

Development and Administration of
Voluntary Water Quality Protection Plans for
Cattle Feeding Operations in Washington State

Water Quality Program

Washington State Department of Ecology

Olympia, WA

Introduction

A beef cattle feedlot is a facility at which cattle are confined for all or part of the year, and fed high-energy rations for the eventual purpose of marketing. Under U.S. EPA National Pollution Discharge Elimination System rules, feedlots are not required to obtain a Concentrated Animal Feeding Operation (CAFO) permit unless a discharge of pollutants to surface occurs and the discharge does not qualify as an agricultural stormwater discharge (40 CFR §122.23, §123.25). Under state law CAFOs must obtain a permit if there is a discharge to ground water. However, feedlot operators who are not required to obtain a CAFO permit still have an interest in working proactively to ensure that their facilities do not cause surface or groundwater pollution. In general, the feedlots to be addressed by this program are located in lower precipitation zones in Central and Eastern Washington. The intent of this program is to create a voluntary process by which cattle feeders can proactively work with Ecology to prevent water pollution.

The goals of this program are to prevent polluted stormwater from moving off-site to surface waters and to prevent leaching of pollutants into groundwater. In order to achieve these goals, this program establishes a process whereby BMPs for feedlot facilities are identified and implemented according to flexible, site-specific Water Pollution Prevention Plans (WP3). These plans are to be developed by the feedlots and approved by Ecology. An Ecology-approved WP3 provides formal recognition that a cattle feeding operation is implementing site-specific practices designed to prevent pollution of surface and ground water. By implementing a WP3, operations are demonstrating they have taken steps to prevent pollution in compliance with Washington's Water Pollution Control Act as well as the state water quality standards. This is a voluntary program that is available to cattle feeders who decide to participate.

Purpose

The purposes of this program are to:

- Enhance working relationships and cooperation by and between Ecology, and the Washington Cattle Feeders Association and its members.
- Provide a framework for the voluntary implementation of water quality pollution prevention plans.
- Provide regulatory certainty to cattle feeding operations. An Ecology-approved WP3 is intended to minimize the potential for a cattle feeding operation to pollute surface or groundwater.

Water Pollution Prevention Plan Components (WP3)

The scope of the plan is limited to: lands that are owned, leased or managed by the plan steward for the purpose of conducting a cattle feeding operation; and the land management activities conducted by the plan steward upon those lands as a usual course of business for a cattle feeding operation.

The below WP3 outline includes examples of components that would commonly be needed in a plan. The final plan will include additional detail for each component and may include additional criteria and/or Best Management Practices (BMPs). Some BMPs or components may not apply to every facility. For example, not all facilities have associated land that they use manure to fertilize. In that case, the Nutrient Management plan component would simply note that BMPs related to nutrient application are not applicable.

Contact information:

- Identification of a contact person at the facility who is knowledgeable about and responsible for the BMPs in the feedlot's WP3 and their implementation.

Facility Site map and description:

- Will include topographical site map and/or topographical map of facility showing surface water if present and slopes of the land around the facility. A map of the feedlot should provide enough detail to allow Ecology to adequately review the feasibility and appropriateness of various BMPs for the facility.
- Will include soil survey map of the parcel (from NRCS Web Soil Survey)
- A description of the operational capacity of the feedlot, including the maximum number of cattle which could be confined, and site-specific features or characteristics, which could complicate or prevent implementation of particular BMPs.

Manure Management (collection and storage):

- Plan describes how solids are stored.
 - Solids are stored in a facility that is designed to prevent discharges.
 - Storage is designed to have adequate capacity.
 - Estimated range for the volume of manure produced on a monthly basis.
 - The plan must indicate that the schedule for manure transfer will be adjusted, as necessary, to ensure that the volume of manure stored on site does not exceed the capacity of the storage facility.

Nutrient Management (application):

- Application of nutrients on site, if applicable:
 - NRCS 590 standard.
 - Obtain annual test on nutrients – manure and soil.
 - Adaptive management through spring and fall soil testing.
 - Limitations on field applications e.g. frozen soils, saturated soils or proximity to surface waters or conduits to surface or groundwater.
 - Map of application fields.

On-site Stormwater Management:

- Stormwater is managed on-site:
 - Clean runoff is diverted from contact with solid manure to the extent practicable.
 - All on-site runoff is diverted to on-site stormwater basins/ponds.
 - Site map and/or topographical map of facility shows where stormwater flows and anticipated runoff during storm events.
- Stormwater Basins/Ponds:
 - Stormwater basins/ponds are designed to prevent discharges to groundwater.
 - Stormwater basins/ponds are designed with the capacity to retain runoff during storm or rain-on-snow events.
 - The plan provides a description of the stormwater/pond design, capacity, construction and anticipated performance.
 - The plan describes the schedule for regular basin/pond pump-out and/or cleanout.

- Plan describes pump back facilities and the emergency application plan.
- NRCS construction standard.

Surface Water Protection:

- Plan describes how the facility prevents discharges to surface water.
 - If riparian areas are present on the facility, they have adequate vegetation to protect all water quality parameters, per ECY riparian buffer guidance.
 - Facility is designed to prevent discharges to surface waters including streams, irrigation canals and ditches.
 - BMPs are in place to prevent concentrated runoff flows from entering riparian buffer.
 - It is not anticipated that livestock grazing will occur on-site, but if it does, grazing BMPs will conform to Ecology’s pasture and range management BMP guidance.

Third Party Transfer of Waste:

- Third Party Transfer records:
 - Amount transferred
 - Date of transfer, by month at minimum
 - Nutrient value of manure, based on sampling results
 - Moisture amount

Schedule of future BMP implementation, if applicable.

- If a feedlot intends to implement an additional BMP or BMPs in the future, a target date for implementation of the future BMPs should be included in the feedlot’s WP3.

Record Keeping:

- Nutrient Management-Nutrient Budget Information & Adaptive Management Strategies
- Nutrient Management-Application Rates and Timing by Field
- Nutrient Management-Soil Sampling Information
- Stormwater Management-How many tons/gallons of sediments are mechanically removed from stormwater basins/ponds, and storage areas.
 - Note that liquids may be utilized for dust control under an Ecology approved fugitive dust control plan.
- Records should be kept for a minimum of five years.

Plan Review/Administration

Plan Review

Cattle Feeders who voluntarily decide to participate in the program will submit a copy of their WP3 to Ecology. The plan will be signed by the facility owner or operator and attest to the accuracy of the plan and their intent to implement the plan. Ecology will review the plan to ensure all criteria are adequately addressed and water quality is protected. If more information is needed or additional actions are necessary to protect water quality, Ecology will coordinate with the planner and the producer. Ecology will determine whether the plan is adequate for protecting water quality.

The owner/operator of a cattle feedlot is responsible for preparing a WP3 and submitting the plan to Ecology for approval. Agricultural extension agents, consultants, or other assistance may be used in developing and reviewing the plan. Ecology may perform a preliminary site visit to assist the owner/operator with determining which BMPs are needed to effectively protect water quality.

Within 60 days of receipt of WP3 Ecology staff will review the plan and notify the feedlot of preliminary plan approval or request additional information or propose alternative practices to approve the plan. Ecology will contact feedlot owner/operator if more review time is needed.

The approval process may include good faith discussion, evaluation, collection of information, and other efforts to resolve differences of opinion about the plan, so long as reasonable progress toward the development and approval of the feedlot's WP3 is being made. The purpose of good faith negotiation is to share information and resolve differences of opinion regarding a feedlot's WP3. Both the feedlot and Ecology need to be able to exchange information freely and in good faith. Information obtained by Ecology in the course of negotiation is obtained for the purpose of providing technical assistance and/or guidance to the owner/operator.

If agreement on a feedlot's WP3 cannot be reached after thorough good faith evaluation of alternatives and consideration of plan effectiveness, costs, and other pertinent matters, feedlots may decide to withdraw their WP3 plan for consideration by Ecology.

Unless otherwise noted in the WP3, all BMPs must be implemented prior to both the site visit and final plan approval.

Facility Review/Verification

Prior to approving a WP3, the plan needs to be implemented. Ecology will conduct a site visit to verify that facilities are constructed, operated and maintained as outlined in the plan, to review records, and to confirm that the plan is being implemented. The operator will sign a consent form indicating that Ecology has permission to perform mutually arranged site visits. Ecology will issue a letter to the facility operator within 60 days after the facility visit that either indicates approval of the water quality protection plan, or outlines issues that need to be addressed in order to obtain Ecology approval. If deficiencies in the implementation of the plan are identified, then a follow-up visit by Ecology will occur following completion of the corrections. This process will repeat in good faith until Ecology determines that the plan is approvable, assuming that satisfactory progress is being made towards the full implementation of an approvable plan.

The WP3 has a three-year life cycle. After the initial plan approval, Ecology will perform a site visit at least once every three calendar years thereafter in order to re-certify that the plan is being implemented. Ecology will send a reminder notice to the operator that the end of a three year cycle is approaching and that the WP3 needs to be recertified. The owner/operator must contact Ecology to schedule the site visit in year three of the plan cycle. Any subsequent deficiencies in a plan or implementation of a plan need to be corrected by the operator within 60 days of identification by Ecology in order to maintain approval of the plan. Ecology may perform an additional site visit to verify that the deficiencies are corrected prior to plan renewal. Ecology will issue a letter to renew approval of the plan within 60 days of the last site visit.

Overview of the general process for WP3 approval and administration:

Step 1: Owner/operator works with the Cattle Feeders Association and Ecology to develop an approvable plan. Ecology provides preliminary plan approval or request for additional information within 60 days of receiving the plan. Owner/operator ensures that the BMPs in the draft plan are implemented prior to the Ecology site visit.

Step 2: Ecology inspects the facility. Ecology issues an approval or deficiency letter within 60 days. If necessary, BMP deficiencies are corrected before plan is approved. Year 1 of the plan starts on the date of the approval letter.

Step 3: Ecology re-inspects the facility before the end of year 3. Any necessary updates to the WP3 are made. Ecology issues an approval or deficiency letter within 60 days of the site visit. If necessary, BMP deficiencies are corrected within 60 days. Plan approval is renewed once all appropriate BMPs are in place. Year 1 of the subsequent plan cycle starts on the date of the approval letter.

The process for Step 3 will re-occur until the owner/operator terminates participation in the WP3 program. The owner/operator may terminate participation through one of two ways: at any time, the owner/operator may inform Ecology in writing of their intent to terminate participation; 2) the WP3 will automatically expire if 60 days pass after a three year plan cycle has concluded and the WP3 has not been re-approved. Ecology may terminate a WP3 due to ongoing non-compliance with its provisions. If the facility has a discharge of pollutants to surface water or groundwater, then a water quality permit will be required for the facility.

Plan Updates

A facility may make modifications to an approved WP3, as long as the effectiveness of the plan is not compromised. Changes to a plan must be documented. Ecology must be notified of the changes to plan components within 60 days. Modifications include, but are not limited to:

- Discontinuance or addition of equipment/facilities identified as a BMP in a WP3. Maintenance and repair of a still functioning BMP does not require notification to Ecology.
- Changes in use of equipment identified as a BMP in a WP3.
- Changes in the operation that will affect the BMPs in a WP3.

During a WP3 re-approval process, Ecology may require revisions or additions to plan components that are necessary to ensure water quality protection.

Regulatory context

Under the Washington State Water Pollution Control Act (Chapter 90.48 RCW) Ecology is given the authority to control and prevent the pollution of state waters. Ecology's preferred approach is to assist people with protecting water quality through voluntary tools that promote the implementation of effective best management practices (BMPs) that prevent the discharge of pollutants to state waters.

The goal of water WP3 plans is to provide regulatory certainty to producers to voluntarily participate. An Ecology-approved water pollution prevention plan provides formal recognition that a cattle feeding operation is implementing site-specific practices intended to prevent pollution of surface or groundwater. The WP3 is a tool for demonstrating that facilities have taken steps to comply with the Water Pollution Control Act and the water quality standards.

If there is a documented discharge to surface or ground water, facilities are required to obtain a CAFO permit. More information on the CAFO Permit and when a facility is required to obtain it can be found on Ecology's website:

<https://ecology.wa.gov/Regulations-Permits/Permits-certifications/Concentrated-animal-feeding-operation>

Complaints:

Ecology is responsible for responding to complaints. Ecology reserves the right to take regulatory action if the facility is not operating according to their approved plan or a discharge to surface or groundwater occurs. If the facility discharges to surface or groundwater, they are required to obtain a permit.

**Ecology Water Quality Program
Flow Chart for Water Quality Complaints regarding Cattle Feeding Operations**

