Issuance Date: January 18, 2017
Effective Date: March 3, 2017
Expiration Date: March 2, 2022

CONCENTRATED ANIMAL FEEDING OPERATION

National Pollutant Discharge Elimination System and State Waste Discharge General Permit

State of Washington
Department of Ecology
Olympia, WA

In compliance with the provisions of
The State of Washington Water Pollution Control Act
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 conditionally authorized to discharge in accordance with the special and general conditions that follow.

The Permittee must reapply for permit coverage on or before **September 4, 2021**, 180 days before the expiration of this permit, if the Permittee intends to continue operations and discharges beyond the term of this permit.

Heather R. Bartlett
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.

Table 1: Summary of Permit Reports and Submittals		
Permit Condition	**Submittal**	**Frequency/Due Date(s)**
S2.A	Application for Permit Coverage	One-time as necessary
S2.D	Transfer of Permit Coverage	As necessary
S2.E	Termination of Permit Coverage	One-time
S6	Ecology Request for Permit Records	As necessary within 14 days
S7.A	Submittal of Initial MPPP	One-time, within 6 months of permit coverage
S7.B	Existing Lagoon Assessment	One-time, within 2 years of permit coverage
S7.C	Annual Report	Annually by December 31
S7.D	Noncompliance notification	As necessary within 24 hours
S7.E	Spills Reporting	As necessary within 24 hours
G6	Permit Modification	As necessary
G17	Application for Permit Renewal	At least 180 days before expiration date of this 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

This permit applies to lots or facilities (other than aquatic animal production facilities) referred to as concentrated animal feeding operations (CAFOs) that meet the conditions in Table 2: CAFOs Required to Obtain Permit Coverage. Two or more CAFOs under common ownership are considered to be a single CAFO for the purposes of permitting if they adjoin each other or if they use a common area or system for handling ***manure***, ***litter***, ***process wastewater***, and ***other organic by-products***.

TABLE 2: CAFOs Required to Obtain Permit Coverage

Type of CAFO	• Animals 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. • 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.	
	CAFO	***Small CAFO***
	• Has a ***discharge*** to surface water that is not ***agricultural stormwater.*** • Has a discharge to ***groundwater***. • Confines the following animal numbers:	• Designated a significant contributor of ***pollutants*** to surface or groundwater by Ecology. • Confines the following animal numbers:
Mature Dairy Cows[1]	200 or more	Less than 200
Veal Calves	300 or more	Less than 300
Other Cattle[2]	300 or more	Less than 300
Swine (55 lbs. or more)	750 or more	Less than 750
Swine (less than 55 lbs.)	3,000 or more	Less than 3,000
Horses	150 or more	Less than 150
Sheep and Lambs	3,000 or more	Less than 3,000
Turkeys	16,500 or more	Less than 16,500
Laying Hens or Broilers w/liquid waste system	9,000 or more	Less than 9,000
Chickens other than layers w/dry waste system	37,500 or more	Less than 37,500
Laying Hens w/dry waste system	25,000 or more	Less than 25,000
Ducks w/liquid waste system	10,000 or more	Less than 10,000
Ducks w/dry waste system	1,500 or more	Less than 1,500
Other animal types.	• Designated by Ecology to be a CAFO.	

[1] Milked or Dry
[2] Including, but not limited to Heifers, Steers, Bulls, Cow/Calf Pairs

S1.A. Activities Covered Under This Permit

This statewide ***general permit*** conditionally authorizes the discharge of pollutants to both surface and groundwaters from the ***production area*** and ***land application fields*** that result from operating a CAFO.

All conditionally 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 special condition S1.A within the State of Washington. This permit does not apply to ***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 an online system for permit administration. Ecology may modify this permit to require electronic submittal of the ***Application for Coverage***, ***Transfer of Coverage***, ***Notice of Termination***, and Annual Report when the electronic system becomes available.

S2.A. Who Must Apply for Permit Coverage

CAFOs discharging only to groundwater are eligible for coverage under this permit or the CAFO State Waste Discharge General Permit.

1. CAFOs

The owner or operator of a CAFO that is not a small CAFO must apply for a permit and is eligible to apply for coverage under this permit if the CAFO has a discharge to surface water or groundwater.

2. Small CAFOs

The owner or operator of a small CAFO must apply for coverage under this permit if the CAFO has been designated by Ecology to be a significant contributor of pollutants to surface water. If the small CAFO has been designated to be a significant contributor of pollutants to groundwater the small CAFO must apply for coverage under this permit or the CAFO State Waste Discharge General Permit.

S2.B. How to Apply for Permit Coverage

Owners or operators of CAFOs required to apply for permit coverage must submit a complete application for coverage (also called a ***Notice of Intent or NOI***).

The application for coverage form is available on the CAFO permit web page: http://www.ecy.wa.gov/programs/wq/permits/cafo/permit.html.

1. Mail the complete application for coverage signed in accordance with general condition G14 to:

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

2. Public Notice

   All facilities that apply for coverage under this general permit must use the Public Notice Template on the application for coverage to publish public notice.

   The public notice must be published once a week for two weeks with at least seven days between publications in a single newspaper of general circulation in the county where the operation is located. Publish the public notice only after Ecology has received the applicant's complete application for coverage.

   The second publication date of the public notice starts a 30-day public comment period. At the end of the 30-day public comment period, Ecology will consider any received comments about the applicability of this permit to the operation before issuing a decision on permit coverage pursuant to special condition S2.C. Once permit coverage is issued, the CAFO owner or operator who applied for coverage becomes a ***Permittee***.

3. Ecology Public Notice of Multiple Applications for Coverage

   Ecology may, at its option, publish public notice of multiple applications for coverage under this permit at one time in the Washington State Register (WSR) which is published the first and third Wednesday of the month. If Ecology publishes public notice in the WSR, the permit coverage timeline will be longer than the timeline listed in special condition S2.C.

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 the application requires additional site-specific information.

c. If the public requests a public hearing about the applicability or nonapplicability of this permit to the operation proposed for coverage.

d. If members of the public submit comments.

e. When more information is necessary to determine whether coverage under the general permit is appropriate.

3. When Ecology needs additional time to reach a decision:

a. Ecology will notify the applicant in writing within 30 days of receiving the complete application for coverage and identify the issues that the applicant must resolve before Ecology can reach a decision.

b. Ecology will notify the applicant in writing of the final decision.

S2.D. How to Transfer Permit Coverage

The original Permittee (current permit holder) may transfer permit coverage to a new Permittee using the Transfer of Coverage form available on the CAFO permit web page: http://www.ecy.wa.gov/programs/wq/permits/cafo/permit.html.

Both the original Permittee and the new Permittee must sign the form according to general condition G14 and provide the date that the new Permittee will take responsibility for permit coverage. Once both parties have signed the Transfer of Coverage 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.

As part of the transfer, the original Permittee must supply the new Permittee with copies of all the permit documents based on current facility conditions used to comply with this permit (e.g. MPPP document).

Mail the complete Transfer of Coverage form signed in accordance with general condition G14 to:

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

Once the permit has been transferred, the new Permittee is required to use the existing permit documents (e.g. MPPP) provided by the original Permittee until the new Permittee updates the documents to reflect any changes to facility operation the new Permittee makes.

S2.E. How to Terminate Permit Coverage

1. Eligibility for Terminating Permit Coverage

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

   a. The Permittee can document that they no longer have a discharge to surface or groundwater from their production area or land application fields except for agricultural stormwater from their land application fields.

   b. The Permittee did not have a discharge but voluntarily obtained permit coverage, no longer wishes to be covered by this permit, and the Permittee has or had no discharge to surface or groundwater from their production area or land application fields except for agricultural stormwater from their land application fields.

   c. The Permittee operates a CAFO and reduces the CAFO size to a small CAFO pursuant to special condition S1 Table 2: CAFOs Required to Obtain Permit Coverage. When Ecology receives a request to terminate permit coverage because of a reduction in facility size to a small CAFO, Ecology will make a significant contributor determination pursuant to special condition S2.A.2 to determine if the CAFO must remain covered by the permit.

   d. The Permittee no longer meets the definition of a CAFO pursuant to special condition S1 Table 2: CAFOs Required to Obtain Permit Coverage. Before termination of permit coverage, the Permittee must clean, re-purpose, or decommission facility infrastructure that will no longer be used.

      i. Cleaning/Re-purposing Requirements:

         1) All manure, litter, ***feed***, process wastewater, and other organic by-products must be removed from storage, management, and other facility

infrastructure and land applied in accordance with the Permittee's yearly nutrient budgets, or ***exported*** in accordance special condition S4.N as appropriate.

2) All manure, litter, feed, process wastewater, and other organic by-product management systems and facilities that could fill with water from precipitation must be flushed with clean water. The water from flushing must be land applied in accordance with the Permittee's yearly nutrient budgets or exported in accordance with special condition S4.N.

3) After flushing/cleaning, if the manure, litter, feed, process wastewater, and other organic by-product storage, management, and other facility infrastructure will no longer be used, the infrastructure must be modified, if necessary, so it is not a conduit for any pollutants to enter surface or groundwater.

ii. Decommissioning Requirements

1) Temporary closure of ***lagoons*** must follow special condition S4.B.1.e.

2) Permanent decommissioning of lagoons must follow special condition S4.B.1.f.

3) Changing a lagoon into an irrigation pond must follow special condition S4.B.1.g.

2. Requesting Termination of Permit Coverage

To request termination of permit coverage, the Permittee must mail a complete Notice of Termination form signed in accordance with general condition G14 to:

Department of Ecology
Water Quality Program
Attn: CAFO Permit Administrator
PO Box 47600
Olympia, WA 98504-7600

The Notice of Termination form is available on the CAFO permit web page: http://www.ecy.wa.gov/programs/wq/permits/cafo/permit.html.

The termination of permit coverage is effective on the date 61 days after Ecology receives the complete Notice of Termination form, unless Ecology notifies the Permittee that their request is denied because the Permittee has not met the eligibility requirements.

The Permittee will continue to incur an annual permit fee (chapter 173-224 WAC) until they submit a completed and signed Notice of Termination form signed in accordance with general condition G14 and permit coverage is terminated by Ecology. The Permittee will receive a letter from Ecology notifying them that their permit coverage is terminated.

S3. DISCHARGE LIMITS

Discharges conditionally authorized by this permit must not cause or contribute to a violation of ***water quality standards***. Discharges not in compliance with these standards are not authorized. The Permittee must also be in compliance with other discharge limits (e.g. special condition S4) in order for discharges to be conditionally authorized.

A. Total Maximum Daily Loads (TMDL)

Discharges conditionally authorized by this permit to waterbodies which have a TMDL in place for a pollutant that the discharge includes must not exceed the established load allocation for CAFOs for the pollutant. Discharges to waterbodies with a TMDL in place not in compliance with these standards are not authorized. To determine if a discharge may be to a waterbody with a TMDL in place, refer to the list of TMDLs at: http://www.ecy.wa.gov/programs/wq/tmdl/TMDLsbyWria/TMDLbyWria.html.

B. Impaired (303d listed) Waterbodies

Discharges conditionally authorized by this permit to impaired waterbodies that do not have a completed TMDL in place must not contain the pollutant(s) for which the waterbody is listed as impaired.

To determine if a discharge may occur to an impaired waterbody, refer to the impaired waterbody database at: http://www.ecy.wa.gov/programs/wq/303d/index.html.

C. Production Area

The Permittee is prohibited from discharging manure, litter, feed, process wastewater, other organic by-products, or water that has come into contact with manure, litter, feed, process wastewater, or other organic by-products, to surface waters of the state from the production area except when:

1. Precipitation events cause an overflow of manure, litter, feed, process wastewater, or other organic by-product management and storage facilities which are designed, constructed, operated, and maintained to contain all manure, litter, feed, process wastewater, and other organic by-products including the contaminated runoff and direct precipitation from a 25-year, 24-hour rainfall event for the location of the facility and still have lagoon design freeboard;

And

2. The production area is operated in accordance with the applicable inspection, maintenance, recordkeeping, and reporting requirements of this permit.

D. Land Application Fields

The Permittee is prohibited from discharging manure, litter, feed, process wastewater, or other organic by-products from their land application fields, unless the discharge is generated only by precipitation, not caused by human activities during the precipitation, and the Permittee is in compliance with this permit (i.e. the discharge meets the definition of agricultural stormwater).

S4. MANURE POLLUTION PREVENTION

The Permittee must implement measures to address the pollution prevention performance objectives in special conditions S4.A through S4.Q.

S4.A. Production Area Run-off Controls

The Permittee must prevent discharges to surface water from its production area except in accordance with special condition S3.

The Permittee must keep manure, litter, and process wastewater from being tracked out onto public roadways.

Alternatively, if manure, litter, process wastewater, or other sources of pollutants are tracked out onto public roadways, the Permittee must clean-up the material tracked onto the roadway. Materials cleaned-up on from the roadway must be disposed of appropriately and may not be placed in ditches, other conduits to surface or groundwaters, or left along right-of-ways.

S4.B. Manure, Litter, Process Wastewater, Other Organic By-Product, and Feed Storage

The Permittee must have adequate storage space for the manure, litter, process wastewater, feed, and any other sources of pollutants on-site during the storage period for the area where the CAFO is located in order to comply with special condition S3.

Lagoons and other liquid storage structures built, expanded, or having major refurbishment (e.g. complete emptying and re-compaction to restore the earthen liner) done after the issuance of this permit must achieve a permeability of $1x10^{-6}$cm/s without consideration for manure sealing and there must be a minimum of two feet of vertical separation between the bottom of the lagoon (measured from the outside of the earthen liner) and the ***water table***, including seasonal high water table.

Design and installation of lagoons and other liquid storage structures built, expanded, or having major refurbishment must be overseen by a licensed professional engineer.

1. Lagoons and other liquid storage structures

   a. Inspection

   Refer to special condition S5.A.

   b. Structure Maintenance

   The Permittee must prevent damage and maintain the integrity of their lagoons and other liquid storage structures by controlling vegetation and animals on the structure and by repairing the structure as necessary to bring it back up to design specifications.

   c. Volume Maintenance

   Periodically remove accumulated solids from lagoons or other liquid storage structures if necessary in order to maintain design storage volume. Ensure that any liner in the lagoon or other liquid storage structure is not damaged during maintenance and specify how leaks, if using a ***synthetic liner*** (e.g. punctures in the plastic), will be detected and repaired.

   d. Depth Gauge

   Lagoons or other liquid storage structures that are designed to contain the 25-year, 24-hour precipitation event run-off from the CAFO's production area 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 design ***freeboard***.

   e. Lagoon Closure – Temporary

   If the Permittee has a lagoon or other liquid storage structure that is temporarily not in use, but will be used again, the lagoon must be maintained as though it were in use so that it remains in good working order.

   f. Lagoon Closure – Permanent Decommissioning

   If a lagoon or other liquid storage structure is being decommissioned, decommissioning must render the lagoon unusable and minimize the risk of leftover nutrients converting to mobile forms (e.g. ammonia to nitrate) which pose a risk to groundwater by:

i. Any manure, litter, feed, process wastewater, or other organic by-products contained in the structure must be removed and land applied in accordance with the Permittees yearly nutrient budgets or exported in accordance with special condition S4.N.

ii. If converting the site to another use that requires complete removal of the structure, high nutrient soils above grade must be land applied according to the Permittee's yearly nutrient budgets or exported in accordance with special condition S4.N.

iii. If the lagoon has a synthetic liner, the liner must be removed and disposed of or recycled in a lawful manner. If the liner prevented nutrients from building up in the soils of the lagoon structure, special condition S4.B.1.f.ii does not apply.

iv. After completion of special condition S4.B.1.f.i through S4.B.1.f.iii, any earthen structure must be filled with soil, made unable to contain liquid, or returned to grade matching the surrounding area. All exposed soil must be seeded with site appropriate plant species or site appropriate land management implemented to prevent erosion unless the Permittee is planning to build a structure on the site where the lagoon existed within 3 months of lagoon decommissioning.

g. Lagoon Closure – Use as Irrigation Pond

If a lagoon or other liquid storage structure will no longer be used to store manure, litter, process wastewater, or other organic by-products, and will be used as an irrigation pond the Permittee must remove all manure, litter, feed, process wastewater, or other organic by-products, and land apply the removed materials in accordance with their yearly field nutrient budgets or exported in accordance with special condition S4.N.

2. Solid Manure, Litter, and Feed Storage, Composting Facilities

Runoff from solid manure, litter, and feed storage areas, and composting facilities (e.g. manure drying) must be collected and stored with other liquid manure and process wastewater. If the storage area is covered (e.g. tarp, roof) clean water may be diverted away from the production area in accordance with special condition S4.D.

If filter strips are used to infiltrate run-off into the ground, the Permittee must document how the filter strip will effectively utilize the nutrients present in the run-off such as with a nutrient budget showing the amount of nutrients directed to the filter strip and how much nutrient uptake the filter strip will generate.

S4.C. Other Above and Below Ground Infrastructure

The Permittee must operate and maintain infrastructure used on-site to prevent discharges due to physical failure of the infrastructure.

Other infrastructure (such as pipes, valves, tile lines, etc.) used to manage manure, litter, feed, process wastewater, and other organic by-products must be regularly inspected according to special condition S5.A and tested (if applicable) to ensure it is in proper working order. Results from inspections 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 along with a schedule of when the work will be completed.

Discharge to groundwater from backflow through wells is prohibited and must be prevented.

S4.D. Diversion of Clean Water

Clean water that has not come into contact with manure, litter, feed, process wastewater, other organic by-products, or other contaminants generated by the CAFO may be diverted from the CAFO production area instead of being stored. 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 (e.g. erosion, sediment build-up, flooding). If the Permittee chooses to divert clean water from storage, they must describe how diversion will be accomplished to prevent contact with contaminants, the location that the diverted clean water will go, and how that location is able to handle the volume of clean water generated without causing other water quality problems.

S4.E. Prevent Direct Animal Contact with Water

Livestock must not be allowed to come into contact with surface waters or conduits to surface waters. This does not apply to small amounts of standing water (e.g. puddles, saturated areas) on pastures, land application fields where livestock are temporarily housed, or in the production area as long as they are not draining to other surface waters or conduits to surface waters.

The Permittee must describe how livestock are prevented from coming into contact with surface water and conduits to surface water.

S4.F. Chemical Handling

All chemicals (e.g. pesticides, cleaning agents) must be disposed of in accordance with the disposal requirements of the chemical's Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) product label or Safety Data Sheet (SDS) if it is not a FIFRA labeled product.

Excess or unused chemicals and empty chemical container wash water may not be disposed of in manure, litter, feed, process wastewater, or other organic by-product management systems, or other surface waters or conduits to surface or groundwaters.

The Permittee must have and implement emergency procedures for containment and clean-up in the event of a chemical spill that could impact surface or groundwater.

S4.G. Livestock Mortality Management

Mortalities must be handled such that they do not pose a threat to surface or groundwater quality. Until properly disposed of, mortalities must be stored in a location that does not allow run-off to surface waters or leaching to groundwater. All run-off from stored mortalities must be directed to a lagoon. Mortalities must not be disposed of in a lagoon or other liquid storage structure unless it is specifically designed to handle mortalities.

Unless prohibited by local ordinances, the Permittee must follow these requirements for specific mortality handling techniques to prevent discharges to surface or groundwater:

1. *Burial*

   Mortality burial must be at least 300 feet from any well, spring, or surface water such as a river, stream, lake, pond, or intermittent stream. Mortality burial must not occur 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. Moralities must be buried with a minimum of 3-feet of soil cover.

2. *Composting*

   Mortality composting must be conducted in compliance with chapter 70.95 RCW and chapter 173-350 WAC and 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.

3. *Natural Decomposition*

   Natural decomposition (livestock mortality left to decompose on the ground surface where it was found or moved to) may be used if the mortality is one-quarter mile (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 or neighboring residence; and not located in an area that has a seasonally high water table, or seasonal flooding.

S4.H. Manure, Litter, Process Wastewater, and Other Organic By-Products Sampling and Nutrient Analysis

Manure, litter, process wastewater, and other organic by-product sampling and analysis must follow the requirements of special condition S5.B

Annually prior to beginning land application after ***T-SUM 200***, the Permittee must have all sources of manure, litter, process wastewater, and other organic by-products that will be land applied sampled and analyzed for nutrient content.

During the application season, if the Permittee begins to use a new organic source of nutrients for crops, the Permittee must have the new source sampled and analyzed for nutrient content prior to land applying the new source.

The Permittee must have all sources of manure, litter, process wastewater, and other organic by-products sampled and analyzed at least twice more, spaced evenly throughout the land application season, to account for seasonal variation in nutrient concentration (e.g. dilution due to rainfall or concentration from evaporation).

The Permittee is not required to have commercial chemical fertilizers sampled and analyzed for nutrient content.

S4.I. Soil Sampling and Nutrient Analysis

Soil sampling and analysis must follow the requirements of special condition S5.C.

1. Spring Soil Sampling and Analysis

   Each year prior to starting land application after T-SUM 200, the Permittee must have all land application fields to which they plan to apply manure, litter, process wastewater, or other organic by-products sampled and analyzed for nutrient content. Soil samples must be taken at the depths specified in special condition S4.I.3 or S4.I.4 depending on the amount of annual precipitation at the facility location.

2. Fall Soil Sampling

   Each year in the fall the Permittee must have all land application fields to which they applied manure, litter, process wastewater, or other organic by-products sampled and analyzed for nutrient content.

   Fall soil samples must be taken by October 1st, after harvest of annual crops, and before heavy rain begins in the fall or before any irrigation water is used on the field after harvest. Soil samples must be taken at the depths specified in special condition S4.I.3 or S4.I.4 depending on the amount of annual precipitation at the facility location.

3. Depth of Soil Samples in Areas with 25 Inches or Less of Annual Precipitation

   In areas with 25 inches or less of precipitation a separate composite soil sample must be taken for the 0-12 inch depth and for the 13-24 inch depth.

   If the soil sample is taken after October 1st or if the field is in the high or very high risk level for adaptive management (special condition S4.K), the Permittee must take an additional composite soil sample for the 25-36 inch depth in the fall in order to account for nutrient leaching.

   If the field does not have 36 inches of soil before refusal or groundwater is reached, the Permittee must take samples in 12-inch increments until it reaches refusal or groundwater. The Permittee must indicate in its record keeping and annual report (special conditions S6.B and S7.C) at what depth refusal or groundwater was reached.

4. Depth of Soil Samples in Areas With More Than 25 Inches of Annual Precipitation

   In areas with more than 25 inches of annual precipitation a composite soil sample must be taken for the 0-12 inch depth.

   If the soil sample is taken after October 1st or if the field is in the high or very high risk level for adaptive management (special condition S4.K), the Permittee must take an additional composite soil sample for the 13-24 inch depth in the fall in order to account for nutrient leaching.

   If the field does not have 24 inches of soil before refusal or groundwater is reached, the Permittee must take samples in 12-inch increments until it reaches refusal or groundwater. The Permittee must indicate in its record keeping and annual report (special conditions S6.B and S7.C) at what depth refusal or groundwater was reached.

S4.J. Land Application

The Permittee must land apply manure, litter, process wastewater, or other organic by-products in accordance with their yearly field nutrient budgets and at the appropriate rates and times to comply with permit conditions. If the Permittee generates more manure, litter, process wastewater, or other organic by-products than the land application fields available to the Permittee can appropriately utilize according to their yearly field nutrient budgets, the Permittee must find other avenues of appropriately utilizing the excess manure, litter, process wastewater, or other organic by-products (e.g. export, composting).

The Permittee's staff must have sufficient training to be able to land apply in accordance with the yearly field nutrient budgets and at appropriate rates and times to comply with permit conditions.

1. Yearly Field-Specific Nutrient Budget

   Each calendar year, the Permittee must develop a field-specific nutrient budget for each land application field they will ***control*** at to which they plan to apply manure, litter, process wastewater, or other organic by-products. The yearly nutrient budget specifies the maximum amount of nutrients that may be land applied to the field during the year unless following special condition S4.J.4. Yearly nutrient budgets must be developed before the first land application of the calendar year. If the Permittee makes changes to their yearly nutrient budget for a land application field they must update the nutrient budget to reflect the changes. The yearly nutrient budget must include:

   a. Current calendar year.
   b. Field ID that is the same as the field ID used on maps in the Permittee's MPPP and acreage (special condition S4.Q.2.b.i).
   c. Soil sample nutrient analysis values (special condition S4.I).
   d. Chemical fertilizer nutrient sources.
   e. Irrigation water nitrate and phosphorus.
   f. Nitrogen and phosphorus from other sources (e.g. precipitation).
   g. Crop to be planted.
   h. Crop yield estimate for the field based upon (in order of use depending on availability): average of the last 3 years of yields from that field, average the last 3 years of yields from similar field in the area, land grant university guidance, commercial chemical fertilizer guides, and national data sources.
   i. Nitrogen and phosphorus required by the crop to reach the yield estimate.
   j. Soil nitrogen and crop residue mineralization
   k. Nitrogen volatilization during land application.
   l. Adaptive management required by special condition S4.K.

   A nutrient budget worksheet that incorporates requirements of special condition S4.J.1 is available on the CAFO permit web page: http://www.ecy.wa.gov/programs/wq/permits/cafo/permit.html.

   If the Permittee chooses to use their own form, it must account for the same parameters as the Ecology form and be able to show the calculations used to reach the final maximum amount of nutrients that may be land applied to each field for the year.

2. Application Rates

   a. Land application of manure, litter, process wastewater, and other organic by-products must be at times and at rates which can be utilized by the crop.

   b. The Permittee must base their ***application rates*** on the most current manure, litter, process wastewater, and other organic by-product nutrient analysis required by special condition S4.H and crop needs at the time of application.

c. The Permittee must use the applicable adaptive management actions specified in special condition S4.K to modify their land application of nutrients.

3. Application Restrictions

   a. The Permittee must not land apply more nutrients to a field than calculated in their yearly nutrient budget (special condition S4.J.1) for that field.

   b. During land application, the Permittee must not cause direct, indirect, or precipitation related discharge to surface waters and must follow the minimum field discharge management practices required by special condition S4.M.

   c. Equipment used for land application of manure and other material that can have a variable application rate (e.g. pumps, injectors, sprinklers, splash plate applicators) must be calibrated so that the Permittee has an accurate measure of how much manure is applied per unit of time or area (e.g. x gallons per hour, y gallons per acre).

   d. No land application of manure, litter, process wastewater, or other organic by-products may occur:

      i. To fields with a frozen surface crust (2 inches) or deeper, or if the soil is at or below zero degrees Celsius (32 degrees Fahrenheit).

      ii. To fields that are snow covered.

      iii. To fields with ***saturated soil***.

      iv. If the water table is within 12 inches or less of the surface.

      v. If precipitation is forecast in the next 24 hours for the facility location that will cause a discharge from the Permittee's land application fields.

      vi. After October 1 and prior to T-SUM 200 unless the manure, litter, process wastewater, or other organic by-products are applied in accordance with special condition S4.J.4.

      vii. To fields that are bare (no perennial crop) unless the Permittee is preparing the bare field for the current year's annual crop (planting within 30 days of land application). Special condition S4.M applies to fields that are being prepared for a crop.

4. Double Cropping, Winter Cover Crops, Perennial Crops

   Land application taking place after fall soil sampling (special condition S4.I) must be demonstrated to be necessary because current soil nutrients plus mineralization in the

winter will not provide the nutrients necessary for the double crop, winter cover crop, or perennial crop.

Before land application may take place for a double crop, winter cover crop, or perennial crop the Permittee must have taken fall soil samples, have had the soil samples analyzed as required by special condition S4.I, and developed a second yearly field nutrient budget for the double crop, winter cover crop, or perennial crop, according to special condition S4.J.1.

If the nutrient budget shows that soil nutrients plus mineralization will not provide the nutrients necessary during the winter for a double crop, cover crop, or perennial crop the Permittee may land apply manure, litter, process wastewater, or other organic by-products in compliance with the land application restrictions in special condition S4.J.1 through S4.J.3.

5. Emergency Winter Land Application

   Land application of manure, litter, process wastewater, or other organic by-products outside of the limits set by special condition S4.J.1 through S4.J.4 or in amounts greater than the Permittee's yearly field nutrient budgets is a violation of this permit.

   Any land application outside of the permit requirements must be due to the need to protect public health and safety (e.g. to prevent lagoon ***over-topping***).

   The Permittee must keep records of, and report all land applications outside of permit requirements to Ecology within 24 hours. Reporting may be done via email at cafopermit@ecy.wa.gov. The records and reports must include the dates and times of land application, the field IDs for the fields to which land application took place, and the amount (e.g. gallons) land applied.

   The Permittee must develop a plan to remain in compliance with the permit within 6 months of the emergency winter land application and submit that plan to Ecology at the address specified in special condition S7.C. The Permittee must implement the plan within 18 months of the emergency winter land application.

S4.K. Adaptive Management

The Permittee must adaptively manage their land application fields in order to prevent the build-up of excessive nutrients in the soil. The goal is to reduce land application field fall soil nitrate concentrations to a Risk Level of Medium or less.

1. Determine Field Risk Level

   a. Use Table 3: Adaptive Management Actions to determine land application field risk level.

b. In areas with 25 inches or less of annual precipitation, for each field use the second foot (13-24 inches) fall soil nitrate sample analysis results (special condition S4.I) to determine the field risk level.

c. In areas with more than 25 inches of annual precipitation, for each field use the first foot (1-12 inches) fall soil nitrate sample analysis results (special condition S4.I) to determine the field risk level.

2. Take Required Adaptive Management Actions

Based on the field risk level, take the required adaptive management actions specified in the corresponding *Required Actions* column in Table 3: Adaptive Management Actions. Where the risk level remains High or Very High for three consecutive years, in addition to taking the actions in the *Required Actions* column of Table 3: Adaptive Management Actions, take the actions in the *Required Actions Based Upon Trends* column in Table 3: Adaptive Management Actions.

Table 3: Adaptive Management Actions		
Field Risk Level	**Required Actions**	**Required Actions Based Upon Trends**
Low Fall Soil Test Nitrate Range: • Less than 15 ppm • Less than 55 Lbs/Acre	• No changes to current practices required.	• N/A
Medium Fall Soil Test Nitrate Range: • 15 - 30 ppm • 55 - 110 Lbs/Acre	• Reevaluate nutrient budget assumptions for estimated crop yield, nitrogen volatilization, mineralization (special condition S4.J), and other sources of nutrients (e.g. irrigation water and atmospheric/precipitation deposition). • Verify actual land application rates and recalibrate land application equipment if necessary.	• N/A
High Fall Soil Test Nitrate Range: • 31 - 45 ppm • 111 - 165 Lbs/Acre	**Continue the actions required by Medium risk level and:** o Adjust land application timing to correspond to peak crop uptake and stop land application after peak crop uptake. o For areas with more than 25 inches annual precipitation an additional fall soil sample must be taken at the second foot depth (13-24 inches) according to special condition S4.I o For areas with 25 inches or less annual precipitation an additional fall soil sample must be taken at the third foot depth (25-36 inches) according to special condition S4.I o Document reason(s) for fall soil sample analysis results at a high risk level on Annual Report (special condition S7.C).	**If fall soil nitrate values are High or Very High for 3 consecutive years** continue the actions in the Required Action column for Medium and High risk levels and take the following actions designed to reduce field nutrient levels to Medium risk within 2 years: o Reduce nutrient application to the field. o Hire a professional/consultant to develop yearly nutrient budgets and application rates.
Very High Fall Test Nitrate Range: • More than 45 ppm • More than 165 Lbs/Acre	**Continue the actions required by High risk level and:** o Enhance nutrient removal via cropping and reduced nutrient application to the field. o Assume no nitrogen losses from denitrification and volatilization on the Permittee's yearly nutrient budgets assumptions. o Ecology must approve the yearly nutrient budget for this field prior to land application. o Document reason(s) for fall soil test nitrate results at a very high risk level on Annual Report (special condition S7.C)	**If fall soil nitrate values are Very High for 3 consecutive years** for a land application field stop land application of nutrients to the field and continue the actions in the Required Action column for High and Very High risk levels until either: o The fall soil nitrate analysis results for the field reach a Medium risk level, or o Groundwater monitoring in the field demonstrates that land application of nutrients is not impacting groundwater quality. Follow the requirements of special condition S5.D for the development of a groundwater monitoring plan.

S4.L. Irrigation Water Management

The Permittee must prevent the downward movement of nitrate by managing their irrigation water so that the amount of water applied from precipitation and irrigation does not exceed the water holding capacity in the top two feet of soil.

S4.M. Field Discharge Management Practices

The Permittee must use field discharge management practices on their land application fields to limit discharge of manure, litter, process wastewater, and other organic by-products to down-gradient surface waters or to conduits to surface or groundwater.

Field discharge management practices are not considered part of the Permittee's land application area for calculating yearly field nutrient budgets and may not have manure, litter, process wastewater, or other organic by-products applied to them. Field discharge management practice distances are measured from the ***top of the bank*** on the surface water or conduit to surface water which is being protected.

Unless the Permittee exercises one of the compliance alternatives provided for in special conditions S4.M.1 through S4.M.3, manure, litter, process wastewater, or other organic by-products may not be applied closer than 100 feet to any down-gradient surface waters, open tile line intake structures, sinkholes, agricultural or drinking water well heads, or other conduits to surface or groundwaters.

1. Vegetated buffer compliance alternative

   As a compliance alternative, the Permittee may substitute the 100-foot setback with a 35-foot wide vegetated buffer where application of manure, litter, process wastewater, or other organic-by-products is prohibited.

2. Berm compliance alternative

   As a compliance alternative, the Permittee may substitute the 100-foot setback with a berm which prevents surface water discharge from the land application field and where application of manure, litter, process wastewater, or other organic by-products is prohibited. Berms must be designed, installed, and maintained to perform their function considering the following factors:

   a. Weather characteristics for the area where the facility is located such as precipitation, storm events, and volume of field run-off.

   b. Land application methods used by the Permittee, form of land applied manure, litter, process wastewater, or other organic by-products, timing of land application, and application rates.

c. Field characteristics such as soil types, infiltration rates, field slope, presence of other conduits to surface waters (e.g. drainage ditches, tile drains), crop type, cropping cycles, and flooding.

d. Installation timing, time from installation to full performance, and maintenance period and activities,

3. Alternative practices compliance alternative.

As a compliance alternative, the Permittee may demonstrate that a field discharge management practice is not necessary because implementation of alternative conservation practices or field-specific conditions will provide pollutant reductions equivalent or better than the reductions that would be achieved by the 100-foot application setback.

If the Permittee is requesting approval to use an alternative practice compliance alternative after the Permittee has obtained permit coverage the following requirements must be met:

a. Prior to beginning implementation of an alternative practice compliance alternative, the Permittee must submit a request to Ecology for approval of the alternative practice compliance alternative. The request must include maps showing the field IDs and locations the alternative practice compliance alternative will be implemented and supporting information demonstrating that the alternative practice compliance alternative will be as effective as the 100-foot application setback.

b. Once the request and supporting information have been submitted to Ecology the Permittee must publish a public notice of the proposal. The public notice must be published once a week for two weeks with at least seven days between publications in a single newspaper of general circulation in the county where the Permittee's operation is located. Publish the public notice only after Ecology has received the request. The Permittee must submit (email is acceptable) an affidavit of public notice from the publishing newspaper to Ecology showing the dates of publication.

The public notice must use the following language (additional information may be added, but the language in bold is required and may not be modified):

[*Permittee Name*]**, at** [*Address of Permittee's Operation*] **is seeking approval to use an alternative practice compliance alternative as allowed by CAFO permit special condition S4.M.3 on their land application field**(s)**. Any person desiring to present their views to Ecology regarding this proposal may do so in writing within 30 days of the last date of publication of this notice.**

Comments on the alternative practice compliance alternative should address whether the proposal will be as effective as the default 100-foot land application setback required by CAFO permit special condition S4.M.

Any person interested in Ecology's action on this proposal may notify the Ecology of their interest within 30 days of the last date of publication of this notice. Comments must be submitted to Ecology. Comments may be submitted to: Department of Ecology, Water Quality Program, Attn: CAFO Permit Administrator, P.O. Box 47600, Olympia, WA 98504-7600.

c. The second publication date of the public notice starts a 30-day public comment period. At the end of the 30-day public comment period, Ecology will consider and respond to any comments received about the proposal before issuing a decision approving or denying the use of the alternative practice compliance alternative.

S4.N. 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, litter, process wastewater, or other organic by-product nutrient analysis to the recipient as part of export. If the Permittee is exporting digestate, the nutrient analysis must be from within the last 5000 cubic yards (approximately 1,010,000 gallons) of digestate generated.

The Permittee must keep records of its manure exports as required by special condition S6.C.

1. On-CAFO Processing ("composting" or drying) of Manure Solids On-Site by a Third Party

   If the Permittee has an agreement with another party (contracted composter) for the contracted composter to process (manure "composting" or drying) manure solids from the Permittee on-site, the solids which go to the contracted composter must be tracked as export by the Permittee. After the solids are under the control of the contracted composter, the Permittee is not responsible for tracking sales and movement off-site of the processed manure solids as part of export unless the solids come under the Permittee's control again.

S4.O. Emergency Procedures

The Permittee must develop emergency procedures in the event of a failure in their infrastructure (e.g. burst pipe, lagoon embankment failure) that will direct the Permittee's actions to prevent, control, or reduce discharges to ground and surface waters. The emergency procedures must include the noncompliance notification requirements

required by special condition S7.D and spills reporting requirements in special condition S7.E.

S4.P. Training

Either the Permittee or at least one of the Permittee's employees must be familiar with the monitoring and inspections required by special condition S5.A.

If the Permittee chooses to train their employee(s) to look for and notice problems with facility infrastructure during their daily work to meet the visual inspection/monitoring requirements of special condition S5.A so that these requirements do not become a separate activity, the employee training must incorporate what to look for, who to notify (if there is a designee other than the Permittee) about problems or potential problems, and where and how to record the information at the end of shift as required by special condition S6.A.

S4.Q. Pollution Prevention Plan

The Permittee must prepare, keep up-to-date, and implement a Manure Pollution Prevention Plan (MPPP) for their CAFO. The MPPP must be designed and implemented to limit the discharge of manure, litter, process wastewater, other organic by-products, and other sources of pollution related to the operation of a CAFO, to waters of the state for the purpose of complying with state water quality standards.

The Permittee must have their initial MPPP prepared and submitted to Ecology (special condition S7.A) within six months of the date that the Permittee receives permit coverage.

1. Pollution Prevention

The MPPP must include a description of how the Permittee is meeting each of the performance objectives in special conditions S4.A through S4.Q on-site. The description provided by the Permittee must include a narrative, and if applicable drawings or diagrams. The narrative must clearly describe the basis the pollution prevention decisions the Permittee has made.

If a performance objective in special conditions S4.A through S4.Q does not apply to a Permittee due to site conditions, the Permittee must explain why the performance objective does not apply to their operation in their MPPP.

2. Drawings and Maps

a. The MPPP must have map and/or aerial photos of the CAFO production area clearly indicating the location of the following items:

i. Lagoons and other liquid manure and process wastewater storage structures (e.g. pits, tanks), including those used for moving liquid manure and process wastewater around the facility.

ii. Solid manure storage structures.

iii. Feed storage (e.g. silage bunker) structures.

iv. Known underground piping for liquid manure and process wastewater.

v. Electrical lines that control pumps or valves that if broken would result in uncontrolled flow of liquid manure or process wastewater.

vi. Animal housing.

vii. Direction(s) that run-off or discharges will flow on the production area.

viii. Groundwater wells, noting their use (e.g. drinking, livestock watering, irrigation) and well tag or ID number.

b. The MPPP must have maps and/or aerial photos of the land application fields clearly indicating the following items:

i. A unique field identifier (e.g. field name, field code, name used for WSDA Dairy Nutrient Management Program required records) for each field that will be used to reference the field on all permit records and reports.

ii. Field discharge management practice location, type, and width (special condition S4.M).

iii. Other areas that must not have manure, litter, process wastewater, or other organic by-products applied to them because application to those areas would result in a discharge.

iv. Known tile drain outlets.

3. Facility Information

The following documentation about the Permittee's facility must be included in the MPPP and kept up-to-date as changes are made to the facility.

a. Information about existing site conditions (topography, drainage, soils, vegetation, etc.).

b. The maximum number of animals the current infrastructure was designed to manage and store manure, litter, process wastewater, or other organic by-products from.

c. Potential surface or groundwater discharge problem areas (e.g. high risk areas).

d. The storage capacity for all manure, litter, feed, process wastewater, and other organic by-product storage structures intended for long-term storage (e.g. lagoon, above ground or in-ground storage tank, bunker, concrete storage pad).

   This does not include structures intended to only hold manure, litter, feed, process wastewater, or other organic by-products on a temporary basis while pumping from one location to another or while processing the materials, for example pits used for pumping liquid manure from one location to another or equipment/buildings used to process feed into a mixed ration. This also does not include structures used to control clean water pursuant to special condition S4.D.

   For each storage structure include:

   i. The total designed storage volume.

   ii. The number of days of storage capacity as designed and as currently maintained.

   iii. Design treatment volume (liquid storage structures only).

   iv. Volume available for solids build-up (liquid storage structures only).

4. Updates

Whenever there is a change in design, construction, operation, or maintenance of the Permittee's facility infrastructure that will affect how manure, litter, feed, process wastewater, or other organic by-products will be managed on-site to prevent pollution, the Permittee must update their MPPP within 30 days.

If it is determined that the MPPP is, or would be, ineffective in eliminating discharges not authorized by this permit, the Permittee must then:

a. Review the MPPP for compliance with the permit and make appropriate revisions to the MPPP within 14 days of a notification of the deficiency by Ecology or WSDA to reflect any necessary changes to the facility.

b. Immediately begin the process to fully implement and maintain appropriate source control and/or treatment practices, addressing the deficiencies no later than 45 days from date of notification. If installation of necessary infrastructure or

practices is not feasible within 45 days, Ecology may approve additional time when an extension is requested by a Permittee within the initial 45-day period.

S5. MONITORING

S5.A. Operations and Maintenance

The Permittee must perform the following visual inspections of the facility to ensure that equipment, infrastructure, and field discharge management practices are in proper working order:

Table 4: Routine Visual Inspections

Inspection	Frequency
Clean and wastewater lines	Daily
Clean water diversion (e.g. roof gutters)	Weekly
Lagoons and waste handling infrastructure	Weekly
Field run-off management	Monthly

The Permittee must record the outcome of the visual inspections according to special condition S6.A. A template for this record keeping is available on the CAFO permit web page: http://www.ecy.wa.gov/programs/wq/permits/cafo/permit.html.

Other templates which document the required information may be used, for example the most recent Oregon Department of Agriculture Large CAFO Record Keeping Calendar available (at the time this permit was issued) under the Resources section of the Oregon CAFO web page:
http://www.oregon.gov/ODA/programs/NaturalResources/Pages/CAFO.aspx.

S5.B. Manure, Litter, Process Wastewater, and Other Organic By-Products

Manure, litter, process wastewater, and other organic by-product samples must be representative of the source (***composite sample***), and taken following the most recent guidance provided in either:

PNW 533
Bary, A., Cogger, C., Sullivan, D. (2016). *Fertilizing with Manure and Other Organic Amendments*. Pacific Northwest Extension, WSU Extension.
A copy of this document is available on the CAFO permit web page:
http://www.ecy.wa.gov/programs/wq/permits/cafo/permit.html.

PNW 673
Moore, A., de Haro-Marti, M., Chen, L. (2015). *Sampling Dairy Manure and Compost for Nutrient Analysis*. Pacific Northwest Extension, University of Idaho.

A copy of this document is available on the CAFO permit web page:
http://www.ecy.wa.gov/programs/wq/permits/cafo/permit.html.

Samples must be analyzed for:

Table 5: Manure, Litter, and Process Wastewater Sampling		
Parameter	**Units** (Liquid Materials)	**Units** (Solid Materials)
Ammonia (NH_3)/Ammonium (NH_4) as N	#/1000 gal	#/ton
Nitrate + Nitrite as N	#/1000 gal	#/ton
Organic Nitrogen as N	#/1000 gal	#/ton
Phosphorus (P_2O_5) as P	#/1000 gal	#/ton

S5.C. Soil

Soil samples must be representative of the land application field (composite sample), following the most recent guidance provided in either:

PNW 570E
Staben, M. L., et. al. (2003). *Monitoring Soil Nutrients Using a Management Unit Approach*. Pacific Northwest Extension. Pub. No. PNW 570E.
A copy of this document is available on the CAFO permit web page:
http://www.ecy.wa.gov/programs/wq/permits/cafo/permit.html.

EM 8832E
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 8832E.
A copy of this document is available on the CAFO permit web page:
http://www.ecy.wa.gov/programs/wq/permits/cafo/permit.html.

Soil samples must be analyzed for the following parameters:

Table 6: Pre-Land Application Soil Sampling (spring)		
Parameter	**Units**	**Timing**
Ammonia (NH_3)/Ammonium (NH_4) as N	lbs/Acre or ppm	Annually
Nitrate + Nitrite as N	lbs/Acre or ppm	Annually

Table 7: Post-Harvest Soil Sampling (fall)		
Parameter	**Units**	**Timing**
Ammonia (NH_3)/Ammonium (NH_4) as N	lbs/Acre or ppm	Annually
Nitrate + Nitrite as N	lbs/Acre or ppm	Annually
Organic Matter	percent	Every 3 years
Phosphorus (P_2O_5) as P	lbs/Acre or ppm	Every 3 years

S5.D. Groundwater Monitoring

If the Permittee's required adaptive management actions (special condition S4.K) include developing and implementing a groundwater monitoring plan to demonstrate that their land application of manure, litter, process wastewater, or other organic by-products is not impacting groundwater quality, the Permittee's groundwater monitoring plan must be developed and implemented in accordance with the *Implementation Guidance for the Groundwater Quality Standards* (Ecology Publication #96-02) and a Quality Assurance Project Plan. The Permittee's groundwater monitoring plan must be submitted to Ecology for review and approval prior to implementation and include the certification statement and signature required by general condition G14. Submit the plan to Ecology at the address specified in special condition S7.C.

If groundwater monitoring is triggered by adaptive management (special condition S4.K) a sufficient number of groundwater monitoring wells must be installed so that the field level impacts of land application of manure, litter, process wastewater, or other organic by-products may be determined.

If groundwater monitoring is triggered by the Existing Lagoon Assessment (special condition S7.B) a sufficient number of groundwater monitoring wells must be installed so that the impacts to groundwater from the lagoon may be determined.

S5.E. Accreditation

All samples must be analyzed by a laboratory registered and accredited for the samples being analyzed under the provisions of *Accreditation of Environmental Laboratories*, Chapter 173-50 WAC.

The Permittee must record, for each measurement or sample taken, the following information:

1. The date and time the sample was taken.

2. The land application field, lagoon, or other source of the sample.

3. The date analyses were performed.

4. Who performed the analysis and the analysis methods used.

5. The results of such analyses.

S6. RECORD KEEPING

S6.A. Operations and Maintenance

The Permittee must record the outcome of the visual inspections/monitoring required by special condition S5.A. A template for this record keeping is available on the CAFO permit web page: http://www.ecy.wa.gov/programs/wq/permits/cafo/permit.html.

S6.B. Land Application

1. The Permittee must keep the following records for land application:

   a. Dates manure, litter, process wastewater, other organic by-products or other source of nutrients were applied to each field.

   b. The field to which the source(s) of nutrients were applied.

   c. Method of land application.

   d. Amount of nutrients applied in gallons, tons, or ft^3 or for commercial/chemical fertilizer lbs/acre.

   e. The total nitrogen applied (ammonia (NH_3)/ammonium (NH_4) as N, nitrate (NO_3)/nitrite(NO_2), and percent organic matter).

   f. Total phosphorus applied.

   g. Weather 24 hours before land application.

   h. Weather during land application.

   i. Weather 24 hours after land application.

   j. Total amount of irrigation water applied to each field each year.

   A template for this record keeping is available on the CAFO permit web page: http://www.ecy.wa.gov/programs/wq/permits/cafo/permit.html.

2. Upon determination that a high fall soil nitrate test is due to crop failure or other unusual environmental conditions, the Permittee must keep records of how the determination was made, including any data, measurements, or best professional judgment by technical assistance providers.

S6.C. Export

The Permittee must record the following information each time it exports manure, litter, process wastewater, or other organic by-products:

1. Amount of manure, litter, process wastewater, or other organic by-products exported in gallons for liquid/slurry and tons for solids.

2. Name of entity manure was exported to.

3. Date export took place.

A template for this record keeping available on the CAFO permit web page: http://www.ecy.wa.gov/programs/wq/permits/cafo/permit.html.

S6.D. Providing Permit Records

The Permittee must provide a copy of their MPPP, records, or other documents required by this permit to Ecology or WSDA within 14 days of their request.

The Permittee must maintain a copy of their MPPP, records, or other documents required by this permit on-site and make these documents available to Ecology or WSDA during site visits.

S6.E. 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.

S7. REPORTS

S7.A. Submittal of MPPP

Within six months of permit coverage, the Permittee must submit its initial MPPP to Ecology.

The MPPP must include the certification statement and signature required by general condition G14.

Submit the MPPP to the address specified in special condition S7.C. Further versions of the Permittee's MPPP are not required to be submitted to Ecology unless requested (special condition S6.D).

S7.B. Existing Lagoon Assessment

The Permittee must use Washington NRCS Engineering Technical Note 23 (NRCS Assessment Procedure for Existing Waste Storage Ponds) to assess each of their lagoons. A completed assessment for each lagoon must be submitted to Ecology within 2 years of permit coverage. The assessment must include the certification statement and signature required by general condition G14. Submit the assessment to the address specified in special condition S7.C.

Washington NRCS Engineering Technical Note 23 is available on the CAFO permit web page: http://www.ecy.wa.gov/programs/wq/permits/cafo/permit.html.

If the assessment results in a risk category of 3A, 3B, 3C, or 4, the Permittee has 6 months to develop a plan to address the deficiencies noted by the assessment and 18 months to begin implementing the plan. The plan must bring the risk category of the lagoon to category 1. The plan must include the certification statement and signature required by general condition G14. Submit the plan to the address specified in special condition S7.C. Based on review of the plan, Ecology may take actions to order the Permittee to immediately address lagoon deficiencies to address threats to public health or the environment.

If the lagoon assessment determines that there less than two feet of vertical separation from the bottom of the lagoon liner (as measured from the outside of the liner) and the water table (including seasonally high water tables), the Permittee has six months from completion of the lagoon assessment to develop a plan to address this deficiency. The plan must include:

1. A description of how the Permittee will ensure there is at least two feet of vertical separation between the bottom of the lagoon liner (as measured from the outside of the liner) and the water table (including seasonally high water tables).

2. Timelines of when work to address the deficiency will be completed.

3. A groundwater monitoring component following the requirements of special condition S5.D which is used to determine the impact the lagoon has had on groundwater.

4. A certification statement and signature as required by general condition G14.

The Permittee must submit the complete plan to Ecology within six months of completion of the lagoon assessment. Submit the plan to the address specified in special condition S7.C

The Permittee has 18 months from the completion of the lagoon assessment to begin implementing their plan to fix the deficiency.

S7.C. Annual Report

By December 31 each year, the Permittee must submit an annual report. The reporting period is the calendar year (January 1 to December 31). The Permittee must submit their annual report to Ecology using the annual report form found in Appendix B. It is also available on the CAFO permit web page: http://www.ecy.wa.gov/programs/wq/permits/cafo/permit.html.

The Permittee must include copies of all of their yearly field nutrient budgets (including double crop or winter crop if applicable) with their annual report.

The annual report must be submitted to:

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

S7.D. Noncompliance Notification

Compliance with the requirements of this special condition (special condition S7.D) 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 of the permit terms, conditions, or discharge limits, due to any cause, the Permittee must:

1. Immediately take action to stop, contain, and cleanup unauthorized discharges or otherwise stop the violation, and correct the problem.

2. Notify Ecology in person, by phone, or email within 24 hours of when the Permittee becomes aware of the noncompliance. Use (360) 407-6600 for phone notification and cafopermit@ecy.wa.gov for email notification.

3. Submit a written report to Ecology within 5 days. The report must include:

   a. A description of the noncompliance

   b. A descriptions of the cause of the noncompliance

   c. The period of noncompliance including exact dates and times

d. A statement about whether the noncompliance has been corrected, or if it has not been corrected how long the noncompliance is expected to last

e. A description of the steps taken, or being taken to correct the noncompliance corrective action taken and/or planned, steps to be taken to prevent a recurrence, results of the re-sampling, and any other pertinent information.

f. The certification statement and signature required by general condition G14.

The Permittee must submit the written report to:

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

4. The Permittee must review their MPPP for compliance with the permit and make appropriate revisions within 14 days of the noncompliance to address the noncompliance and reflect any necessary changes to the facility. The Permittee must also immediately begin the process to fully implement and maintain appropriate source control and/or treatment infrastructure or practices, addressing the deficiencies no later than 45 days from the date of noncompliance. If installation of necessary infrastructure or practices is not feasible within 45 days Ecology may approve additional time when an extension is requested by a Permittee within the initial 45-day period.

S7.E. Spills Reporting

The Permittee must report spills of oil or hazardous materials (e.g. pesticides) in accordance with the requirements of RCW 90.56.280 and 173-303-145 WAC by calling the National Response Center 1-800-424-8802, and the Washington Emergency Management Division 1-800-258-5990. Permittees can obtain additional instructions at the following website: http://www.ecy.wa.gov/programs/spills/other/reportaspill.htm.

S8. APPENDICES

The attached appendices are incorporated by reference into this permit.

Appendix A: Acronyms and Definitions
Appendix B: Annual Report
Appendix C: Yearly Field Nutrient Budget

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 is 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. 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 deemed to be a separate and distinct violation.

G14. 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.

G15. APPEALS

The terms and conditions of this 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 this 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 this general permit to an individual discharger is limited to the applicability or non-applicability of this 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 this 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.

G16. 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.

G17. 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.

G18. MONITORING BEYOND PERMIT REQUIREMENTS

If the Permittee performs monitoring to document compliance with this permit beyond that required by this permit, 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 specify alternative methods for parameters without limits and for those parameters without an EPA approved test method in 40 CFR Part 136.

APPENDIX A: DEFINITIONS

25-year, 24-hour Storm Event:
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 from a storm event of this type varies by location.

Agricultural Stormwater:
Discharges to surface water from land application fields generated only by precipitation provided that the following are true:

1. The discharge was not from the production area,

2. The discharge was not caused by human activities even if the activity took place during precipitation, and

3. Permittee is in compliance with their CAFO permit (including use of best management practices), where the manure, litter, process wastewater, or other organic by-products have been applied in accordance with site specific yearly field nutrient budget and other relevant permit requirements.

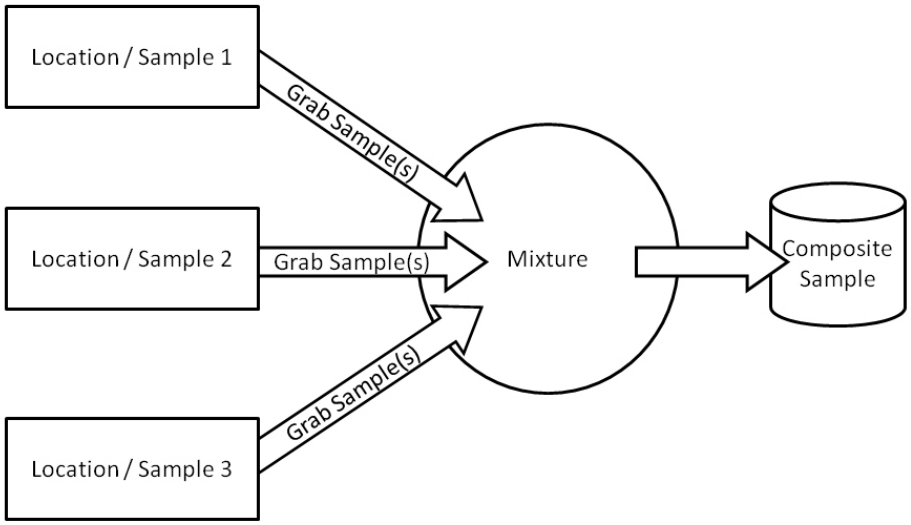
Applicant:
The person or entity applying for permit coverage.

Application for Coverage:
The form developed by Ecology used by a discharger to apply for coverage under a general permit. It is specific to each general permit. Also referred to as a Notice or Intent or NOI.

Application Rate:
The rate in quantity per acre (e.g. gallons/acre, tons/acre) that manure, litter, process waste, process wastewater, other organic by-products, or other nutrients from all sources are applied to a land application field.

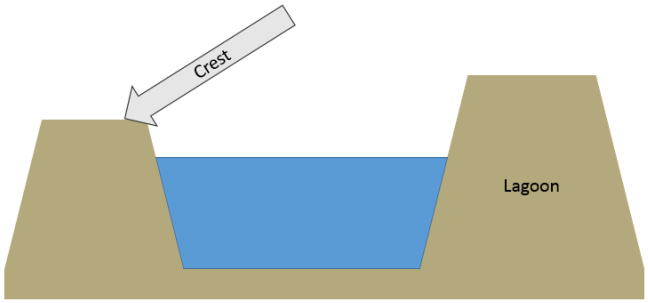
Beneficial Use:
All existing and future uses of waters of the state as defined in WAC 173-200-020(4), and the use designations specified in WAC 173-201A-602. All uses have the same priority.

Composite Sample:
A series of grab samples collected over several locations within a field or management unit and combined together.



Control:
Performing, directing, managing, overseeing, supervising, or giving instruction about, any action or decision.

Crest:
The highest point of the structural (e.g. embankment) wall of a lagoon or other liquid storage structure.



Discharge:
The addition of any pollutant or combination of pollutants to waters of the state.

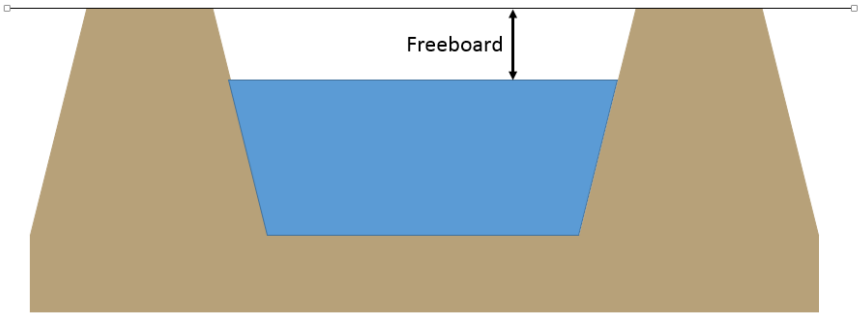
Discharger:
The owner or operator of any commercial or industrial operation subject to regulation under chapter 90.48 RCW or the federal Clean Water Act due to a discharge.

Effluent Limitation:
Synonymous with discharge limits. Any restriction on timing, quantities, rates, and concentrations of pollutants discharged into waters of the state.

Export:
The removal of manure, litter, and process wastewater, or other organic by-products from the CAFO's production system to another party that is not under the control of the Permittee.

Feed:
Materials used for animal nutrition or that will be processed and used for animal nutrition that are stored by the CAFO such as hay, silage, grain, vegetable leavings, or other materials used for animal nutrition.

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

Geomembrane Liner:
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 in a saturated zone or stratum beneath the surface of land or below a surface water body. Surficially perched water is groundwater (Douma v. Ecology PCHB 00-019).

Indian Country:
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:
A structure designed for storage of liquid manure, process wastewater, other organic by-products, or other liquids or slurries. May also be referred to as a temporary storage pond.

Land Apply/Application:
The process of putting manure, litter, process wastewater, or other organic by-products on to a field to provide nutrients for crop growth.

Land Application Field:
An area of land, including management units, under the control of the CAFO (excluding the production area) to which manure, litter, process wastewater, or other organic by-products are added as a fertilizer or soil amendment.

Litter:
Animal bedding, materials used in animal housing such as straw, sand, or shavings on the floor, or spilled feed that has come into contact with manure, other organic by-products, or other contaminants.

Management Unit:
Portions of a field or portions of multiple closely located fields which have the same or very similar soil and crop growth characteristics which allow the areas to be managed as a single land application field.

Manure:
Liquid and solid livestock excrement.

Notice of Intent (NOI):
A formal application or request for coverage under a general permit pursuant to WAC 173-226-200. See also Application for Coverage.

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, litter, process wastewater, other organic by-products, or other material (e.g. precipitation), to a lagoon until the level of the liquid in the lagoon rises over the lagoon crest.

Other Organic By-Product:
Decomposable materials such as compost, biosolids, digestate, crop residues, or other organic sources of nutrients that may be land applied.

Permit:
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 to waters of the state within constraints.

Permittee:
The person or entity that holds a permit coverage allowing specific discharge(s) to waters of the state (surface or ground).

Point Source:
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:
Dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, dirt, sediment, industrial, municipal, and agricultural waste, or any other organic or inorganic matter that shall cause or tend to cause pollution when discharged into water.

Pollution:
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.

Process Wastewater:
Any water that is used as part of the operation of a CAFO that has come into contact with manure, litter, feed, other organic by-products, or other contaminants on the facility.

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

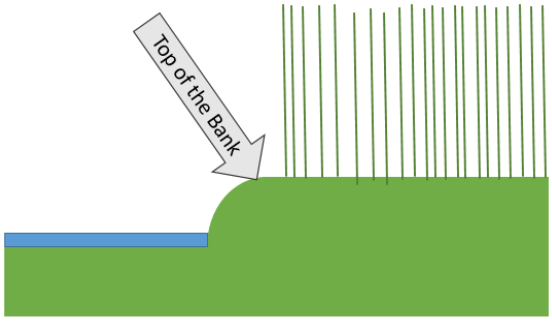
Saturated Soil:
Soil that has water filling 100% of its soil pore volume and that no longer has the capacity to retain additional water within is pore structure.

Storage period
The period of time (generally fall to early spring) during which manure, litter, process wastewater and other organic by-products must be stored because they may not be land applied and comply with permit requirements.

Synthetic Liner:
Synonymous with **geomembrane liner**.

T-SUM 200:
A sum of the daily heat units above zero for each day since January 1 until 200 heat units are reached. Heat units are the average of each day's low and high temperatures in degrees Celsius.

Top of the Bank:
The point on 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 seasonable variation in water quality.

Trust or Restricted Lands:
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*."

Vegetative buffer
A strip of dense permanent vegetative cover such as grass and shrubs which slow land application field run-off and work to filter out nutrients and other contaminants (e.g. sediment, chemicals, bacteria, pathogens).

Water Table:
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:
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).

DEPARTMENT OF ECOLOGY
State of Washington

APPENDIX B: ANNUAL REPORT FORM
Concentrated Animal Feeding Operation (CAFO) General Permit

Reporting Year:	**Reporting Period:** January 1 to December 31

I. Permit Information

Permit Number:	Facility Name:
Permittee Name:	

II. Contact Information (fill out if different from I. Permittee Information above)

Name:	Email:
Phone:	Cell Phone (*optional*):

III. Operation Information

Provide the maximum number of each type of animals at your facility for the year.

- ❒ Dairy Cows:_____
- ❒ Dairy Heifers:_____
- ❒ Veal Calves:_____
- ❒ Beef:_____
- ❒ Swine
  - ≥55 pounds:_____
  - < 55pounds:_____
- ❒ Other:_____
- ❒ Sheep or Lambs:_____
- ❒ Turkeys:_____
- ❒ Ducks: _____
- ❒ Horses: _____
- ❒ Chickens
  - Broilers:_____
  - Layers:_____

Generated by CAFO (Specify units: tons, gallons, or ft^3)	❒ Manure: Liquid:_____ Solid:_____ ❒ Poultry Litter: _____ ❒ Other Organic By-Products: _____ ❒ Process Wastewater: _____ ❒ Digestate: _____
Exported by CAFO (Specify units: tons, gallons, or ft^3)	❒ Manure: Liquid: _____ Solid:_____ ❒ Poultry Litter: _____ ❒ Other Organic By-Products: _____ ❒ Process Wastewater: _____ ❒ Digestate: _____

Total number of acres **available** for land application **included in** your MPPP:_____

Total acres **you control** used for land application in the past year:_____

Discharges

During the year, has manure, litter, process waste, or process wastewater discharged from your production area or land application fields? ☐ Yes / ☐ No

(NOTE: if you are covered by the Combined Permit, do not include discharges of agricultural stormwater here.)

If **YES**, provide a summary of the approximate date, time, volume and duration of the discharge(s). Summarize your response to the discharge(s). If necessary, attach a separate sheet of paper for additional space.

Adaptive Management Risk Level High or Very High

Document the reason(s) a land application field fall soil nitrate tests for a single year result in the field being at a risk level or high or very high. Identify which field the documentation applies to. If necessary, attach a separate sheet of paper for additional space.

IV. Nutrient Source Content Analysis (Print additional copies of this page if you have more nutrient sources than space provided)

Nutrient Source Name	Nutrient Content					
		(NH_3/NH_4)	(NO_3/NO_2)	Phosphorus	Units	% OM
	1st Analysis				❒ PPM ❒ (fill in)	
	2nd Analysis				❒ PPM ❒ (fill in)	
	3rd Analysis				❒ PPM ❒ (fill in)	
	1st Analysis				❒ PPM ❒ (fill in)	
	2nd Analysis				❒ PPM ❒ (fill in)	
	3rd Analysis				❒ PPM ❒ (fill in)	
	1st Analysis				❒ PPM ❒ (fill in)	
	2nd Analysis				❒ PPM ❒ (fill in)	
	3rd Analysis				❒ PPM ❒ (fill in)	
	1st Analysis				❒ PPM ❒ (fill in)	
	2nd Analysis				❒ PPM ❒ (fill in)	
	3rd Analysis				❒ PPM ❒ (fill in)	
	1st Analysis				❒ PPM ❒ (fill in)	
	2nd Analysis				❒ PPM ❒ (fill in)	
	3rd Analysis				❒ PPM ❒ (fill in)	
	1st Analysis				❒ PPM ❒ (fill in)	
	2nd Analysis				❒ PPM ❒ (fill in)	
	3rd Analysis				❒ PPM ❒ (fill in)	

V. Field Land Application Information (Print one copy of this page for each of your fields)

Field ID:	**Action Level:**	**Crop Grown:**	**Crop Yield (provide units):**

Field Soil Sample Nutrient Analysis							
	NH_3/NH_4 as N		NO_3/NO_2 as N		Phosphorus as P	Units	% OM
Soil Profile Depth	**Spring**	**Fall**	**Spring**	**Fall**	**Fall**		**Fall**
1st Foot						❒ PPM ❒ Lbs/Acre	
2nd Foot (if required)						❒ PPM ❒ Lbs/Acre	
3rd Foot (if required)						❒ PPM ❒ Lbs/Acre	
Date of last Organic Matter (OM) Analysis:			Date of last Phosphorus Analysis:				

Nutrient Sources Applied to Field	
Nutrient Source Applied (List all sources of nutrients including commercial fertilizer that were applies to this field. Source name must match Nutrient Source Name from section IV)	**Total Amount Applied**
	❒ Gallons ❒ Tons ❒ Ft^3
	❒ Gallons ❒ Tons ❒ Ft^3
	❒ Gallons ❒ Tons ❒ Ft^3
	❒ Gallons ❒ Tons ❒ Ft^3
	❒ Gallons ❒ Tons ❒ Ft^3
	❒ Gallons ❒ Tons ❒ Ft^3
	❒ Gallons ❒ Tons ❒ Ft^3

VI. 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."

Printed Name:	Date:
Signature:	

NOTE: Be sure to include your yearly nutrient budget for each of your fields including the budget for a double crop or winter cover crop (if applicable) **with your completed Annual Report Form**.

Instructions for Annual Report Form

Concentrated Animal Feeding Operation General Permit

Year

Start by filling out the year for this annual report (e.g. 2016). The reporting period of January 1 to December 31 always remains the same.

I. Permittee Information

Fill in the permit number assigned by Ecology. This number is found on the coverage letter Ecology sends to the Permittee when issuing permit coverage. Also fill out your facility name (e.g. ABC Facility) and the Permittee's name.

II. Contact Information

Provide the contact information for your facility if the contact person is not the same as the Permittee. The contact must be familiar with the information on the Annual Report.

III. Operation Information

Provide the following data for your operation:

- Animal numbers – max for year
- Amount of manure, litter, process waste, process wastewater, and other organic by-products generated for the past year in gallons, tons, or cubic feet.
- Amount of manure, litter, process waste, process wastewater, and other organic by-products exported to other parties in the past year in gallons, tons, or cubic feet.
- The number of acres in your MPPP
- The number of acres you control
- Summary of the discharges from your production area or land application fields in the past year. Note that if you are covered by the Combined Permit, do not include agricultural stormwater as part of the discharges from your land application fields.
- Document the reasons, for each field, that the field has an adaptive management risk level or high or very high.

IV. Nutrient Source Content Analysis

This section of the annual report is to provide the 3 nutrient analysis required for each source of nutrients that the Permittee land applies. Chemical/Commercial fertilizer and the label content must be included. Provide the following for each nutrient source:

- Name of the nutrient source (e.g. lagoon 1, manure pile A)
- The ammonia/ammonium as N concentration
- The nitrate/nitrite as N concentration
- The phosphorus as P concentration
- The units of measure. Check the PPM box or provide an alternate unit of measure.
- The percent organic matter.

V. Field Information

Provide the following data for each of your fields:

- Field ID. Ensure that the field IDs you use in this section are the same fields IDs you used for your fields on your yearly nutrient budgets.
- Crop grown
- Crop yield (you provide units).
- Total amount of each nutrient source from section IV. Nutrient Source Content Analysis applied to the field in tons, gallons, or cubic feet. The names must match between the two sections.

- The spring and fall soil sample nutrient analysis containing Ammonia/Ammonium (NH_3/NH_4), Nitrate (NO_3), and every third year percent organic matter, and phosphorus

NOTE:

- If you have more fields than space available on this page, print out extras so that you have space for each of your fields.

Nutrient analysis for commercial chemical fertilizers may be provided as the nutrient analysis on the packaging (e.g. N-P-K)

VI. Certification

A person who has signature authority must sign the Application. Signature authority is defined in General Condition 14 as:

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.

Once the information in sections I-VI is complete and the Annual Report Form is signed by the Permittee, the form must be submitted to:

Washington Department of Ecology
Water Quality Program
Attn: CAFO Permit Administrator
PO Box 47600
Olympia, WA 98504-7600

NOTE: Maintain a copy of the completed Annual Report Form and attached documents for your records.

Questions?
Contact: CAFO Permit Administrator at (360) 407-6600 or cafopermit@ecy.wa.gov.