate discharged to a field or filter strip? ☐ Yes ☐ No

8) Is the farm frequently flooded? ☐ Yes ☐ No

Comments: _____

C. Manure Storage

1) What type of manure storage is used? ☐ Manure lagoon ☐ Above ground tank ☐ Under ground tank ☐ Dry stack ☐ Manure pit

2) How much total storage is available in months per year? _____

3) If there is a dry stack, is the runoff contained and transferred to liquid storage? ☐ Yes ☐ No

4) Does the manure lagoon appear sound? ☐ Yes ☐ No ☐ Don't Know

5) How full currently is the lagoon? (%) _____.

Comments: _____

D. Waste Application

1) How is manure applied? ☐ Sprinkler (big gun) ☐ Spreader (honey wagon) ☐ Injector ☐ Custom Pumper

2) Are manure application records maintained? ☐ Yes ☐ No

3) Are manure and soil testing records maintained? ☐ Yes ☐ No

4) Are water quality records maintained? ☐ Yes ☐ No

5) Are there any additional cattle rearing or feeding operations associated with this dairy? ☐ Yes ☐ No

Comments _____

Name of Dairy: _____ **Date:** _____

E. Plan Implementation

1) Nutrient Management Plan is fully implemented	☐ Yes	☐ No
2) Nutrient Management Plan is partially implemented	☐ Yes	☐ No
3) Nutrient Management Plan is not being implemented	☐ Yes	☐ No

F. Pollution Discharges

1) Do animals have direct access to surface water?	☐ Yes	☐ No
2) Is there a discharge of pollutants to waters of the state due to animal access to waters?	☐ Yes	☐ No
3) ☐ Was a discharge, ☐ evidence of a discharge, or ☐ a potential for discharge, of pollutants to waters of the state observed?	☐ Yes	☐ No
4) Were any samples taken?	☐ Yes	☐ No
5) Were any photographs taken?	☐ Yes	☐ No

Additional Comments: _____

_____ _____

Ecology Inspector Signature *Date*

Dairy Contact Signature Acknowledging Receipt *Date*

Washington State Conservation Commission

Checklist for Conservation District Approval of a Dairy Nutrient Management Plan

All answers must be yes for a conservation district to approve this plan. If all answers are yes, the district board of supervisors must approve the plan. If any answer is no, the district cannot approve the plan.

When approval is denied, the district must explain the changes required to obtain plan approval. The explanation must be in writing, and it must be delivered to the applicant within 90 days of the date the plan was received by the district.

☐ Yes ☐ No	Do all standard practices meet the standards, specifications and methods described in the NRCS Field Office Technical Guide and the NRCS Agricultural Waste Management Field Handbook, and if alternative practices are utilized, have such practices been approved by the Washington Conservation Commission?
☐ Yes ☐ No	Is a summary of the operation included (name, location, acres available for nutrient management, herd size, existing nutrient management facilities)?
☐ Yes ☐ No	Does the dairy nutrient management plan developed after November 1, 1998 follow the planning format adopted by the Washington Conservation Commission?
☐ Yes ☐ No	Have the following been inventoried and evaluated to identify potential pollution sources and to determine water quality protection needs: all fields used in the dairy operation; cattle confinement areas; barns; milking facilities; waste collection, handling and storage facilities; feed storage and mixing areas; riparian areas; irrigation systems; and drainage systems?
☐ Yes ☐ No	If the plan has not been fully implemented, is there a schedule of planned practices listing the location, what will be done, how much will be done and when it will be completed?
☐ Yes ☐ No	Are forage and crop fields identified and their acreage shown on an aerial photo, topographic map or a plan map drawn to scale?
☐ Yes ☐ No	Is a month-by-month nutrient application schedule included? A nutrient balance sheet (including nutrient requirements of crops that will receive dairy wastes)?
☐ Yes ☐ No	Are crop yield values or estimates supported in the plan, or in the dairy producer's case file?
☐ Yes ☐ No	If manure must be utilized elsewhere, are off-site manure management agreements included in the plan?
☐ Yes ☐ No	Is an operation plan included for the waste management system?
☐ Yes ☐ No	Are the major factors influencing the quantity of manure and wastewater described (e.g., herd size and composition, climatic data, existing runoff controls, etc.)?
☐ Yes ☐ No	Are existing manure and wastewater collection systems evaluated, and needed improvements described?
☐ Yes ☐ No	Are storage facilities for solid and liquid manure described, are storage needs described, and are the calculations and worksheets used to determine storage needs included?
☐ Yes ☐ No	Are transfer facilities and systems described?
☐ Yes ☐ No	If the manure or wastewater is treated, is this described?
☐ Yes ☐ No	Are soils described, including their physical capacity to accept nutrient applications?
☐ Yes ☐ No	Is nutrient testing of soils and manure required, and testing procedures described?
☐ Yes ☐ No	Is a recordkeeping system included that covers soil and manure tests, application of the solid and liquid components of the manure, cropping, and other significant factors and practices?
☐ Yes ☐ No	Are the periods and conditions clearly described when dairy nutrients can be safely and agronomically applied?
☐ Yes ☐ No	Are the periods and conditions clearly described when dairy nutrients should not be applied?

A dairy nutrient management plan was submitted for approval by _____
name of dairy producer

on _____. The plan was ☐ approved ☐ not approved on _____ by the
date *date*

Board of Supervisors of the _____ Conservation District.
name of district

_____
signature and title

Department of Ecology
Water Quality Program
PO Box 47600
Olympia, WA 98504-7600

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"How to Survive a Dairy Inspection" is part of an ongoing effort to provide Washington's dairy industry with meaningful information about the 1998 Dairy Nutrient Management Act and Ecology's inspection of dairy farms. We mailed this publication, a requirement of the Act, to each registered dairy farm in the state early in the year 2000.

At this point, more than 3/4 of the state's dairy farms have received their initial inspection as required by the Dairy Nutrient Management Act. If you have already received one, this publication does not mean you will get another initial inspection.

"Contribution to Clean Water" Awards

Each year, Ecology gives awards to dairy farms that do an excellent job of protecting water quality. These farms are chosen by inspectors with the assistance of the Conservation Districts. In 1999, the first year of the program, 15 "Contribution to Clean Water" awards honored dairy farmers throughout the state who took extra care to keep pollution out of streams and ground water. If you know of a dairy farm deserving of special recognition (including your own), contact your dairy inspector or your Conservation District.