

MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY

**GENERAL PERMIT
FOR
CONCENTRATED ANIMAL FEEDING OPERATIONS**

Permit No.: MTG010000

**AUTHORIZATION TO DISCHARGE UNDER THE
MONTANA POLLUTANT DISCHARGE ELIMINATION SYSTEM (MPDES)**

In compliance with the Federal Water Pollution Control Act (the “Clean Water Act”), 33 U.S.C. § 1251 et seq. and the Montana Water Quality Act, Title 75, Chapter 5, Montana Code Annotated (MCA), owners and operators of concentrated animal feeding operations (CAFOs) are authorized to discharge and must operate their facility in accordance with the limitations, monitoring requirements, and other provisions set forth herein. A written letter of authorization from the Department is required before an owner or operator of a CAFO is authorized to discharge under this general permit.

A copy of this General Permit and a written authorization letter from DEQ must be kept on-site at all times. The General Permit is not valid without a current authorization letter from DEQ.

This permit shall become effective **TBD**

This permit and the authorization to discharge shall expire at midnight on **TBD**

FOR THE MONTANA DEPARTMENT
OF ENVIRONMENTAL QUALITY

DRAFT

Tatiana Davila, Bureau Chief
Water Protection Bureau
Water Quality Division

Issuance Date: **TBD**

TABLE OF CONTENTS

I. ELIGIBILITY AND APPLICATION PROCESS	3
A. AREA OF COVERAGE	3
B. SOURCES ELIGIBLE FOR COVERAGE	3
C. SOURCES PROHIBITED FROM COVERAGE UNDER THIS GENERAL PERMIT	3
D. REQUIREMENTS FOR AUTHORIZATION – NOTICE OF INTENT PACKAGE	3
E. CONTINUING PERMIT COVERAGE UNDER THE 2023-GENERAL PERMIT	5
F. OBTAINING NEW AUTHORIZATION UNDER THE 2023-GENERAL PERMIT	5
G. PUBLIC PARTICIPATION DURING THE PERMIT APPLICATION PROCESS	5
H. REQUIRING AN INDIVIDUAL PERMIT	5
I. TRANSFERRING PERMIT COVERAGE	5
J. TERMINATING PERMIT AUTHORIZATION	6
II. EFFLUENT LIMITS AND STANDARDS	7
A. TECHNOLOGY BASED EFFLUENT LIMITS AND STANDARDS -- PRODUCTION AREA	7
B. ADDITIONAL MEASURES – PRODUCTION AREA	7
C. GROUNDWATER PROTECTION REQUIREMENTS -- PRODUCTION AREA	9
D. TECHNOLOGY-BASED EFFLUENT LIMITS AND TECHNICAL STANDARDS FOR CAFOs – LAND APPLICATION AREA (OLD APPENDIX D).....	10
E. ADDITIONAL MEASURES – LAND APPLICATION	14
F. NUTRIENT MANAGEMENT PLAN (NMP).....	15
G. EFFLUENT LIMITS FOR OTHER DISCHARGES	18
H. GENERAL PRETREATMENT STANDARDS	18
I. REQUIREMENTS FOR IMPLEMENTING THE TERMS OF THE NUTRIENT MANAGEMENT PLAN	18
III. MONITORING AND REPORTING REQUIREMENTS	19
A. NOTIFICATION OF DISCHARGE	19
B. ANNUAL REPORT	19
C. GROUNDWATER MONITORING.....	20
D. GENERAL INSPECTION, MONITORING, AND RECORDKEEPING REQUIREMENTS	20
IV. SPECIAL CONDITIONS	22
A. FACILITY CLOSURE: THE FOLLOWING CRITERIA APPLY TO ALL FACILITY CLOSURES:.....	22
V. STANDARD CONDITIONS	24
A. DUTY TO COMPLY	24
B. PENALTIES FOR VIOLATIONS OF PERMIT CONDITIONS	24
C. DUTY TO REAPPLY	24
D. NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE.....	24
E. DUTY TO MITIGATE	24
F. PROPER OPERATION AND MAINTENANCE.....	24
G. PERMIT ACTIONS.....	24
H. PROPERTY RIGHTS	25
I. DUTY TO PROVIDE INFORMATION	25
J. INSPECTION AND ENTRY	25
K. MONITORING AND RECORDS.....	25
L. SIGNATORY REQUIREMENT.....	26
M. REPORTING REQUIREMENTS	26
N. BYPASS.....	28
O. UPSET CONDITIONS.....	28
P. FEES	28
Q. REMOVED SUBSTANCES.....	28
R. OIL AND HAZARDOUS SUBSTANCE LIABILITY.....	29
S. SEVERABILITY.....	29
T. REOPENER PROVISIONS.....	29
U. TOXIC POLLUTANTS.....	29
VI. DEFINITIONS AND ABBREVIATIONS	30

I. Eligibility and Application Process

A. Area of Coverage

This General Permit applies to all areas of the State of Montana, except on lands within the boundary of federally recognized Indian reservations.

B. Sources Eligible for Coverage

Owners or operators of animal feeding operations that meet the definition of a concentrated animal feeding operation (CAFO) as defined by Montana Code Annotated are eligible for coverage under this general permit. The Montana Discharge Elimination System (MPDES) requirements for CAFOs apply to all animals in confinement at the operation and to all manure, litter, and process wastewater generated by those animals or by the production of those animals, regardless of the type of animal.

C. Sources Prohibited from Coverage under this General Permit

The following CAFOs are not eligible for coverage under this General Permit and must apply for an individual permit:

1. CAFOs that cannot comply with any applicable effluent standards, effluent limitations, standards of performance for new sources of pollutants, toxic effluent standards and prohibitions, and pretreatment standards, or any additional requirements that DEQ determines are necessary.
2. CAFOs that do not meet the adequate storage requirements for manure, litter, and process wastewater.
3. CAFOs that do not meet the minimum ground water protection.
4. CAFOs that cannot comply with any applicable water quality standards.
5. CAFOs that have discharges to which the regional administrator of the Environmental Protection Agency (EPA) has objected in writing.
6. CAFOs that DEQ has notified to apply for an individual permit.
7. If an MPDES permit or authorization for the same operation has been previously denied or revoked.
8. Discharge different in degree or nature from the sources or activities described in the General Permit.
9. Point sources in an area of unique ecological or recreational significance as determined by Montana stream classifications, such as impacts on fishery resources, local conditions at proposed discharge sites, designations of wilderness areas, or designations of wild and scenic rivers.

D. Requirements for Authorization – Notice of Intent Package

Owners and operators of CAFOs seeking to be covered under this General Permit must submit a complete Notice of Intent package (NOI package), which includes:

1. The completed Notice of Intent (NOI-CAFO) Form and Facility area map(s). The Facility area map must adhere to the following requirements:
 - a. Topographic or aerial map of sufficient size and scale that clearly show the facility conditions
 - b. Depict the facility/activity boundaries, receiving water, and major drainage patterns
 - c. Identify the specific location of the production area and the land application area(s)
2. The completed Nutrient Management Plan (NMP) that meets the requirements of this permit and includes the following maps and photos for the production area and land application area:
 - a. Production area maps and photos must depict:
 - i. The production area that shows the locations of all animal confinement structures
 - ii. The flow direction of storm water and wastewater for all animal confinement structures
 - iii. Permanent and temporary manure and wastewater handling storage areas
 - iv. Storage and disposal areas of chemicals or other contaminants handled on site
 - v. Clean water diversion practices
 - vi. BMPs that will be used to control runoff of pollutants from the facility's production area

- vii. Flow lines for wastewater
 - viii. All land application areas, including the topography and soil types of the land application areas
 - ix. Environmentally sensitive areas for the production area, including sinkholes, wells, drinking water sources, tile drain outlets, etc.
- b. Land application photos and maps must depict:
- i. Individual field boundaries for all planned land application areas
 - ii. A name, number, letter, or other means of identifying each individual land application field
 - iii. The soil type(s) present and their locations within the individual land application field(s)
 - iv. The location of any downgradient surface waters
 - v. The specific manure/waste handling or nutrient management restrictions associated with each land application field, i.e. setbacks
 - vi. Buffers and setbacks around state surface waters, well heads, etc.
 - vii. Any downgradient open tile line intake structures (if there are none, it must be stated on the map)
 - viii. Any downgradient sinkholes (if there are none, it must be stated on the map)
 - ix. Any downgradient agricultural well heads (if there are none, it must be stated on the map)
 - x. All conduits to surface waters
 - xi. All temporary, permanent, and structural BMPs used to control runoff of pollutants from the land application area
 - xii. Areas with a high potential for significant soil erosion (due to topography, activities, or other factors)
3. The appropriate application fee, which is determined by NOI status:
- a. New Permit Application Fee: \$1,200
 - b. Renewal Application Fee: \$600
4. If the CAFO is within designated sage grouse habitat, any modification due to a change in disturbed acreage requires a consultation letter or updates to a consultation letter from the Sage Grouse Habitat Conservation Program. If the operation is outside of sage grouse habitat, a consultation letter is not required. Information regarding the Sage Grouse Habitat Conservation Program can be found online at <https://sagegrouse.mt.gov/>.
5. If the CAFO is a new source or new authorization, applicants must evaluate the impacts their facility will have on ecological resources and cultural heritage sites. These analyses can be obtained from:
- a. Montana National Heritage Program <https://mtnhp.org/>
 - b. Montana State Historic Preservation Office <https://mhs.mt.gov/Shpo/>

Once a complete NOI package is received, DEQ will review it and decide whether to deny or issue an authorization letter for coverage under this General Permit. Upon review, DEQ may also request additional information from the CAFO if it is necessary to complete the NMP or to clarify, modify, or supplement previously submitted material.

Each authorization under the General Permit will be to a specific owner/operator of a CAFO facility. The operation will be allowed only in the area specified in the authorization letter, and discharge is only allowed via identified outfalls to specified receiving waters.

If the permittee wishes to continue an activity regulated by this permit after the expiration date of the permit, the permittee must apply for and obtain a new permit.

E. Continuing Permit Coverage under the 2023-General Permit

For continued permit coverage, eligible applicants with **current** authorization under the 2018-General Permit must submit a complete NOI package. The complete application package must be submitted and received by DEQ **within 30 days of the permit effective date.**

If a permittee with authorization under the 2018-General Permit seeks to reapply for coverage after the expiration date, the permittee must apply for and obtain a new permit.

F. Obtaining New Authorization Under the 2023-General Permit

At least 60 days prior to operation, applicants must submit a complete NOI package to DEQ. Applicants are not allowed to discharge without an authorization letter from DEQ.

G. Public Participation During the Permit Application Process

If DEQ makes a preliminary determination that the NOI-Package is complete, the package will be made available for a 30-day public review and comment period on DEQ's website. DEQ will respond to any significant comments received during the comment period and, if necessary, require the CAFO owner or operator to revise the NMP. DEQ will notify the applicant of the final decision concerning the CAFO permit application. After DEQ authorizes permit coverage for the CAFO, the terms of the approved NMP will be incorporated as terms and conditions of the permit.

The permittee must notify DEQ of any proposed modifications to the NMP. DEQ will review the proposed modifications to determine if revision to the terms of the NMP is necessary.

1. If revision to the terms of the NMP is not necessary, DEQ will notify the permittee and upon such notification the CAFO may implement the revised NMP; or
2. If revision to the terms of the NMP is necessary, DEQ will determine whether such changes are substantial changes.
 - a) If changes to the terms of the NMP are not substantial, DEQ will notify the permittee and the public of any changes incorporated into the terms of the NMP on DEQ's website.
 - b) If changes to the terms of the NMP are substantial, DEQ will make the proposed changes available for public review and comment for a 30-day public review and comment period on DEQ's website. DEQ will respond to any significant comments received during the comment period and, if necessary, require the CAFO owner or operator to revise the NMP. DEQ will notify the permittee of the final decision concerning the proposed changes to the NMP.

H. Requiring an Individual Permit

An operation that meets the definition of a CAFO and other applicable requirements must be authorized by DEQ under this General Permit. However, DEQ may require any facility to apply for and obtain individual permit coverage if review of the NOI package finds that site-specific information indicates:

1. The facility is unable to comply with the terms and condition of this permit. Or,
2. DEQ determines that discharge causes or contributes to a violation of water quality standards.

If a permittee is denied authorization to operate under the General Permit, DEQ will proceed to process the request for authorization through the individual MPDES permit requirements, unless the applicant withdraws the NOI or modifies the proposed discharge to meet the requirements of the General Permit. If the applicant withdraws the application, they must reapply with a full NOI package and applicable fees if they intend to seek future coverage under the General Permit.

I. Transferring Permit Coverage

DEQ may transfer authorization to a new owner or operator under this General Permit if:

1. The current owner and new owner submit a completed Permit Transfer Notification (PTN) form to DEQ at least 30 days before the effective date of the proposed transfer.

2. The notice includes a written agreement between the new owner or operator containing a specific transfer date for permit responsibility and liability for all the terms and conditions in the permit, including fees.

The PTN form may not be used to transfer permit coverage to a new or different site location or to modify the terms and conditions of the permit.

If the new CAFO owner or operator modifies any part of the NMP, the NMP must be submitted to DEQ consistent with **Part I.D.** of this permit.

J. Terminating Permit Authorization

Permit coverage remains in effect until the expiration date of this General Permit or until DEQ receives notice from the permittee that the point source of discharge has been eliminated.

1. Coverage under this permit may be terminated if one of the following three conditions is met:
 - a. The facility has ceased all operations and all wastewater or manure storage structures have been properly closed following the procedures outlined in the National Resource Conservation Service (NRCS) Conservation Practice Standard No. 360 and all remaining stockpiles of manure, litter, or process wastewater not contained in a wastewater or manure storage structure are properly disposed.
 - b. The facility is no longer a CAFO that discharges manure, litter, or process wastewater to state waters.
 - c. The entire discharge is permanently terminated by elimination of the flow or by connection to a publicly owned treatment works (POTW).
2. Owners or operators may seek to be excluded from coverage under this General Permit by either submitting to DEQ a written Notice of Termination or by applying for an individual permit according to **Part I.H.** The written notice must include a reason for why coverage is no longer needed and be signed and certified by the owner or operator of the CAFO. The options for terminating permit coverage are listed below:
 - a. Permittees must complete and submit a Notice of Termination (NOT) form to DEQ. Annual fees will accrue until DEQ receives a Notice of Termination.
 - b. Permittees may request to be excluded from coverage under this General Permit by applying for and obtaining an individual MPDES permit. If an individual MPDES permit is issued, coverage under this General Permit will be terminated on the effective date of the final individual MPDES permit.

II. Effluent Limits and Standards

A. Technology Based Effluent Limits and Standards -- Production Area

There must be no discharge of manure, litter, or process wastewater pollutants from the production area into State Waters except when precipitation causes an overflow of manure, litter, or process wastewater.

For new swine, chicken, turkey, and veal calf operations there must be no discharge of manure, litter, or process wastewater pollutants from the production area into State Waters. These operations must meet the requirements of 40 CFR 412.46.

In an event where precipitation causes an overflow, the overflow may only be discharged to State Waters from CAFOs that meet the eligibility criteria of this Permit provided that:

1. The production area must be designed, constructed, operated, and maintained to contain all manure, litter, and process wastewater including runoff and direct precipitation from a 25-year, 24-hour rainfall event (or snowmelt event of equivalent volume).
 - a) The discharge can only be the result of the 25-year, 24-hour rainfall event.
 - b) No feasible alternative to discharge can exist.
 - c) Discharge must consist only of waste in excess of storage capacity.
 - d) The discharge must be conducted under conditions which minimize any adverse effects to State Waters.
 - e) DEQ must receive notification of the discharge.
2. The production area must be designed, operated, and maintained as follows:
 - a) *Minimal Critical Storage Period*: The minimum critical storage period must be at least 180 days and must include all liquid and solid manure, litter, process wastewater, and any other wastes from the production area.
 - b) *Normal Stormwater Runoff Containment*: The facility must contain the normal stormwater runoff from the production area for the 180-day critical storage period.
 - c) *25-year, 24-hour Rainfall Event Runoff Containment*: The facility must contain a volume of runoff equivalent to the 25-year, 24-hour rainfall event or larger;
 - d) *Direct Precipitation Containment*: The facility must contain the direct precipitation from the 25-year, 24-hour rainfall event, or meets the New Source Performance Standards of 40 CFR 412.46.
 - e) *Residual Solids Containment*: The facility must contain residual solids after liquid has been removed.
 - f) *Freeboard Requirement*: The facility's waste containment structures must have a minimum of one foot of freeboard. See **Figures 1, 2, 3**.
 - g) *Dewatering*: Dewatering of facilities must begin on the first dewatering day following a precipitation event and continue on all subsequent dewatering days until the "Must Pump" level is reached, see Mark A in Figure 1, Figure 2, and Figure 3. The facilities must be dewatered before the winter months to provide capacity indicated by the 180-day, or "Winter Pump Down" level.

B. Additional Measures – Production Area

1. *Capacity Depth Marker*: The facility must have a depth marker which clearly indicates the minimum capacity necessary to contain the runoff and precipitation of the 25-year 24-hour rainfall from **Parts II.A.2.c** and **II.A.2.d**. Refer to the Must Pump Level, Mark A in **Figure 1, Figure 2, and Figure 3**.
2. *Mortality Handling*: Mortalities must not be disposed of in any liquid manure or process wastewater system and must be handled in such a way as to prevent the discharge of pollutants to surface water. Mortality handling practices must be in accordance with all applicable state and local regulatory requirements and consistent with NRCS Practice Standard 316, as applicable.
3. *Clean Water Diversion*: The facility must ensure that clean water is diverted, as appropriate, from the production area; consistent with **Part II.F** of this permit.
4. *Recordkeeping*: The permittee must inspect, monitor, and record the results of inspection and monitoring according to **Table 3**. The permittee must maintain records onsite for a period of five

years from the date they are created and must make these records available to DEQ upon request. Records must include those specified for Operation and Maintenance in **Part V.F.** of this permit.

5. Additional Requirements for Large CAFOs:

- a) *Routine visual inspections:* Large CAFOs must conduct routine visual inspections of the CAFO production area. At a minimum, the following must be visually inspected:
 - i. Daily inspection of water lines, including drinking water or cooling water lines.
 - ii. Weekly inspections of all storm water diversion devices, runoff diversion structures, and devices channeling contaminated storm water into wastewater and manure storage and containment structures.
 - iii. Weekly inspections of the manure, litter, and process wastewater impoundments. The inspection must note the level in liquid impoundments as indicated by the depth marker in **Part II.B.1.**
- b) *Corrective Actions:* Any deficiencies found as a result of inspections must be corrected as soon as possible.

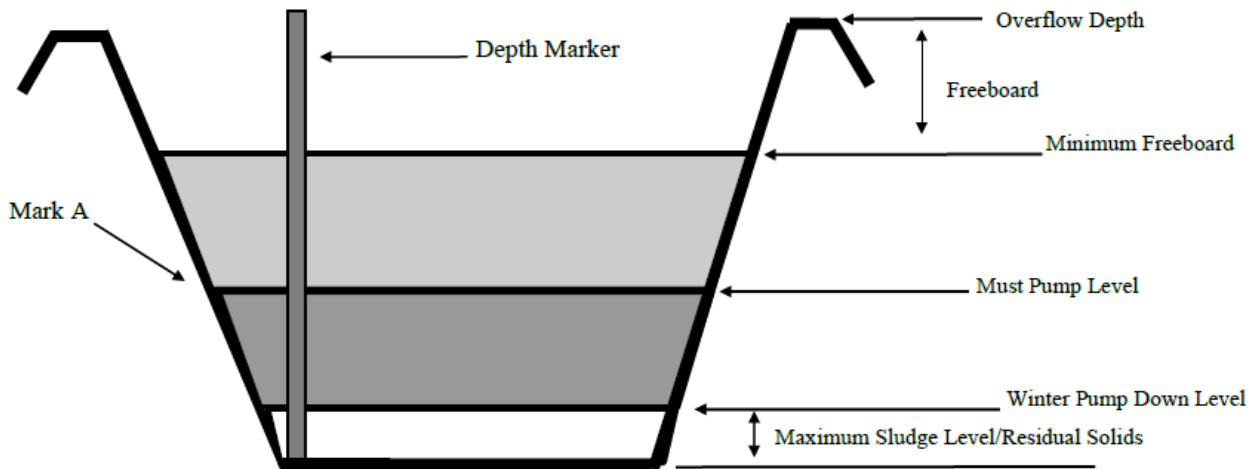


Figure 1. Holding Pond, Must Pump Level (Mark A)

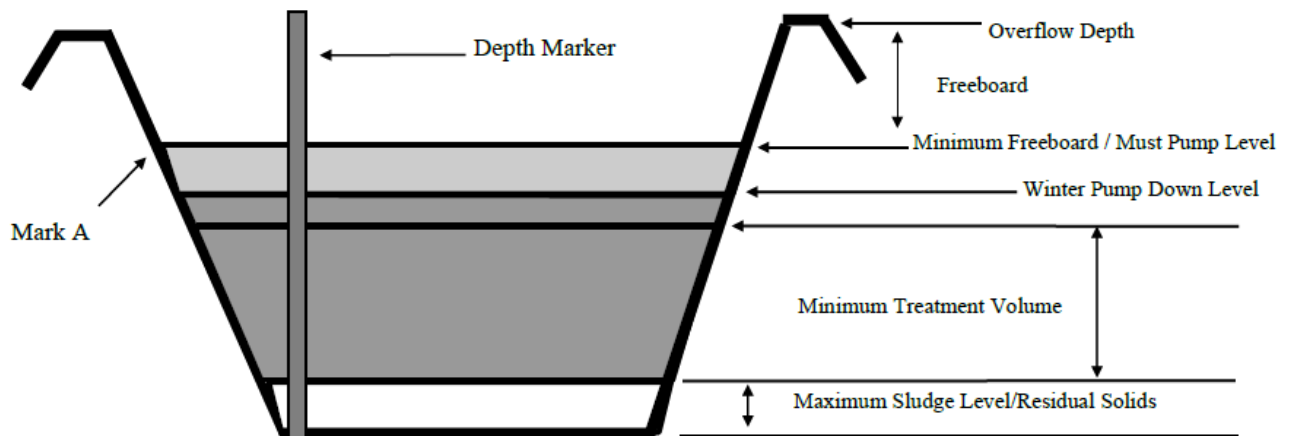


Figure 2. Lagoon, Must Pump Level (Mark A)

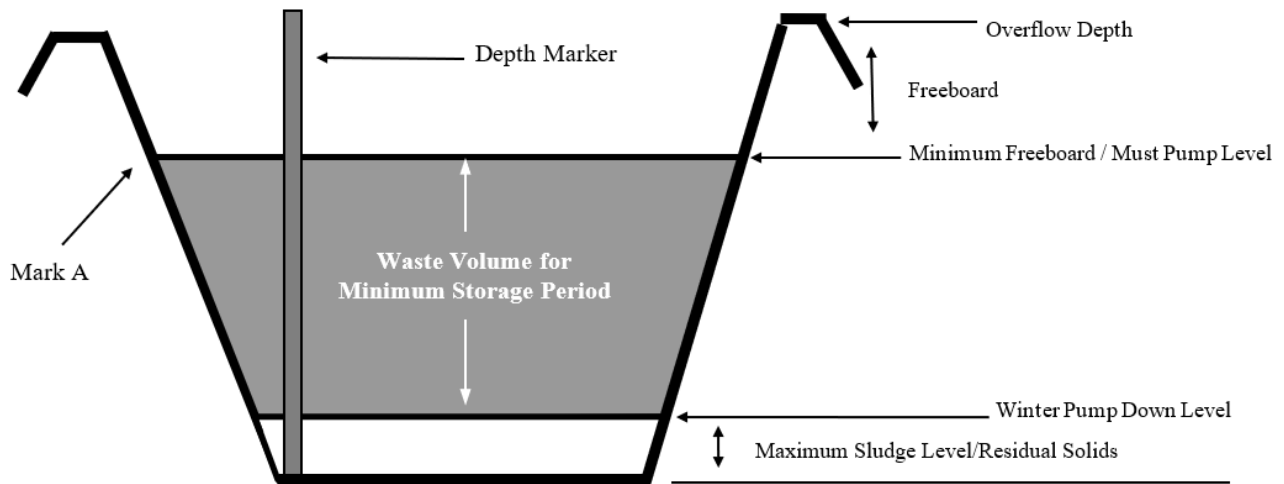


Figure 3. Liquid Manure Storage Pit/Tank, Must Pump Level (Mark A). Note: Only processed wastewater from a totally housed operation or the totally housed portion of the operation.

C. Groundwater Protection Requirements -- Production Area

1. *Groundwater Protection, Seal Requirements:* Waste containment structures must be sealed such that seepage loss through the seal is as low as practicably possible. Seals consisting of solids, bentonite, steel, concrete, or synthetic liners may be considered provided the permeability, durability, and integrity of the proposed material is satisfactorily demonstrated for the anticipated conditions:
 - a. The design report must include results of a testing program that substantiate the adequacy of the proposed seal.
 - b. Testing must take place at maximum operation depth.
 - c. Standard ASTM procedures or acceptable similar methods must be used for all tests.
 - d. To achieve an adequate seal in systems using soil, bentonite, or other seal materials, the coefficient of permeability (k) in centimeters per second (cm/sec) specified for the seal may not exceed the value derived from the following expression:

$$k = (2.6 \times 10^{-9}) L$$

Where: L = thickness of the seal (cm)
 k is based on a water depth of 6-ft

- e. Finished elevations for soil and bentonite liners must not vary more than 3 inches from the average elevation of the bottom and should be as level as possible. Sloped pond bottoms are allowed for synthetic liners, however they must be uniformly sloped.
2. *Groundwater Protection, Containment Structure Criteria:* Waste containment structures must also meet the following criteria:
 - a. The structure must maintain a minimum separation of 10 feet between the pond bottom and any bedrock formation.
 - b. There must be a minimum separation of 4 feet between the pond bottom and any groundwater.
 - c. New wastewater containment structures or manure and wastewater disposal sites must follow any applicable setbacks from water wells.

If a facility cannot meet the above criteria, then site-specific information must be submitted to DEQ demonstrating that the location of any wastewater containment structure will not be a source of pollutants to groundwater.

D. Technology-Based Effluent Limits and Technical Standards for CAFOs – Land Application Area (Old Appendix D)

1. *Discharge Restriction and BMP Requirements:* There must be no discharge from the land application area during dry weather. Each CAFO that land applies manure, litter, or process wastewater must do so in accordance with the Best Management Practices (BMPs) specified in the rest of this section **(II.D.3-10)**.
2. *Nutrient Management Plan:* The CAFO must develop and implement a nutrient management plan that that incorporates items **(4)** through **(10)** of this section based on a field-specific assessment that evaluates the potential for nitrogen and phosphorus transport from the land application field(s) and that addresses the form, source, amount, timing, and method of application of nutrient on each field to achieve realistic production goals while minimizing nitrogen and phosphorus movement into surface waters.
3. *Requirement to Determine Application Rates:* Except as provided in **(10)** below, application rates for each field must be determined based on criteria given in (a) through (c):
 - a) The CAFO must complete a field-specific assessment for CAFOs applying manure on fields that are located in a watershed that is listed as impaired for nutrients (total nitrogen or total phosphorus) must follow the method listed below in (i). The field-specific assessment for CAFOs applying manure on fields that are not located in a watershed that is listed as impaired for nutrients (total nitrogen or total phosphorus) may follow the procedures in either (i) or (ii).
 - i. The field-specific assessment must be based on the phosphorus index assessment method described in the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) [No. 80.1 Nutrient Management, Agronomy Technical Note MT-77](#). The nutrient application basis is determined as follows:
 - A. Nitrogen-based application if the site vulnerability rating is low (total phosphorus index value is less than 11);
 - B. Phosphorus-based application if the site vulnerability rating is medium (total phosphorus index value is between 11 and 21);
 - C. Phosphorus-based application up to crop removal if the site vulnerability rating is high (total phosphorus index value is between 22 and 43); or
 - D. No application of if the site vulnerability rating is rated as very high (total phosphorus index value is greater than 43).
 - ii. The field-specific assessment must be based on a representative soil sample using the Olsen soil test method. The nutrient application basis is determined as follows:
 - A. Nitrogen-based application if the Olsen phosphorus soil test is less than 25 mg/L;
 - B. Phosphorus-based application if the Olsen phosphorus soil test is greater than 25.1 mg/L and less than 100 mg/L;
 - C. Phosphorus-based application up to crop removal if the Olsen phosphorus soil test is greater than 100.1 mg/L and less than 150.0 mg/L; or
 - D. No application if the Olsen phosphorus soil test is greater than 150 mg/L.
 - b) *Nutrient Needs Analysis:* The CAFO must complete a nutrient needs analysis for each crop to determine the acceptable amounts of nitrogen and phosphorus to be applied to the field based on the appropriate nutrient-based application (nitrogen- or phosphorus-) as determined in the field specific assessment in (a), above. The nutrient needs must be determined using Montana State University Extension Service Publication 161, Fertilizer Guidelines for Montana Crops. For crops not listed in Bulletin 161, DEQ may approve a fertilizer application rate provided by the local county extension service or other qualified source. The CAFO must identify the source of the nutrient needs analysis in the NMP.
 - c) *Nutrient Budget:* Each CAFO must complete a nutrient budget based on the nutrient needs of the crop as defined in (b), above. The nutrient budget must account for all sources of nutrients available to the crop. Other sources that must be addressed where applicable include those in (i) through (iv), below:

- i. Nitrogen needs determined in (b), above, must be reduced based on nitrogen fixation credits if a legume crop was grown in the field in the previous year. Nitrogen reduction for annual legume crops is ten pounds per acre and for perennial legumes is 50 pounds per acre, unless appropriate justification is given showing a lower rate is appropriate, but not less than 35 pounds per acre for all perennial legumes except black medic and annual sweet clover, for which the rate is not less than 15 pounds per acre, and lentils and chickpeas, for which the rate is not less than 30 pounds per acre.
- ii. Nitrogen needs determined in (b), above, must be reduced based on the nitrogen residual from past manure application and nitrogen mineralization rates provided in **Table 1** below.

Table 1. Nitrogen Mineralization Rates

Type of Wastes	First Year ⁽¹⁾	Second Year
Fresh poultry manure	0.90	0.02
Fresh swine manure	0.75	0.04
Fresh cattle manure	0.70	0.04
Fresh sheep and horse manure	0.60	0.06
Liquid manure, covered tank	0.65	0.05
Liquid manure, storage pond	0.65	0.05
Solid manure, stack	0.60	0.06
Solid manure, open pit	0.55	0.05
Manure pack, roofed	0.50	0.05
Manure pack, open feedlot	0.45	0.05
Storage pond effluent	0.40	0.06
Oxidation ditch effluent	0.40	0.06
Aerobic lagoon effluent	0.40	0.06
Anaerobic lagoon effluent	0.30	0.06

⁽¹⁾ If irrigated, reduce first year mineralization by 0.05.

- iii. The nitrogen needs determined in (b), above, must be reduced based on any commercial fertilizer applied, irrigation water, or other sources of nutrients. The CAFO must provide the basis for the nutrients adjustment on the NMP.
- iv. Nitrogen availability may be adjusted to reflect the method of application given in **Table 2** below. For phosphorus-based application, the nitrogen availability is 1.0.

Table 2. Nitrogen Availability and Loss by Method of Application

Application Method	Loss Factor
Injection (sweep)	0.90
Injection (knife)	0.95
Broadcast (incorporated within 12 hours)	0.7
Broadcast (incorporated after 12 hours but before four days)	0.6
Broadcast (incorporated after four days)	0.5
Sprinkling	0.75

- v. The nutrient budget must be completed on forms provided by the department.
- vi. If after the first three years of implementing the NMP the yield does not average at least 80 percent of the planned expected crop yield, the NMP must be amended to be consistent with the documented yield levels unless sufficient justification for the use of the higher yield is

approved by the department. The amendment must be submitted as an amendment in accordance with ARM [17.30.1365](#).

4. *Testing procedures for manure, litter, and process wastewater:* Manure, litter, and process wastewater that is land applied must be sampled at least once per year and analyzed for total nitrogen (as N), ammonium nitrogen (as $\text{NH}_4\text{-N}$), total phosphorus (as P_2O_5), total potassium (as K_2O), and percent dry matter (solids). Except for percent dry matter, the results of this analysis must be expressed as pounds per 1,000 gallons for liquid wastes or as pounds per ton for solid manure. The sample must be representative of the manure that is to be land-applied to a field and must be collected and analyzed in accordance with the following:
 - a) Solid manure must be sampled from at least ten different locations (subsamples) within the material to be applied from a depth of at least 18 inches below the surface. Subsamples must be thoroughly mixed in a clean receptacle and a sample of the mixed material must be collected and placed in a sealable plastic bag or other sample container approved by the analytical laboratory. The sample must be identified with the name, source, and date. The sample must be cooled to four degrees centigrade and analyzed within seven days or frozen at minus 18 degrees centigrade for up to six months or as directed by the analytical laboratory specified in [Montana State University Extension Service Publication 4449-1, Soil Sampling and Laboratory Selection, Dec. 2014](#).
 - b) Liquid manure must be agitated for a minimum of four hours prior to sample collection or until thoroughly mixed. A minimum of five one-quart subsamples must be collected from different locations in the storage facility. The subsamples must be collected from the liquid manure at a depth of least 12 inches below the surface. The subsamples must be combined into a single container and thoroughly mixed. A sample for laboratory analysis must be collected from the composite subsamples and placed into a clean one-quart plastic bottle or other sample container approved by the analytical laboratory. The sample must be identified with the name, source, and date. The sample container must not be completely filled. The sample must be cooled to four degrees centigrade and analyzed within seven days, or frozen at minus 18 degrees centigrade for up to six months or as directed by the analytical laboratory specified in [Montana State University Extension Service Publication 4449-1, Soil Sampling and Laboratory Selection, Dec. 2014](#).
5. *Testing procedures for soil:* Each field where manure is to be land applied must be sampled at least once every five years in accordance with the following:
 - a) A minimum of ten individual soil core samples must be composited to formulate a composite sample for the field. Core sampling in fields with significant landscape variation, including soil type, slope, degree of erosion, drainage, historic usage, or other factors, must be collected from each unit in proportion to the relative abundance in terms of total area. Uniform fields may be sampled in a simple random, stratified random, or systematic pattern following the guidance sources listed below. Individual core samples must be composited and thoroughly mixed in a clean plastic container except that core samples collected at different depths must be kept separate. Alternative soil sampling procedures are given in the following:
 - i. United States Department of Agriculture (USDA), Natural Resource Conservation Service (NRCS), [Sampling Soils for Nutrient Management – Manure Resource Series, MT, April 2007](#); and
 - ii. [Montana State University Extension, MontGuide, Interpretation of Soil Test Reports for Agriculture, MT200702AG, Oct. 2013](#).
 - b) The composite soil sample for phosphorus analysis must be collected from a depth of zero to six inches below the surface and analyzed for phosphorus using the Olsen soil test method. Results must be reported as mg/kg phosphorus and pounds per acre.
 - c) Composite soil samples for nitrogen analysis must be collected from a depth of zero to six inches below the surface and analyzed for total nitrogen (as N) and nitrate (as N). A second composite sample must be collected at a depth of six to 24 inches and analyzed for nitrate (as N) only. Samples must be analyzed in accordance with method code 4H2a1-3 in United States Department

of Agriculture (USDA), Natural Resources Conservation Service (NRCS), [Soil Survey Laboratory Methods Manual, Soil Survey Investigations Report No. 42, Version 6.0, 2022](#) .

Results must be reported as mg/kg total nitrogen and pounds per acre.

6. Analytical laboratories approved for manure and soil testing are given in Montana State University Extension Service Publication 4449-1, Soil Sampling and Laboratory Selection, June 2005.
7. *Timing and Conditions of the Land Application:* Manure must be applied to fields at times and under conditions that will hold the nutrients in place for crop growth and protect both surface and ground water by using the best management practices described in the NMP. The intended target spreading dates must be included in the NMP. **Manure must not be land applied under the following conditions:**
 - a) On land that is flooded or saturated with water;
 - b) During or within 36 hours of a rainfall event that exceeds four hours in duration or 0.25 inches or more of precipitation; or
 - c) To frozen or snow-covered ground (winter application) except for fields meeting the following criteria:
 - i. The application area must be at least 300 feet from lakes, stream, intermittent streams, irrigation canals and ditches, open intake structures, property lines and road right-of-way's;
 - ii. There must be permanent vegetative cover or standing stubble with crop residue greater than 50%; and
 - iii. Land slope of the field must not exceed the following criteria: six percent for application of solid manure (total solids content great than 15%); or three percent for application of slurry or liquid waste (total solids content of 15% or less).
8. *Winter Application:* If winter application is proposed, the CAFO must identify fields suitable for winter application in the NMP and application rates for manure must not exceed those identified in the nutrient budget as determined in 4.c above.
9. Manure application rates and procedures must be consistent with the capabilities, including capacity and calibration range, of the application equipment.
 - a) For an existing CAFO, the NMP must include a statement indicating that the existing equipment has been calibrated to ensure delivery of the application rates described in the plan and that it has the capacity to meet those rates. The CAFO must maintain the supporting documentation onsite and shall make this information available to DEQ upon request.
 - b) For proposed operations, or when it is not feasible to calibrate the equipment or verify its capacity during NMP development, the operator must perform this application equipment verification prior to the first application of manure. The information required in 9.a, above, must be maintained on site and incorporated into any subsequent amendment of the NMP. The CAFO must maintain the supporting documentation on site and shall make this information available to DEQ upon request.
 - c) If a commercial hauler is used, the hauler must be responsible for ensuring that the equipment can comply with the application rate in the NMP. The CAFO must maintain the supporting documentation on site and shall make this information available to DEQ upon request.
10. *Multiyear Phosphorus Application Rate:* A multiyear phosphorus application rate is allowed for fields that require a nitrogen-based application based on a site-specific assessment (site vulnerability rating less than 22) as described in Part II.D.3. When such application is made, the following conditions apply:
 - a) The application rate may not exceed the recommended nitrogen application rate during the years of application. This may include a calculation for fertilizer inefficiencies or the estimated nitrogen removal in harvested plant biomass during the year of application when there is no recommended nitrogen application.
 - b) Conservation practices must be included in the NMP and implemented to minimize the risk of phosphorus loss from the field.

- c) No additional manure may be applied to the field until the phosphorus applied in the single application has been removed through plant harvest.
11. *Alternative to the Manure Application Rates*: As an alternative to the manure application rates based on the on the criteria given in (3), the CAFO may develop application rates for manure based on NRCS Conservation Practice Standard Code 590, provided that all of the following conditions are met:
- a) A field-specific assessment of the potential for nitrogen and phosphorus transport from the field to surface waters must be conducted.
 - b) The form, source, amount, timing, and method of application of manure and any other nutrients to each field must be based on realistic production goals and minimizing nitrogen and phosphorus movement to surface water must be addressed.
 - c) The appropriate flexibilities for the CAFO must be maintained to implement a multiyear phosphorus application as described in (9).
 - d) Manure must be sampled a minimum of once annually for nitrogen and phosphorus and must be analyzed based on procedures and methods given in (4) and (5).
 - e) Soil must be analyzed a minimum of once every three years for phosphorus content.
 - f) The results of the manure and soil sampling analysis must be used in determining manure application rates.
 - g) The nutrient budget must be completed on forms provided by DEQ.
12. *Setbacks*: Manure, litter, and process wastewater must not be applied or temporarily stored within 100 feet of any down-gradient surface waters, open tile line intake structures, sink holes, agricultural well heads, or any other conduits to surface waters unless the permittee demonstrates in the site-specific NMP that the following compliance alternatives are protective of water quality:
- a) Vegetative buffer compliance alternative: The CAFO may substitute the 100-foot setback with a 35-foot wide vegetated buffer where applications of manure, litter, or process wastewater are prohibited; or
 - b) Alternative practices compliance alternative: The CAFO may demonstrate that a set-back or buffer is not necessary because implementation of alternative conservation practices or field-specific conditions will provide pollutant reductions equivalent to or better than the reductions that would be achieved by a 100-foot setback.

E. Additional Measures – Land Application

1. Additional BMPs to control discharges from land application areas:
 - a. Areas with a high potential for significant soil erosion (due to topography, activities, or other factors) must be identified. Where these areas have potential to contribute pollutants to state waters, measures used to limit erosion and pollutant runoff must be identified and implemented.
 - b. Irrigation systems must be managed to minimize ponding or puddling of wastewater on land application fields and contamination of groundwater and surface water.
2. *Prohibitions*: There must be no discharge of manure, litter, or process wastewater to State waters as a result of the application of manure, litter, or process wastewater to land application areas, except where it is an agricultural stormwater discharge. Where manure, litter, or process wastewater has been applied in accordance with the terms of the NMP set forth in **Part II.F** of the permit, a precipitation-related discharge of manure, litter, or process wastewater is considered to be an agricultural stormwater discharge.
3. *Recordkeeping*: The permittee must maintain on-site a copy of its site-specific NMP and, for a minimum of five years from the date they are created, a complete copy of the information required by **Part II.D.2.** and the records specified for Soil and Manure/Wastewater Nutrient Analyses and Land Application in **Part III.D** of this permit. The permittee shall make this information available to DEQ upon request.

F. Nutrient Management Plan (NMP)

The NMP must specifically identify and describe the practices that will be implemented to assure compliance with the effluent limits established in **Part II.A-E** of this permit and other conditions of the permit. The NMP may be completed in FACTS as part of the NOI application materials. The terms of the NMP will be incorporated as conditions of this permit for the CAFO when DEQ authorizes coverage of the CAFO owner or operator under the general permit. The permittee must implement the terms of the NMP.

1. *Terms of the Nutrient Management Plan:* Each CAFO covered by this permit must comply with the site-specific permit terms based on the approved NMP for the CAFO:
 - a) Ensure adequate storage of manure, litter, and process wastewater, including procedures to ensure the proper operation and maintenance of the storage facilities.
 - b) Ensure proper management of mortalities (i.e., dead animals) to ensure they are not disposed of in a liquid manure, storm water, or process wastewater storage or treatment system that is not specifically designed to treat animal mortalities.
 - c) Ensure that clean water is diverted, as appropriate, from the production area.
 - d) Prevent direct contact of confined animals with State waters.
 - e) Ensure that chemicals and other contaminants handled onsite are not disposed of in any manure, litter, process wastewater, or storm water storage or treatment system unless specifically designed to treat such chemicals and other contaminants.
 - f) Identify appropriate site-specific conservation practices to be implemented, including the use of appropriate buffers or equivalent practices, to control the runoff of pollutants into State waters.
 - g) Identify protocols for the appropriate testing of manure, litter, process wastewater, and soil required by this permit.
 - h) Establish protocols to land apply manure, litter, or process wastewater according to the site-specific nutrient management practices that ensure appropriate agricultural use of the nutrients in the manure, litter, or process wastewater.
 - i) Maintain specific records that document the implementation and management of the minimum requirements described in **Parts II.F.1.a.** through **II.F.1.h.** of this section and outlined in **Table 3** of this permit.
2. *Recordkeeping:* The permittee must create, maintain for five years, and make available to DEQ, upon request, the following records:
 - a) All applicable records identified pursuant paragraph **II.F.1.i.** of this section;
 - b) Inspection and monitoring records according to **Table 3.** Records must include those specified for Operation and Maintenance in **Part V.F.** of this permit; and
 - c) A copy of the CAFO's site-specific nutrient management plan.
3. *Transfer of Manure, Litter, or Process Wastewater to Other Persons:* Prior to transferring manure, litter, or process wastewater to other persons, the CAFO must provide the recipient with the most current nutrient analysis. The analysis must specify the nitrogen and phosphorus content of the manure, litter, and process wastewater based on the current calendar year using the testing procedures given in the permit. CAFOs must retain for 5 years records of the date, recipient name, recipient address, and the approximate amount of manure, litter, or process wastewater transferred to the recipient.
4. *Annual Report:* The permittee must submit an annual report to DEQ. The annual report must include content outlined in **Part III.B.**
5. *Land Application Rates:* The NMP must address the land application rates using either the Linear or Narrative approach.
 - a) Linear Approach Terms: The linear approach expresses rates of application as pounds of nitrogen and phosphorus as determined below.

- i. Terms: The terms include the maximum application rates from manure, litter, and process wastewater for each year of permit coverage for each crop identified in the NMP, in chemical forms given in **Part II.D.4** of this permit, in pounds per acre, per year, for each field to be used for land application, and certain factors necessary to determine such rates. At a minimum, the factors that are terms must include the following:
 - A. The outcome of the field-specific assessment for the potential for nitrogen and phosphorus transport from each field, as determined according to **Part II.D.4**;
 - B. The crops to be planted in each field or any other uses of a field such as pasture or fallow fields (including alternative crops identified in the NMP);
 - C. The expected crop yield (goal) for each crop or use identified;
 - D. The nitrogen and phosphorus recommendations based on a nutrient needs analysis for each crop based on the appropriate basis (nitrogen- or phosphorus-based application) using the procedure described in **Part II.D.4.b** of the permit;
 - E. The nitrogen and phosphorus recommendations must account for all sources of nutrients. This includes the nitrogen reduction credit due to legumes, mineralization of manure, litter and process wastewater, commercial fertilizer, irrigation water and other sources, and any adjustment for method of application;
 - F. For any fields for which a multiyear phosphorus application is considered (nitrogen-based application), application rates based in the protocols given in **Part II.D.4** of this permit; and
 - G. The form and source of manure, litter, and process wastewater to be land-applied; the timing and method of land application; and the methodology by which the nutrient management plan accounts for the amount of nitrogen and phosphorus in the manure, litter, and process wastewater to be applied.
 - ii. CAFOs that use the linear approach must calculate the maximum amount of manure, litter, and process wastewater to be land applied at least once each year using the results of the most representative manure, litter, and process wastewater analysis for nitrogen and phosphorus taken within 12 months of the date of land application.
- b) Narrative Rate Approach: The narrative rate approach expresses the rates of application as a narrative rate of application resulting in the amount (tons or gallons) of manure, litter, and process wastewater to be land applied, according to the terms below.
- i. Terms: The terms include maximum amounts of nitrogen and phosphorus derived from all sources of nutrients, for each crop identified in the NMP. This must include the chemical forms given in **Part II.D.4** of this permit in pounds per acre for each field, and certain factors necessary to determine such amounts. This must be done in accordance with **Part II.D.4** of the permit. At a minimum, the factors that are terms must include the following:
 - A. The maximum application rate of nitrogen and phosphorus from manure, litter, and process wastewater;
 - B. The outcome of the field-specific assessment of the potential for nitrogen and phosphorus transport from each field, as determined according to Part II.D.4;
 - 1) The NMP must document any basis for assuming that nitrogen will be fully used by crops.
 - C. The crops to be planted in each field or any other uses of a field such as pasture or fallow fields (including alternative crops identified in the NMP);
 - D. The expected crop yield (goal) for each crop or use identified;
 - E. The nitrogen and phosphorus recommendations based on a nutrient needs analysis for each crop based on the appropriate basis (nitrogen- or phosphorus-based application) using the procedure described in **Part II.D.4.b** of this permit; and

- F. The methodology by which the nutrient management plan accounts for the following factors when calculating the amounts of manure, litter, and process wastewater to be land applied:
- 1) The results of soil tests conducted according to protocols identified in the NMP
 - 2) Credits for all nitrogen in the field that will be plant available
 - 3) The amount of nitrogen and phosphorus in the manure, litter, and process wastewater to be applied
 - 4) Consideration of multi-year phosphorus application
 - 5) Accounting for all other additions of plant available nitrogen and phosphorus to the field
 - 6) The form and source of manure, litter, and process wastewater
 - 7) The timing and method of land application
 - 8) The volatilization of nitrogen and mineralization of organic nitrogen
- ii. **Alternative Crops:** The terms of the nutrient management plan include alternative crops as identified in the CAFO's nutrient management plan that are not in the planned crop rotation. Where a CAFO includes alternative crops in its NMP, the alternative crops must be listed in addition to the crops identified in the planned crop rotation for that field. The NMP must also include expected crop yield and the nitrogen and phosphorus recommendations from sources identified in **Part II.D.4**. Maximum amounts of nitrogen and phosphorus from all sources of nutrients and the amounts of manure, litter, and process wastewater to be applied must be determined in accordance with the methodology described in **Part II.D.4** of this permit.
- iii. **Required Projections:** For CAFOs using the narrative approach, the following projections must be included in the NMP but are not terms of the nutrient management plan:
- A. The CAFO's planned crop rotations for each field for the period of permit coverage;
 - B. The projected amount of manure, litter, or process wastewater to be applied;
 - C. Projected credits for all nitrogen in the field that will be plant available;
 - D. Consideration of the impacts of multi-year phosphorus application;
 - E. Accounting for all other additions of plant available nitrogen and phosphorus to the field;
 - F. The predicted form, source, and method of application of manure, litter, and process wastewater for each crop; and
 - G. The timing of application to each field, insofar as it concerns the calculation of rates of application, is not a term of the nutrient management plan.
- iv. **Required Data:** CAFOs that use the narrative approach must calculate the maximum amounts of manure, litter, and process wastewater to be land applied at least once each year using the methodology required **Part II.D.4** prior to land-applying manure, litter, and process wastewater. The narrative rate approach relies on the following data:
- A. A field-specific determination of soil levels of nitrogen and phosphorus that includes:
 - 1) For nitrogen, a concurrent determination of nitrogen that will be plant available consistent with the methodology given in Part II.D; and,
 - 2) For phosphorus the results of the most recent soil test conducted in accordance with soil testing requirements given in Part II.D.4.
 - B. The results of most recent representative manure, litter, and process wastewater tests for nitrogen and phosphorus taken within 12 months of the date of land application, in order to determine the amount of nitrogen and phosphorus in the manure, litter, and process wastewater to be applied.
6. *Signature:* The NMP must be signed by the owner/operator or other signatory authority in accordance with **Part V.L.** of this permit (Signatory Requirements).
7. *A current copy of the NMP* must be kept on site at the permitted facility according to **Part III.D.** of this permit and provided to DEQ upon request.

G. Effluent Limits for other Discharges

1. *Process wastewater discharges from outside the production area:* Process wastewater discharges from outside the production area must be identified in the NMP, and the NMP must identify measures necessary to meet applicable water quality standards in DEQ Circular 7. This includes washdown of equipment that has been in contact with manure, raw materials, and products or byproducts that occur outside of the production area and runoff of pollutants from raw materials. Products or byproducts from the CAFO that have been spilled or otherwise deposited outside the production area which are discharged to State waters must be identified in the NMP. Examples include manure, feathers, litter, bedding, and feed.
 - a. Discharges that do not meet the definition of process wastewater include:
 - i. Discharges that have not been in contact with manure, raw materials, products and byproducts; and are associated with feed, fuel, chemical or oil spills, equipment repair, and equipment cleaning.
 - ii. Domestic wastewater discharges to State waters.

H. General Pretreatment Standards

Any source that introduces process wastewater pollutants into a publicly owned treatment works must comply with 40 CFR Part 403, *General Pretreatment Regulations for Existing and New Sources of Pollution*.

I. Requirements for implementing the Terms of the Nutrient Management Plan

Each CAFO authorized under this general permit must comply with the terms of the CAFO's site-specific NMP, as established by DEQ pursuant to the procedural requirements in **Part II.F**.

III. Monitoring and Reporting Requirements

A. Notification of Discharge

1. If there is a discharge of pollutants from the permitted facility for any reason, the permittee must notify DEQ orally within 24 hours from the time the permittee becomes aware of the discharge. Oral notification must be reported to DEQ's Water Protection Bureau. If the discharge occurs on a weekend or holiday, the permittee must leave a message describing the circumstances of the discharge.
2. The permittee must also provide a written notification to DEQ within 5 days of the time the permittee initially became aware of the discharge. The written submission must contain the following:
 - a) A description of the discharge and its cause, including a description of the flow path to state waters;
 - b) An estimate of the volume and duration of the discharge;
 - c) The period of discharge, including exact dates and times;
 - d) The steps taken or planned by the permittee to reduce, eliminate, and prevent recurrence of discharge; and
 - e) If the discharge was the result of precipitation, a record of the total precipitation at the appropriate gage station identified within the permittee's application materials, or at an onsite rain gauge, for the period of weather that resulted in the discharge.

B. Annual Report

The permittee must submit an annual report to DEQ by **January 28th of each year**. The annual report must cover the previous calendar year and must be submitted using the CAFO Annual Report Form provided on DEQ's website. All information requested in the annual report must be included, as applicable. The annual report must include the following information:

1. The number and type of animals, whether in open confinement or housed under roof;
2. The estimated amount of total manure, litter, and process wastewater generated by the CAFO in the previous 12 months (tons/gallons);
3. The estimated amount of total manure, litter, and process wastewater transferred to other persons by the CAFO in the previous 12 months;
4. The number of acres for land application covered by the NMP;
5. The total number of acres under control of the CAFO that were used for land application of manure, litter, and process wastewater in the previous 12 months;
6. A summary of all manure, litter, and process wastewater discharges from the production area that have occurred in the previous 12 months, including the date, time, and approximate volume;
7. A statement indicating whether the current version of the CAFO's NMP was developed or approved by a certified nutrient management planner;
8. The actual crops planted and the actual yields for each field for the preceding 12 months;
9. The actual nitrogen and phosphorus content for manure, litter and process wastewater;
10. The data and results of calculations conducted according to the linear or narrative rate of application;
11. The amount of manure, litter, and process wastewater applied to each field during the preceding 12 months;
12. The results of any soil testing for nitrogen and phosphorus conducted during the preceding 12 months;
13. The amount of any supplemental fertilizer applied during the preceding 12 months; and
14. CAFOs that follow narrative approach must also submit results of all soil testing and concurrent calculations to account for residual nitrogen and phosphorus in soil, all recalculations, and the new data from which they are derived (40 CFR 122.42(e)(5)(ii)).

C. Groundwater Monitoring

DEQ may require the permittee to monitor groundwater near the facility if any component of the production area constitutes a potential source of pollution to state groundwater. Monitoring may be required in areas having shallow ground water or soils materials in the unsaturated zone with low filtering capacity. Groundwater sampling, analysis, and reporting is subject to the monitoring and reporting provision of this permit, including conformance with the specifications of 40 CFR 136 and the analyses must achieve the required reporting value (RRV) specified in the latest version of Department Circular DEQ-7 unless otherwise specified. DEQ may require groundwater monitoring regardless of whether a discharge of pollutants occurs.

D. General Inspection, Monitoring, and Recordkeeping Requirements

The permittee shall inspect, monitor, and record the results of all inspections and monitoring in accordance with Table 3.

Table 3. Recordkeeping Requirements

Parameter	Units (e.g.)	Frequency
Permit and Nutrient Management Plan		
Maintain onsite a copy of the current MPDES permit and authorization letter granting coverage.	N/A	Maintain at all times
Maintain onsite a copy of a current, site-specific NMP that reflects existing operational characteristics.	N/A	Maintain at all times
Maintain onsite all necessary records to document that the NMP is being properly implemented with respect to manure and wastewater generation, storage and handling, and land application.	N/A	Maintain at all times
Soil, Irrigation Water, and Manure/Wastewater Nutrient Analyses		
Analysis of manure, litter, and process wastewater to determine nitrogen and phosphorus content	ppm, pounds/ton	At least annually after initial sampling
Analysis of soil in all fields where land application activities are conducted to determine nitrogen content	ppm, pounds/ton	Annually after initial sampling
Analysis of soil in all fields where land application activities are conducted to determine phosphorus content	ppm, pounds/ton	At least once every five (5) years after initial sampling
Analysis of water used for irrigation purposes on application fields to determine nitrogen content	ppm, pounds/ton	At least once every five (5) years after initial sampling
Inspection and O&M Documentation, Production Area (<i>Large CAFOs only</i>)		
Visual inspection of all water lines	N/A	Daily
Precipitation events	Inches	Daily
Depth of manure and process wastewater in impoundments	Feet	Weekly and after precipitation events
Storm water diversion devices, runoff diversion structures, and devices channeling contaminated storm water to the facilities	N/A	Weekly
Documentation of all corrective actions taken. An explanation of the factors preventing correction within thirty (30) days	N/A	As necessary
Documentation of animal mortality handling practices	N/A	As necessary

Parameter	Units (e.g.)	Frequency
Documentation of chemical handling practices	N/A	As necessary
The CAFO must maintain onsite a copy of a current design of any manure or litter storage structures, including volume for solids accumulation, design treatment volume, total design volume, and approximate number of days of storage capacity	N/A	Maintain at all times
Documentation of overflows from all manure and wastewater facilities:		
• Date and time of overflow	Month/day/year	Per event
• Estimated volume of overflow	Total gallons	Per event
Land Application		
For each application event where manure, litter, or process wastewater is applied, document the following for each field:		
• Date of application	Month/Day/Year	Daily
• Method of application	N/A	Daily
• Weather conditions at the time of application and for twenty-four (24) hours before and after application	N/A	Daily
• Total amount of nitrogen and phosphorus applied	Pounds/acre	Daily
Documentation of the crop and expected yield for each field	Bushel/acre	Seasonally
Documentation of the actual crop planted and actual yield for each field	Crop Bushel/acre	Seasonally
Documentation of test methods and sampling protocols used to sample and analyze manure, litter, and wasters and soil	N/A	Once in the permit term unless revised
Documentation of the basis for the application rates used for each field where manure, litter, or wastewater is applied	N/A	Once in the permit term unless revised
Calculations showing the total nitrogen and phosphorus to be applied to each field, including sources other than manure, litter, or process wastewater	N/A	Once the permit term unless revised
Total amount of nitrogen and phosphorus actually applied to each field, including documentation of calculations for the total amount applied	Pounds/acre	Once in the permit term unless revised
Documentation of manure application equipment inspection	N/A	Seasonally
Manure Transfer		
Date of transfer	Month/Day/Year	As necessary
Name and address of recipient	N/A	As necessary
Approximate amount of manure, litter, or process wastewater transferred	Tons / gallons	As necessary
Provide copy of nutrient analysis results for each transfer	ppm	For each transfer

IV. Special Conditions

A. Facility Closure: The following criteria apply to all facility closures:

1. *Maintenance*: Livestock waste control facilities must be maintained at all times until facility closure. Livestock waste control facilities that are not in use for a period of 12 consecutive months must be properly closed unless the permittee either:
 - a. Maintains the structure as though it were actively in use, to prevent compromise of structural integrity, or
 - b. Removes manure and wastewater to a depth of one foot or less and refills the structure with clean water to preserve the integrity of the synthetic or earthen liner.
2. *Inspections, Maintenance, and Record Keeping*: The permittee must conduct routine inspections, maintenance, and recordkeeping as though the structure were in use. At least 30 days before the use of the structure is resumed, the permittee must notify DEQ and provide DEQ with the opportunity for inspection.
3. *Compliance*: Facility closure must comply with all federal, state, and local laws, rules, and regulations.
4. *Waste Conveyance Structures*: All structures used to convey waste to the waste impoundments must be removed and replaced with compacted earth material or other materials otherwise rendered unable to convey waste.
5. *Waste*: Liquid and slurry wastes must be agitated and pumped to the extent conventional pumping will allow. Clean water must be added as necessary to facilitate agitation and pumping. The wastewater must be used according to the facility's site specific NMP. The manure solids remaining on the bottom and sides of the waste treatment lagoons or waste storage ponds may remain in place if they do not pose a threat to the environment. If leaving the manure solids in place would pose a threat, then they must be removed to the fullest extent practical and either land applied at agronomic rates or transferred to other persons. If manure solids are transferred to other persons, there must be compliance with any applicable transfer requirements.
6. *Impoundments*: Impoundments with embankments may be breached as to no longer impound water. Excavated impoundments may be backfilled so that these areas can be reclaimed for other uses. Impoundments that have water impounded against the embankment are considered embankment structures if the depth of water is three feet or more above natural ground. The following requirements apply to waste impoundment embankments:
 - a. *Embankment Impoundments*: Waste must be removed from the site before the embankment is breached. The slopes and bottom of the breach must be stable for the soil material involved, however the side slopes must not be steeper than a horizontal to vertical ratio of 3:1.
 - b. *Excavated Impoundments*: The backfill height must exceed the design finished grade by 5 percent to allow for settlement. The finished surface must be constructed of the most clayey material available and mounded to shed rainfall runoff. Available topsoil must be incorporated where feasible to aid vegetation establishment.
 - c. *Conversion to Freshwater Storage*: Converted impoundments must meet all applicable state laws and regulations governing the impoundment of freshwater. The converted impoundment must not be used for fish production if manure solids are not removed. Fencing and warning signs must be used to ensure the pond is not used for incompatible purposes such as swimming and livestock watering until water quality is adequate for these purposes.
7. *Erosion Minimization*: All disturbed areas not returned to crop production must be vegetated or otherwise stabilized to control erosion. Measures must be taken during construction and deconstruction to minimize site erosion and pollution of downstream water resources. This may

include but is not limited to the installation of silt fences, hay bale barriers, temporary vegetation, and mulching material.

8. *Closure Date:* Unless otherwise authorized by DEQ, livestock waste control facilities closure must occur as promptly as practicable after the permittee ceases to operate. If the permittee has not ceased operations, closure must occur 12 months from the date on which the use of the structure ceased unless the facilities are being maintained for possible future use in accordance with the requirements above.

V. Standard Conditions

The permittee must meet the following standard conditions of MPDES permits.

A. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Montana Water Quality Act and is grounds for enforcement action; for termination under the General Permit; for revocation and reissuance of an authorization letter; for a modification requirement; or for denial of coverage under the General Permit (new or renewed). The permittee must give DEQ advance notice of any planned changes at the permitted facility or of an activity which may result in permit noncompliance.

B. Penalties for Violations of Permit Conditions

The Montana Water Quality Act at 75-5-631, MCA provides that in an action initiated by DEQ to collect civil penalties against a person who is found to have violated a permit condition of this Act is subject to a civil penalty not to exceed \$25,000. Each day of violation constitutes a separate violation.

The Montana Water Quality Act at 75-5-632, MCA provides that any person who willingly or negligently violates a prohibition or permit condition of the Act is guilty of an offense, and upon conviction, is subject to civil or criminal penalties not to exceed \$25,000 per day of violation or imprisonment for not more than one year, or both, for the first conviction. Following an initial conviction, any subsequent convictions subject a person to a fine of up to \$50,000 per day of violation or by imprisonment for not more than two years, or both.

The Montana Water Quality Act at MCA 75-5-611 also provides for administrative penalties not to exceed \$10,000 for each day of violation and up to a maximum not to exceed \$100,000 for any related series of violations. Except as provided in permit conditions “Bypass of Treatment Facilities” and “Upset Conditions”, nothing in this permit shall be construed to relieve the permittee of the civil or criminal penalties for noncompliance.

C. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The reapplication must be submitted at least 60 days before the expiration date of this permit.

D. Need to Halt or Reduce Activity Not a Defense

It is not a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

E. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

F. Proper Operation and Maintenance

The permittee must at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the 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 that are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

G. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

H. Property Rights

The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege.

I. Duty to Provide Information

The permittee shall furnish to DEQ, within a reasonable time, any information which DEQ may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee must also furnish to DEQ, upon request, copies of records required to be kept by this permit.

J. Inspection and Entry

The permittee shall allow the head of DEQ, or an authorized representative upon the presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and as otherwise authorized by the Montana Water Quality Act, any substances or parameters at any location; and
4. Sample, or monitor at reasonable times for the purpose of assuring permit compliance, any substances or parameters at any location.

K. Monitoring and Records

1. DEQ may require a permittee to monitor in addition to any conditions in this permit, on a case-by-case basis. If monitoring is required, DEQ will specify monitoring requirements to include, and not limited to, storm water sampling, analytical testing, and an evaluation of monitoring results, recording, and reporting. Monitoring results must be reported in the permittee's Annual Report.
2. *Representative Sampling*: Samples and measurements taken for the purpose of monitoring must be representative of the monitored activity.
3. *Retention of Records*: The permittee must retain records of all monitoring information including all calibrations and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three years from the date of the sample, measurement, report, or application. This period may be extended by request of DEQ at any time.
4. *Records Content*: Records of monitoring information must include:
 - a. The date, exact place, and time of sampling or measurements;
 - b. The individual(s) who performed the sampling or measurements;
 - c. The date(s) analyses were performed;
 - d. The individual(s) who performed the analyses;
 - e. The analytical techniques or methods used; and,
 - f. The results of such analyses.
5. *Test Procedures*: Monitoring must be conducted according to test procedures approved under Title 40 of the Code of Federal regulations (40 CFR) Part 136, unless other test procedures have been specified in this permit, authorization letter, or by DEQ.
6. *Availability of Reports*: Except for data determined to be confidential under 40 CFR Part 2, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of DEQ. As required by the Clean Water Act, applications, permits and effluent data shall not be considered confidential.

7. *Penalties for Falsification and Tampering:* The Montana Water Quality Act at 75-5-633, MCA provides that any person who knowingly falsifies, tampers with, or renders inaccurate any monitoring device or method, or makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction be punished by a fine of not more than \$25,000 per violation, or by imprisonment for not more than six months per violation, or by both.

L. Signatory Requirement

Authorized Representatives: All applications, reports or information submitted to DEQ shall be signed and certified as required by ARM 17.30.1323.

1. All permit notices of intent shall be signed as follows:
 - a. For a corporation: by a principal executive officer or ranking elected official;
 - b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
 - c. For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official.
2. All reports required by the permit and other information requested by DEQ shall be signed by a person described above or by a duly authorized representative of that person. A person is considered a duly authorized representative only if:
 - a. The authorization is made in writing by a person described above and submitted to DEQ; and
 - b. The authorization specified either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. A duly authorized representative may thus be either a named individual or an individual occupying a named position.
3. *Changes to authorization:* If an authorization described 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 above requirements must be submitted to DEQ prior to or together with any reports, information, or applications to be signed by an authorized representative.
4. *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 gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the 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."

M. Reporting Requirements

1. *Planned Changes:* The permittee must give notice to DEQ as soon as possible of any planned physical alterations or additions to the permitted facility, activity, or operation. Notice is required only when:
 - a. The alteration or addition to the permitted facility, activity, or operation may meet one of the criteria for determining whether a facility is a new source under ARM 17.30.1340(2); or
 - b. The alteration or addition could significantly change the nature or increase the quantity of pollutant discharged. This notification applies to pollutants which are not subject to effluent limitations in the permit, nor notification requirements under ARM 17.30.1343(1)(a).

2. *Anticipated Noncompliance:* The permittee shall give advance notice to DEQ of any planned changes in the permitted facility/activity/operation which may result in noncompliance with permit requirements. The permittee shall notify as soon as possible by phone and provide with the following information, in writing, within five (5) days of becoming aware of such condition:
 - a. A description of the discharge and cause of noncompliance; and
 - b. The period of noncompliance including exact dates and times, or if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate and prevent recurrence of the non-complying discharge.
3. *Transfers:* This permit is not transferable to any person except after notice to DEQ and a transfer fee is paid. The Permit Transfer Notification (PTN) form provided by DEQ must be completed and must be received by DEQ at least 30 days prior to the anticipated date of transfer. The form must be signed by both the existing owner/operator and the new owner/operator following signatory requirements of **Part V.L** of the General Permit.
4. *Monitoring reports:* Monitoring results shall be reported at the intervals specified elsewhere in this permit and is subject to the following additional requirements:
 - a. If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR Part 136 using procedures specified in the permit for any pollutant for which an analytical method is not established by 40 CFR Part 136, or by another method required for an industry-specific waste stream under 40 CFR 503.8 or subchapter N, the results of such monitoring must be included in the calculation and reporting of the data submitted in the Annual Report; and,
 - b. Calculations for all limits that require averaging of measurements must use an arithmetic mean unless otherwise specified by DEQ in the permit.
5. *Compliance Schedules:* Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.
6. *Twenty-Four Hour Reporting:* The permittee shall report any serious incident of noncompliance affecting the environment. Any information must be provided orally within 24 hours from the time the permittee becomes aware of the circumstances:
 - a. Any noncompliance which may seriously endanger health or environment;
 - b. Any unanticipated bypass which exceeds any effluent limitation in the permit;
 - c. Any upset which exceeds any effluent limitation in the permit; or
 - d. As applicable, violation of a maximum daily discharge limit of any pollutant listed by DEQ in the General Permit or authorization letter [see 40 CFR 122.44(g)].

A written submission must also be provided within five days of the time that the permittee becomes aware of the circumstances. The written submission must contain:

- a. A description of the noncompliance and its cause;
- b. The period of noncompliance, including exact dates and times;
- c. The estimated time noncompliance is expected to continue if it has not been corrected; and,
- d. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

Oral Notification: The report shall be made orally to the Water Protection at (406) 444-5546 or the Office of Disaster Emergency Services at (406) 324-4777.

Waiver of Written Notification Requirement: DEQ may waive the written report on a case-by-case basis if the oral report has been received within 24 hours by the Water Protection Bureau, by phone, (406) 444-5546. Written reports shall be submitted to the following address:

Montana Department of Environmental Quality
Water Protection Bureau
PO Box 200901
Helena, Montana 59620-0901

7. *Other Noncompliance:* Instances of noncompliance not required to be reported within 24 hours shall be reported as soon as possible. The reports shall contain the information listed above for written submissions under “Twenty-four Hour Reporting” (**Part V.M.6**).
8. *Other Information:* Where the permittee becomes aware that it failed to submit any relevant facts in a permit application or submitted incorrect information in a permit application or any report to DEQ, it shall promptly submit such facts or information.

N. Bypass

Intentional diversions of untreated waste streams from any portion of a treatment facility are prohibited unless:

1. The bypass does not cause effluent to exceed effluent limitations and is necessary for essential maintenance to ensure efficient operation; or
2. The bypass is unavoidable to prevent loss of life, personal injury, or severe property damage; or
3. There are no feasible alternatives; and
4. The proper notification is submitted.

Bypass is prohibited and DEQ may take enforcement action against a permittee for a bypass. If the permittee knows in advance of the need for anticipated bypass, it shall submit prior notice, if possible, at least ten days before the date of the bypass. DEQ may approve an anticipated bypass, after considering its adverse effects.

The permittee shall submit notice of an unanticipated bypass as required under **Part V.M.6**.

O. Upset Conditions

An upset may be used as an affirmative defense in actions brought to the permittee for noncompliance with a technology-based effluent limitation. The permittee (who has the burden of proof) must have operational logs or other evidence showing:

1. When the upset occurred and its causes;
2. That the facility was being operated properly;
3. Proper notification was made; and
4. Remedial measures were taken as required by the duty to mitigate standard condition.

P. Fees

The permittee is required to submit payment of an annual fee as set forth in ARM 17.30.201. If the permittee fails to pay the annual fee within 90 days after the due date for the payment, DEQ may:

1. Impose an additional assessment computed at the rate established under ARM 17.30.201, and
2. Suspend the processing of the application for a permit or authorization or, if the nonpayment involves an annual permit fee, suspend the permit, certificate, or authorization for which the fee is required. DEQ may lift suspension at any time up to one year after the suspension occurs if the holder has paid all outstanding fees, including all penalties, assessments and interest imposed under this section. Suspensions are limited to one year, after which the permit will be terminated.

Q. Removed Substances

Collected screenings, grit, solids, sludges, or other pollutants removed in the course of treatment shall be disposed of in such a manner so as to prevent any pollutants from entering any waters of the state or creating a health hazard.

R. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Clean Water Act.

S. Severability

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

T. Reopener Provisions

This permit may be reopened and modified (following proper administrative procedures) to include the appropriate effluent limitations (and compliance schedule, if necessary), or other appropriate requirements if one or more of the following events occurs:

1. **Water Quality Standards:** The water quality standards of the receiving water(s) to which the permittee discharges are modified in such a manner as to require different permit conditions than contained in this permit.
2. **Water Quality Standards are Exceeded:** If it is found that water quality standards or trigger values in the receiving stream are exceeded either for parameters included in the permit or others, DEQ may modify the permit conditions or water management plan.
3. **TMDL or Wasteload Allocation:** TMDL requirements or a wasteload allocation is developed and approved by DEQ and/or EPA for incorporation in this permit.
4. **Water Quality Management Plan:** A revision to the current water quality management plan is approved and adopted which calls for different effluent limitations than contained in this permit.

U. Toxic Pollutants

The permittee shall comply with effluent standards or prohibitions established for toxic pollutants which are present in the discharge, within any specified timeframe within rule or thereof, and even if the General Permit or authorization letter has not yet been modified to incorporate such standard or prohibition for the toxic pollutant.

VI. DEFINITIONS AND ABBREVIATIONS

The following definitions and abbreviations apply to terms used in this permit:

25-year 24-hour rainfall event means a precipitation event with a probable recurrence interval of once in 25 years as defined by the National Weather Service in Technical Paper Number 40, "Rainfall Frequency Atlas of the United States," May 1961, and subsequent amendments, or the equivalent regional or state rainfall probability information developed therefrom.

Act means the Montana Water Quality Act, Title 75, Chapter 5, MCA.

Animal feeding operation (AFO) means a lot or facility (other than an aquatic animal production facility) where the following conditions are met: animals that have been, are, or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12-month period; and crops, vegetation, forage growth, or post-harvest residues are not sustained in the normal growing season over any portion of the lot or facility.

Bypass means the intentional diversion of waste streams from any portion of a treatment facility.

CFR means the Code of Federal Regulations.

Clean Water Act means the federal legislation at 33 USC 1251, et seq.

Concentrated animal feeding operation (CAFO) means an AFO that is defined as a Large CAFO or as a Medium CAFO, or that is designated as a CAFO by the Department of Environmental Quality. Two or more AFOs under common ownership are considered to be a single AFO for the purposes of determining the number of animals at an operation, if they adjoin each other or if they use a common area or system for the disposal of wastes

Critical storage period means the minimum storage period required to store all manure, process wastewater, contaminated stormwater minus evaporation before it can be land applied or transferred offsite.

Daily discharge means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the average measurement of the pollutant over the day.

Department means the Montana Department of Environmental Quality.

DEQ means the Montana Department of Environmental Quality (MDEQ). Established by 2-15-3501, MCA.

Director means the Director of the Montana Department of Environmental Quality.

Discharge when used without qualification means discharge of a pollutant.

Discharge of a pollutant(s) means any addition of any pollutant or combination of pollutants to state water from any point source. This definition includes additions of pollutants into waters of the state from: surface runoff which is collected or channeled by man; discharges through pipes, sewers, or other conveyances owned by the state, municipality, or other person which do not lead to a treatment works. This term does not include an addition of pollutants by any indirect discharger, as defined in ARM 17.30.1304.

EPA or USEPA means the United States Environmental Protection Agency.

Expected Crop Yield means the estimated crop yield expressed as bushels per acre or tons per acre, in a future year based on one of the following: where historic crop yield data are available, the expected crop yield must be based on the average of at least 3 years of previous crop yield data (past average yield) using the formula: estimated crop yield = 1.05 times past average yield: or, where historic crop data are unavailable, expected crop yield must be based on realistic yield goals determined from other sources and described in the facility's NMP.

Facility or activity means any MPDES point source or any other facility or activity (including land or appurtenances thereto) that is subject to regulation under the MPDES program.

Federal Clean Water Act means the federal legislation at 33 USC 1251, et seq.

Field means an area of land that is capable of supporting vegetation and homogeneous with respect to crop or cover type where manure is to be applied and is under the control of the CAFO owner or operator.

General permit means an MPDES permit issued under ARM 17.30.1341 authorizing a category of discharges under the Act within a geographical area.

Hazardous substance means any substance designated under 40 CFR Part 116 pursuant to section 311 of the federal Clean Water Act.

Land application area means land under the control of an AFO owner or operator, whether it is owned, rented, or leased, to which manure, litter, or process wastewater from the production area is or may be applied (40 CFR 122.23(b)(3)).

Large concentrated animal feeding operation (Large CAFO). An AFO is defined as a Large CAFO if it stables or confines as many as or more than the numbers of animals specified in any of the following categories: 700 mature dairy cows, whether milked or dry; 1,000 veal calves; 1,000 cattle other than mature dairy cows or veal calves. "Cattle" includes but is not limited to heifers, steers, bulls and cow/calf pairs; 2,500 swine each weighing 55 pounds or more; 10,000 swine each weighing less than 55 pounds; 500 horses; 10,000 sheep or lambs; 55,000 turkeys; 30,000 laying hens or broilers, if the AFO uses a liquid manure handling system; 125,000 chickens (other than laying hens), if the AFO uses other than a liquid manure handling system; 82,000 laying hens, if the AFO uses other than a liquid manure handling system; 30,000 ducks (if the AFO uses other than a liquid manure handling system); or, 5,000 ducks (if the AFO uses a liquid manure handling system).

Manure means manure, litter or processed wastewater, including bedding, compost, and raw materials or other materials comingled with manure or set aside for disposal.

Medium concentrated animal feeding operation (Medium CAFO) means any AFO with the type and number of animals that fall within any of the ranges listed below and which has been defined or designated as a CAFO. An AFO is defined as a Medium CAFO if the type and number of animals that it stables or confines falls within any of the following ranges: 200 to 699 mature dairy cows, whether milked or dry; 300 to 999 veal calves; 300 to 999 cattle other than mature dairy cows or veal calves. "Cattle" includes but is not limited to heifers, steers, bulls and cow/calf pairs; 750 to 2,499 swine each weighing 55 pounds or more; 3,000 to 9,999 swine each weighing less than 55 pounds; 150 to 499 horses; 3,000 to 9,999 sheep or lambs; 16,500 to 54,999 turkeys; 9,000 to 29,999 laying hens or broilers, if the AFO uses a liquid manure handling system; 37,500 to 124,999 chickens (other than laying hens), if the AFO uses other than a liquid manure handling system; 25,000 to 81,999 laying hens, if the AFO uses other than a liquid manure handling system; 10,000 to 29,999 ducks (if the AFO uses other than a liquid manure handling system); or 1,500 to 4,999 ducks (if the AFO uses a liquid manure handling system); and either one of the following conditions are met: pollutants are discharged into waters of the state through a man-made ditch, flushing system, or other similar man-made device; or, pollutants are discharged directly into waters of the United States which originate outside of and pass over, across, or through the facility or otherwise come into direct contact with the animals confined in the operation.

Montana Pollutant Discharge Elimination System (MPDES) means the system developed by the Board of Environmental Review and DEQ for issuing permits for the discharge of pollutants from point sources into state surface waters. The MPDES is specifically designed to be compatible with the federal MPDES program established and administered by the EPA.

Multi-year phosphorus application means phosphorus applied to a field in excess of the crop needs for that year. In multi-year phosphorus applications, no additional manure, litter, or process wastewater is applied to the same land in subsequent years until the applied phosphorus has been removed from the field via harvest and crop removal.

On-site means upon the piece of land or property on which the production area is located, including immediately adjacent land used in connection with the facility or activity. (e.g. this includes instances where a business office is located on an immediately adjacent piece of property. This does not include offices, homes, or other facilities on property that does not share an adjoining boundary with the production area.)

Outfall means the place where a point source discharges effluent into the receiving water. For each outfall, there typically is at least one monitoring location. Although the monitoring location might or might not be at the actual point of discharge, samples taken at the monitoring location should be representative of the discharge.

Overflow means the discharge of manure or process wastewater resulting from the filling of wastewater or manure storage structures beyond the point at which no more manure, process wastewater, or storm water can be contained by the structure (40 CFR 412.2(g)).

Owner/operator means a person who owns, leases, operates, controls, or supervises a point source.

Permit means an authorization or license issued by EPA or an "approved state" to implement the requirements of this rule and 40 CFR Parts 123 and 124. "Permit" includes an NPDES general permit (ARM 17.30.1341). Permit does not include any permit that has not yet been the subject of final agency action, such as a "draft permit" or a "proposed permit".

Point Source means any discernible, confined, or discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel, or other floating craft, from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff.

Pollutant means dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural wastes discharged into water. The terms "sewage," "industrial waste," and "other wastes" as defined in 75-5-103, MCA, are interpreted as having the same meaning as pollutant.

Process wastewater means water directly or indirectly used in the operation of the AFO for any or all of the following: spillage or overflow from animal or poultry watering systems; washing, cleaning, or flushing pens, barns, manure pits, or other AFO facilities; direct contact swimming, washing, or spray cooling of animals; or dust control. Process wastewater also includes any water which comes into contact with any raw materials, products, or byproducts including manure, litter, feed, milk, eggs or bedding.

Production area means that part of an AFO that includes the animal confinement area, the manure storage area, the raw materials storage area, and the waste containment areas. The animal confinement area includes but is not limited to open lots, housed lots, feedlots, confinement houses, stall barns, free stall barns, milkrooms, milking centers, cowyards, barnyards, medication pens, walkers, animal walkways, and stables. The manure storage area includes but is not limited to lagoons, runoff ponds, storage sheds, stockpiles, under house or pit storages, liquid impoundments, static piles, and composting piles. The raw materials storage area includes but is not limited to feed silos, silage bunkers, and bedding materials. The waste containment area includes but is not limited to settling basins, and areas within berms and diversions which separate uncontaminated storm water. Also included is the definition of production area is any egg washing or egg processing facility, and any area used in the storage, handling, treatment, or disposal of mortalities.

Regional Administrator is the administrator of the EPA Region with jurisdiction over federal water pollution control activities in the State of Montana.

Setback means a specified distance from the surface waters or potential conduits to surface waters where manure, litter, and process wastewater may not be land applied. Examples of conduits to surface waters include but are not limited to open tile line intake structures, sinkholes, and agricultural well heads.

Severe property damage means substantial physical damage to property, damage to the treatment facilities that causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

Site means the land or water area where any facility or activity is physically located or conducted, including adjacent land used in connection with the facility or activity.

State Waters means a body of water, irrigation system, or drainage system, either surface or underground. The term does not apply to: ponds or lagoons used solely for treating, transporting, or impounding pollutants; or,

irrigation waters or land application disposal waters when the waters are used up within the irrigation or land application disposal system and the waters are not returned to state waters.

Surface waters means any waters on the earth's surface, including but not limited to streams, lakes, ponds, and reservoirs; and irrigation and drainage systems. Water bodies used solely for treating, transporting, or impounding pollutants shall not be considered surface water.

TMDL means the total maximum daily load limitation of a parameter, representing the estimated assimilative capacity for a water body before other designated uses are adversely affected. Mathematically, it is the sum of wasteload allocations for point sources, load allocations for non-point and natural background sources, and a margin of safety.

Total phosphorus index value means the sum of the weighted risk factors for a field as determined by Table 3 (Phosphorus Index Assessment) in United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS), No. 80.1 Nutrient Management, Agronomy Technical Note MT-77 (revision 4), May 2013.

Toxic pollutant means any pollutant listed as toxic pursuant to section 1317(a)(1) of the federal Clean Water Act and set forth in CFR Part 129.

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

Vegetative buffer means a narrow, permanent strip of dense perennial vegetation established parallel to the contours of and perpendicular to the dominant slope of the field for the purposes of slowing water runoff, enhancing water filtration, and minimizing the risk of any potential nutrients or pollutants from leaving the field and reaching surface waters.