

Issuance Date:  
Effective Date:  
Expiration Date:

Commented [JonJ1]: Insert dates

# PRELIMINARY DRAFT

## Concentrated Animal Feeding Operation General Permit

National Pollutant Discharge Elimination System and State Waste Discharge General Permit

State of Washington  
Department of Ecology  
Olympia, WA 98504-7600

In compliance with the provisions of  
The State of Washington Water Pollution Control Law  
Chapter 90.48 Revised Code of Washington  
and  
The Federal Water Pollution Control Act  
(The Clean Water Act)  
Title 33 United States Code, Section 1251 et seq.

Until this permit expires, is modified, or revoked, Permittees that have properly obtained coverage under this general permit are authorized to discharge in accordance with the special and general conditions that follow.

The Permittee must reapply for permit coverage on or before **DATE**, 180 days before the expiration of this permit if the Permittee intends to continue operations and discharges beyond the term of this permit.

Commented [JonJ2]: Insert Date



Scan with QR Reader to go to permit web page

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Water Quality Program Manager  
Washington State Department of Ecology

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## Summary of Permit Submittals

Refer to the Special and General Conditions for details on submittal requirements.

Permit Condition	Submittal	Frequency/Due Date(s)
S2.B	Application for Coverage	At least 60 days prior to first discharge.
S2.D	Modification of Permit Coverage	As necessary.
S2.E	Transfer	As necessary.
S2.F	Termination	One-time.
S7.A	One-time Report	12-months after permit coverage is issued.
S7.B	Annual Report	December 31 annually.
S7.C	Noncompliance notification	As necessary.
G18	Application for Permit Renewal	By <b>DATE</b> , at least 180 days before expiration of the general permit.

**NOTE:** The text of this permit contains words and phrases in *bold and italics*. These words and phrases are the first usage in the permit and are defined in **Appendix A**.

## SPECIAL CONDITIONS

### S1. PERMIT COVERAGE

#### S1.A Activities Covered Under This Permit

This statewide general permit covers activities associated with operating a **concentrated animal feeding operation (CAFO)** that results in a **discharge of pollutants to waters of the state** from the **production area** or from **land application field(s)** that is not agricultural stormwater.

All authorized discharges and activities must be consistent with the terms and conditions of this permit.

#### S1.B Geographic Area Covered

This permit covers the activities listed in **S1.A** within the State of Washington.

This permit does not apply to:

1. Federal lands.
2. **Indian Country** and **trust or restricted lands** except portions of the Puyallup Reservation as noted. Puyallup Exception: Following the Puyallup Tribe of Indians Land Claims Settlement Act of 1989, 25 U.S.C. §1773; this permit does apply to land within the Puyallup Reservation except for discharges to surface water on land held in trust by the federal government.

### S2. PERMIT ADMINISTRATION

Ecology is moving to online system for permit administration. Ecology may modify this permit to require electronic submittal of the Permit Application, Transfer of Coverage, or Notice of Termination when the electronic system becomes available.

#### S2.A Who Must Apply for Permit Coverage

The owner or operator of a CAFO is required to apply for coverage under this permit if the CAFO has or had a discharge to surface or ground water from its production area or land application area that is not agricultural stormwater. Ecology has determined that if the CAFO has a lagoon that does not have a double **geomembrane liner** with a leak detection system between the liner layers that it is discharging to groundwater.

For existing operations that are required to apply for permit coverage, application for coverage must be submitted no later than 90 days after the issuance date of this permit.

**Commented [j3]:** This permit is a reissuance of the CAFO General Permit that expired July 21, 2011. The proposed permit will replace the previous permit. The CAFO permit is a general permit, which covers a category of discharger [40 CFR 122.28][WAC 173-226]. All dischargers covered under a general permit receive the same permit conditions because they have substantially the same or similar discharge characteristics. This reduces the overall workload associated with writing and administering discharge permits.

The draft CAFO permit is a statewide general permit that provides coverage for discharges of pollutants (manure, litter, process wastewater, etc – collectively referred to as manure) associated with operating a CAFO within the state of Washington. This condition describes which activities and discharges are covered by the permit. In general, if a facility is a CAFO and it has or had a discharge to surface or groundwater from the production area any land application field, a permit is required [RCW 90.48][40 CFR 122.1, 122.23].

An exception is made for agricultural stormwater. Agricultural stormwater is not a point source discharge. It is a discharge that occurs because of precipitation, not human activities (e.g. irrigation). In order to show that a land application field discharge is agricultural stormwater, and therefore does not require a permit, the CAFO must have records that shows proper land application. Such records may include, but is not limited to: amounts, times, and locations that manure was applied to the field, 24-hour pre- and post-application weather reports, and the presence and current state of field buffers [40 CFR 122.4, however no exemption in RCW 90.48].

**Commented [j4]:** The Water Quality Program has determined that a lagoon with two layers of synthetic geomembrane liner with a leak detection and capture system between the layers (if installed, maintained, and operated properly) does not have a discharge that requires a permit. Other lagoon designs are known to leak, which in certain areas is a discharge. In areas where there are known groundwater impacts from nitrate, or where the groundwater is susceptible to impacts from nitrate, Ecology has determined that the leakage from lagoons that are not double lined with leak detection requires a permit.

[Ag. Waste Mngmt System Component Design Part 651 Appendix 10D][Animal Waste Containment Lagoons, ASCE Manual No. 105] . .

**Commented [JJ(5):** WAC 173-226-200(1)(a)

## S2.B How to Apply for Permit Coverage

To apply for coverage under this permit the permit applicant must use the permit **application for coverage (Notice of Intent or NOI)** provided at: **WEB ADDRESS**.

1. Mail the complete NOI to:

Department of Ecology  
Water Quality Program  
Attn: CAFO Permit Administrator  
PO Box 47600  
Olympia, WA 98504

2. Using the Public Notice Template in the NOI, publish a public notice once a week for two weeks with at least seven days between publications in a single newspaper of general circulation in the county. Publish the public notice only after Ecology has received the complete application for permit coverage.

At the end of the 30-day public comment period, Ecology will consider any received comments about the applicability of this permit to the proposed activity before issuing a decision on permit coverage. Once permit coverage is issued, the CAFO owner or operator who applied for coverage becomes a **Permittee**.

## S2.C Permit Coverage Timeline

1. If the applicant does not receive notification from Ecology, permit coverage automatically commences on whichever of the following dates occurs last:
  - a. The 31st day following receipt by Ecology of a completed application for coverage.
  - b. The 31st day following the end of a 30-day public comment period.
  - c. The effective date of the general permit.
2. Ecology may need additional time to review the application:
  - a. If the application is incomplete.
  - b. If it requires additional site-specific information.
  - c. If the public requests a public hearing.
  - d. If members of the public submit comments.

**Commented [j6]:** Application Form (NOI) to be developed

40 CFR 122 data requirements

Information to include:

Type of facility  
Operator/Permittee Contact Information  
Facility Address  
Facility Lat/Long  
Topographic map of production area  
Types of livestock  
Numbers of livestock  
Types of manure containment  
Capacity of manure containment (tons/gallons)  
Acres available for land application  
Amount of manure generated  
Amount of manure exported

**Commented [j7]:** WAC 173-226-200

- e. When more information is necessary to determine whether coverage under the general permit is appropriate.
3. When Ecology needs additional time:
- a. Ecology will notify the applicant in writing within 30 days and identify the issues that the applicant must resolve before a decision can be reached.
  - b. Ecology will submit the final decision to the applicant in writing. If Ecology approves the application for coverage, coverage begins the 31st day following approval, or the date the approval letter is issued, whichever is later.

### S2.D How to Modify Permit Coverage

Permittees that must modify their permit coverage, or that propose changes that require modification of permit coverage must revise and resubmit permit application materials specified in [S2.B](#).

### S2.E How to Transfer Permit Coverage

A Permittee may transfer coverage to a new Permittee, in accordance with [General Condition G13](#) of this permit, using the Transfer of Coverage (TOC) form found here: [WEB ADDRESS](#)

Both the original Permittee and the new Permittee must sign the form and provide the date that the new Permittee will be responsible for permit coverage. Once both parties have signed the TOC form, the new Permittee becomes responsible for all permit compliance and permit fees on the date indicated on the form. The original Permittee remains responsible for, and subject to, all permit conditions and permit fees until the transfer of permit coverage is effective.

Mail the complete TOC form to:

Department of Ecology  
 Water Quality Program  
 Attn: CAFO Permit Administrator  
 PO Box 47600  
 Olympia, WA 98504

### S2.F How to Terminate Permit Coverage

The Permittee will continue to incur an annual permit fee until it submits a NOT. Once permit coverage is cancelled, the Permittee may no longer discharge to waters of the state unless it applies for, and gains coverage under this permit again.

**Commented [j8]:** WAC 173-226-210

Transfer form to be developed

Information to include:

- Current Permittee name and contact
- New Permittee name and contact
- New facility contact, if different from New Permittee
- Effective date of transfer for when new Permittee becomes responsible and liable for meeting permit conditions

**Commented [j9]:** WAC 173-226-230

A permit is required if there is a discharge. Requiring demonstration that there is no longer a discharge ensures that facilities that discharge remain covered.

Notice of Termination (NOT) form to be developed

Information to include:

- Permit number
- Permittee name and contact information
- Facility location information
- Check boxes for termination requirements (checking box plus certification that Permittee has met the permit termination requirements).
- Additional details for permit termination due to CAFO no longer being in business:
- A report detailing where and how all manure and high nutrient soils from manure storage were appropriately land applied, and how there is no longer a risk of discharge from the production area of the facility.

1. A Permittee may request termination of permit coverage by submitting a completed **Notice of Termination (NOT)** form found here: **WEB ADDRESS**

A Permittee may request termination of permit coverage when one of the following conditions are met:

- a. The CAFO is no longer in operation or no longer a CAFO and all manure, litter, process waste water, any other wastes currently onsite (collectively manure), and manure impacted soil (soils containing nutrient levels above natural background) from lagoons that will be decommissioned (**S4.C.3.a.9**) are disposed of in a manner which does not pose a threat to surface or groundwater quality.

No more than 30 days after the completion of disposing of all manure and manure impacted soil the Permittee must submit a termination report which documents how the disposal activities were completed. Termination of permit coverage will not occur until disposal activities are complete.

- b. The Permittee demonstrates that there is no longer a discharge to waters of the state.
2. When the CAFO is eligible for termination, the Permittee must submit a complete and accurate NOT form, signed in accordance with General Condition G2 to:

Department of Ecology  
Water Quality Program  
Attn: CAFO Permit Administrator  
PO Box 47600  
Olympia, WA 98504

The termination is effective on the date Ecology receives the NOT form, unless Ecology notifies the Permittee within 30 days that the termination request is denied because the Permittee has not met the eligibility requirements in **S2.F.1**.

**Commented [j10]:** Fact Sheet language – discuss when and how this is determined and communicated to the Permittee.

### **S3. DISCHARGE LIMITS**

#### **S3.A Compliance with Standards**

1. Discharges authorized by this permit must not cause or contribute to a violation of Water Quality Standards for Surface Waters of the State of Washington (chapter 173-201A WAC), Ground Water Quality Standards (chapter 173-200 WAC), Sediment Management Standards (chapter 173-204 WAC), and human health criteria in the National Toxics Rule (40 CFR 131.36). Discharges not in compliance with these standards are not authorized.

2. Permittees must use **all known, available, and reasonable methods of prevention, control, and treatment (AKART)** when operating their production and land application areas.

### **S3.B Compliance with Total Maximum Daily Load Requirements**

**Commented [j11]:** Modified from the municipal stormwater permit

The following requirements apply if an applicable **Total Maximum Daily Load (TMDL)** is approved for discharges from CAFOs owned or operated by the Permittee. Applicable TMDLs are TMDLs which have been approved by EPA on or before the issuance date of this Permit or prior to the date that Ecology issues coverage under this permit, whichever is later.

1. For applicable TMDLs affected Permittees shall comply with the specific requirements identified in the TMDL for CAFOs. Each Permittee shall keep records of all actions required by this Permit that are relevant to applicable TMDLs within their jurisdiction. The status of the TMDL implementation shall be included as part of the annual report submitted to Ecology. Each annual report shall include a summary of relevant activities conducted in the TMDL area to address the applicable TMDL parameter(s).
2. For TMDLs compliance with this Permit shall constitute compliance with those TMDLs.
3. For TMDLs that are approved by EPA after this Permit is issued, Ecology may establish TMDL related permit requirements through future permit modification if Ecology determines implementation of actions, monitoring or reporting necessary to demonstrate reasonable further progress toward achieving TMDL waste load allocations, and other targets, are not occurring and shall be implemented during the term of this Permit or when this Permit is reissued. Permittees are encouraged to participate in development of TMDLs within their jurisdiction and to begin implementation.

### **S3.C Ecology Review of Engineering Documents**

Prior to constructing or modifying any wastewater control facilities, an engineering report and detailed plans and specifications must be submitted to Ecology for approval in accordance with Chapter 173-240 WAC. Engineering reports, plans, and specifications must be submitted at least one hundred eighty (180) days prior to the planned start of construction unless a shorter time is approved by Ecology. Facilities must be constructed and operated in accordance with the approved plans.

## **S4. MANURE POLLUTION PREVENTION PLAN**

The Permittee must prepare, keep up-to-date, and properly implement an adequate Manure Pollution Prevention Plan (MPPP) for their CAFO in accordance with the requirements of this permit.

The Permittee must have their initial MPPP prepared within **6 months** of the date that the Permittee receives permit coverage.

#### **S4.A Objectives**

1. To implement management practices to identify, reduce, eliminate or prevent CAFO related water pollution.
2. To prevent violations of surface water quality, ground water quality, or sediment management standards.
3. To document implementation of AKART for controlling pollutants on the CAFO.
4. Explain how the Permittee is meeting permit conditions on a site specific basis.

**Commented [j12]:** Modified from CSWGP

#### **S4.B General Requirements**

1. The Permittee must modify the MPPP whenever there is a change in design, construction, operation, or maintenance of the CAFO.

**Commented [j13]:** Modified from CSWGP

What are appropriate thresholds for when a MPPP should be updated to reflect changes to the CAFO infrastructure, operations, or management?

2. The MPPP must include a narrative and drawings. All BMPs must be clearly referenced in the narrative and marked on the drawings. The MPPP narrative must include documentation to explain and justify the pollution prevention decisions made for the facility. Documentation must include:
  - a. Information about existing site conditions (topography, drainage, soils, vegetation, etc.).
  - b. Potential surface or groundwater discharge problem areas.
  - c. The minimum elements of a MPP in **S4.C**, including BMPs used to address each element.
  - d. Construction phasing/sequence and general BMP implementation or maintenance schedule.

- e. The actions to be taken if BMP performance goals are not achieved—for example, a contingency plan for additional treatment and/or storage of manure.
  - f. Engineering calculations for lagoons and any other designed structures.
3. The Permittee must modify the MPPP if, during inspections or investigations conducted by the Permittee, or the applicable local or state regulatory authority, it is determined that the MPPP is, or would be, ineffective in eliminating or significantly minimizing discharges from the production area or land application fields that are not agricultural stormwater. The Permittee must then:
- a. Review the MPPP for compliance with the permit and make appropriate revisions within 7 days of the inspection or investigation.
  - b. Immediately begin the process to fully implement and maintain appropriate source control and/or treatment BMPs as soon as possible, addressing the problems no later than 10 days from the inspection or investigation. If installation of necessary BMPs is not feasible within 10 days Ecology may approve additional time when an extension is requested by a Permittee within the initial 10-day response period.
  - c. Document BMP implementation and maintenance.

Commented [j14]: Timing Appropriate?

Commented [j15]: Timing appropriate?

#### S4.C Minimum Components of a MPPP

The Permittee must include each of the minimum components below in the narrative of the MPPP and implement them unless site conditions render the component unnecessary and the exemption from that component is clearly justified in the MPPP.

##### 1. Facility Documentation

The following documentation must be included in the MPPP and kept up-to-date as changes are made to the CAFO.

- a. Mapping
  - 1) Locate and map underground infrastructure such as pipes, tile drains, tile drain outlet locations, manholes, drinking water wells, buried electrical lines controlling manure management devices (e.g. pumps, valves, etc.), . . .
  - 2) Maps of land application fields must be created showing required field run-off prevention management practices as well as areas that must not be applied to such as manholes or other intake structures because application to those areas would cause a discharge.

3) Maps of the production area detailing facility structures and showing the flow of manure through the manure handling and storage system.

b. Infrastructure

Documentation of how manure handling and storage structures were built including engineering plans and certifications.

An inventory of static (stays in place) equipment used to move manure and its flow rate in gallons/hour as used on the CAFO. This must be measured as it may differ from the manufacturers specifications based on how the equipment is used on site.

2. **Facility Run-off Controls**

The Permittee must design, construct, operate, and maintain its production area such that no discharge occurs except: if the liquid manure handling and storage system is designed, constructed, operated, and maintained such that when the storage is full there is enough capacity left to also hold all the manure and contaminated runoff from the production area generated by a 25-year, 24-hour precipitation event and still have 1-foot of freeboard.

Keep manure from being tracked out onto public roadways.

**Other Options to Prevent Run-Off from Facilities**

Are there other general options that are available to prevent run-off from facilities or tracking manure onto public roads?

3. **Manure and Feedstock Storage**

a. Lagoons

1) *Inspection*

Refer to **S5.A**.

2) *Vegetation Control*

Vegetation on the lagoon must be controlled and maintained to prevent it from damaging lagoon integrity.

3) *Animal Control*

Burrowing animals must be controlled to prevent damage to lagoon integrity. Repair burrowing animal damage immediately to bring the lagoon back up to design specifications.

4) *Embankment Maintenance*

The lagoon embankment must be maintained and repaired as necessary in order to maintain lagoon integrity. Repair damage immediately to bring the lagoon back up to design specifications.

5) *Volume Maintenance*

The solids which build up in a lagoon must be periodically removed in order to maintain the lagoon storage volume. Ensure that any liner in the lagoon is not damaged during maintenance and specify how leaks, if using a geomembrane liner, will be detected and repaired.

Debris, vegetation, and manure solids must not be allowed to accumulate on the surface of the lagoon.

6) *Emergency Procedures*

The Permittee must develop emergency procedures in the event of a failure in its lagoon to prevent discharge of manure into surface waters. The emergency procedures must, in addition to notifying Ecology as required by **S7.D (noncompliance notification)**, at a minimum address:

- i. How the Permittee will stop remaining manure from leaving containment once the lagoon failure is detected.
- ii. In the event that the lagoon can no longer be used to contain manure, where the Permittee will store manure until a new lagoon is constructed.
- iii. How the Permittee will clean-up or recover any manure that escaped containment.
- iv. How the Permittee will prevent the failure from occurring again in the future.

7) *Depth Gauge*

Lagoons designed to contain the 25-year, 24-hour precipitation event must have a depth gauge that clearly indicates the minimum capacity necessary to contain the contaminated runoff and direct precipitation from a 25-year, 24 hour precipitation event and still have 1-foot of freeboard.

8) *Lagoon Closure – Temporary*

If the Permittee has a lagoon that is temporarily not in use, the lagoon must be maintained as though it were in use.

9) *Lagoon Closure – Permanent Decommissioning*

When decommissioning a lagoon, the Permittee must remove all manure and nutrient rich soil (above natural background levels) from the lagoon and properly dispose of the soil so that there is no discharge to groundwater from forms of nitrogen converting to nitrate left behind in the soil structure of the lagoon.

b. Solid Manure Storage

Is it necessary to apply any BMPs to solid manure storage for the protection of groundwater? If so what, and what is the technical basis (including data) for the recommendation?

- 1) Leachate and runoff from solids must be collected and stored with other liquid manure.
- 2) If the solid manure is covered (e.g. tarp, roof) clean water may be diverted away from the production area in accordance with [§4.C.5](#)

c. Composting Facilities

- 1) Leachate and runoff from compost must be collected and stored with other liquid manure.
- 2) If the compost is covered (e.g. tarp, roof) clean water may be diverted away from the production area in accordance with [§4.C.5](#)
- 3) Composting must be conducted in compliance with chapter 70.95 RCW and chapter 173-350 WAC.

d. Feed Storage

- 1) Leachate and runoff from feed storage areas (e.g. silage) must be collected and stored with other liquid manure.
- 2) If the compost is covered (e.g. tarp, roof) clean water may be diverted away from the production area in accordance with [§4.C.5](#)

#### 4. Other Above and Below Ground Infrastructure

Infrastructure (such as pipes, valves, tile lines, etc.) must be regularly inspected and tested (e.g. pressure testing of buried pipes) to ensure it is in proper working order. Results from inspections (S5.A) and testing must be used to make repairs or replacements to infrastructure in a timely manner. Reasons for repairs not being completed in a timely manner must be documented in the MPPP.

Discharge to groundwater from backflow through water or irrigation supply wells is prohibited and must be prevented.

#### 5. Diversion of Clean Water

Clean water that has not come into contact with livestock manure, compost, or feed stock may be diverted from the CAFO production area instead of being stored with other manure. Clean water must be diverted to a location that is able to handle the volume of clean water generated and not cause other water quality problems such as erosion. If the Permittee chooses to divert clean water, it must describe how it will do so to prevent contact with contaminants, where that diverted water will go, and how that area is able to handle the volume of clean water without causing other water quality problems (e.g. erosion).

#### 6. Prevent Direct Animal Contact with Water

Livestock must not be allowed to come into contact with surface waters or conduits to surface waters. The Permittee must describe how it prevents livestock contact with surface water during its operations.

On grazing areas that are part of the CAFO, livestock must be fenced out of surface water, vegetative buffers, and conduits to surface water by a minimum of 35 feet from the *top of the bank*. Animals may not be allowed access to buffers or conduits to surface water.

#### 7. Chemical Handling

- a. All chemicals, such as pesticides or cleaning agents, must be handled and disposed of in accordance with the *Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)* label or other applicable directions.
- b. Chemicals must be stored and mixed in a location that prevents spills from coming into contact with clean water, manure, or waste water.
- c. Excess or unused chemicals and empty container wash-water may not be disposed of into the manure handling and storage system unless the system is specifically designed to neutralize the chemicals.

- d. All personnel handling or applying chemicals must be licensed to do so if a license is required, or be under the supervision of a licensed individual.
- e. The Permittee must develop and implement emergency procedures for containment and clean-up in the event of a chemical spill.

## 8. Livestock Mortality Management

Until properly disposed of, carcasses must be stored in a location that does not allow run-off to surface waters or leaching to groundwater. All run-off from stored carcasses must be directed to the lagoon.

Carcasses must not be disposed of in a lagoon unless the lagoon is specifically designed to handle carcasses.

### a. *Offsite Disposal/Rendering*

Carcasses may be rendered only by a rendering plant licensed under chapter 16.68 RCW.

Commented [j16]: Directly from WAC 16-25-025

### b. *Burial*

Carcass burial must be at least 300 feet from any well, spring, or surface water such as a river, stream, lake, pond, or intermittent stream; not in low-lying areas subject to seasonally high water table, seasonal flooding, within a 100-year flood plain or in a manner that will impact groundwater. Carcasses must be buried with a minimum of 3-feet of soil cover.

### c. *Composting*

Carcass composting must be conducted in compliance with chapter 70.95 RCW and chapter 173-350 WAC. On-farm carcass composting must comply with Ecology Publication No: 05-07-034 "On-Farm Composting of Livestock Mortalities." This publication may be accessed on Ecology's website at: <https://fortress.wa.gov/ecy/publications/summarypages/0507034.html>.

### d. *Natural Decomposition*

Natural decomposition may be used if the carcass is 1,320 feet or more from any groundwater well, spring, sinkhole, or body of surface water, including wetlands, such as a river, stream, lake, pond, or intermittent stream; and not located in an area that has a seasonally high water table, seasonal flooding, or within a hundred-year flood plain.



### Other Options for Mortality Management

Are there other options for mortality management that are currently being used that need to be taken into account?

**OR**

Alternatively, the permit could just reference WAC 16-25-025 for carcass disposal options. Something like:

The Permittee must manage carcasses using one of the options specified in WAC 16-25-025 which are: burial, burning, composting, incineration, landfill, natural decomposition, digestion, or rendering.

### 9. Manure Nutrient Testing

The Permittee must have all manure that will be land applied tested for its nutrient content prior to beginning land application.

Manure sampling and testing must follow the requirements of **S5.B**

### 10. Soil Nutrient Testing

The Permittee must have all fields that will receive land applications of manure tested for its soil nutrient content prior to beginning land application.

Soil sampling and testing must follow the requirements of **S5.C**

### 11. Land Application

#### a. General Restrictions

#### Options for General Manure Application Restrictions

- The Permittee must not cause a direct, indirect, or precipitation related discharge to surface water during land application.
- The application of manure to land not owned, leased, or controlled by the Permittee without written permission from the landowner is prohibited.
- The Permittee must follow its annual nutrients budgets developed using the form provided as **Appendix XX**.
- Manure may not be applied to frozen, snow covered, or *saturated* fields, dormant

**Commented [j17]:** E.g. Big-gun overspray into surface water.

**Commented [j18]:** E.g. Tile drain lines.

**Commented [j19]:** E.g. Applying during rain events or when rain events are forecast.

**Commented [j20]:** Ecology could develop template nutrient budget worksheets/spreadsheets. This would make the calculation consistent across all Permittees and may reduce some record keeping requirements because the calculations for a nutrient budget are specified in the permit.

crops, or to bare fields that are not being prepared for the current year's crop, generally from October 15 to TSUM-200.

- Manure application must not cause ponding on the field to which it is applied or discharge from tile drainage lines.
- Manure applied to bare fields must be incorporated into the soils within 24-hours of application.
- Manure must not be applied within the Sanitary Control Area for Group-A public drinking water wells.
- Prior to applying manure to a field, manure and soil samples must be collected and analyzed for nutrient content as specified in S5.B and S5.C. The results of the analysis must be the basis for the application rates for that manure when applied to any given field.
- Manure may not be applied within 24 hours of a previous rain event, or longer, if the field does not have water holding capacity,
- Manure may not be applied within 3 days of a forecasted precipitation event of ½ inch or greater.
- Other options???

**Commented [j21]:** State Regulations also require source water protection around public drinking water supplies (WAC 246-290-135). Source water protection includes maintaining a protective **Sanitary Control Area** around ground water wells (100 feet for wells and 200 feet for springs) and a wellhead protection area around wells. Land uses or practices that could potentially contaminate a well are not allowed within the Sanitary Control Area, and are strongly recommended against within the six-month time of travel zone of the wellhead protection area.

**Commented [j22]:** Check literature for better timing estimates of how long to wait after rain before applying manure.

#### b. *Equipment Calibration*

Equipment used for land application of manure that can have a variable rate depending on how it is installed and used (e.g. pumps, injectors, sprinklers, splash plate applicators, etc) must be calibrated so that the Permittee has an accurate measure of how much manure is applied per unit of time (e.g. 1-hour).

#### c. *3-foot Soil Nitrate Benchmark*

### **Accounting for Eastern and Western Washington Differences**

May need to modify this to account for differences in Eastern and Western Washington environments:

The Permittee must manage its land application fields such that end of season soil test results at the 3-foot depth (S5.C) do not exceed 15 ppm nitrate. If the 3-foot soil sample results already exceed 15 ppm nitrate, the Permittee must manage its land application fields so that the current nitrate concentration in the soil does not increase in the 3-foot soil sample beyond current levels and must take the actions required based on its Matrix

Score (below).

### Option for land application response to nitrate benchmark

#### Matrix Approach:

Fall Soil Test Response Matrix				
Depth of Sample	Low (<15 ppm)	Medium (15-30 ppm)	High (31-45 ppm)	Very High (>45 ppm)
1 <sup>st</sup> Foot (0-12 inches)	0	0	1	3
2 <sup>nd</sup> Foot (13-24 inches)	0	1	2	3
3 <sup>rd</sup> Foot (25-36 inches)	0	2	3	3

Based on the fall soil nitrate test, find the ppm range within with the test results fall for each of the 1, 2, and 3 foot soil samples. The number in the cell that corresponds to the correct depth and correct nitrate range is the score for that depth sample. Add the three scores for the samples. Based on the total score, Permittees are required to select actions to implement from the lists of options provided.

Total Score	Required Action Level
≤ 1	No action required
2-3	Light Action
4-5	Modest Action
≥ 5	Aggressive Action

#### Example:

1<sup>st</sup> foot results: 12 is a score of 0.

2<sup>nd</sup> foot results: 8 is a score of 0.

3<sup>rd</sup> foot results: 15 is a score of 2.

Total score = 2.

This score would require light action on the field.

#### Light Action Options

- Review and revise nutrient budget and assumptions used.
- Review and revise crop yield expectations.
- Review equipment calibration and recalibrate if necessary.
- ????

#### Modest Action Options

In addition to light actions:

- Revise realistic yield goals.
- Revise nutrient budget assumptions.
- Reduce the amount of manure applied to the field by 25-50? Percent.
- Tissue sampling (base application rates on crop tissue sample results which provide information on what nutrients a crop needs and based on soil nutrient availability).
- If modest actions are taken because of test results from the 3<sup>rd</sup> foot, provide documentation to Ecology describing why the 3<sup>rd</sup> foot test results are high (e.g. historical land use).
- ????

#### **Aggressive Action Options**

In addition to light and modest actions:

- Implement irrigation water monitoring using soil moisture sensors
- No manure application until determine (e.g. engineering report) the reason for continued exceedance submit plan for future to keep from continuing to exceed benchmark.
- Use a consultant to develop nutrient budgets
- Possibly no further manure or commercial fertilizer application to the field
- ????

#### d. Emergency Application

If the Permittee must apply manure to crop fields when any of the field conditions in **S4.C.12.a** are present in an emergency situation to prevent manure handling system failure, the Permittee must request approval from Ecology before beginning emergency application.

In the event that the Permittee determines that an emergency application is necessary, whether approved by Ecology or not, the Permittee must evaluate its manure handling and storage system and determine if it has enough manure storage to remain in compliance with the permit. In the event that the Permittee does not have enough storage, it must make facility changes within **12 months** of the emergency application so that it will have adequate manure storage to prevent future emergency applications.

### 12. **Irrigation Water Management**

#### a. *East of Cascades*

The Permittee must prevent the downward movement of nitrate by managing their irrigation water so that crop needs are met and so that irrigation water does not exceed the water holding capacity of the top two feet of soil.

#### b. *West of Cascades*

**Commented [j23]:** Ecology is aware that of the ARM project taking place in Whatcom County under an EPA grant. However, though Ecology has request data from the ARM project, it has not received a response or been supplied the data. Until Ecology has had a chance to review and analyze the data, Ecology is not including any allowances in the permit for following ARM recommendations.

**Commented [JJ(24):** Need to determine how ECY and WSDA can coordinate on this.

**Commented [j25]:** Discuss nitrate movement with irrigation water in Fact Sheet.

Nitrate moves with water as the water moves through the soil profile. In order to minimize downward nitrate movement, irrigation water management is important. As the Columbia Basin Project found, by managing irrigation water, nitrate movement can also be managed.

If the Permittee applies irrigation water it must do so such that only what is needed by the crop but not supplied by precipitation is applied. Application of irrigation water in addition to precipitation must not exceed the water holding capacity of the top two feet of soil.

### 13. Field Run-off Prevention Management Practices

The Permittee must prevent pollution of surface and ground waters by installing **buffers** on all land application fields where surface waters or conduits to surface and ground waters are present. The width of the buffer is measured from the **top of the bank** to the inner edge where the buffer ends and regular crop production begins.

Buffers are not considered part of the Permittee's land application area for calculating yearly nutrient mass balances. Manure may not be applied to the buffer.

The buffer chosen for use on a field must be maintained to provide optimal pollutant reduction performance. Maintenance must not cause discharge of pollutants.

Buffers must at least conform to the minimums in **S4.C.14.a and b** unless site specific circumstances (e.g. field slope) require a larger vegetated buffer to be protective of water quality. An objective risk assessment of the field must be completed to determine if a larger buffer is required.

a. 35-foot Perennial Vegetative Buffer

A minimum of 35-feet of vegetative buffer, measured horizontally from the top of the bank, from surface waters, wellheads, drains, open tile lines, or other conduits to surface or ground waters.

b. 100-foot Land Application Setback

A minimum 100-foot land application setback, measured horizontally from the top of the bank, from all surface waters, wellheads, drains, open tile lines, or other conduits to surface or ground waters.

#### Other Buffer Options

Are there other buffer options that are equivalent or better, based on data, to the default options provided by the federal CAFO rules? If so, what are they and what data is available (provide the data to Ecology)?

### 14. Manure Export

Manure is exported from the Permittee's CAFO to an unaffiliated party when the Permittee no longer has **control** of how the manure is used.

The Permittee must provide the most recent manure nutrient analysis to the recipient as part of exporting manure. If the Permittee is only exporting manure, the manure nutrient analysis may be up to 12 months old. If the Permittee is exporting digestate, the nutrient analysis must be from within the last 5000 cubic yards (approx. 1,010,000 gallons) of digestate generated.

**Commented [j26]:** Digester – Within the last 5000 cubic yards generated (WAC 173-350-250(2)(a) Table 250-A (3) and WAC 173-350-220(1)(b) Table 220-A (3-5) and WAC 173-350-220(4)(a)(x)(B)).

The Permittee must keep records of its manure exports as detailed in **S6.A**

#### **On-CAFO Composting of Manure Solids by a Third Party**

If the Permittee has an agreement with another party for that party to compost the Permittee's manure solids on-site, sale of the composted solids as a product by the third party is not required to be tracked as part of manure export.

## **S5. MONITORING**

### **S5.A Operations and Maintenance Monitoring**

#### **Inspection Template**

Would an inspection form for use by the Permittee (such as Oregon's calendar) be helpful for Ecology to develop as part of the permit?

Routine visual inspection of the production area including:

- Daily inspection of clean water (e.g. drinking, cooling) lines.
- Weekly inspection of all manure and contaminated water handling devices.
- Weekly inspection of all clean water diversion devices.
- Weekly inspections of manure storage, noting the depth of manure in liquid manure storage.
- At least monthly inspection of land application field buffers/setbacks to ensure in proper working order

**Commented [j27]:** 40 CFR412

### **S5.B Manure Sampling and Testing**

#### **Manure Sampling Options**

- 1. Collecting a Representative Liquid/Slurry Manure Sample*

- a. Thoroughly mix the stored liquid manure for at least 2 hours before sampling. If not mixed, the Permittee must sample the entire depth of the lagoon.
- b. If the manure is thoroughly mixed take a minimum of 5 subsamples from different locations around the lagoon. If liquid manure is not mixed, take a minimum of 10 subsamples. Subsamples should be collected in a clean plastic bucket.
- c. Mix the manure subsamples in the bucket and take the final composite sample that will be analyzed by the laboratory.
- d. The final composite sample should be stored or shipped immediately according to the methods described by the laboratory that the Permittee is using to have the sample analyzed.
- e. The sample must be analyzed according to the requirements in **S5.E.3**.

2. *Collecting a Representative Solid Manure Sample*

- a. Thoroughly mix the stored solid manure before sampling. If not mixed, the Permittee must sample at several different locations and depths in the manure pile and must avoid the outer 6 inches of the stored manure.
- b. If the solid manure is thoroughly mixed take minimum of 5 subsamples. If manure is not mixed, take a minimum of 10 subsamples. Subsamples should be collected and all placed in a clean plastic bucket.
- c. Mix the manure subsamples in the bucket for form a bulk sample. Take the final composite sample that will be analyzed by the laboratory from the bulk sample.
- d. The final composite sample should be stored or shipped at 0° to 6° C and sent immediately to the laboratory according to the methods described by the laboratory that the Permittee is using to have the sample analyzed.
- e. The manure sample must be analyzed according to the requirements in **S5.B.3**.

**Commented [r28]:** Can we point to guidance on how to do this? Are all our CDs going to be up on our approved methods so they can be ready to respond to questions by potential permittees during the draft review process? It would be good to make sure technical assistance providers are ready to help CAFOs, especially the small ones.

**OR**

**Use one of these or other appropriate method:**

Bary, A., Cogger, C., Sullivan, D. (2000). *Fertilizing with Manure*. Pacific Northwest Extension, WSU Food and Farm Connections Team. PNW0533.

Peters, J., et. al. (2003). *Recommended Methods of Manure Analysis*. University of Wisconsin. Madison, WI. Pub. No. A3769.

Murphy, S. (2006). *Manure Sampling & Analysis*. Rutgers Cooperative Research & Extension. The State University of New Jersey. Pub. No. E306.

### 3. Manure Sample Analysis

The Permittee must have manure samples analyzed for the following parameters using EPA test methods from SW846, or the methods included in the table, with the results reported in the units specified.

Parameter	EPA Test Method	Units
Organic Matter		Percent(%)
pH	SM4500-H+ B	Standard Units
Total Kjeldahl Nitrogen (TKN)	SM4500-NorgB/C and SM4500NH3-B/C/D/EF/G/H	mg/kg as N (dry weight)
Ammonia/Ammonium (NH3)	SM4500-NH3-B and C/D/E/G/H	mg/kg as N (dry weight)
Phosphorus (P2O5)	SM 4500 PB followed by SM4500-PE/PF	mg/kg as P (dry weight)

### S5.C Soil Sampling and Testing

#### Soil Sampling Options

##### 1. Collecting a Representative Soil Sample

The Permittee must take separate soil samples for each foot of the top three feet of soil on each field that it controls and applies manure to. **Samples must represent 0-12 inches, 12-24 inches, and 24-36 inches.** No samples may be collected in buffer areas.

If fields that the Permittee controls do not have 36 inches of soil before **refusal** or ground water is reached, the Permittee must take samples in 12-inch increments until it reaches this depth. The Permittee must indicate in its record keeping and annual report (**S7.C**) at what depth the confining/restricting layer or ground water was reached.

**OR**

**Use one of these or other appropriate method:**

- Use sampling instructions out of *Soil Sampling*\* from University of Idaho Cooperative Extension System as basis?  
\*Mahler, R. L., Tindall, T. A. (1990). *Soil Sampling, Bulletin 704 (revised)*. University of Idaho Cooperative Extension System.
- Other soil sampling protocols to use as basis?
  - Peters, J.B., Kelling, K.A., Bundy, L.G. (2002). Sampling soils for testing. University of Wisconsin Extension. Pub No A2100. Accessed June 2015 from <http://datcp.wi.gov/uploads/Farms/pdf/uwex-a2100.pdf>
  - Staben, M. L., et al. (2003). *Monitoring Soil Nutrients Using a Management Unit Approach*. Pacific Northwest Extension. Pub. No. PNW 570-E.
  - Sullivan, D., Cogger, C. (2003). *Post-Harvest Soil Nitrate Testing for Manured Cropping Systems West of the Cascades*. Oregon State University Extension Service. Pub. No. EM 8832-E.
- Develop a hybrid of currently existing protocols for better fit in Eastern or Western Washington?

**Commented [j29]:** Oregon's permit points to this.

2. *Soil Sample Analysis*

The Permittee must have soil samples analyzed for the following parameters using EPA test methods from SW846 with the results reported in the units specified.

Parameter	Units
Moisture Content	Percent (%)
Organic Matter	Percent (%)
pH	Standard Units
Total Kjeldahl Nitrogen (TKN)	mg/kg as N (dry weight)
Nitrate (NO3) plus Nitrite (NO2)	mg/kg as N (dry weight)
Ammonia/Ammonium (NH3) as N	mg/kg as N (dry weight)
Phosphorus (Total)	mg/kg as P (dry weight)

**S5.D Monitoring Beyond Permit Requirements**

If the Permittee performs monitoring to document compliance with this permit beyond the manure and soil nutrient testing required by **S5.B and C**, sampling and analysis must conform to the latest revision of the *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in 40 CFR Part 136 (or as applicable in 40 CFR subchapters N [Parts 400–471] or O [Parts 501-503]). Ecology may only specify alternative methods for parameters without limits and for those parameters without an EPA approved test method in 40 CFR Part 136.

All samples must be analyzed by a laboratory registered or accredited under the provisions of *Accreditation of Environmental Laboratories*, Chapter 173-50 WAC. The following parameters need not be accredited or registered:

1. Flow.
2. Temperature.
3. Settleable solids.
4. Conductivity, except that conductivity must be accredited if the laboratory must otherwise be registered or accredited.
5. pH, except that pH must be accredited if the laboratory must otherwise be registered or accredited.
6. Turbidity, except that turbidity must be accredited if the laboratory must otherwise be registered or accredited.
7. Parameters which are used solely for internal process control

Documentation of monitoring activities and results must include (if applicable):

1. The date, exact place, and time of sampling.
2. The date analyses were performed.
3. Who performed the analyses.
4. The analytical techniques/methods used (if any).
5. The results of such analyses.

## **S6. RECORD KEEPING**

**Commented [j30]:** Meet with WSDA to ensure compatibility to the extent feasible.

### **S6.A Operations and Maintenance Record Keeping**

#### **Options for Records Keeping**

- Ecology could develop record keeping templates
- Record keeping could be left to Permittee.

#### **Required Records:**

- Records of routine visual inspection of the production area including
- Records of weekly inspection of all manure and contaminated water handling devices.
- Records of weekly inspection of all clean water diversion devices.
- Records of daily inspection of clean water (e.g. drinking, cooling) lines

- Records of weekly inspections of manure storage, noting the depth of manure in liquid manure storage.
- Weekly records of liquid manure storage depth
- Records of corrective actions taken for deficiencies noted during inspections. Deficiencies not corrected within 30 days must have documentation explaining why not.
- Mortality management records – how many mortalities and how handled
- Records documenting current manure storage structures including volume, volume for solids build up (in liquid storage), design treatment volume, total volume, number of days of storage capacity
- Records of date, time, location, estimated volume of any overflow (lagoon)

**Manure Export Record Requirements:**

The Permittee must record the following information when it exports manure:

1. Volume (gallons) of liquid manure or Mass (tons) of solid manure exported.
2. Name of entity manure was exported to.
3. Assessor’s parcel number(s) and acreages of the fields where the exported manure will be applied.
4. Types of crops to be fertilized with the manure.
5. Date export took place.

In addition, the Permittee must include an agreement by the receiving party to:

1. Use the manure at a rate that is appropriate for the crops to be grown, and
2. Prevent the runoff of manure to surface water.

**Digesters (if operated on site):**

If a digester is operated on the CAFO, the Permittees must maintain documentation that the digester is being operated in compliance (e.g. recording amounts of non-manure feedstocks) with WAC 173-350.

**S6.B Land Application Record Keeping**

**Options for Land Application Record Keeping**

- Ecology could develop record keeping templates
- Record keeping could be left to Permittee.

If Ecology develops the record keeping templates or templates for calculating nutrient budgets, some of the record keeping requirements may not be necessary because they are already specified in the permit (e.g. calculations to determine how much manure to apply to a field).

Required land application records:

1. Expected crop yields

2. Dates manure was applied to each field
3. Weather conditions during application and for 24 hours pre and post-application
4. Test methods used to sample and analyze manure and soil
5. Results of manure and soil testing
6. Explanation of the basis for determining manure application rates as provided in state technical standards (40 CFR 123.36)
7. Calculations showing total nitrogen and phosphorus to be applied to the field from all sources
8. Total amount of nitrogen and phosphorus from all sources actually applied to the field
9. Method used to apply manure
10. Dates of manure application equipment inspection (e.g. calibration).
11. Records for at least monthly inspection of land application field buffers/setbacks to ensure in proper working order
12. Amount of irrigation water used.

#### **S6.C Records Retention**

The Permittee must retain records of for a minimum of five (5) years. Such information must include copies of all monitoring, reports, and records required by this permit, and records of all data used to complete the application for this permit.

The Permittee must keep records longer in the event of unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by Ecology.

The Permittee must make the records, reports, other documents, and information required by this permit available to Ecology upon request.

#### **S7. REPORTING**

Ecology is moving to online system for permit reporting. When it becomes available for this permit, Ecology may modify this permit to require electronic submittal of reports for this permit.

The Permittee must provide a copy of its MPPP to Ecology within 14 days upon request..

##### **S7.A Public Access to MPPP**

The Permittee shall provide access to, or a copy of, the MPPP to the public when requested in writing. Upon receiving a written request from the public for the MPPP, the Permittee must:

1. Provide a copy of the MPPP to the requestor within 14 days of receipt of the written request; or

**Commented [j31]:** From Industrial Stormwater General Permit

2. Notify the requestor within ten days of receipt of the written request of the location and times within normal business hours when the requestor may view the MPPP , and provide access to the MPPP within 14 days of receipt of the written request; or
3. Provide a copy of the plans and records to Ecology, where the requestor may view the records, within 14 days of a request; or may arrange with the requestor for an alternative, mutually agreed upon location for viewing and/or copying of the plans and records. If access to the plans and records is provided at a location other than at an Ecology office, the Permittee will provide reasonable access to copying services for which it may charge a reasonable fee.

### S7.B One-Time Facility Report

Within **six months** of permit coverage, the Permittee must provide the following information to Ecology:

1. Maps of land application fields that include locations and sizes of buffers or application setbacks, areas where manure application is avoided due to the presence of conduits to surface or groundwater (e.g. manholes, drainage ditches, well heads, etc.)
2. Nutrient budgets for the current crop year using the form found here: [WEB ADDRESS](#)

**Commented [JJ(32)]:** Ecology could develop a nutrient budget form for the permit to ensure that it meets all the permit requirements.

### S7.C One-Time Lagoon Report

Within two years of permit coverage, the Permittee must provide a report to Ecology that provides the engineering details of Permittee’s manure lagoons. The report must be certified by an engineer and include information on:

- Year that the lagoon was constructed
- Construction (e.g. soils, clay and sand content, slope, compaction, etc.)
- Depth to groundwater below the lagoon during winter and summer
- Any standard to which the lagoon was constructed

**Commented [j33]:** Annual report form to be developed

40 CFR 122.42  
Information to be included:

Current number and type of animal  
Type of animal housing (open confinement, housed under roof)  
Total manure generated (tons/gallons)  
Total manure exported (tons/gallons)  
Total number of acres available for land application (not including exports)  
Total number of acres used for land application  
Summary of all discharges from the production area including date, time, approximate volume (these should have already been reported under the noncompliance notification requirements, so is this really necessary?)  
Actual crop(s) planted on each field, actual crop yields  
Actual nitrogen and phosphorus content of manure  
Results of nutrient balance calculations (this would be the nutrient balance form for each field)  
Amount of manure applied to each field  
Amount of supplemental fertilized and nutrient content, if used  
Results of field level soil testing

### S7.D Annual Reporting

**By December 31** each year, the Permittee must submit an annual report to Ecology using the annual report form found here: [WEB ADDRESS](#).

Other non CFR information needed to determine compliance:  
Nutrient Budgets for the current season/coming crop season  
Updated maps if new fields were added (bought, leased, under contract, etc) or removed.  
Soil and manure test results  
Depth confining layer was reached for soil sampling if not able to sample 3<sup>rd</sup> foot.

### S7.E Noncompliance Notification

Compliance with the requirements of this special condition does not relieve the Permittee from responsibility to maintain continuous compliance with the terms and conditions of this permit or the resulting liability for failing to comply.

In the event the Permittee is unable to comply with any part of this permit, which may threaten human health or the environment, the Permittee must:

1. Immediately take action to minimize potential pollution or otherwise stop the noncompliance and correct the problem.
2. Immediately notify the appropriate Ecology regional office and the CAFO permit manager of the failure to comply via the phone numbers below.

**Central (CRO)** ----- **509-575-2490**

Benton, Chelan, Douglas, Kittitas, Klickitat, Okanogan, and Yakima counties

**Eastern (ERO)** ----- **509-329-3400**

Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, and Whitman counties

**Northwest (NWRO)** ----- **425-649-7000**

Island, King, Kitsap, San Juan, Skagit, Snohomish, and Whatcom counties

**Southwest (SWRO)** ----- **360-407-6300**

Clallam, Clark, Cowlitz, Grays Harbor, Jefferson, Mason, Lewis, Pacific, Pierce, Skamania, Thurston, and Wahkiakum counties

**CAFO Permit Manager** ----- **360-407-6283**

**Commented [JJ(34)]:** Need to add WSDA contact info and determine how ECY/WSDA will continue to coordinate.

3. The Permittee must provide a written report to Ecology within five (5) days of the time that the Permittee becomes aware of any permit non-compliance. The report must contain a description of the noncompliance and its cause, the exact date(s), time(s), place(s), and duration(s) of the noncompliance, whether the noncompliance has been corrected and, if not, when the noncompliance will be corrected, and the steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

4. The Permittee must submit noncompliance notifications to:

Washington State Department of Ecology  
Water Quality Program  
Attn: CAFO Permit Manager  
PO Box 47696  
Olympia, WA 98504-7696

5. The Permittee must update its MPPP to address the noncompliance to prevent it from occurring again in the future.

**S7.F Spills Reporting**

In the case of a spill or discharge of oil or hazardous substances which present a threat to human health, welfare, or the environment immediately call the National Response Center 1-800-424-8802, and the Washington Emergency Management Division 1-800-258-5990 or 1-800-OILS-911, the appropriate Ecology Regional Office, and CAFO permit manager at the contact numbers provided in **S7.E**.

**Commented [JJ(35)]:** Add WSDA contact info and determine how ECY/WSDA will coordinate.

**S8. APPENDICES**

The attached appendices are incorporated by reference into this permit.

**Appendix A: Acronyms and Definitions**

DRAFT

## **GENERAL CONDITIONS**

### **G1. DISCHARGE VIOLATIONS**

All discharges and activities authorized by this general permit shall be consistent with the terms and conditions of this general permit. The discharge of any pollutant more frequently than, or at a concentration in excess of that authorized by this general permit shall constitute a violation of the terms and conditions of this general permit.

### **G2. PROPER OPERATION AND MAINTENANCE**

The Permittee shall, at all times, properly operate and maintain all facilities or systems of treatment and control (and related appurtenances) which are installed to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems, which are installed by a Permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

### **G3. RIGHT OF ENTRY**

The Permittee shall allow an authorized representative of Ecology, upon the presentation of credentials and such other documents as may be required by law:

- A. To enter upon the premises where a discharge is located or where any records shall be kept under the terms and conditions of this permit;
- B. To have access to and copy at reasonable times any records that shall be kept under the terms of this permit;
- C. To inspect at reasonable times any monitoring equipment or method of monitoring required in this permit;
- D. To inspect at reasonable times any collection, treatment, pollution management, or discharge facilities; and
- E. To sample at reasonable times any discharge of pollutants.

### **G4. PERMIT COVERAGE REVOKED**

Pursuant with chapter 43.21B RCW and chapter 173-226 WAC, the Director may require any discharger authorized by this permit to apply for and obtain coverage under an individual

permit or another more specific and appropriate general permit. Cases where revocation of coverage may be required include, but are not limited to, the following:

- A. Violation of any term or condition of this permit;
- B. Obtaining coverage under this permit by misrepresentation or failure to disclose fully all relevant facts;
- C. Failure or refusal of the Permittee to allow entry as required in RCW 90.48.090;
- D. A determination that the permitted activity endangers human health or the environment, or contributes to water quality standards violations;
- E. Nonpayment of permit fees or penalties assessed pursuant to RCW 90.48.465 and chapter 173-224 WAC;
- F. Failure of the Permittee to satisfy the public notice requirements of WAC 173-226-130(5), when applicable; or Permittees who have their coverage revoked for cause according to WAC 173-226-240 may request temporary coverage under this permit during the time an individual permit is being developed, provided the request is made within ninety (90) days from the time of revocation and is submitted along with a complete individual permit application form.

#### **G5. GENERAL PERMIT MODIFICATION AND REVOCATION**

This permit may be modified, revoked and reissued, or terminated in accordance with the provisions of chapter 173-226 WAC. Grounds for modification or revocation and reissuance include, but are not limited to, the following:

- A. When a change which occurs in the technology or practices for control or abatement of pollutants applicable to the category of dischargers covered under this permit;
- B. When effluent limitation guidelines or standards are promulgated pursuant to the FWPCA or chapter 90.48 RCW, for the category of dischargers covered under this permit;
- C. When a water quality management plan containing requirements applicable to the category of dischargers covered under this permit is approved; or
- D. When information is obtained which indicates that cumulative effects on the environment from dischargers covered under this permit are unacceptable.

#### **G6. REPORTING A CAUSE FOR MODIFICATION**

A Permittee who knows or has reason to believe that any activity has occurred or will occur which would constitute cause for modification or revocation under Condition G5 above, or 40 CFR 122.62 shall report such plans, or such information, to Ecology so that a decision can be made on whether action to modify coverage or revoke coverage under this permit will be required. Ecology may then require submission of a new application for coverage under this, or another general permit, or an application for an individual permit. Submission of a new application does not relieve the Permittee of the duty to comply with all the terms and conditions of the existing permit until the new application for coverage has been approved and corresponding permit has been issued.

#### **G7. TOXIC POLLUTANTS**

The Permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if this permit has not yet been modified to incorporate the requirement.

#### **G8. OTHER REQUIREMENTS OF 40 CFR**

All other requirements of 40 CFR 122.41 and 122.42 are incorporated in this general permit by reference.

#### **G9. COMPLIANCE WITH OTHER LAWS AND STATUTES**

Nothing in this permit shall be construed as excusing the Permittee from compliance with any applicable Federal, State, or local statutes, ordinances, or regulations.

#### **G10. ADDITIONAL MONITORING**

Ecology may establish specific monitoring requirements in addition to those contained in this permit by administrative orders or permit modification.

#### **G11. PAYMENT OF FEES**

The Permittee shall submit payment of fees associated with this permit as assessed by Ecology. Ecology may revoke this permit coverage or take enforcement, collection, or other actions, if the permit fees established under chapter 173-224 WAC are not paid.

#### **G12. REQUESTS TO BE EXCLUDED FROM COVERAGE UNDER A GENERAL PERMIT**

Any discharger authorized by this permit may request to be excluded from coverage under this general permit by applying for an individual permit. The discharger shall submit to the Director an application as described in WAC 173-220-040 or WAC 173-216-070, whichever is applicable, with reasons supporting the request. These reasons must fully document how an individual permit will apply to the applicant in a way that the general permit cannot. Ecology may make specific requests for information to support the request. The Director shall either issue an individual permit or deny the request with a statement explaining the reason for the denial. When an individual permit is issued to a discharger otherwise subject to this general permit, the applicability of this general permit to that Permittee is automatically terminated on the effective date of the individual permit.

### **G13. TRANSFER OF PERMIT COVERAGE**

This permit coverage may be automatically transferred to a new Permittee if:

- A. The Permittee notifies the Department at least 30 days in advance of the proposed transfer date.
- B. The notice includes a written agreement between the existing and new Permittees containing a specific date transfer of permit responsibility, coverage, and liability between them.
- C. The Department does not notify the existing Permittee and the proposed new Permittee of its intent to modify or revoke permit coverage.

### **G14. PENALTIES FOR VIOLATING PERMIT CONDITIONS**

Any person who is found guilty of willfully violating the terms and conditions of this permit shall be deemed guilty of a crime, and upon conviction thereof shall be punished by a fine of up to ten thousand dollars and costs of prosecution, or by imprisonment in the discretion of the court. Each day upon which a willful violation occurs may be deemed a separate and additional violation. Any person who violates the terms and conditions of a waste discharge permit shall incur, in addition to any other penalty as provided by law, a civil penalty in the amount of up to ten thousand dollars for every such violation. Each and every such violation shall be a separate and distinct offense, and in case of a continuing violation, every day's continuance shall be and be deemed to be a separate and distinct violation.

### **G15. SIGNATORY REQUIREMENTS**

All applications, reports, or information submitted to Ecology shall be signed and certified.

- A. All permit applications shall be signed:

1. In the case of corporations, by a responsible corporate officer.
  2. In the case of a partnership, by a general partner of a partnership.
  3. In the case of sole proprietorship, by the proprietor.
  4. In the case of a municipal, state, or other public facility, by either a principal executive officer or ranking elected official.
- B. All reports required by this permit and other information requested by Ecology shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
1. The authorization is made in writing by a person described above and submitted to Ecology.
  2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)
- C. Changes to authorization. If an authorization under paragraph B.2 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph B.2 above must be submitted to Ecology prior to or together with any reports, information, or applications to be signed by an authorized representative.
- D. Certification. Any person signing a document under this section shall make the following certification:

*I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.*

## **G16. APPEALS**

The terms and conditions of the mosquito control general permit are subject to appeal. There are two different appeal categories.

- A. The permit terms and conditions as they apply to the appropriate class of dischargers are subject to appeal within thirty (30) days of issuance of the mosquito control general permit in accordance with chapter 43.21(B) RCW and chapter 173-226 WAC; and
- B. The applicability of the permit terms and conditions to an individual discharger are subject to appeal in accordance with chapter 43.21(B) RCW within thirty (30) days of the effective date of coverage of that discharger.

An appeal of the coverage of the mosquito control general permit to an individual discharger is limited to the applicability or non-applicability of the mosquito control general permit to that same discharger. Appeal of this permit coverage of an individual discharger will not affect any other individual dischargers. If the terms and conditions of the mosquito control general permit are found to be inapplicable to any discharger(s), the matter shall be remanded to Ecology for consideration of issuance of an individual permit or permits.

#### **G17. SEVERABILITY**

The provisions of this permit are severable, and if any provision of this general permit or application of any provision of this general permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this general permit, shall not be affected thereby.

#### **G18. DUTY TO REAPPLY**

The Permittee shall reapply for coverage under this permit at least one hundred and eighty (180) days prior to the specified expiration date of this permit. An expired permit and coverage under the permit continues in force and effect until Ecology issues a new permit (coverage) or until Ecology cancels it. Only those facilities that have reapplied for coverage under this permit are covered under the continued permit.

## Appendix A: Acronyms and Definitions

**AFO:** Animal Feeding Operation  
**AKART:** All known, available, and reasonable methods of pollution control, prevention, and treatment  
**BAT:** Best Available Technology Economically Achievable  
**BCT:** Best Conventional Pollutant Control Technology  
**BPJ:** Best Professional Judgment  
**BPT:** Best Practicable Control Technology Currently Available  
**BOD:** Biological Oxygen Demand  
**CAFO:** Concentrated/Confined Animal Feeding Operation  
**CFR:** Code of Federal Regulations  
**COD:** Chemical Oxygen Demand  
**CWA:** Federal Clean Water Act  
**DNMA:** Dairy Nutrient Management Act, chapter 90.64 RCW  
**DNMP:** Dairy Nutrient Management Program  
**EPA:** United States Environmental Protection Agency  
**FIFRA:** Federal Insecticide, Fungicide and Rodenticide Act  
**FWPCA:** Federal Water Pollution Control Act, synonym for CWA  
**MOA:** Memorandum of Agreement  
**NMP:** Nutrient Management Plan  
**NOI:** Notice of Intent (also referred to as the Application for Coverage)  
**NOT:** Notice of Termination  
**NPDES:** National Pollutant Discharge Elimination System  
**NRCS:** Natural Resource Conservation Service  
**NSPS:** New Source Performance Standards  
**PCHB:** Pollution Control Hearings Board  
**RCW:** Revised Code of Washington  
**SEPA:** State Environmental Policy Act, RCW 43.21C, WAC 197-11  
**TMDL:** Total Maximum Daily Load  
**TSP:** Technical Service Provider  
**WAC:** Washington Administrative Code  
**WSDA:** Washington State Department of Agriculture  
**USDA:** United States Department of Agriculture

**25-year, 24-hour Storm Event:**

Means the amount of precipitation from a 24-hour storm event that has the likelihood of occurring once in a 25-year period. The amount of precipitation for a storm event of this type varies by location.

**All known, available, and reasonable methods of prevention, control, and treatment (AKART):**

A technology-based approach of engineering and economic decision-making for limiting pollutants from discharges. AKART represents the most current methodology for preventing, controlling, and abating pollution that can be reasonably installed or used at a reasonable cost. Described in chapters 90.48 and 90.54 RCW and chapters 173-201A, 173-204, 173-216 and 173-220 WAC.

**Animal Unit:**

A unit of measure that is equal to 1000 pounds of average live-weight. For example 1 Holstein cow weighing 1500 pounds is 1.5 animal units, 4 swine each weighing 250 pounds is 1 animal unit.

**Applicant:**

The person or entity applying for permit coverage.

**Application for Coverage:**

Means the form developed by Ecology used by a discharger to apply for coverage under a *general permit*. It is specific to each general permit.

**Application Rate:**

Means the rate, in a quantity per acre (e.g. gallons/acre or lbs/acre), that manure or other nutrients (from all sources) are applied to a land application field.

**Beneficial Use:**

Means all existing and future uses of waters of the state as defined in WACs 173-200-020(4), 173-201A-020, and 173-216-030(1). All uses have the same priority.

**Best Management Practices (BMPs):**

Mean schedules of activities, prohibitions on practices, maintenance procedures, and other management techniques or strategies to prevent or reduce the pollution of the waters of the state. BMPs also include treatment requirements, operating procedures, and physical interventions and barriers to control runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

**Concentrated Animal Feeding Operation (CAFO):**

Means a lot or facility (other than an aquatic animal production facility) meeting the following conditions:

1. Animals have been, are, or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12-month period. The same animal individuals need not be confined for the entire 45 day period.
2. Crops, vegetation, forage growth, or post-harvest residues are not sustained in the normal growing season over any portion of the lot or facility where the animals are confined.
3. There is, or has been a **discharge** to surface or groundwater.

**Control:**

For the purposes of this permit, the Permittee (CAFO) is in control of a field or manure when it performs, directs, manages, oversees, supervises, or gives instruction about, any action or decision related to the field or waste.

**Crest:**

Means the highest point of the structural (e.g. embankment) wall of a **lagoon** or other liquid waste storage structure. The crest may not be the same elevation around the entire perimeter of the lagoon.

**Depth Gauge:**

A pole, or similar device, with easily visible incremental markings in inches and feet that shows when the lagoon is full with 1 foot of free-board (18 inches for solid waste) in addition to capacity for a 24-hour, 25-year storm event as measured from the lowest point of the lagoon **crest**. The gauge measures the entire depth of the lagoon.

**Discharge:**

Means the addition of any pollutant or combination of **pollutants** to waters of the state.

**Discharger:**

Means the owner or operator of any operation, facility, or activity subject to regulation under chapter 90.48 RCW or the federal Clean Water Act due to a **discharge**.

**Effluent Limitation:**

Means any restriction on timing, quantities, rates, and concentrations of **pollutants** discharged from point sources into waters of the state. Includes **best management practices**.

**Export:**

Means the removal of **manure** from the CAFO's production system to another party that is not under the **control** of the Permittee or part of the Permittee's whole facility nutrient mass balance.

**Freeboard:**

Means the vertical distance from the maximum storage level (including normal storage plus storage volume for a 25-year, 24-hour storm event) of a lagoon to the lowest point on the lagoon **crest**.

**General Permit:**

Means a permit that covers multiple dischargers of a point source category within a designated geographical area in lieu of issuing individual site-specific permits to each discharger.

**Geomembrane Liner:**

Means a type of lagoon liner material that is a synthetic polymer such as reinforced polypropylene, high density polyethylene (HDPE), or polyvinyl chloride (PVC) and that is usually between 35 and 60 mil thick.

**Groundwater:**

Water located below the surface of the ground. Surficially perched water is groundwater (Douma v. Ecology PCHB 00-019).

**Indian Country:**

Means as defined in 18 USC 1151: "Except as otherwise provided in sections 1154 and 1156 of this title, the term "Indian country", as used in this chapter, means (a) all land within the limits of any Indian reservation under the jurisdiction of the United States Government, notwithstanding the issuance of any patent, and, including rights-of-way running through the reservation, (b) all dependent Indian communities within the borders of the United States whether within the original or subsequently acquired territory thereof, and whether within or without the limits of a state, and (c) all Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through the same."

**Lagoon:**

Means a structure designed for storage of liquid manure and other waste materials.

**Land Apply/Application:**

Means the process of putting manure on a field to provide nutrients for crop growth.

**Land Application Field:**

Means a field or *management unit* to which manure is added as a fertilizer or soil amendment.

**Management Unit:**

Means fields, portions of a field, or portions of multiple fields which have the same or very similar soil and crop growth characteristics which allow them to be managed as a single unit.

**Manure:**

Livestock excrement and any water or solids (e.g. bedding, spilled feed) that come into contact with the excrement.

**Notice of Intent (NOI):**

A formal application or request for coverage under this general permit pursuant to WAC 173-226-200. See *Application for Coverage, General Permit*.

**Notice of Termination (NOT):**

A request by the **Permittee** to Ecology to end the Permittee's permit coverage because the facility no longer requires a permit.

**Over Top:**

The addition of manure, liquid or other material, including precipitation, to a lagoon until the level of the liquid in the lagoon rises over the lagoon **crest**.

**Permit:**

Means an authorization, license, or equivalent control document issued by Ecology to implement chapter 90.48 RCW, the federal Clean Water Act, and associated statutes by allowing discharges of pollutants within constraints.

**Permittee:**

Means the person or entity that holds a permit for a discharge(s) to waters of the state (surface or ground).

**Point Source:**

Means any discernible, confined, and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged.

**Pollutant/Pollution:**

Means such contamination, or other alteration of the physical, chemical or biological properties, of any waters of the state, including change in temperature, taste, color, turbidity, or odor of the waters, or such discharge of any liquid, gaseous, solid, radioactive, or other substance into any waters of the state as will or is likely to create a nuisance or render such waters harmful, detrimental or injurious to the public health, safety or welfare, or to domestic, commercial, industrial, agricultural, recreational, or other legitimate beneficial uses, or to livestock, wild animals, birds, fish or other aquatic life.

It also means dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste discharged into water.

**Process Wastewater:**

Any water that is used as part of the operation of a CAFO or the processing of products by the CAFO. This does not include clean water that has not come into contact with **manure** or other **wastes** which is directed away from the CAFO.

**Production Area:**

Means the locations making up a CAFO facility that are used for animal confinement, **manure** storage, raw or feed materials storage, product processing facilities (e.g. milking parlor, egg washing, feed mixing), and other areas used for the storage, handling, treatment, or movement of raw materials, products, or **wastes**. This includes manure stockpiled on fields.

**Refusal:**

Means the point at which during soil sampling, the sampling instrument will not travel further through the soil profile due to reaching conditions such as a caliche layer or bedrock.

**Sanitary Control Area:**

Means **groundwater** source protection areas as defined in WAC 246-290-135.

**Saturated Soil:**

Means soil in which there is more water than its water holding capacity.

**Seasonally High Water Table:**

A water table that comes within X feet of the surface of the surface.

**Commented [JonJ36]:** Need a policy call to determine what distance from surface of the ground is appropriate.

**Silage Leachate:**

Seepage from silage piles in bags, bunkers, silos, or other silage storage areas.

**Synthetic Liner:**

Synonymous with **Geomembrane Liner**.

**Stormwater:**

Water run-off that occurs during and after a precipitation event.

**Top of the Bank:**

Means the highest point or **crest** on (usually) the edge of a field past which the land drops quickly down into a drainage ditch, surface water, or depression in the land.

**Total Maximum Daily Load (TMDL):**

A calculation of the maximum amount of a pollutant that a water body can receive and still meet state water quality standards. Percentages of the total maximum daily load are allocated to the various pollutant sources. A TMDL is the sum of the allowable loads of a single pollutant from all contributing point and nonpoint sources. The TMDL calculations include a "margin of safety" to ensure that the water body can be protected in case there are unforeseen events or unknown sources of the pollutant. The calculation also accounts for reasonable variation in water quality.

**Trust or Restricted Lands:**

Means as defined in 25 USC 2201(4): "(i) "trust or restricted lands" means lands, title to which is held by the United States in trust for an Indian tribe or individual, or which is held by an Indian tribe or individual subject to a restriction by the United States against alienation; and (ii) "trust

*or restricted interest in land” or “trust or restricted interest in a parcel of land” means an interest in land, the title to which interest is held in trust by the United States for an Indian tribe or individual, or which is held by an Indian tribe or individual subject to a restriction by the United States against alienation.”*

**Upset:**

Means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. See 40 CFR 122.41.

**Waste:**

Means discarded materials.

**Water Table:**

Means the level at, and below, which the ground is completely saturated with water.

**Waters of the State:**

Includes lakes, rivers, ponds, streams, inland waters, underground waters (**groundwater**), salt waters and all other surface waters and watercourses within the jurisdiction of the state of Washington (RCW 90.48.020).

**Water Quality Standards:**

Means the current state and federal standards for water quality including, but not limited to:

- Surface Waters of the State of Washington (chapter 173-201A WAC).
- Ground Water Quality Standards (chapter 173-200 WAC).
- Sediment Management Standards (chapter 173-204 WAC).
- Human health based criteria in the National Toxics Rule (40 CFR 131.36).
- National Primary Drinking Water Regulations (40 CFR chapter 1, Part 141).
- Group A Public Drinking Water Supplies Source Water Protection and Maximum Contaminant Levels (WACs 246-290-135 and 246-290-310).
- **Total Maximum Daily Load(s).**